



MOBILE MONEY CASE STUDY

A Comparison between Cash and Mobile Payments
in WorldFish's Aquaculture for Income and
Nutrition (AIN) Project

August 2014



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DISCLAIMER

The views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the U.S. Government

1 | INTRODUCTION

WorldFish is an autonomous, international, non-profit, scientific research center. It was created to conduct, stimulate and accelerate research on fisheries and other living aquatic resources. WorldFish (WF), headquartered in Penang, Malaysia, is an integral part of the Consultative Group on International Agricultural Research (CGIAR).

The USAID-funded Aquaculture for Income and Nutrition (AIN) project is a five year transformative investment in aquaculture focused on 20 southern districts in the Barisal, Khulna and Dhaka divisions of Bangladesh, and was launched in October 2011. Through a small grant provided by USAID's Mobile Solutions Technical Assistance and Research (mSTAR) project, WorldFish is piloting the use of mobile financial services in Khulna and Faridpur. This pilot is testing whether mobile financial services can provide populations living in remote areas of Bangladesh with access to a new way of receiving money instantly.

Previously, WorldFish did not use mobile financial services to make payments because there was a lack of understanding and training around how to cash out, disburse and check balances. The organization, therefore, found bank transfers to be a more viable option to transfer money to staff. The initial plan for the grant is to assist with disbursing conveyance allowances via mobile money using bKash. Since bKash requires corporate accounts to be linked to a BRAC bank account, WorldFish decided to forgo opening a corporate account to manage bulk payments. Instead, it has opted to use a partial over-the-counter (OTC) approach, whereby it has a bKash agent send funds to its target recipients' bKash accounts.

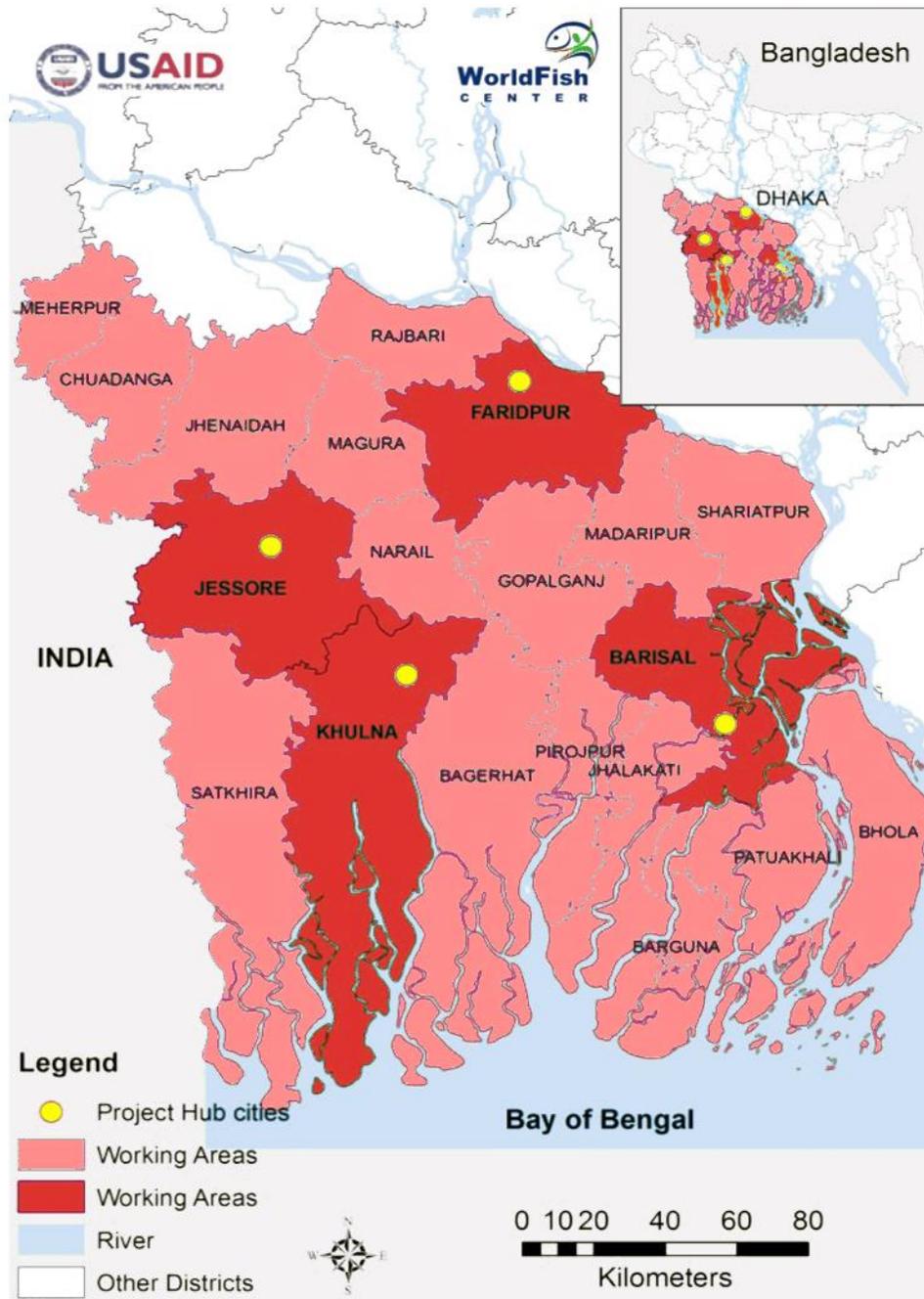
If the pilot runs successfully, it will be extended to the other 20 districts where AIN implements its activities.

2 | PILOT OBJECTIVES

The pilot's overall objective is to determine if mobile financial services are a viable tool that can be utilized in Bangladesh to pay farmers. The specific objectives of the pilot are:

- To increase the receptiveness of staff and beneficiaries to using mobile financial services
- To test using mobile financial services to transfer payments to staff and beneficiaries
- To improve accountability, traceability and transparency of fund disbursement

3 | PROJECT AREA



Map 1: AIN Project Area

4 | FINANCIAL PROCESS FLOW USING CASH

Previously, financial disbursements were handled by AIN’s finance department in the Khulna office. The finance department processed cash disbursements for training allowances, per diems, conveyance allowances and other training-related expenses. The finance office provided a cash advance to Technical Specialists (TSs), who then disbursed the cash to Field Supervisors (FSs), who then disbursed the cash to Extension Facilitators (EFs), who finally disbursed the cash to farmers. The step by step cash flow procedure is depicted in Figure 1 and detailed further below.

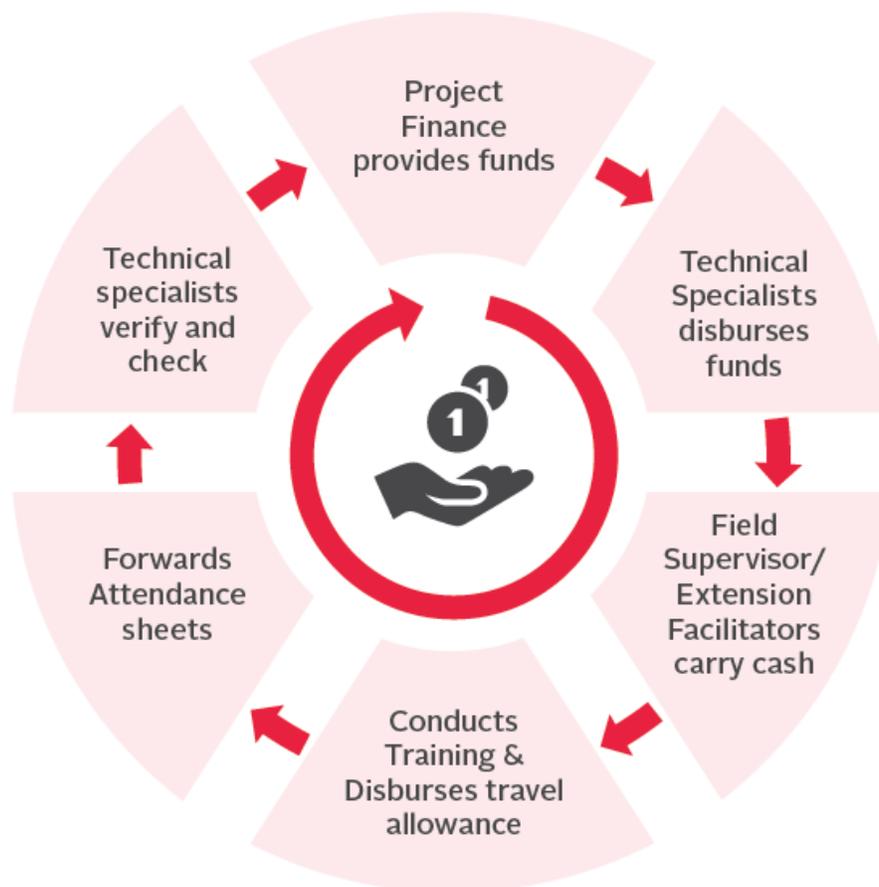


Figure 1: Payment process flow using cash

Step 1 | TSs estimate finance needs for training sessions that are planned for March to September of each fiscal year. TSs give a budget, a list of planned training sessions, and a breakdown of expected expenses to the project manager and finance office for their review and approval.

Step 2 | The finance department reviews the budgets for the training sessions. They make adjustments as needed and provide a cash advance each month to the TSs within 1-2 days.

- Step 3 |** TSs collect the advance amount in cash from the Khulna office. TSs are required to physically travel to the Khulna office from their various working locations. This requires taking public transportation or using motorcycles. It takes around 3-4 days to distribute the cash due to the necessary travel. Some staff are required to travel from as far as Satkhira (59 km from Khulna) and Paikgacha (61 km from Khulna). On average, staff spend a minimum of 6 hours in transit.
- Step 4 |** TSs distribute the collected cash to FSs and EFs, which takes approximately 8-10 days because of the distance between locations.
- Step 5 |** EFs then disburse the farmers' conveyance allowances and prepare a "Farmer's Group Session Attendance" sheet. Each individual farmer is required to attend the training workshop to be eligible to receive the BDT 40 conveyance allowance. Farmers are required to sign the "Farmer's Group Session Attendance" sheet to verify attendance and receipt of money.
- Step 6 |** EFs forward the "Farmer's Group Session Attendance" sheet to FSs for their review and signatures. FSs review the attendance sheet and forward it to their supervising TS for their final review, taking approximately 3-5 days.
- Step 7 |** TSs verify the farmer's list and forward it by courier to the finance department located in AIN's Khulna office. This takes another 2-4 days.
- Step 8 |** The finance assistant checks and verifies the attendance sheet, and writes a summary to collect signatures from the chief of finance and the project manager.

The entire process (Steps 1-8) takes approximately 18-22 days, meaning that the finance department has to keep track of advances for up to 22 days. The finance team receives disbursement documentation at the end of each month from hundreds of trainings sessions, and is under pressure to release payments for the next month very quickly. Verifying the paperwork in a very short time places finance staff under immense duress, and they normally work late into the evenings at the end of each month. This translates into additional office hours which is not officially reimbursed, documented or sanctioned by management.

5 | FINANCIAL PROCESS FLOW USING MOBILE FINANCIAL SERVICES

Given Steps 1-8 detailed above, there was a clear need to develop a new system to disburse payments. mSTAR approached WorldFish in early 2014 to discuss how to incorporate mobile financial services into its finance operations. After several meetings, a new finance process was developed; see Figure 2 below. Steps 1-11 below describe the new financial process, detail the changes from the previous cash method, and note the decreases in time.



Figure 2: Payment process flow using mobile financial services

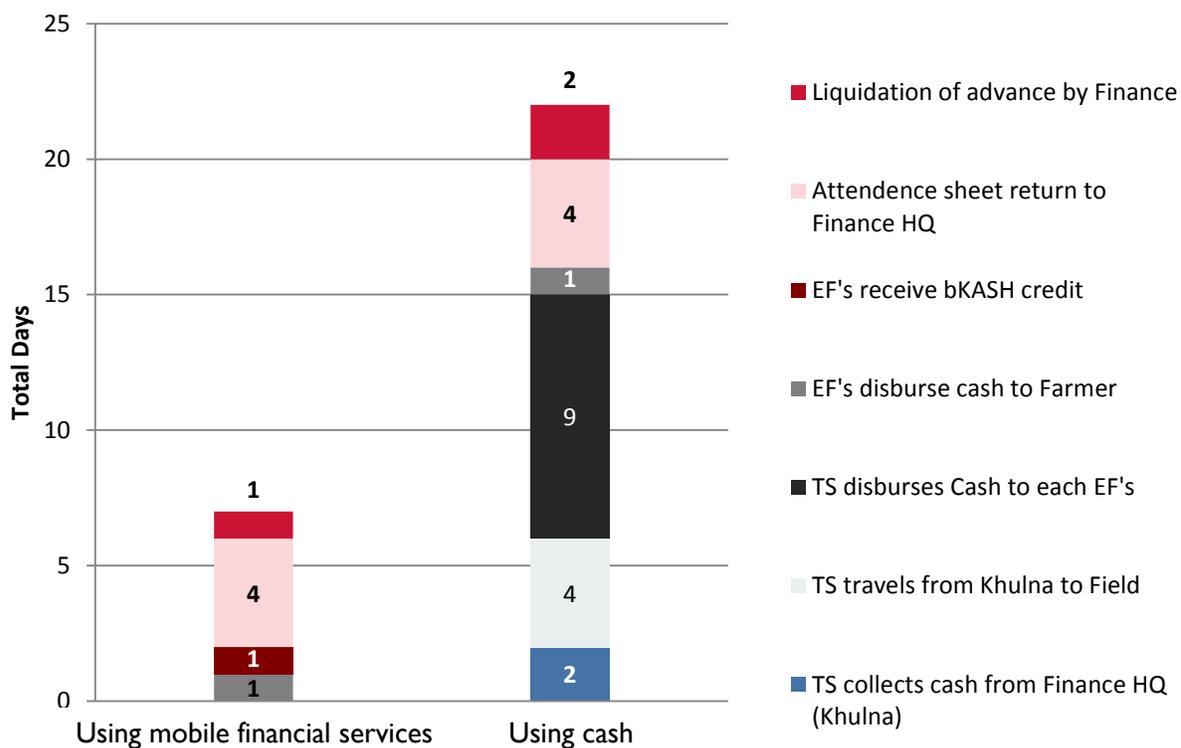
- Step 1 |** TSs present a budget, a list of planned training sessions, and a breakdown of expected expenses to the project manager and finance office for their review and approval.
- Step 2 |** The finance department reviews the proposed budget and estimates for the training sessions. For each month, EFs submit a work plan for 3 training sessions and finance provides an advance to EFs to execute the training sessions. This advance is sent directly to EFs via their bKash mobile money account. The use of mobile money eliminates the need for TSs and FSs to carry cash for 3-4 days.
- Step 3 |** Each farmer is required to attend training workshops in order to be eligible to receive the BDT 40 conveyance allowance. Farmers must sign the “Farmer’s Group Session Attendance” sheet to verify attendance. It takes approximately 2 working days to complete the training sessions and collect the attendance sheets.
- Step 4 |** EFs submit the attendance sheet to the assigned FSs for their verification and signature, which takes approximately 1-2 working days.

- Step 5 |** Verified attendance sheets are then submitted to EFs for their final verification and signature. EFs receive the attendance sheet within 2 days and submit it by courier to the Khulna finance office.
- Step 6 |** The finance department in the Khulna office receives the attendance sheet and thoroughly reviews it by verifying the names, signatures and date on the attendance sheet, often comparing farmers' signatures against previous attendance sheets for confirmation. This normally takes about 2 hours per 30 farmers.
- Step 7 |** In order to certify that management is aware of the workshops provided and that they are in line with the activities detailed in the project's monthly work plan, the project manager must provide a signature indicating their approval. Approval can take between 5 minutes to a few days, pending the availability of the project manager.
- Step 8 |** Once approved, individual claims for workshop trainings are summarized into one payment advice sheet. The payment advice sheet contains each EFs' claims for the training sessions given in a period, which are reconciled against their previous advances. The period may range from daily claims to weekly claims. Payment advice sheets are checked, verified and then approved by finance and project management. Budgets for payment are also checked using WorldFish's Enterprise Resource Management software. This step takes up to 1 hour.
- Step 9 |** WorldFish's finance department then submits the payment advice sheet to a local bKash agent, who processes and records the individual transaction IDs within 2 hours.
- Step 10 |** The agent returns the payment advice sheet and finance verifies a sample of the sheet by calling 3-4 individuals to confirm that the payments were received within 30 minutes.
- Step 11 |** Finance reimburses the bKash agent by wire transfer or by cheque.

6 | TIME AND RESOURCES SAVED

Prior to mSTAR's pilot, TSs were required to travel to the Khulna office to collect cash, which took 1-2 days. TSs then had to meet with FSs to transfer the cash, which took between 3-4 days. Then FSs had to meet with EFs to transfer the cash, taking another 8-10 days. The total time, therefore, to send cash from the Khulna office to EFs took 12-16 days, on average.

Comparison between cash and mobile financial services



Using mobile financial services, EFs receive a one month advance from the Khulna office in a matter of hours (though in rare cases there can be a 1 day delay). While EFs still send attendance sheets to the Khulna office via FSs and TSs, taking 5-7 days, they no longer have to wait an additional 12-16 days to receive an advance for the next planned training workshops.

When using cash, there were security risks that were not addressed by AIN. TSs carried between 2-3 lak takas (USD \$2,564 - \$3,846) from Khulna to their designated working area, sometimes using public transportation. While this risk was realized, it was never officially addressed by management. Using mobile financial services, there is no longer a security risk to TSs because they are not required to go to Khulna and do not have to travel with cash. Further, since EFs receive funds directly into their bKash accounts, they are not exposed to the security risks of carrying cash.

In addition to being more secure, using mobile financial services also saves time by not requiring TSs to travel to the Khulna office to collect cash. The time saved, which can be up to one full day, can now be used to work on technical work, rather than on financial processes.

Finally, using mobile financial services has decreased the burden on finance and project staff through a more streamlined process. Using cash, finance staff had to track advances given to TSs for up to 22 days. The Finance Assistant at the Khulna office, Amina Khatun, noted, "This June is the first time we did not have to work late at the end of the month! We also appreciate the clear directions and mapping done by mSTAR, we now know what our tasks are."