

# CAN E-TRANSFERS PROMOTE FINANCIAL INCLUSION IN EMERGENCIES: A CASE STUDY FROM BANGLADESH

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Strategic Impact Advisors, September 2016

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Cashing-out in Sakkhira - ACF

The Electronic Cash Transfer Learning Action Network (ELAN) is convened by Mercy Corps, with support from the MasterCard Center for Inclusive Growth. Access and support provided by Action Contre la Faim (ACF) Bangladesh made this case study possible.



Mastercard Center for Inclusive Growth

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# ACKNOWLEDGMENTS

This study was made possible through the MasterCard Center for Inclusive Growth's generous support of Electronic Cash Transfer Learning Action Network (ELAN). This study illustrates a shared commitment to improving how electronic cash transfers are used to assist survivors of natural disasters and conflict.

We are grateful to Action Contre la Faim (ACF) Bangladesh for participating in the case study and inviting an in-depth look at their two projects in Bangladesh. Many thanks especially to Tapan Kumar Chakraborty, ACF's Head of the Food Security, Livelihoods, Disaster Risk Reduction Department and his team who coordinated the research in Bangladesh and provided valuable inputs.

We would like to especially thank the participants in the surveys, the focus group discussions, and the key informant interviews. Within Mercy Corps, we would like to thank the Financial Inclusion team, including Thea Anderson, Lily Frey and Bree Oswill, who supported this research and provided valuable comments on the report.

## ABBREVIATIONS

ACF	Action Contre la Faim
BDT	Bangladeshi Taka
CB	Cox's Bazar
CT	Cash Transfers
DFS	Digital Financial Services
ELAN	Electronic Cash Transfer Learning Action Network
E-transfers	Electronic Transfers
FGD	Focus Group Discussion
FSLDRR	Food Security, Livelihoods, Disaster Risk Reduction (Program)
HA	Humanitarian Assistance
KII	Key Informant Interview
KYC	Know Your Customer
MCT	Mobile Cash Transfers
MMSP	Mobile Money Service Provider (bank)
MNO	Mobile Network Operator
NID	National Identity Document
NGO	Non-governmental Organization
OTC	Over the Counter (money transfer)
P2P	Person to Person (money transfer)
SK	Satkhira
SP	Service Provider

# EXECUTIVE SUMMARY

## BACKGROUND

The Electronic Cash Transfer Learning Action Network (ELAN) launched research to build an evidence base around connecting emergency electronic transfer (e-transfer) recipients with additional financial services.<sup>1</sup> They wanted to learn if, when, and how e-transfers can promote sustained uptake and use of e-transfer services including mobile money.

This case study explores two humanitarian assistance projects implemented by Action Contre La Faim (ACF) in two districts in Bangladesh during 2015 and 2016. The programs provided humanitarian cash assistance to communities affected by severe flooding, with one focused on risk mitigation and the other on emergency relief. In each program, cash was transferred electronically via mobile wallets<sup>2</sup> (although some recipients received their first transfer manually.) ACF chose the e-transfer mechanism to reduce cash handling risks, improve transparency, and reduce leakage. They also wanted to provide flexibility to recipients to withdraw the cash from their mobile wallet (cash-out) where and when needed. E-transfers were used only to improve the process. **There was no specific intent during ACF's project design or implementation to link e-transfer recipients to additional financial services or to encourage continued use of the SIM and mobile wallet after the project's end.**

## RESEARCH METHODOLOGY

The research included household surveys with 50 recipients (84% women); focus group discussions (FDGs) with 32 recipients (50% women); and key informant interviews (KII) with ACF staff, service providers, NGO partners (local and international), and other stakeholders (Appendix 1). The case study was conducted over a brief timeframe and was not intended as a large, randomized survey. Instead, **the goal of this research is to take a 'snapshot' to understand any continued mobile money usage among cash transfer recipients.** This case study relied heavily on qualitative research to examine uptake and usage of mobile money among cash transfer recipients and to identify critical barriers and enabling factors affecting uptake and usage.

## KEY FINDINGS & RECOMMENDATIONS

The research focused on three key questions:

- To what extent do e-transfer programs influence the use of mobile money among cash transfer recipients?
- What are the key barriers and enabling factors that influence recipients' uptake and use of mobile money services?
- What measures can and should be implemented in humanitarian e-transfer programs to overcome the barriers to uptake and use?

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<sup>1</sup> E-transfers refer to a digital transfer of money or vouchers from the implementing agency to a program participant.

<sup>2</sup> A mobile wallet is an account primarily accessed using a mobile phone. GSMA Mobile Money Definitions, July 2010.

Overall, the research demonstrated that humanitarian program participants do not automatically adopt or utilize new mobile money technology through participation in an e-transfer program. Rather, while participants in ACF's two programs demonstrated robust savings and money transfer behavior prior to participation – as well as post-program – it was rare for an e-transfer recipient to radically alter the way in which they managed their household finances and the product or approach they used (e.g., transferring money through friends, savings in livestock, saving currency at home). Many factors impeded uptake of mobile money wallets, including lack of confidence and skills to conduct mobile money transactions; transfer amounts that were utilized almost immediately in full (thereby limiting the chance to deposit additional funds); access/distance to agents; gender dynamics around handset control and access to agents, which disproportionately impacted women's usage; fee structures; and regulatory hurdles including ID requirements and cumbersome registration processes. Other factors that may have influenced the use of mobile money wallets include the limited number of transfers (which hindered practice); the weak business case for service providers (which may have limited investments in training and agent networks in target areas); and the decision to give out new SIM cards without handsets to program participants.

Despite these barriers, many latent enabling factors were present which could have been acted upon to improve uptake and usage of mobile money wallets. These included high awareness of mobile money services in general; a preference for e-transfers; general interest in learning more about mobile money account features; and trust in the service provider.

To learn from this experience and capitalize on these enabling factors, future e-transfer programs might:

- Embed program participant capacity-building efforts which are user-appropriate and hands-on
- Assess and mitigate against any gender-specific constraints which disproportionately impede uptake and use of mobile money for female participants
- Understand participants' access to, and control of, handsets and build creative solutions to address low ownership
- Formulate realistic financial inclusion strategies early – and recognize these may only be focused on a specific sub-set of your total program population
- Pre-position for future humanitarian crises by familiarizing staff and local partners with e-transfer principles and conducting joint assessments of potential service providers

# 1. CASE STUDY BACKGROUND

## 1.1 PURPOSE & RESEARCH QUESTIONS

The Electronic Cash Transfer Learning Action Network (ELAN) convenes humanitarian agencies and private sector partners to improve the impact of humanitarian cash transfers through the appropriate use of payments technology. Although not traditionally a focus of humanitarian assistance, promoting financial inclusion through the use of electronic cash transfers (e-transfers) has gained traction in a number of recent emergencies. There is growing interest in linking humanitarian cash transfer recipients with e-transfer services, like mobile money, that may enable vulnerable populations to better prepare for, and respond to, crises.<sup>3</sup>

The ELAN launched this research to understand which barriers and enabling factors influence the uptake and potential use of mobile money introduced during a humanitarian assistance program. Emergency programs often target vulnerable populations who are frequently underserved or “unbanked.” The objective of the research is to learn if, when, and how e-transfers can result in sustained uptake and use of e-transfer services like mobile money. The key questions explored were:

- To what extent do e-transfer programs influence the use of mobile money among cash transfer recipients?
- What are the key barriers and enabling factors that influence uptake and use of e-transfer services among recipients?
- What measures can and should be implemented in a humanitarian e-transfer program to overcome the barriers to achieving uptake and use?

Figure 1: ACF program areas studied



To answer these questions, the ELAN conducted a series of case studies examining emergency cash transfer programs using mobile money in Bangladesh, Zimbabwe, and Ethiopia. This first case study was conducted in April 2016, and examined two projects implemented by ACF in two districts of Satkhira and Cox's Bazar in Bangladesh (see map). These projects represent typical short-term, humanitarian initiatives using e-transfers without a specific link to longer-term financial inclusion objectives.

## 1.2 HUMANITARIAN CONTEXT

### COUNTRY CONTEXT

Bangladesh has high rates of poverty and under-nutrition, exacerbated by high population density and frequent national disasters. It is one of the world's most vulnerable countries to environmental disasters such as cyclones, tropical storms, and flooding.<sup>4</sup> As such, cash-based humanitarian responses have been prioritized by both large donors and implementing agencies, like ACF.

<sup>3</sup> ELAN's Financial Services Primer for Humanitarians provides an overview of the opportunities and challenges associated with using e-transfers as a pathway to financial inclusion.

<sup>4</sup> <http://www.worldriskreport.org/>

## IMPLEMENTING AGENCY

ACF International is recognized as one of the leading non-governmental organizations (NGOs) in the fight against hunger worldwide. ACF started work in Bangladesh in 2007 focused on nutrition and health, mental health care, food security and livelihoods, water, sanitation and hygiene (WASH), and disaster and climate change risk management.<sup>5</sup>

## 1.3 OVERVIEW OF FINANCIAL SERVICES IN BANGLADESH

Bangladesh has a population of approximately 160 million, and over 66% live in rural areas with limited access to banks.<sup>6</sup> The rapid expansion of microfinance and mobile money services, however, has placed Bangladesh in the midst of a financial inclusion growth spurt. As of 2015, 43% of Bangladeshi adults (an 8% increase from 2013) had accounts at financial institutions offering at least one of the following services: savings, insurance, investments, or money transfers. Bangladesh's rate includes 9% of adults with registered mobile money accounts, 19% with bank accounts, and 24% with accounts at non-bank financial institutions (like MFIs). The growth between 2013 and 2015 consisted almost entirely of increases in mobile money and MFI accounts, while access to bank accounts remained constant.<sup>7</sup> The increase in access to mobile money and MFI accounts is helping Bangladesh close ranks on neighboring countries; South Asia's regional average for adult account access was just higher than Bangladesh in 2015, at 46%.<sup>8</sup>

While the growth in financial access is impressive, it has not been evenly spread. In just one year (2014-2015), registered account access increased by 14% for those living above the poverty line, and by 10% for men. By contrast, women's access increased by just 3% and those living below the poverty line increased by only 4% in the same period. This means that males and the less-poor experienced three times as much growth in access to financial accounts compared to women and those living below the poverty line.<sup>9</sup>

## 1.4 MOBILE MONEY IN BANGLADESH

The Bangladesh Bank (the Central Bank of Bangladesh) launched mobile money regulations<sup>10</sup> in 2011 with an aim to expand financial inclusion. Mobile Money Service Providers (MMSPs) are able to extend their reach into rural areas through a distribution network of mobile money agents that do not rely on 'brick and mortar' branch offices. According to the Bangladesh Bank (BB)<sup>11</sup>, as of Q1 2016, 29 (of 56)<sup>12</sup> banks are approved to deliver mobile money, with 18 actively providing services through 584,912 mobile money agents. MMSP agent networks have greatly expanded the reach of financial services that had previously been limited to a limited number of bank branches, 62 insurance companies, and 697 microfinance institutions.<sup>13</sup>

MMSPs in Bangladesh are bank-led (meaning all mobile wallets must be linked to a formal bank account), and require partnerships between mobile network operators (MNOs) and financial institutions. This contrasts with many other countries, where mobile money is delivered directly by MNOs (e.g., MPESA in Kenya). Bangladesh's bank-led model is complex for customers, since it requires them to register twice:

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<sup>5</sup> <http://www.actioncontrelafaim.org/en/content/bangladesh>

<sup>6</sup> <http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS>

<sup>7</sup> <http://finclusion.org/uploads/file/reports/2015%20InterMedia%20FII%20BANGLADESH%20Wave%20Report.pdf> \*Note that these figures show an increase from 2014 World Bank Global Findex data (which relied on 1,000 HH surveys carried out in April-May 2013). This data relies on 6,000 representative HH surveys conducted in August and September 2015.

<sup>8</sup> <http://datatopics.worldbank.org/financialinclusion/region/south-asia>

<sup>9</sup> <http://finclusion.org/uploads/file/reports/2015%20InterMedia%20FII%20BANGLADESH%20Wave%20Report.pdf>

<sup>10</sup> The Bangladesh Central Bank uses the term "mobile financial services."

<sup>11</sup> <https://www.bb.org.bd/fnansys/paymentsys/mfsdata.php>

<sup>12</sup> FHI360 Mobile Financial Services in Bangladesh, April 2015: <https://www.microlinks.org/library/mobile-financial-services-bangladesh-survey-current-services-regulations-and-usage-select-us>

<sup>13</sup> <https://www.bb.org.bd/fnansys/insurance.php>



first with the MNO for a SIM card, and then with the bank for a mobile wallet. Both registration processes require customers to present a National ID (such as a citizenship certificate, driver's license, or passport) with a photocopy, photographs, and a completed, signed account application form. As of May 2016, a biometric thumbprint is also required. In comparison to many other countries, these requirements are stringent and may limit financial inclusion.<sup>14</sup> Other Bangladesh regulations relevant for bulk mobile money payments relate to transaction limits which can limit transfer amounts and frequency.<sup>15</sup>

Bangladeshis have a number of mobile money service options, including two outlined below. The distinction between mobile wallets and over-the-counter usage is important, since the former relies on the recipient's own mobile wallet, while the latter uses the agent's wallet.

**Mobile money wallets:** Mobile money wallets are a limited service bank account linked to a SIM card that offers payments, transfers, and savings.<sup>16</sup> Current products and services available through mobile money wallets in Bangladesh include: airtime top-up, utility bill payment, money transfers, payment collection, merchant payment, and savings with earned interest. Several MMSPs allow overseas remittances to be received directly into a mobile wallet. Mobile money wallets can also be used as a channel to access a customer's separate, full-service bank account. Currently, mobile money wallets are not allowed to offer credit or insurance.

**Over-the-counter (OTC):** In this case, a mobile money agent performs the transactions on behalf of the customer, using the agent's wallet (rather than a client wallet). OTC transactions may be easier for recipients who are unable or unwilling to open a mobile money account; do not own or have access to a mobile handset; or struggle to operate their own mobile wallet. However, OTC limits clients from accessing many of the benefits of a mobile money wallet, such as stored value with interest, financial service products beyond payments, and establishing a credit history.

Mobile network coverage – including reliability and availability – is essential to delivering mobile money. As of Q1 2016, nine MNOs are present in Bangladesh, with Grameenphone possessing the greatest market share (42%), followed by banglalink (24%), and Robi (22%). The remaining five companies share the rest of the market.<sup>17</sup> Network coverage by population is 80%, with over 90 million unique subscribers.<sup>18</sup>

<sup>14</sup> <http://www.gsma.com/mobilefordevelopment/programmes/mobile-money/policy-and-regulation/guide/are-customer-identification-verification-requirements-proportionate>

<sup>15</sup> Bangladesh Bank fixed transaction limits for mobile wallet holders at maximum Tk. 10,000 daily and a total of Tk. 25,000 on a monthly basis according to DCMPs Circular No. 10/2011 December 14, 2011.

<sup>16</sup> Bangladesh Bank categories of approved mobile money: <https://www.bb.org.bd/fnansys/paymentsys/paysystems.php>

<sup>17</sup> [www.gsma.com](http://www.gsma.com)

<sup>18</sup> <https://www.gsmaintelligence.com/markets/240/data/?report=55250cf3e3185>

# 2. ACF'S E-TRANSFER PROJECT BACKGROUND

## 2.1 PROJECT DESCRIPTIONS

Both ACF projects provided humanitarian assistance to flood-affected communities through both manual cash and e-transfers, with one focused on disaster risk mitigation and the other on emergency relief. Project details are captured in Table 1 below.

Table 1: ACF Project Highlights

LOCATION	SATKHIRA (SK), SOUTH-WEST REGION	COX'S BAZAR (CB), SOUTH-EAST REGION
Timeframe	12 months (March 2015-February 2016)	3 months (September-November 2015)
Purpose	Risk mitigation due to waterlogging	Emergency relief post-floods
ACF Recipients	2,300	1,334
Cash Transfer Frequency*	Four transfers	Two transfers
Service Providers	Dutch Bangla Bank (DBBL) and bKash	bKash
Local Implementing Partner NGO	Shushilan	Mukti
Donor	ECHO	ECHO

\*See Table 2 below for further payment mechanism details.

**The Satkhira Project (SK):** This project targeted landless daily laborers who were affected by lost work opportunities as a result of chronic waterlogging<sup>19</sup> which had impacted the local agricultural cycle. This Satkhira Project organized cash for work (CFW) activities to improve food security and mitigate the risk of waterlogging for 2,300 of the most vulnerable landless farmers and laborers.



<sup>19</sup> Water saturation of the soil as a result of flooding.



**Cox's Bazar Project (CB):** In June 2015, torrential rains set off flash floods and landslides in low-lying areas in the south-east districts of Cox's Bazar. The flash flood affected 316,000 households. The situation was further aggravated by Tropical Storm Komen and a second spell of floods, causing loss of employment. The cumulative impact of these natural disasters forced many communities towards toward negative coping mechanisms (e.g., reduction in food intake, inland migration, borrowing money at high interest rates, and purchasing food on credit). ACF's Cox Bazar Project used cash transfers to meet basic needs of 1,334 recipients with unconditional cash grants delivered through mobile money.<sup>20</sup> Table 2 (page 12) describes further transfer details for both projects.

## 2.2 SERVICE PROVIDER SELECTION

Selecting service providers took ACF four months, which was much longer than anticipated. ACF conducted a feasibility assessment of both MNOs and MMSPs, and sent a targeted Request for Quotation to nine MMSPs. Once service providers were evaluated against established criteria<sup>21</sup>, ACF began contracting processes. Contracts were required with both MNOs and financial institutions (MMSPs) to deliver bulk mobile money transfers. In SK, ACF initially contracted Dutch Bangla Bank (DBBL) as the MMSP, but later switched to bKash when DBBL decided to discontinue the partnership. In CB, ACF contracted bKash as the MMSP.

## 2.3 RECIPIENT REGISTRATION, ORIENTATION & DISBURSEMENT

Registering program participants as MMSP account holders required coordination between ACF, their local NGO partners, and the service providers. Although many program participants had access to a SIM card, ACF decided to re-register all participants with mobile money wallets.<sup>22</sup> Program participants first registered with the MNO, filling out an individual application form to receive a SIM card. Next, the program participant registered with the MMSP, filling out a KYC form. Both registration processes required copies of national ID cards and four copies of passport sized photos.

During registration events, local partners facilitated brief orientation meetings on how to use mobile money and access cash transfers. ACF and local partners informed recipients they could use their mobile wallets beyond just cashing-out, but no formal or practical training took place to reinforce this information. In SK, a one-page flyer was produced in Bangla which provided instructions on protecting recipients' SIM cards, PIN codes and registration forms, cash-out processes and other mobile wallet services, though it is unclear how many program participants saw or received the flyer.

<sup>20</sup> Vulnerability criteria included women/girls; children; the elderly; ethnic/ minority communities; and people with disabilities.

<sup>21</sup> ACF's service provider assessment tool: <http://solutionscenter.nethope.org/blog/view/new-tool-to-identify-digitalbulk-payment-service-providers>

<sup>22</sup> Some KIIs implied that it was difficult to convince the MMSP to use existing SIMs given their interest to acquire more customers, and/or their concerns on AML/KYC since many accounts may not have been properly registered in the past. In addition, multiple people in a household use a shared wallet and ACF wanted to ensure the identified recipient received her/his disbursement.

Due to delays around contracting and the complex two-step mobile wallet registration process, most of ACF's first cash transfers were disbursed manually.

Table 2: Transfer Details

LOCATION	TRANSFER NUMBER	# RECIPIENTS	AMOUNT (BDT)	AMOUNT (USD)*	PAYMENT MECHANISM	DATE DISBURSED (M/Y)
<b>Satkhira (SK) Project</b>		<b>2,300</b>				
Dhulihar	1	1,200	3,000	38	e-transfer	June 2015
	2	1,200	2,400	30	e-transfer	July 2015
	3	1,200	6,500	81	e-transfer	October 2015
Jhaudanga	1	1,100	400	5	manual cash	July 2015
	2	1,100	6,500	81	e-transfer	October 2015
	3	1,100	3,000	38	e-transfer	February 2016
	4	1,100	2,000	25	e-transfer	February 2016
<b>Cox's Bazar (CB) Project</b>		<b>1,334</b>				
Baharchara	1	1,300	3,000	38	manual cash	October 2015
	2	1,219	6,000	75	e-transfer	November 2015
	2	81**	6,000	75	manual cash	November 2015
	Only	34***	9,000	113	manual cash	November 2015

\*1USD = approximately 80 Bangladeshi Taka (BDT) in April 2016.

\*\*Eighty-one recipients lacked national ID documents and received manual cash transfers in lieu of e-transfers.

\*\*\*An additional 34 households were selected to participate and received their first and only transfer manually in November 2015.

Once cash was transferred electronically, program participants were instructed to bring their SIM card to the mobile money agent on specific disbursement days (when agents were prepared with sufficient levels of cash to meet program demand). Recipients would queue while waiting for individual service from the MMSP agent. When program participants did not have their SIM in a personal phone, the agent inserted the participant's SIM into his phone, allowed the recipient to key in their PIN; and then distributed the cash to the recipient. While this process closely resembles a manual cash distribution, mobile money still offered benefits by transferring the cash handling risks from ACF to the MMSPs and by enabling the recipient to cash-out even if they could not attend the organized cash-out events.

Challenges and lessons learned from the e-transfer projects are captured in post-distribution monitoring reports from SK and the CB project review (Appendix 3). Common problems included far travel distances

to agents, agent liquidity constraints, and technical problems (locked SIMs, forgotten PINs, and errors showing zero balance).

## 2.4 ACF PROGRAM PARTICIPANT PROFILE

The demographic and vulnerability profiles of ACF cash transfer recipients are useful in understanding their receptiveness to mobile money, especially in comparison to national and global patterns. As the ACF projects studied took place in two different locations and contexts, participant characteristics from both program locations are profiled below.

Table 3: Participant Profile Summary

	SATKHIRA (SK) SURVEY PARTICIPANTS	COX'S BAZAR (CB) SURVEY PARTICIPANTS	BANGLADESH NATIONAL AVERAGE
Average Household Size	4.1	5.4	4.5
Average Income	USD 38-56/month	USD 38-56/month	USD 99/month <sup>23</sup>
Literacy Rate	28%	20%	57% <sup>24</sup>
% female	76%	88%	
Average age	45.76	41.2	
Infrastructure & mobile money proximity:	100% of survey respondents in SK lived within a half hour of their nearest mobile money agent.	56% of CB survey respondents have to travel 30-60 minutes to arrive at a mobile money agent; 36% can reach one within 30 mins and 8% have to travel over an hour to reach a mobile money agent.	
Access to ID documents	All participants had, or were able to obtain, national ID documents.	2% of program participants lacked national ID documents.	
Access mobile phones before the program	88%	48%	

Overall, participants from the two program areas are similar, in that they fall far below Bangladesh's average poverty and vulnerability indicators. Notable differences between SK and CB include the slightly longer distances between CB participants and mobile money agents (as compared to SK) and higher pre-program access to mobile phones in SK. It is also notable that CB was recovering from recent flooding, and program reports noted increased vulnerability and hunger, along with the use of negative coping mechanisms. While both programs targeted highly vulnerable participants, those in CB seem to be slightly more vulnerable when compared to SK, based on slightly lower literacy levels and larger household sizes.

<sup>23</sup> <http://data.worldbank.org/indicator/NY.GNP.PCAP.CD?locations=BD>

<sup>24</sup> [http://data.un.org/Data.aspx?d=SOWC&f=inID%3A74#f\\_1](http://data.un.org/Data.aspx?d=SOWC&f=inID%3A74#f_1)

### 3. RESEARCH METHODOLOGY

In-country research for this study included a mix of household surveys, key informant interviews, and gender-segregated focus group discussions (FGDs). The research took place in Dhaka, SK (two months after transfers ended) and CB (five months after transfers ended), with research participant details provided in the table below. For more details on research participant characteristics, see Appendix 4.

Table 4: Research Participants – Summary Characteristics

RESEARCH PARTICIPANTS	SK	CB	TOTAL
Survey respondents	25	25	50
% Women	76%	88%	82%
FGD participants	16	16	32
% Women	50%	50%	50%

In addition to surveys and FGDs, twenty KIIs were conducted with ACF staff, local partner staff, MNOs, MMSPs, and ECHO representatives (details available in Appendix 1). The local NGO partners identified the respondents for the household surveys using purposive sampling<sup>25</sup> and the FGDs using convenience sampling.

Implementation of the household survey and the FGDs ran concurrently. ACF-hired enumerators administered surveys in Bangla that included 47 questions divided into four topical sections:

- Account usage of the new mobile money wallet
- Financial behavior before the ACF project (savings, credit, money transfer)
- Experience using the e-transfer mechanism
- Financial behavior post-project

With the goal of understanding how the use of e-transfers could enable recipients to continue to access and use a range of financial services, the FGD was narrowly focused on mobile phone ownership, mobile money knowledge, and account usage (focused almost exclusively on savings and money transfers) before and after the ACF project.



<sup>25</sup> Purposive sampling is characterized by a deliberate effort to gain representative samples by including groups or typical areas in a sample.



**Methodological Limitations:** This study was not intended as a large-scale, fully randomized survey; rather it is intended to provide a snapshot of behaviors, preferences, and trends among emergency e-transfer recipients in Bangladesh. Specific limitations of the methodology include:

- The study did not have access to mobile money transaction data of program participants, and relied heavily on recall memory of participants.
- Mobile money is relatively new for most of the research participants, who frequently demonstrated a lack of understanding of basic concepts (including mobile money account use and OTC transactions). This presented communication challenges and limited inquiry in some cases. Many participants perceive mobile money as being limited to money transfer services (sending/receiving money) rather than the wide range of available services.
- Without a purely random selection among all recipients, there may be some research bias towards respondents who were easier to reach or more articulate in answering questions.
- Framing of the before and after questions were slightly different – with “before” questions focused on financial behavior and use of financial services, while “after” questions focused on knowledge and access to mobile money services.
- Some key questions were inadvertently left off of the household survey, meaning that analysis relies heavily on FGD findings where survey findings would have been more robust. (Questions about money transfers before and after the program, for example, were excluded from the HH survey).
- Given the study’s limited timeframe, FGDs discussions did not allow for a deep dive into all topics to dissect respondents’ financial behavior and preferences. As a result, the research can make limited assertions on exactly why and how e-transfers drove uptake of mobile money and impacted recipients’ desire or ability to adopt financial services. The findings do, however, provide insights into recipients’ use of financial services generally, preferences for traditional vs. mobile money services, and reasons for limited uptake of mobile money.

# 4. FINDINGS

This research intended to answer the following questions:

- To what extent did ACF program participants use their mobile money wallets after the program?
- What key barriers and enabling factors influenced participants' uptake and use of mobile money?
- In future humanitarian e-transfer programs, which measures can/should be implemented to overcome barriers?

## 4.1 FINANCIAL BEHAVIOR PRIOR TO THE E-TRANSFER PROGRAM

Even highly vulnerable Bangladeshis, such as ACF's program participants, have options for managing their money. These range from regulated formal financial services (such as savings and credit services offered by banks and MFIs) to informal practices (such as saving money through livestock, purchasing jewelry, or storing cash with family and friends). While purchasing a goat **looks radically different** than depositing money into a mobile money wallet, in the minds of new mobile money users, they are often in competition.

Therefore, understanding ACF program participants' financial practices and choices **prior** to the program is critical to gaining a full picture of what mobile money was "competing" against, and why it may have been used or ignored once the program ended. Research participants were asked about their previous experiences with mobile money, and about their pre-program experience with money transfers and savings (typically the most common first uses for mobile money).

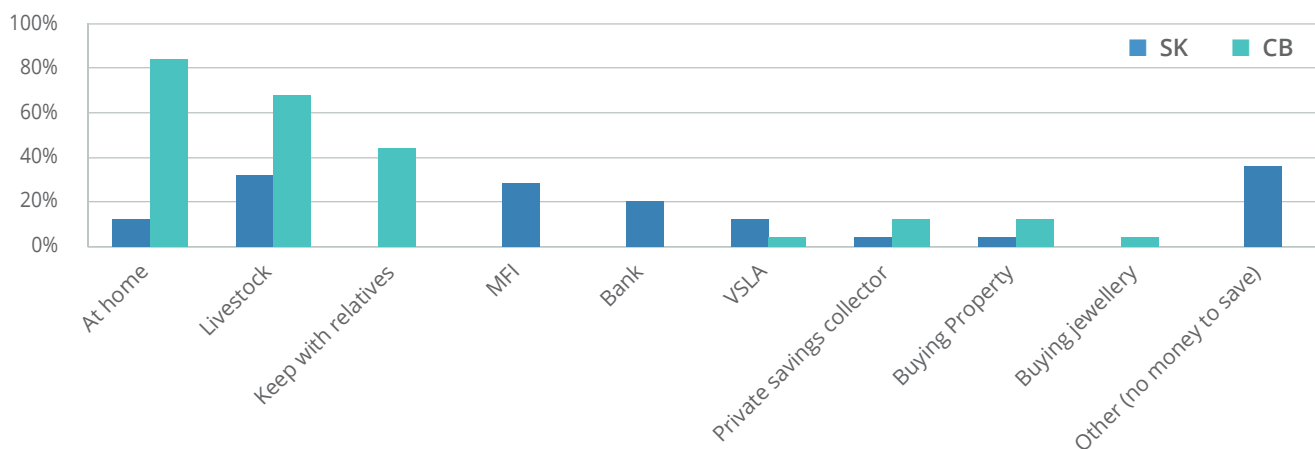
### MOBILE MONEY USE BEFORE THE E-TRANSFER PROGRAM

When asked if they had used mobile money service prior to the program, nine respondents (18% of survey respondents) reported using the service. Eight respondents had used mobile money for money transfers, one had used the service for "cash out" (presumably to cash-out remittances), and one had used the service for both money transfers and cash out services.

### SAVINGS BEFORE THE E-TRANSFER PROGRAM

Savings are essential to cope with emergencies, build liquidity to purchase assets, and manage life events. The HH survey asked participants about their use of savings mechanisms before the project to understand how program participants saved (and whether they used mobile money to do so).

Chart 1: Pre E-Transfer Program Savings Behaviors *Source: HH surveys*





Of survey respondents, 82% used at least one savings mechanism prior to the ACF program. Respondents who did not use any savings mechanism explained that they did not have enough money to save. While no survey respondents listed mobile money as a mechanism they used for saving, three male focus group participants (9%) mentioned using mobile money to safely store money, though none knew of its interest-earning potential. Respondents who did not use mobile money prior to the program cited a variety of reasons, including:

- Cash-out fees are too high to make it worthwhile.
- Investing savings in the *Shomiti* (VSLA-style rotating savings and credit schemes) or in livestock was more lucrative.
- Lack of knowledge and/or confidence in how to use mobile money.
- For women: the process was perceived to be more complex and inconvenient, since they must travel to markets with a male relative to conduct transactions with male agents.

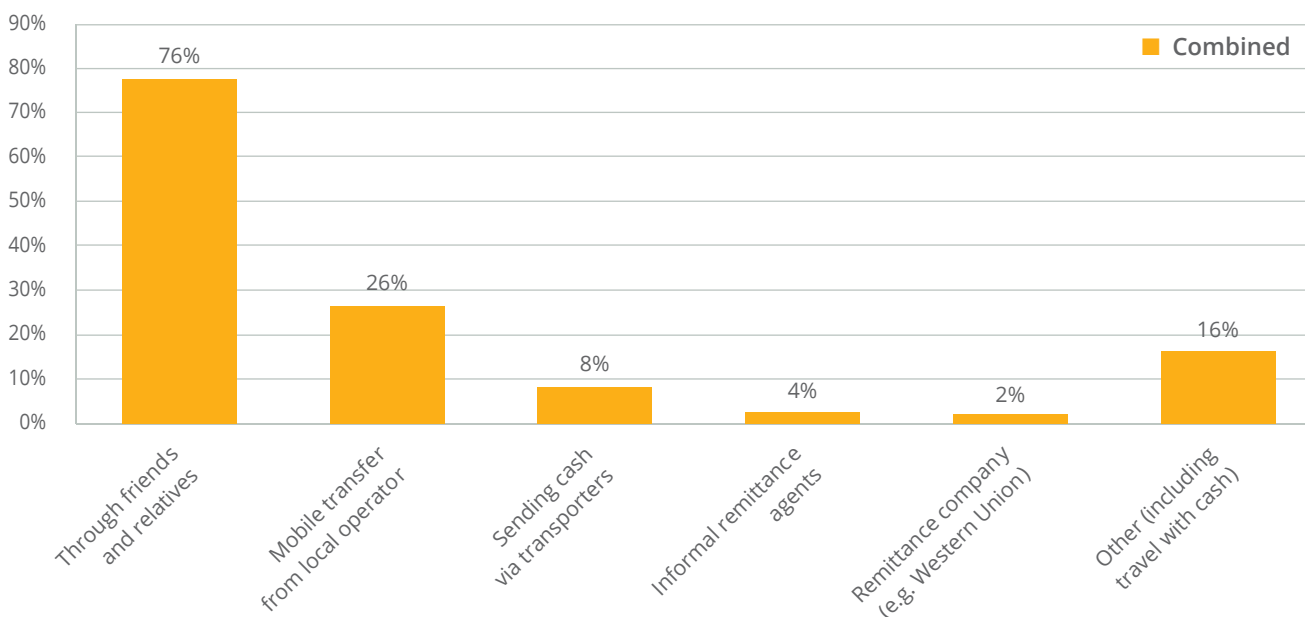
In summary, program participants relied on a variety of savings mechanisms before the ACF projects, but savings through mobile money was very limited.

### MONEY TRANSFER USE BEFORE THE E-TRANSFER PROGRAM

Money transfers can be particularly valuable for recipients to receive support after disasters. Typically, people use a variety of mechanisms to send/receive money, including sending money with friends and relatives, and using formal (e.g., Western Union) and informal money transfer services. In Bangladesh – as in most countries – money transfers are the predominant use for mobile money, with most people relying on an agent to perform the transaction OTC, as opposed to sending/receiving money directly via their own mobile wallet.<sup>26</sup>

Ninety-two percent of survey respondents used at least one mechanism to send or receive money, with the predominant transfer types broken down below:

Chart 2: Pre E-Transfer Program Money Transfer Behavior *Source: HH surveys*



<sup>26</sup> <https://www.cgap.org/blog/mobile-money-bangladesh-still-long-way-go>

Transportation of physical cash, either by trusted friends and relatives, or by the individual themselves while traveling, was the most popular mechanism, followed by mobile money transfers (utilized by over a quarter of survey respondents.)

No survey respondents reported using mobile money for other transactions, such as paying bills before the e-transfer program.

In conclusion, while participants demonstrated a diverse range of financial practices to save and transfer money, mobile money was not in wide use, limited instead to OTC money transfers.

## 4.2 MOBILE MONEY USE AFTER THE E-TRANSFER PROGRAM

### CHANGES IN MOBILE MONEY USAGE

**In general, program participants reported continued limited usage of their mobile wallets** following their introduction during the ACF program, as described below:

- **Survey results, savings:** No survey participants reported using mobile money for savings before the program. After the program, only one survey respondent (2%) reported depositing some of her own money into the mobile money wallet, and six survey respondents (12%) reported using mobile money savings accounts (meaning that these recipients retained a portion of their cash transfer in their mobile wallet).
- **Focus group discussion results, money transfers:** A small minority of FGD participants reported using mobile money transfers before the program, while the majority reported the same use after the program (a significant increase).
- **Survey results, additional mobile wallet services:** No participants reported using mobile wallets to purchase goods or airtime before the program. Post-program, three survey respondents (6%) reported using mobile money to purchase goods or services and four survey respondents (8%) reported using mobile money to purchase airtime after the program.

### FACTORS AFFECTING SAVINGS THROUGH MOBILE MONEY

The HH survey asked participants why they did not **keep** money in their mobile money wallets and why they did not **add** money to their wallets. Both questions revealed similar constraints. Captured in the table below, the primary reasons recipients did not keep money in their mobile wallets were related to household spending needs (most withdrew the entire transfer at one time) and the lack of understanding and trust in the mechanism.

These survey findings are unsurprising for disaster-response projects – where agencies are providing emergency relief and basic needs are urgent. Post-monitoring data from ACF noted that expenditures for basic needs in CB were higher than the project's total cash transfer amount (and higher than participant incomes pre-crisis). Results also align with industry-wide trends which demonstrate that people new to mobile money will tend to cash-out their entire transfer value until they gain confidence in their ability to use the system and trust the system to perform without error.<sup>27</sup>

When asked why they did not deposit their own money into the mobile wallet, participants' primary response was that **they did not know it was possible** (or did not know how to complete the transaction), followed by a lack of resources to save.

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<sup>27</sup> In ELAN Mobile Money workshops involving participants from seven countries in West Africa and the Great Lakes region, the need to build trust, train users to use accounts and manage liquidity to meet cash out requests arose frequently based on cash-out habits in humanitarian programs. See <http://www.cashlearning.org/resources/library/895-elan-mobile-money-workshop-report>

Chart 3: Reasons for Not Keeping Money in Mobile Wallets *Source: HH surveys*

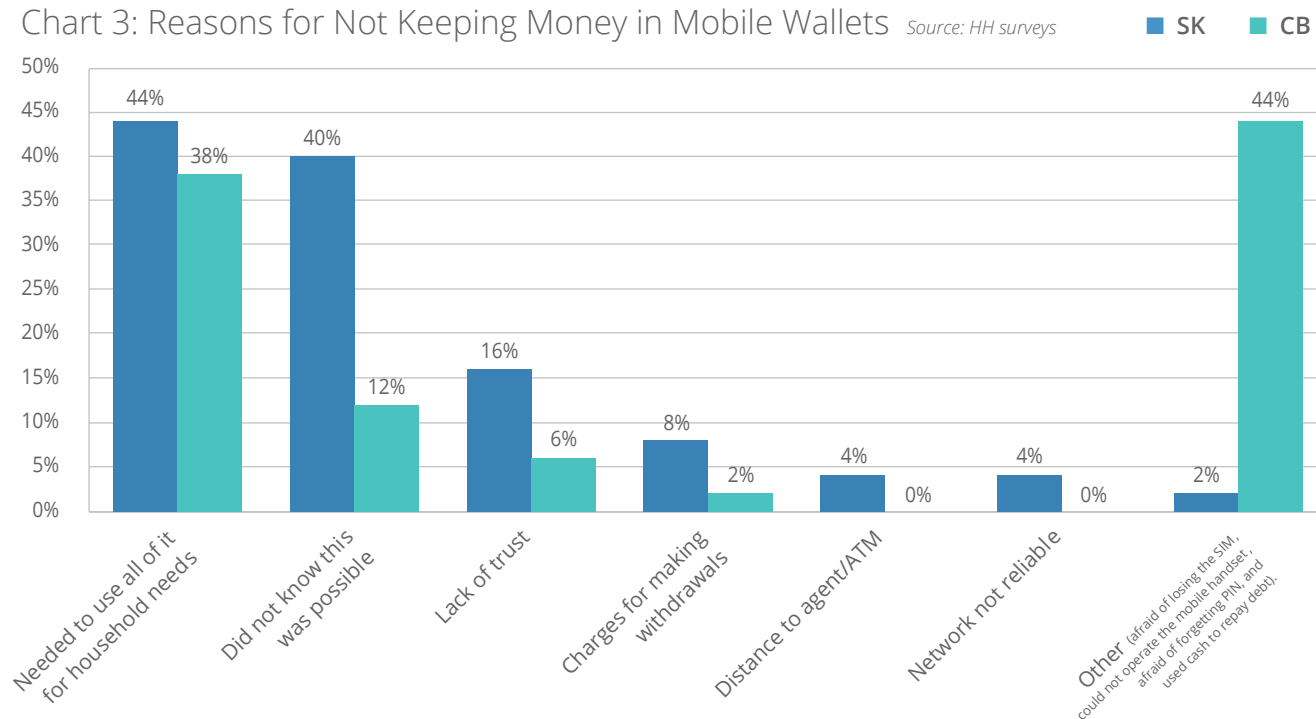
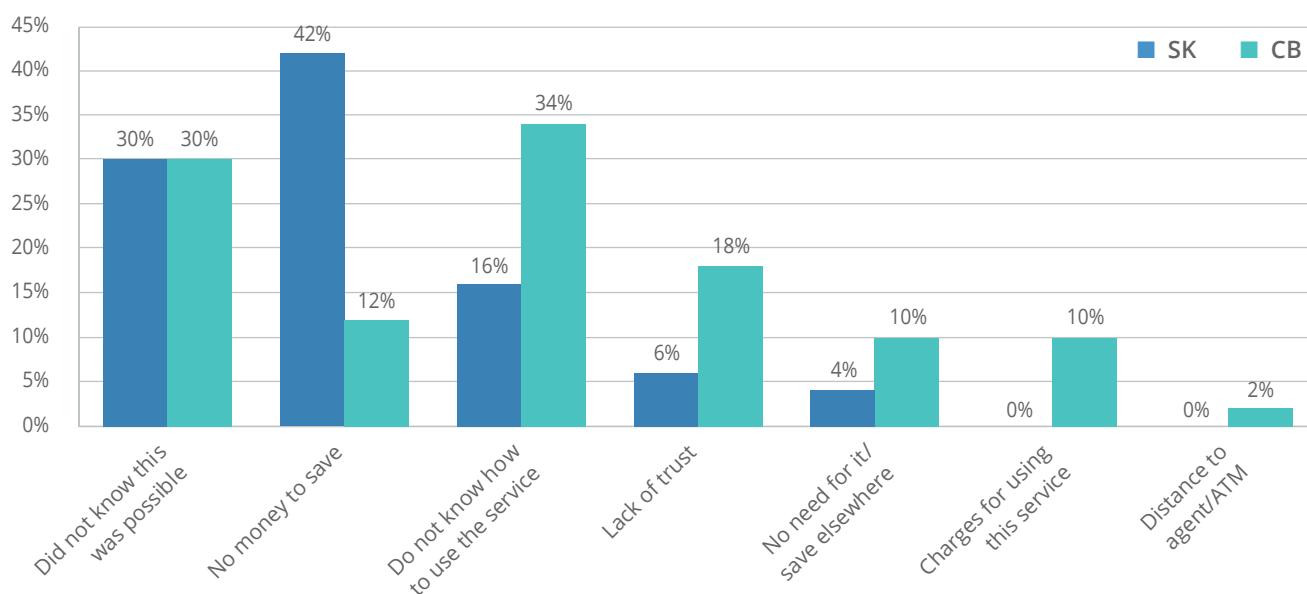


Chart 4: Reasons for Not Depositing Own Money in Mobile Wallets *Source: HH surveys*



In addition to the survey results, FGDs revealed additional barriers to saving in mobile wallets, including:

- Cash-out fees were considered too high to make it worthwhile.
- Investing savings in the *Shomiti* (rotating savings and credit scheme) or in livestock was more lucrative.
- Lack of knowledge and confidence to use mobile money.
- For women: their reliance on a male relative to travel to the market to conduct transactions with agents rendered mobile money more complex and inconvenient than alternatives.

"If I invest BDT 500 in Betel Nut and stock it for 4 – 6 months, it will almost double and I will get BDT 1000 (approximately). But if I keep money in my bKash account, I will not get any profit".

Women's FGD participant in CB

## FACTORS AFFECTING MONEY TRANSFERS THROUGH MOBILE MONEY

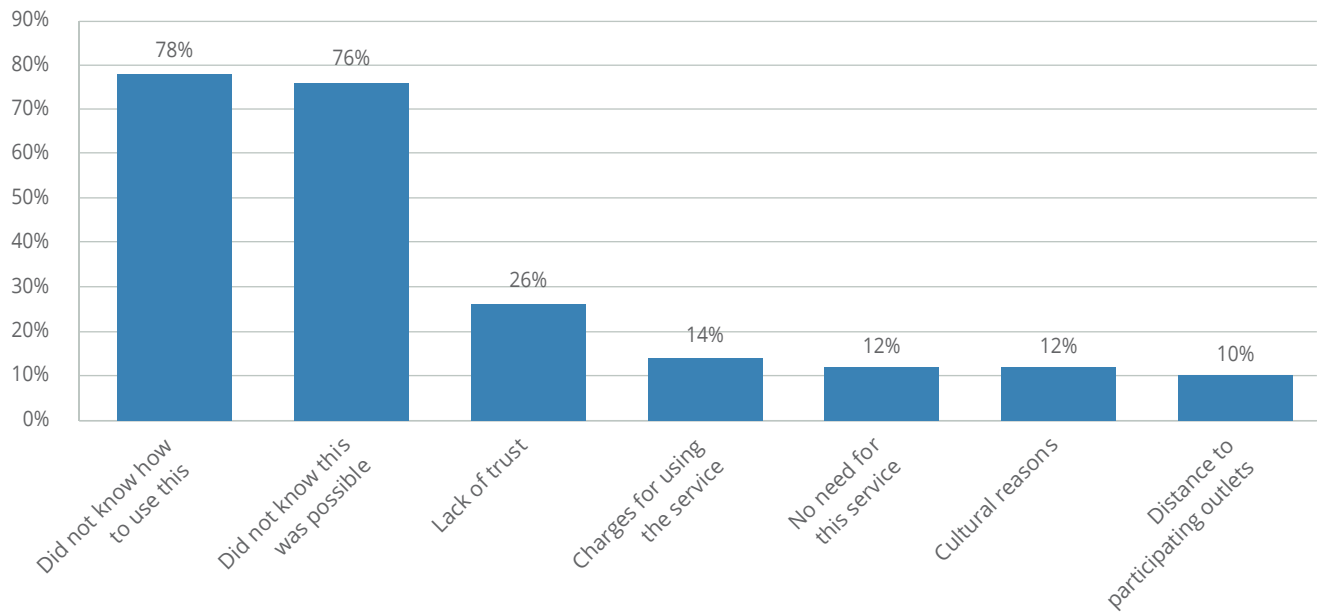
As a result of marketing and advertising prior to the program, FGD participants were generally aware that mobile wallets could be used to transfer money. However, most FGD participants still relied on OTC services to transfer money even after opening their own wallets and gaining experience through the project.

Focus group discussions revealed that participants' lack of comfort and confidence with mobile money transactions led to a heavy reliance on agents. In addition, female FGD participants were highly concerned about losing their SIM cards, as the cards are small and easy to misplace when not in a phone. Participants also feared that losing a SIM could jeopardize future ACF cash transfers as the process for replacing SIMs is cumbersome and slow. As a result, many reported keeping their SIM cards locked up at home, except for when collecting their ACF cash transfers.

## FACTORS AFFECTING USE OF OTHER MOBILE MONEY SERVICES

Only three survey respondents reported paying for goods or services with their mobile money wallets. Primary reasons cited for not utilizing this service were, again, overwhelmingly due to a lack of knowledge about the service or capacity to conduct the transaction. Responses are shown in the table below.

Chart 5: Reasons for Not Using Mobile Money to Procure Goods and Services *Source: HH surveys*



In summary, the bulk of ACF program participants did not substantially increase their use of mobile money post-program, besides an increase in OTC money transfers. The primary explanations for this were a lack of understanding and trust in the mechanism, including fears of losing the SIM card. The existence of more profitable and accessible savings alternatives (such as investments in livestock or savings groups) also impacted mobile money usage. For women, the need to travel to, and interact with, an agent in a marketplace was an additional factor. Specific barriers and enabling factors are explored in the next section.



### 4.3 BARRIERS AND ENABLING FACTORS

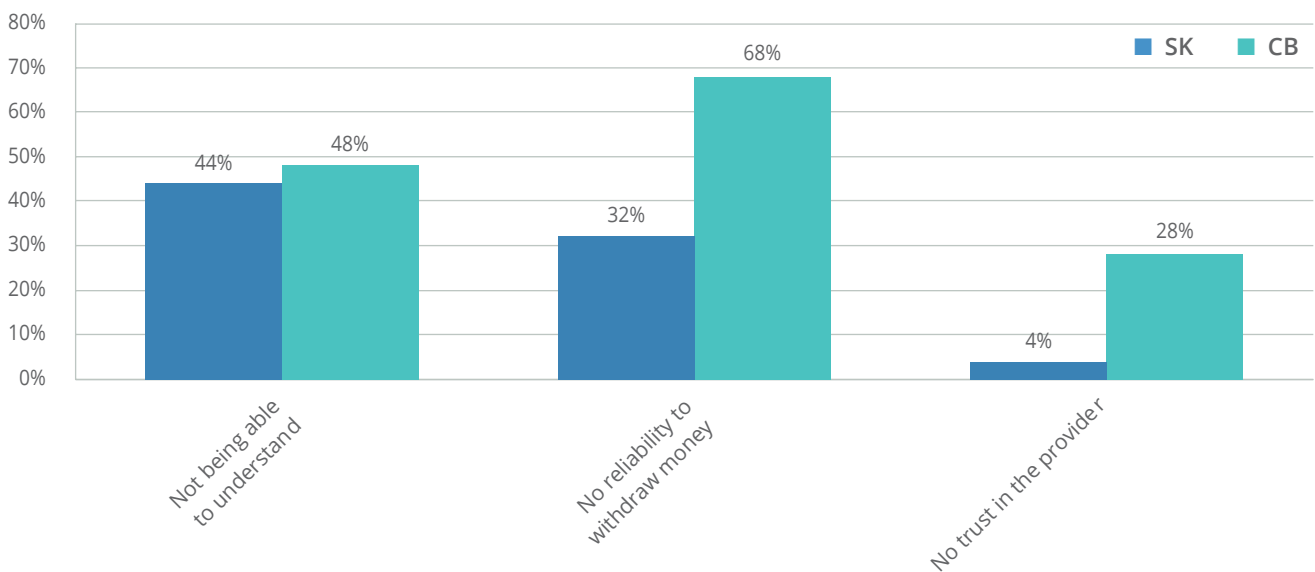
The limited uptake of mobile money among e-transfer recipients in Bangladesh revealed a higher number of barriers than enabling factors, all of which are discussed below.

#### BARRIERS

##### 1. Participant capacity to operate mobile money

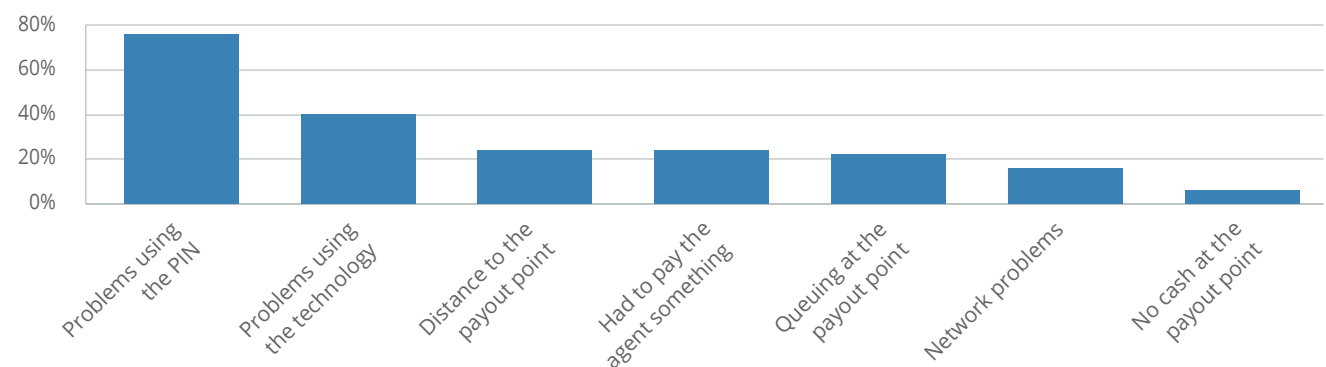
The graphs below highlight a number of concerns about mobile money and trepidation at the outset, with 44-48% of respondents concerned about not being able to understand. There was also some degree of mistrust in the provider in CB and concerns about reliability, which could stem from multiple issues (network uptime, agent liquidity, etc.)

Charts 6: Concerns and Fears at Start of E-transfer Program *Source: HH surveys*



Initial misgivings about ability to operate mobile money did present problems for participants during the cash-out process. Chart 7, below, highlights the array of challenges facing program participants during cash-out processes, with lack of capacity to use the technology among the most-cited concerns.

Chart 7: Problems Faced during Cash-out *Source: HH surveys*



Program participants consistently demonstrated a lack of ability and confidence in conducting mobile money transactions. As shown in the Chart 7, 76% of survey participants listed “problems using [their] PIN” as a challenge. Among survey respondents, only one person out of fifty could fully explain the cash out process and only 11 (22% of respondents) could partially explain it. As one FGD participant stated: **“I do not have enough knowledge on mobile money transfers. I cannot understand how money can be kept in the mobile bank account with a SIM card. I need to learn more. I need training”**

Lack of confidence and capacity affected participants’ willingness to use mobile money once the program ended. As a female FGD participant in SK stated, **“Due to fear of transferring money to another mobile by pressing the wrong button, I usually don’t keep my money in my mobile account.”**

## 2. Participant understanding of product offerings

Neither ACF project was designed to improve financial inclusion or increase usage of mobile money services among participants. Mobile money was instead selected as the distribution mechanism for its presumed security, transparency, and efficiency benefits. While 48% of survey participants had heard of bKash or DBBL services, participants demonstrated a lack of detailed understanding about the products and services available through their mobile wallet. This may be related to the lack of training and marketing of mobile money services to ACF participants. As shown in the charts below, only half of all respondents understood that storing cash in their mobile wallet was possible, and fewer still understood that accounts could be used to make deposits and transfer money.

Chart 8: SK Participants’ Knowledge of Account Capabilities *Source: HH surveys*

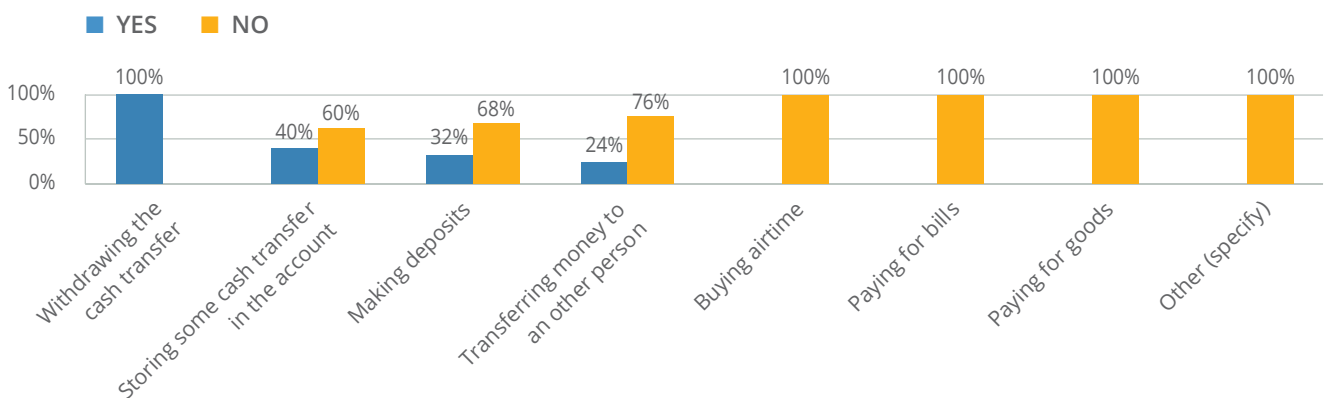
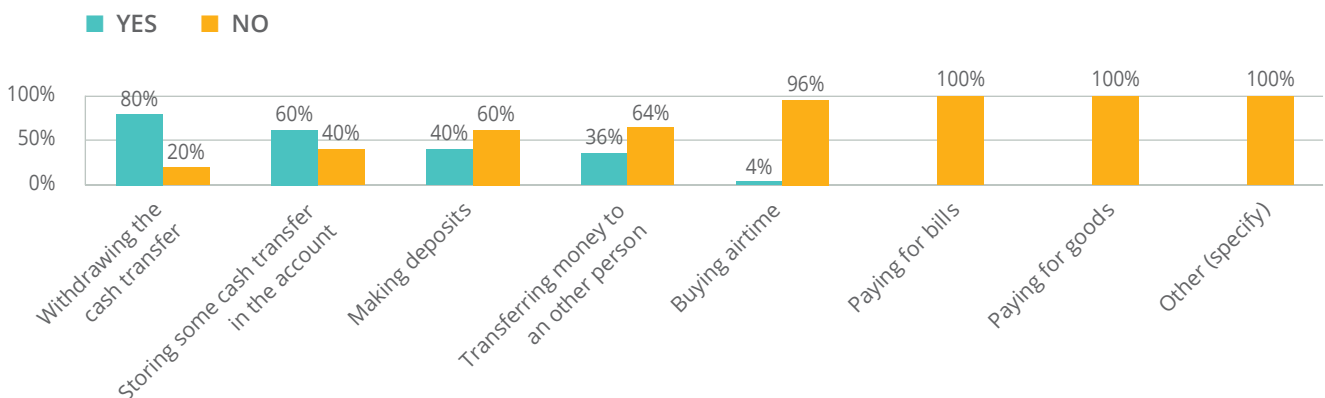


Chart 9: CB Participants’ Knowledge of Account Capabilities *Source: HH surveys*



### 3. Program targeted immediate needs – very few participants had surplus money left to transfer/store

Both ACF projects were designed to meet the immediate needs of the most vulnerable households affected by natural disaster. While transfer values helped participants meet immediate needs, they were not high enough to allow for a surplus. The primary reason cited by recipients for not storing value in their wallets was their need to spend the transfer in full (82% of survey respondents “needed to use all of it for household needs.”) Theoretically, households could have used their mobile wallets to pay bills, buy goods, or transfer money to another person to repay debt (all potential “immediate needs.”) However, very few understood this to be possible, or opted to use their mobile wallets in that way.

### 4. National regulatory environment: two-part mobile wallet registration process & ID requirements

The Bangladeshi regulatory environment presented barriers both for both ACF and program participants. For ACF, the need to assess and contract two different service providers (MMSPs and banks) resulted in implementation delays and longer timelines to deliver cash assistance. In addition, the lengthy two-part registration process for new account holders/program participants (detailed in Appendix 2) slowed down or complicated cash delivery to program participants. An additional hurdle included the strict national ID requirement, which entirely excluded 81 participants (2% of all program participants) from mobile wallet accounts.

### 5. Distance to mobile money agents

Mobile money agents were closer to SK program participants (where 100% had an agent within 30 minutes) than CB participants (where only 36% had an agent within 30 minutes). Distance to agents is correlated with higher pre-program use of mobile money and preferences for mobile money in the future. In CB, where agent access was weaker, 68% of survey respondents would prefer cash in envelopes rather than e-transfers.

Table 5: Agent Proximity *Source: HH surveys*

IMPACT OF AGENT PROXIMITY	SK (BETTER AGENT ACCESS)	CB (WORSE AGENT ACCESS)
Had used services prior to the program	24%	12%
Distance listed as a reason for not using mobile money	4%	16%
“Closer agents” listed as a factor that would increase use of MM in the future	4%	24%
In the future would prefer cash in envelopes vs. e-transfer	4%	68%

### 6. Specific barriers for women: access to agents and control of handsets

Women faced two specific barriers to using mobile money: an inability to independently visit mobile money agents and a lack of control over handsets. In terms of agent access, many female respondents remarked that they needed to be accompanied by a male relative to travel to markets (where agents are located) and to interact with male agents. Many reported this as a deterrent to using the service, because they felt the amount they saved seemed too small to be worth the effort to engage a male to escort her.

As one FGD participant explained:

**“We women generally don’t go to the market. Without the support of the agent, it is not possible to keep money in a mobile account”.** Female FGD participant in SK

When the issue of phone access and ownership was explored during FGDs, participants explained that a family typically owns two phones: one phone belongs to the male head of household for his exclusive use, and one is the “family phone.” The family phone is controlled by the same male head of household, but available for everyone’s use (typically, to communicate when some family members are out working or for children to play games on). In Bangladesh, therefore, expecting this second, family phone to be used for managing personal finances is difficult, particularly for women. While phones might be accessible (and they were: for 88% of respondents in SK and 48% of respondents in CB), this did not necessarily mean that the majority of female program participants had exclusive control over a handset.

Of the FGD participants, 10 recipients (including eight women) bought or were gifted a handset as a result of program participation. The primary reason cited was to have better control over their e-transfer and mobile wallet, and to continue using mobile money in the future. Higher levels of phone ownership among women may have resulted in increased use of mobile money services, by improving privacy and a sense of control over funds stored in a personal (vs. shared) handset.

Both issues (gendered access to agent and control of handsets) likely negatively impacted women’s use of mobile money services. In FGDs, every female participant reported cashing-out their transfers in full.

## **7. Mobile money fee structures**

Mobile wallet fees were cited by 10% of survey respondents as a barrier to utilizing mobile wallets. This was the fifth-most frequently cited explanation (behind lack of understanding, ability, trust in the MM mechanism, as well as preference for alternative forms of savings and an overall lack of money to save). As a female FGD participant from SK stated:

**“To keep money in the mobile wallet we need to pay a charge, or many times a computer can deduct money, so we feel afraid to keep the money there.”**

While fees were not a leading cause for lack of use of mobile money wallets, in combination with other barriers, they do seem to present an additional disincentive.

## **BARRIERS – CONCLUSIONS**

The seven key barriers contributing to low uptake and usage of mobile money among ACF participants include:

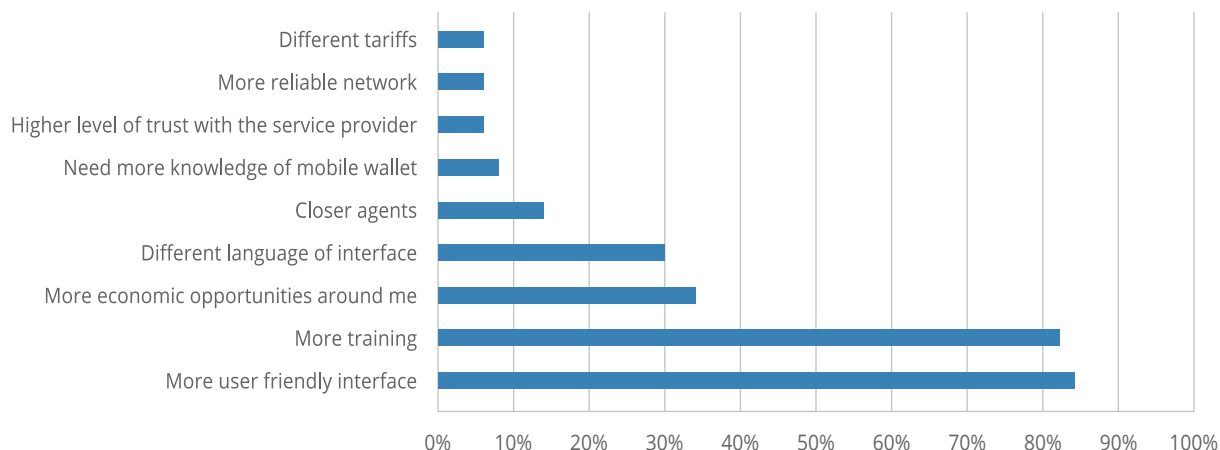
Participant capacity to conduct mobile money transactions

- Participant understanding of mobile money product offerings
- Immediate needs outranking ability to save (through mobile money wallet or other means)
- Regulatory hurdles (2-step registration processes for agency/account holder and strict national ID requirements)
- Distance to agents
- Gender barriers (women’s independent access to mobile money agents and control over handsets)
- Mobile money fee structures

When participants were asked what would make them use their mobile wallets in the future, responses focused heavily on training and technology and improvements to the user interface.



Chart 10: What Would Make Participants Use Mobile Wallets in the Future? *Source: HH surveys*



## ENABLING FACTORS

In addition to the many barriers, this research highlighted enabling factors that have supported uptake of mobile money and could be leveraged to increase usage in the future.

### 1. Awareness of mobile money

While many participants lacked knowledge of specific mobile money services and products, the survey found that 48% of respondents had heard of the bKash or DBBL services during the 12 months prior to the ACF projects. While the majority of survey respondents had not used mobile money, almost half had at least heard about it and were familiar with various brands and basic mobile money concepts.

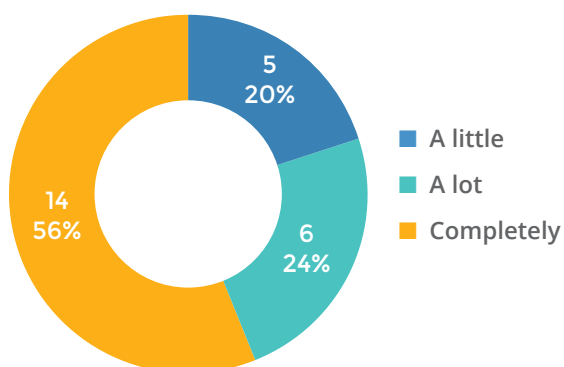
**“From television at first I knew about the bKash’s facility of sending money, and then we learnt about opening a bKash account from ACF when we were engaged with cash for work.”**

### 2. High trust in MMSPs

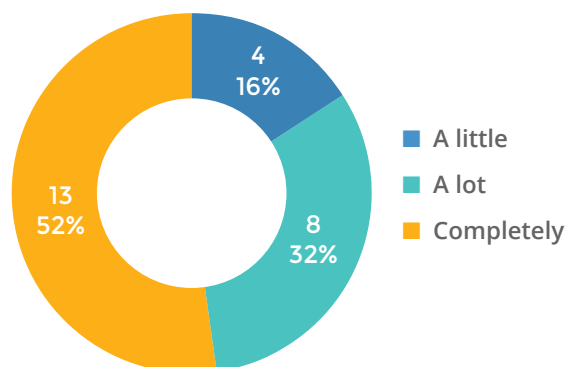
When asked directly about their reticence to save in mobile wallets, only few cited a lack of trust in the MMSP (12% in SK and 32% in CB; Charts 11 and 12, below).

Charts 11 and 12: Trust in E-transfer Services *Source: HH surveys*

SK: Belief that the e-transfer service would provide all of your cash when needed, without problems, when the program started?



CB: Belief that the e-transfer service would provide all of your cash when needed, without problems, when the program started?



Further evidence of a high degree of trust in the provider comes from a survey question that asked about fears or concerns around the e-transfer mechanism. A fairly low percentage of respondents (28% in CB and only 4% in SK) noted “no trust in the provider” as a concern. Both questions illustrate trust in mobile money services and the provider.

### 3. Preference for e-transfers

Overall, 92% of the survey respondents in SK but only 24% in CB would prefer e-transfers to cash in the future. Reasons cited are listed below:

Chart 13: SK: Reasons for Preference of Cash in Envelopes OR E-transfers *Source: HH surveys*

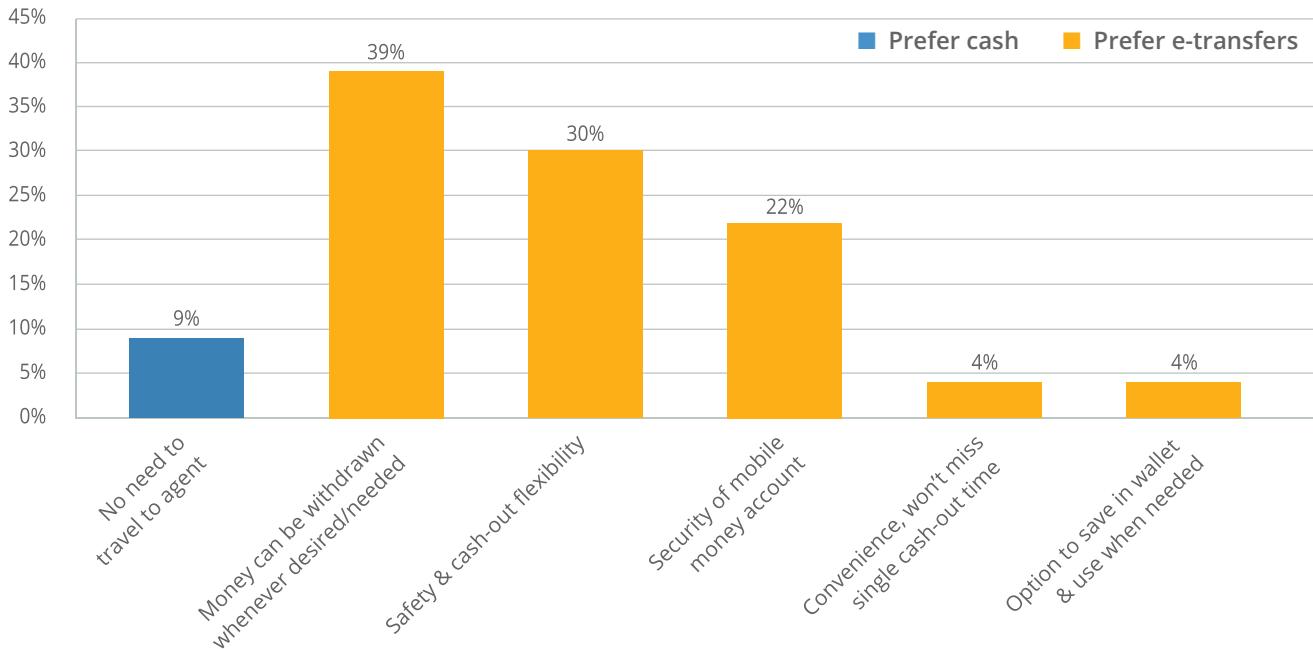
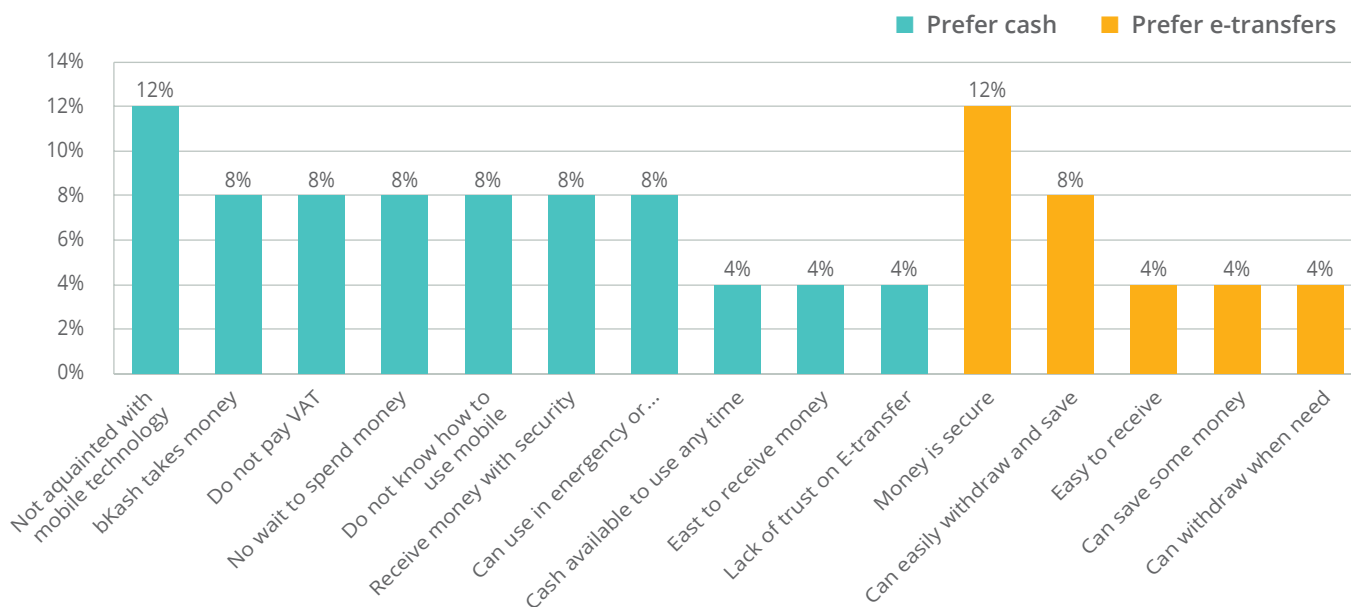


Chart 14: CB: Reasons for Preference of Cash in Envelopes OR E-Transfers *Source: HH surveys*



Survey respondents in SK focused mostly on the benefits of e-transfers, including convenience as well as reduced susceptibility to other people accessing their money. In CB, where respondents preferred manual transfers, responses focused more on disadvantages of mobile money, including difficulties of technology and fees.

In addition, 66% of respondents were “very satisfied” and 34% were “quite satisfied” with the “overall e-transfer payment system during the program” (with little difference between CB and SK). While it is difficult to distinguish satisfaction with receiving cash support and actual satisfaction with the transfer mechanism, both questions revealed a fairly high level of support for mobile money despite challenges discussed earlier.

FGDs reinforced an overall sense of satisfaction with mobile money transfers, with participants overwhelmingly noting they would prefer e-transfers to cash-in-hand in the future. The main reasons cited by FGD participants’ for their preference also centered on concepts of safety and security – not just from loss and theft, but from susceptibility of consumption by family members and/or corruption. FGD participants noted:

**“We want to receive money through the mobile account, otherwise money can be lost or consumed soon.”** Female FGD participant in SK

**“There is a lot of risk in carrying direct cash from distribution points; it can be snatched away by miscreants. It is also time consuming and needs transportation cost. Mobile money transfer has reduced the cost and risk.”** Female FGD participant in CB

#### **4. Accessible support for mobile money users**

Given the low level of capacity to operate mobile money, and a number of problems encountered with the transfer mechanism, participants sought and received help from a variety sources, mostly from ACF’s local partner (100% in SK and 72% in CB). Some also received support from family members, mobile money agents, and other trusted community members.

**“I keep money in my mobile bank account for security. I can cash out the money anytime, anywhere, when I need,”** expressed one of the younger men in the FGD in CB. He was one of the most knowledgeable about using a mobile wallet, and said he had learned from the local agent. His enthusiasm for mobile money was different from the majority of survey respondents in CB who stated a preference for manual cash transfers.

### **ENABLING FACTORS – CONCLUSIONS**

The four key enabling factors supporting mobile money uptake and use among e-transfer recipients are:

- Awareness of mobile money
- High trust in mobile money service providers
- Preferences for e-transfers (in SK, where agents were more accessible)
- Accessible support for mobile money users

## OTHER POTENTIAL INFLUENCING FACTORS

A number of other factors may have influenced uptake and usage trends, but are difficult to confirm due to limitations of the research:

### 1. Frequency of transfers and lack of training

Using a personal mobile wallet was new to almost all ACF program participants. The limited number of transfers (just one mobile money disbursement in CB and three in SK) did not provide ample opportunity for participants to practice and become comfortable with the transfer mechanism. In addition, the limited training and marketing on the mobile money wallet did not offer a dedicated environment where participants could test and ask questions about the service. As two FGD participants noted:

**“Most of the village people do not know about the mobile bank account and its use. If we know all mobile account functions, we will be able to do transactions by ourselves without going to a bKash agent. For that we need a handset and training.”** Male FGD participant in CB

**“To operate the mobile bank account, training is necessary. We want to learn about this, and then we can check our own account balance.”** Female FGD participant in SK

As previous research indicates, adoption of new financial services (particularly digital), is often supported not just by theoretical training, but through direct experience, including small trials and observation of new financial services in use by peers.<sup>28</sup> More frequent transfers may have increased opportunities for testing, resulting in improved user proficiency and confidence with the new technology. It is important to remember, however, that this was not the programs' primary objective and would have likely increased the time and cost required to deliver aid.

### 2. Unattractive business proposition for the service provider

In interviews with three service providers (DBBL, Grameenphone, and bKash), all had experience managing e-transfer services for a number of humanitarian organizations. In general, they described these deployments as making up a fairly small part of their overall business, with one provider noting that of the approximately 3 million customers acquired in the previous year, only 20,000 new customers came from humanitarian projects. They noted that the amount of effort and support required for acquiring humanitarian clients is about “ten times” the amount required for acquiring more typical clients in urban areas. The remoteness of humanitarian program areas and the profile of humanitarian program participants (typically with low education and literacy levels) add to the expense and often require deployment of additional support staff.

While one provider expressed a commitment to serving humanitarian programs despite the additional costs, another reported losing interest in these programs due to SIM dormancy among program participants. (This provider claimed an 80% SIM dormancy rate among typical humanitarian program participants.) Without regular use, dormant SIMs represent lost opportunities to expand a client base, and a lost investment for the provider given the high upfront registration and training costs.

While it is unclear if service provider investment had an impact on the experience of ACF program participants, it is possible that the weak business case offered by the humanitarian sector could eventually affect both quality of service by MNOs during programs (e.g., investments in training and agent network expansion), and willingness to service humanitarian programs in the future.

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<sup>28</sup> Zollman, Julie, and Daryl Collins. 2011. “Financial Capability and the Poor: Are We Missing the Mark?” Kenya: FSD Kenya. <http://fsdkenya.org/publication/financial-capability-and-the-poor-are-we-missing-the-mark-fsd-insights-issue-02/>; Tiwari, Akhand et. Al, 2013. “MicroSave Briefing Note #141: Breaking Free from the Myths of Financial Education.” [http://www.microsave.net/files/pdf/BN\\_141\\_Breaking\\_Free\\_From\\_Myths\\_Of\\_Financial\\_Education.pdf](http://www.microsave.net/files/pdf/BN_141_Breaking_Free_From_Myths_Of_Financial_Education.pdf)



CFW participants in Satkhira – ACF

### 3. SIM distribution and handset access

Although many participating households already had access to phones and SIM cards, ACF procured SIM cards for each program participant to ensure they could accurately tie individual recipients to their e-transfers. As a result, many just brought their SIM card to the agent and used the agent's handset to complete the transaction (since they either did not have access to handset, or did not want to remove an existing SIM card from their personal phone). While there is limited evidence of different uptake/usage levels between those who inserted their mobile money SIM into a phone and those who did not, the "SIM only" approach may have reduced usage and uptake rates, as this reduced opportunity for hands-on testing and access to the product menu that displays other services (i.e., bill pay, savings, etc.)

In addition to influencing opportunities for testing mobile money, the lack of handsets impacted feelings of control over the cash transfer. Ten FGD participants (including eight women) bought or were gifted a handset as a result of program participation. As one FGD participant noted:

**"After getting a SIM and mobile account from ACF and also hearing the news of receiving money from ACF, I was given a mobile phone from my father."** Female FGD participant in SK

The primary reason cited among those who purchased phones was to have better control over their e-transfer and mobile wallet, as well as being able to continue using mobile money in the future.

# 5. CONCLUSIONS

This research aimed to answer three key questions in the context of ACF's e-transfer programs:

- To what extent do e-transfer programs influence the use of mobile money among cash transfer recipients?
- What are the key barriers and enabling factors that influence recipients' uptake and use of e-transfer services?
- What measures can and should be implemented in a humanitarian e-transfer program to overcome the barriers to uptake and use?

## MOBILE MONEY USAGE AMONG E-TRANSFER RECIPIENTS

Although there were slight increases in mobile money usage after the program, most ACF program participants did not widely use mobile money before or after the program. Of all mobile services, money transfers were the most popular, and participants more than doubled their use of money transfers after the program (source: FGDs). Most of the increase, however, was in the form of OTC transactions rather than through program participant's personal mobile money wallets.

In terms of savings behavior after the program, only one survey participant actively used her mobile wallet to deposit new savings, though 12% of survey respondents and 25% of FGD participants reported retaining a portion of their e-transfer in their wallet. Very few respondents used mobile money for any other financial services. Despite low usage, participants expressed considerable interest in learning more about how to use their mobile wallets.

## KEY BARRIERS AND ENABLING FACTORS TO UPTAKE AND USE OF MOBILE MONEY

While a number of specific barriers to uptake and regular use of mobile money are summarized in the table below, participants also revealed their use of a wide array of alternative financial management tools and practices. This means that mobile money faces significant competition as a tool to save, send, and spend money. For example, many female FGD participants, preferred to use other forms of savings (such as livestock or other investments) that were perceived to earn a higher return. Limited mobile money usage should not automatically be considered a "missed opportunity," when it is passed up for more attractive tools. In some cases, lack of uptake and use is rather a result of participants making informed choices about how to maximize their limited resources.



Table 6: Barriers and Enabling Factors

BARRIERS	ENABLING FACTORS	POTENTIAL INFLUENCES
<ul style="list-style-type: none"> <li>➤ Participant capacity to operate mobile money</li> <li>➤ Participant understanding of mobile money product offerings</li> <li>➤ Immediate needs outranking ability to save (through mobile money or other means)</li> <li>➤ Regulatory hurdles (2-step registration processes for agency and account holder + strict ID requirements)</li> <li>➤ Distance to agents</li> <li>➤ Gender barriers (women's access to mobile money agents and control over handsets)</li> <li>➤ Fee structures</li> </ul>	<ul style="list-style-type: none"> <li>➤ Awareness of mobile money</li> <li>➤ High trust in mobile money service providers</li> <li>➤ Preferences for e-transfers</li> <li>➤ Accessible support for mobile money users</li> </ul>	<ul style="list-style-type: none"> <li>➤ Frequency of transfers and lack of training</li> <li>➤ Unattractive business case for the provider</li> <li>➤ New SIM distribution and handset access</li> </ul>

## RECOMMENDATIONS FOR FUTURE E-TRANSFER PROGRAMS

The research aimed to identify measures that can and should be implemented in a humanitarian e-transfer program to improve uptake and use of mobile money among program participants. Key recommendations are provided below.

### 1. Embed program participant capacity-building efforts

This case study revealed that the most significant barrier to mobile money usage was a lack of knowledge about the e-transfer mechanism (and wider array of mobile money products) and confidence in carrying out transactions. Many recipients were provided with mobile wallets for the first time and often did not have the knowledge or skills to fully utilize them. This both increases the risk of program participant exploitation (since participants will then rely heavily on agents or others to conduct transactions) and limits their likelihood to test and explore other features of their mobile wallet. Practical training that incorporates visuals<sup>29</sup> for low-literacy populations, transaction demonstrations, and a series of opportunities to test features and functions hands-on can improve participant's capacity and confidence.

Ideal messaging and training would cover available services, how to access them, how to manage the functionality of the interface, where to seek guidance, and other topics.<sup>30</sup> Training-of-trainers approaches can leverage experienced community volunteers to support their peers. Follow-up monitoring is then important to verify if participants have attained the skills and knowledge necessary to complete an array of mobile wallet transactions. Building training and support costs into project proposals can help ensure

<sup>29</sup> DNET Training Manual for Using Mobile Money in Bangladesh: <https://www.microlinks.org/library/training-manual-using-mobile-money-bangladesh>

<sup>30</sup> Training Checklist for Building Recipient Capability for Successful Use of e-Payments, NetHope's Toolkit on How to Transition from Cash to Electronic Payments [http://solutionscenter.nethope.org/assets/collaterals/042114\\_Key\\_Tool\\_Step\\_8\\_Clean.docx](http://solutionscenter.nethope.org/assets/collaterals/042114_Key_Tool_Step_8_Clean.docx)

that time and resources are set aside. Where appropriate, agreements with MMSPs can also clearly lay out training responsibilities and divide roles between the MMSP and humanitarian agency.

Both programs' limited number of transfers may have also impacted participants' ability to master mobile wallet transactions. Future programs may want to measure whether programs with more frequent transfers (and therefore, where participants had more opportunities to use their mobile wallets) experience greater confidence and better uptake.

## **2. Identify & respond to context-specific gender dynamics**

This case study revealed two gender differences which more negatively impacted women's control over their e-transfer and opportunities for engaging with their mobile wallet: handset control and access to agents. Programs using new cash transfer technology should pay special attention to gender dynamics in early assessments to ensure that women are not unintentionally placed at a disadvantage. Early action is particularly appropriate in contexts like Bangladesh, where it is already known that women have lower rates of usage of mobile money. To improve uptake, these challenges should be anticipated and mitigated; this may include setting aside program budget to provide extra training or hardware to women. Where possible, providing participants with a choice of transfer mechanism may also help those most likely to suffer from access or control issues.

## **3. Think creatively about handsets**

A SIM card without a handset presents several barriers to adopting mobile money. When recipients only have a SIM card, it is more difficult to keep a mobile money account active and utilize the wallet. Some recipients lost their SIM; others feared losing their SIM so kept them locked up. Furthermore, recipients without their own handset relied on a third party to access their account and conduct transactions (which proved an additional barrier to uptake for women, see above.) Without active account usage, SIMs became dormant, and one MNO expressed this as a disincentive for them to engage in future deployments for humanitarian assistance.

Funding for emergency response – as both these programs were – is limited and usually required to meet basic, essential needs post-crisis. If, in future programs, baseline survey data reveals that most program participants control their own handset and SIM, then it may be optimal to use these rather than provide new SIM cards. If people do not have their own handsets, then creative solutions are needed for e-transfer recipients to fully utilize their mobile wallets. For example, if recipients are using their e-transfer to purchase a handset, like several FGD participants noted, a handset may be an essential need for them. Perhaps purchasing handsets from MNOs with bulk wholesale pricing and providing recipients with the option to receive a new handset and partial e-transfer in lieu the full transfer amount may be a valid alternative to encourage uptake and use.

## **4. Be realistic & intentional about financial inclusion objectives**

Incorporating financial inclusion priorities into humanitarian programming is a relatively new concept. This case study demonstrates that – without special attention and support – e-transfer programs do not automatically increase participants' uptake of new financial services. And since supporting account uptake requires extra attention and resources, they may compete against other humanitarian goals. In the ACF programs, for example, additional training on mobile money may be considered alongside needs for capacity building on Disaster Risk Reduction.



Competing needs and scarcity of resources, of course, are ever-present tensions in humanitarian work. As always, decisions about investing in a particular outcome (financial inclusion, in this case) should be guided by needs assessments, and accompanied by monitoring on expected impact. Key questions to guide the design of e-transfer programs with financial inclusion aims may include:

- **What specific gaps will the new financial services fill?** How do participants currently save, send, and borrow money? Are they satisfied with available services? Will access to new financial services support more robust coping mechanisms, or otherwise contribute to enhanced economic well-being?
- **Who is most likely to adopt new financial services?** Financial management strategies vary greatly among households, even within similar populations. It is unlikely that a single financial product or service will be uniformly adopted – or uniformly beneficial – to a large, diverse group of program participants. What segments of program participants are more likely to use and benefit from adoption of new financial services? Consider age, gender, and livelihood strategies. These questions may help to identify “high potential” population segments that are more likely to adopt and benefit from new financial services.
- **What investments are required to enable uptake and use of new financial services?** What are the potential barriers to uptake and usage (IDs? Knowledge and capacity? Hardware?) What actions could a program take to help overcome these challenges? How much would it cost?
- **How will the usage and impact be monitored?** Move beyond simple indicators measuring the numbers of participants that use new financial services. Did use of financial services deliver anticipated benefits? What did participants value about the e-transfer services? Did the new services help households meet specific objectives?

Much work remains to help humanitarian programs identify and support program participants who are most likely to adopt and benefit from access to new financial services. However, recognizing the diversity of participant needs and barriers, and articulating realistic objectives, are important first steps.

## 5. Improve e-transfer preparedness within humanitarian organizations

Improving e-transfer preparedness within humanitarian organizations can improve program participants' experience with mobile money and other types of e-transfers. Pre-positioning assessments of available e-transfer services and agreements with service providers can shave weeks or even months off of normal start-up timelines (making it easier for agencies to deliver transfers electronically from the start of the program, instead of delivering first transfers in physical cash). In addition, humanitarian staff who are trained on the basics of mobile money will be better sources of support and knowledge for program participants. Finally, preparedness on capacity building (in the form of pre-positioned training materials and procedures) can support capacity building for program participants that are new to mobile money or digital financial services.

# APPENDICES

## APPENDIX 1: KEY INFORMANT INTERVIEWS

ENTITY	TYPE	NUMBER OF PARTICIPANTS
ACF Bangladesh, FS/L/DRR Program	Implementing Partner	3
ACF Bangladesh, Procurement & Logistics	Implementing Partner	2
bKash	MMSP	3
Christian Aid	DeSHARI Implementing Partner	1
DBBL	MMSP	2
ECHO	Donor	1
FHI360 mSTAR Program	Stakeholder	2
Grameenphone	MNO SP	2
Mukti	Local Implementing Partner	1
Oxfam	Coordinator of Cash Working Group	2
Shushilan	Local Implementing Partner	1
WFP	Stakeholder	1
TOTAL		21

## APPENDIX 2: TIMELINE FOR RECIPIENT REGISTRATION IN SAKTHIRA (SK)

It took just over three weeks from the initial work order requesting SIM cards to the first e-transfer disbursement, and included the following key steps:

1. ACF and local partner finalized recipient list.
2. ACF sent list to MNO in Dhaka to obtain the SIM cards.
3. MNO sends SIM cards to ACF, not yet activated.
4. MNO assigns 2-3 people in SK to fill out KYC forms, local partners assist, and recipients sign.
5. ACF sends forms back to Dhaka to upload, which takes 3-4 days to activate SIM cards.
6. ACF delivers SIM cards to the MMSP. They use the SIM cards to open the mobile bank account. (Estimated time is two minutes per SIM just for this step).
7. Once KYC forms were verified by the MMSP, the account is activated.

Note that some delays were caused by cancelled IDs (fake), and/or low quality of photocopies or photos.

## APPENDIX 3: ACF SUMMARY ON CHALLENGES AND LESSONS LEARNED

### 3.1 EXCERPTS FROM THE DESHARI REPORT ON USE OF E-TRANSFERS IN COX'S BAZAR:

Challenges faced by ACF and Consortium members utilizing e-transfers:

- Ensuring the availability of required documents for mobile SIM and bKash registration by all program participants within short time frames.
- MM service providers are not acquainted with humanitarian emergency support project and they are profit-oriented.
- Low number of mobile money agents, cash flow constraints (liquidity), technical problem of e-transfer process (such as SIM lock, PIN code block, showing zero balance).

Lessons learned:

- Building knowledge of recipients on e-transfers before initiating any e-transfer lowers the risk of misappropriation of money during cash withdrawal. Most of the recipients of the project were illiterate and had never used mobile money before to receive or send money. They were not aware of the risks of potential fraud by vendors or others. In some cases, recipients disclosed their SIM PINs to vendors (local agents) or relatives, which led to funds being withdrawn without the consent of the recipients.
- A feasibility study of mobile money helps determine the practicality of using e-transfers and reduces the risk of problems for cash transfers. E-transfers were a new approach in the region as a method for transferring cash. However determining the operational practicalities of using e-transfers in the project was limited, leading to cash transfer delays due to the lack of vendors in the project locations and problem with network coverage etc.
- Enhancing the capacity of the staff on e-transfers may increase effectiveness and efficiency of the e-transfer approach. The majority of staff in the implementing agencies was not aware of the e-transfer approach before the project. As it was the first time many staff had used e-transfers, challenges were experienced from the lack of knowledge.

### 3.2 EXCERPTS FROM SATKHIRA POST DISTRIBUTION MONITORING REPORT WITH CFW RECIPIENTS

Challenges faced by CFW recipients accessing their e-transfers:

- Cash-out locations were far from residence (13.5%)
- Mobile or SIM related problems - mainly losing SIM cards, lack of access to mobile handsets, forgotten pin-codes or bank account codes (9.5%)
- Cash-out was not possible at times due to liquidity shortages (1.4%)
- Did not face any challenge (24.3%)
- Did not know (14.9%) or did not provide feedback (35.8%)

## APPENDIX 4: RESEARCH PARTICIPANT PROFILES

The following section provides information on the general profile of the survey and FGD participants including residence, household size, age, gender, literacy, occupation, and income.

The following table summarizes the number and location of recipients that participated in this research:

FGD PARTICIPANTS	REMOTENESS	VILLAGE	SURVEY RESPONDENTS	FGD PARTICIPANTS
Satkhira, Jhaudanga Union, Sadar Upazila	<ul style="list-style-type: none"> <li>➤ Most households are within 2 - 3 km from main road.</li> <li>➤ Both villages are 2 - 3 km from a main market where bKash agents are located.</li> <li>➤ Both villages are located 10 - 15 km from Satkhira district town where banking services are available.</li> </ul>	Goldarpara	23	8
		Waria	2	8
Cox's Bazar, Baharchara Union, Teknaf Upazila	<ul style="list-style-type: none"> <li>➤ Most households are within .5 - 2 km from main road, and where bKash agents are located.</li> <li>➤ Both villages are 1.5 - 5 km from a main market in Baharchora.</li> <li>➤ Both villages are 25-30 km from sub-district town and 45 km from district town where banking facilities are available - though with more limited availability at sub-district level.</li> </ul>	Shamlapur Jumpera	25	8
		Bainnapara	0	8
TOTALS			50	32

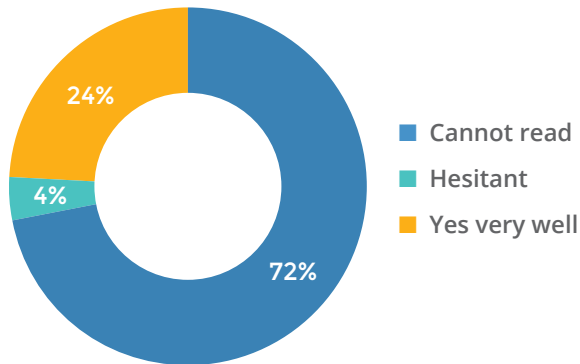
The table below provides some general background information on research participant profiles:

PARTICIPANTS	AVERAGE HH SIZE	MARITAL STATUS	AVERAGE AGE	VULNERABILITY
SK HH Surveys	4.1	21 Married 4 Widows	46	4 Widows
SK FGD Women	4.1	N/a	30	N/a
SK FGD Men	N/a	N/a	29	N/a
CB HH Surveys	5.1	21 Married 2 Widows 2 Separated / divorced	41	2 Widows
CB FGD Women	5.8	N/a	37	N/a
CB FGD Men	5.6	N/a	38	1 Disabled

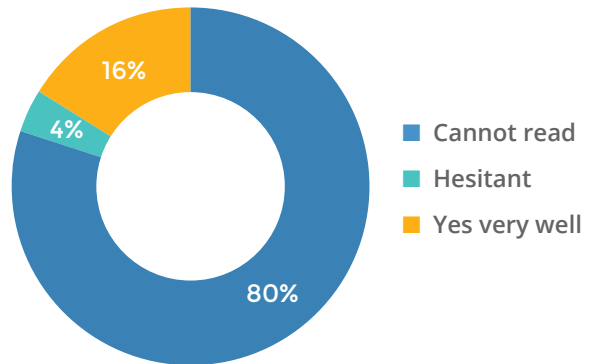
The survey included 19 women (76%) in SK and 23 women (92%) in CB. The survey group contains a higher percentage of women than the total percentage of women project recipients - i.e. 60% in SK and 73% in CB. The FGDs included 16 men and 16 women.

Literacy levels in Bangladesh are estimated at 60% for adults<sup>31</sup> (male and female combined), while the percentage of survey respondents that claim they cannot read was higher at 72-80%.

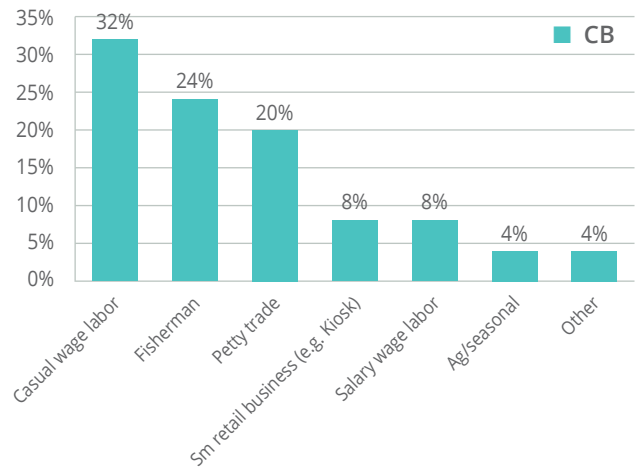
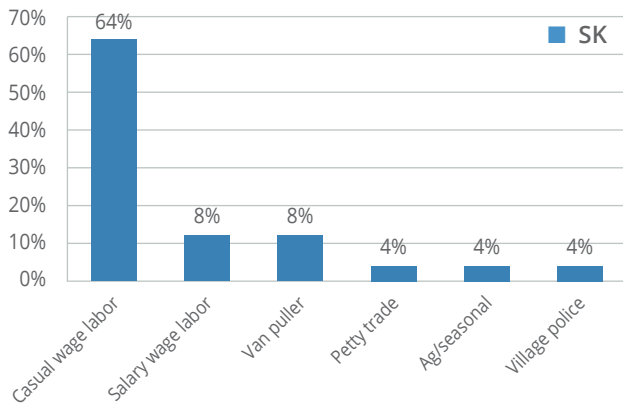
SK: Ability to Read



CB: Ability to Read

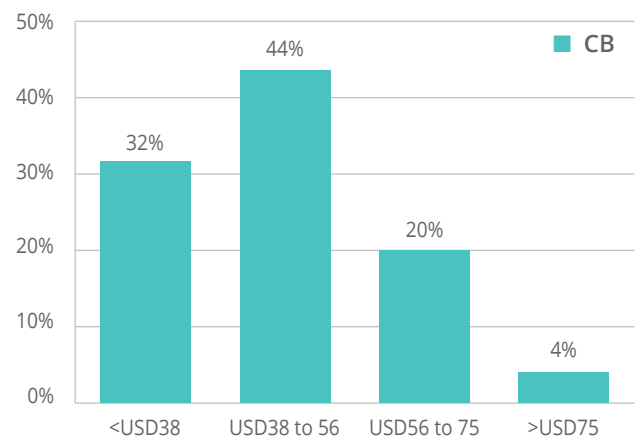
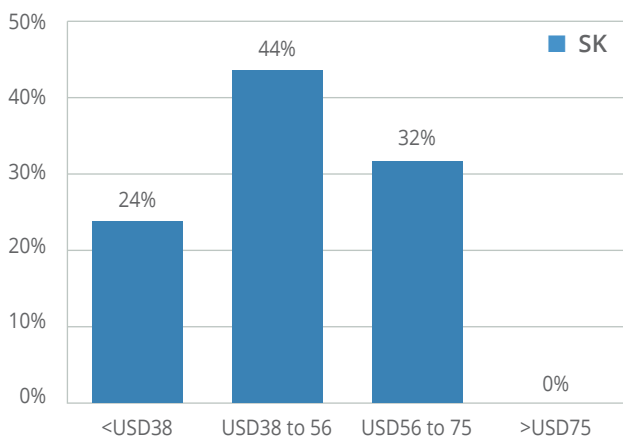


Two additional characteristics on the recipient profile are occupation and income levels as shown in the charts below:



Similar to the survey respondents, most of the FGD participants rely on casual, daily wage labor for income.

Average incomes for most survey respondents ranged between 3,000-6,000 Taka per month (approximately USD38-75).



<sup>31</sup> <http://www.indexmundi.com/g/g.aspx?c=bg&v=39,2011>

## APPENDIX 5: DECISION GUIDE

### A Guide to Decision-Making: When to Promote Mobile Money through Humanitarian E-Transfers.

CRITERIA	WHAT TO REVIEW	MOBILE MONEY SHOULD BE CONSIDERED WHEN...	MOBILE MONEY REQUIRES FURTHER ANALYSIS WHEN...
Type of emergency	Sudden onset, slow onset, recurring.	It is a slow and/or recurring disaster that allows more preparation.	A sudden onset would shorten time for preparation, training and/or set-up.
Disaster prone zone	Countries or geographical areas that are prone to recurring disasters.	The response is in a disaster prone zone -as it enables preparedness and resiliency for vulnerable populations.	The context or nature of the disaster is a one-time occurrence.
MMSPs	Availability and readiness in affected area of MMSPs including distribution points of access (e.g. agents), previous experience with humanitarian e-transfers, and/or current NGO clients.	MMSPs are still active in the affected area, and have previous experience doing mobile bulk payments there (for development programs or humanitarian assistance).	MMSPs exist but may have been impacted by the disaster, or do not have experience with NGO disbursements, or do not have presences yet in the afflicted area.
Mobile phone ownership	Ownership, rather than access, of mobile handsets, and registration of unique SIM subscription.	Program participants have mobile devices, and they have their own registered SIM subscription.	Device ownership is low. (It may require creative solutions for wholesale handset purchase).  Recipients own handsets but their SIM is not registered correctly. (E.g. when registration is not strict and multiple people will have multiple SIMs, or people are registered under another's name such as a relative or an agent's).
KYC registration	Ownership of necessary documentation (e.g. National ID) to open an account, and KYC process.	Program participants have the requisite documentation (National ID), and the process is deemed relatively easy and straightforward.	Program participants lack National ID, and there is no tiered KYC <sup>32</sup> policy.  Program participants have proper ID, but the process is tedious (i.e. submission of multiple documents, signatures, biometrics) and time-consuming.
Number of e-transfers	Total number of e-transfers per program participant to be disbursed.	There are four or more e-transfers to be disbursed to each program participant.	Fewer than four e-transfers to be disbursed, as it often takes recipients who are new to mobile money several disbursements before they begin to trust the system enough to leave their cash in the mobile wallet.

Continued...

<sup>32</sup> Tiered KYC allows for different levels of identification linked to lower and upper limits of funds that can be stored in the account. Tiered KYC allows the bank to meet national regulations on a sliding scale and is often used to allow currently unbanked population with limited funds to engage in the formal financial sector. Examples of countries with tiered KYC accounts are Nigeria and Mexico.

## APPENDIX 5: DECISION GUIDE (CONTINUED)

A Guide to Decision-Making: When to Promote Mobile Money through Humanitarian E-Transfers.

CRITERIA	WHAT TO REVIEW	MOBILE MONEY SHOULD BE CONSIDERED WHEN...	MOBILE MONEY REQUIRES FURTHER ANALYSIS WHEN...
Length of project	Number of months that the disbursements continue.	The disbursements continue six months or longer.	Fewer than six months, as it often takes recipients time to practice using mobile money, and time to monitor successful usage and needs for refresher training.
NGO internal capacity	NGO expertise and capacity to implement.	The NGO has previous experience with e-transfers, and bandwidth from key units to stand up a deployment: procurement, finance, programs the NGO has staff capacity to conduct a market assessment, vet SPs, and process contracting it should be considered.	The NGO has never used e-transfers, is short staff or lacks a key department to act as focal point to manage the process.
Current status of mobile money	Number of program participants with existing mobile wallets, and maturity level of mobile money market.	When mobile money is prevalent based on number of mobile money subscriptions.	There is limited usage of mobile money such that recipients are not even aware such services exist.
Program participant capability	Literacy and financial inclusion rates.	When literacy rates are high and mobile money subscription rates are significant.	Recipients have low levels of literacy and low levels of mobile money usage, more time and resources will be required for proper training.