



A New Model for Delivering Cash Relief

FINDINGS FROM THE IRC'S CASH RESEARCH & DEVELOPMENT PROGRAM

PAKISTAN 2015-2016

Summary

The IRC's cash research priorities aim to understand how best cash can be delivered to achieve greater scale and better outcomes for people affected by crises. This briefing shares the results of the IRC's year-long research and development effort to improve the speed and cost efficiency of delivering cash assistance.

At baseline, we found that cash transfer programs, when delivered at scale, are hampered by challenges in identifying the right people to provide with cash assistance, onerous mechanisms for delivering that assistance, and heavy data management and approval processes which delay implementation and require costly staff time to administer.

The IRC partnered with Segovia technology, the national government social protection system, and Telenor, a mobile money provider, to introduce a series of innovations to deliver cash to crisis-affected households in Pakistan. Over the course of three pilot projects, we demonstrated ability to cut time to delivery by half, reduce the cost of delivery by more than half, and retain similar levels of beneficiary satisfaction with program implementation as at baseline.

These pilots are among the first to demonstrate how piggybacking on social protection can drive efficiencies in humanitarian cash transfer programming. They also offer a set of performance metrics which allow us to benchmark and compare delivery models against one another and establish measures to characterize the quality and efficiency of humanitarian cash relief.

Overview

Cash relief is one of the most effective and well-evidenced tools to help vulnerable people survive and recover in emergencies. Research has demonstrated that it is effective in enabling affected populations to meet basic needs, improve food security and economic well-being, and is increasingly used to support a number of outcomes in emergency settings. In 2015, the High Level Panel on Humanitarian Cash Transfers recommended large-scale expansion of the use of cash relief in humanitarian settings and, at the World Humanitarian Summit in 2016, the Grand Bargain on humanitarian financing included global commitments to increase the use and coordination of cash-based programming and invest in new delivery models which can be increased in scale.

As acceptance of cash as an effective method of delivering assistance has grown, attention is now shifting towards **how** to best deliver cash to people affected by crisis. Currently, it can take up to eight weeks for cash to be disbursed to affected families, and often much longer to reach significant scale. Delays in cash distribution can force people affected by crises to resort to negative coping mechanisms such as cutting the size of meals, engaging in harmful work practices and selling their assets. Increasing the speed of cash distribution in crises will support communities' recovery and help prevent long term devastation. Increasing the cost efficiency of cash relief - making it cheaper to administer, transparently manage and comparable across programs - will mean scarce aid resources reach many more people when they need it most.

The International Rescue Committee (IRC) is committed to scaling the use of cash in humanitarian crises while simultaneously testing the use of a range of delivery models, inclusive of government, private sector and civil society, to find the most **effective and efficient** means of delivering assistance. This framing shifts the focus away from how humanitarian agencies might most effectively deliver cash to focus instead on how crisis-affected people may receive cash assistance. To this end, the IRC has piloted and rigorously tested an innovative approach to cash relief programming. This approach leverages a pre-existing database and a technology enabled platform to identify people faster, streamline the paperwork and process of program implementation, and to process payments to those affected.

This next generation model for delivering cash in emergencies has cut in half the time required to disburse payments to beneficiaries, and shows great potential for reducing the operating cost of cash delivery. Furthermore, by utilizing pre-existing data on vulnerable households from a social protection program, this approach reduces by approximately 90% the opportunity cost of lost wages to the community due to participation in the program. Additionally, our approach is based on agile development which enables us to iterate each phase of development through a data-driven approach. We systematically measure program performance against cost, time and user experience metrics and benchmark against previous programs. We believe this model of service delivery and performance benchmarking of all cash projects will make a valuable contribution to the discussion on cash assistance delivery models and ultimately will have a positive impact for cash recipients. This briefing summarizes the methodology and results from the three pilot tests of the new operating model in Sindh Province, Pakistan.

The Cash R&D Project

In December 2014, the IRC assessed a cash transfer program in Pakistan to identify the pain points in cash assistance delivery. The assessment indicated that 43% of the IRC's total project implementation time and 19% of its non-transfer costs go towards identifying and selecting beneficiaries, with an additional 37% of project costs spent on support and coordination. Furthermore, the report suggested that although our current internal process (beneficiary and workflow management and approvals) and payment mechanism was sufficient for delivering cash at a small scale, we would need to develop/adopt a more efficient system to deliver cash at scale. Given these findings, the IRC launched the research and development (R&D) program to address these two main pain points.

The R&D program included two phases (see Table 1 below). Phase one tested different targeting approaches side by side in order to identify the most time and cost efficient approach to identifying and registering beneficiaries while still resulting in high community satisfaction. In Phase two, the best-performing targeting approach was selected and built into a single technology platform to systematize the collection and management of beneficiary data, including field-level data collection, with the payment processing. For Phase two, the IRC and Segovia Technology partnered to adapt the Segovia beneficiary management platform to create an end-to-end beneficiary and workflow management portal to improve the operational efficiency of processing payments to beneficiaries. The results from both phases are presented in Tables 2 and 3.

The IRC's Cash Relief Performance Metrics

> Speed

Time to delivery from a pre-defined starting and end point for the program. The IRC defined the starting point as the day the IRC, in collaboration with the district authorities, decided where the project would be delivered. The end point was defined as the day the first recipient cashes out their transfer amount.

> Cost-Efficiency

Cost-transfer ratio, the ratio of all non-transfer costs to the total value of the money transferred, and non-transfer cost per household, the cost of reaching one household with a cash transfer

> User experience

Community satisfaction (including recipients and non-recipients) with each step of the process including creation of village committee, selection of clients, and the complaint response mechanism. For recipients, we also captured satisfaction with the payment process. As a part of user experience, the IRC also captured the monetary value of community time involved in each approach

> Targeting Accuracy

Captured using an abbreviated version of the DHS wealth index for Pakistan consisting of 14 questions and a series of individual questions establishing

TABLE 1: Design Features of the Cash R&D Pilots

	Phase 1		Phase 2
	Pilot 1	Pilot 2	Pilot 3
Targetting Approach	Community based targeting	Use of pre-existing beneficiary information	Use of pre-existing beneficiary information
Digital Data Collection	No	No	Yes
Technology Platform	No	No	Yes
Cash Delivery Mechanism	Mobile money	Mobile money	Mobile money

These pilots make two critical contributions:

- (i) They serve as a first step in practically testing out the feasibility of an idea that has gained significant traction since the World Humanitarian Summit- leveraging social protection systems for shock response
- (ii) They lower the barriers to entry for other organizations to use the same cash delivery model. IRC's approach to rigorous testing of a variety of targeting approaches and implementation models, and publishing the results from these studies, allows other organizations to benefit from the experience and learning. The primary pathway to scale for this model is adoption by other operational agencies working at delivering humanitarian cash transfers at scale, including UN agencies, NGOs, and national government disaster management authorities

A more efficient operating model

The cash delivery model developed and tested in our pilots is a modern, unified approach for emergency cash relief. It has been built from the ground up around four primary elements:

1. Pre-positioned beneficiary lists

Departing from the current practice of community-based identification of beneficiaries or door to door household level data collection, our model draws on pre-existing data from a national social protection registry. The new model demonstrates the feasibility and efficiency of leveraging long term development programs such as social protection systems to scale-up humanitarian cash transfers. Instead of waiting for a disaster to strike before collecting data on people in need, this approach enables us to identify from existing data sources those people likely to be in need when an emergency happens. This results in significantly more rapid and cost-efficient beneficiary identification than traditional approaches.

2. Mobile data collection

Pad-and-paper documentation of transactions remains commonplace in aid programs. Our new model collects individual and household-level beneficiary information and outcome data using android devices that feed directly into a beneficiary management platform. The updated information is reconciled with the pre-positioned data from the national socio-economic registry, and beneficiary lists are automatically updated. This approach minimizes the amount of data which needs to be collected, reducing the amount of time implementers and beneficiaries spend collecting or providing data, and has the added benefit of real-time transaction tracking. It further allows for seamless linking of post distribution monitoring data with beneficiary information and transaction history.

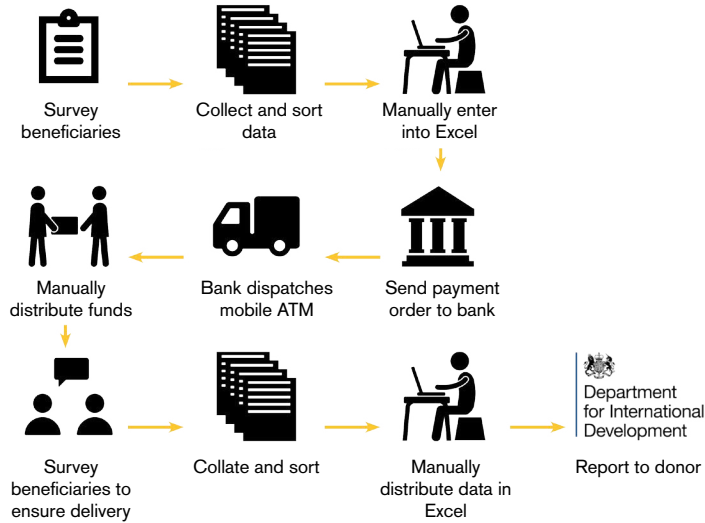
3. Digital payment to beneficiaries

In the past, manual distribution of paper currency was the default. Our new model utilizes mobile money networks to deliver cash to people in need faster. Additional digital payment systems, such as ATM cards or other channels used by social assistance programs could also be leveraged to improve the speed and ease of delivering cash relief.

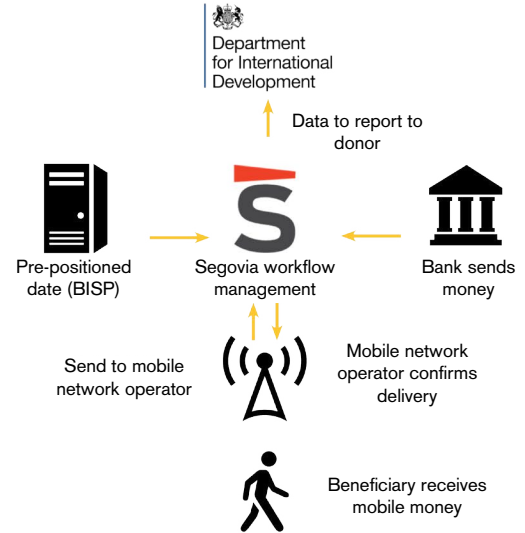
4. End-to-end workflow management

The backbone of the model is a technology platform that streamlines and automates the cash delivery process as a whole. The technology, piloted using the Segovia platform, links together the pre-existing household data, with the bank or digital payment service provider in order to bring every step of a cash transfer program into one workflow system. This not only saves time, but also creates an audit trail of user access and decisions, and tracks program performance in order to analyze productivity and blockages. This model enables much more reliable beneficiary-level monitoring of payments made, received and spending. This gives us assurance that we are reaching the right people; getting to those people as rapidly as possible; and identifying bottlenecks in the payment process.

BUSINESS AS USUAL



NEW MODEL



Phase 1: Testing Targeting Approaches

Two targeting approaches were tested and compared: 1.) Community-based targeting where communities identified criteria by which households should be selected for emergency assistance, and then produced a list of names to receive the aid; and 2.) Data-based targeting where household poverty scores from Pakistan's national socio-economic registry were used to identify and register the most vulnerable households in identified communities. The IRC typically either conducts a door to door household level survey or uses community based targeting to identify vulnerable households. The initial assessment in 2014 provided us with rough figures on the performance of a door to door household survey targeting approach, so for the purpose of the current operational research, we compared a community based approach with a more novel method of identifying and selecting households.

In Pakistan, our pre-existing data is provided by the Government of Pakistan's Benazir Income Support Program (BISP), a nationally administered social protection program based on a socio-economic registry of 27 million households. Drawing on government held beneficiary data in this manner is a new approach which has not previously been used for humanitarian assistance in Pakistan. When piloted alongside a manual, community-based targeting approach, it was shown to have similar levels of targeting accuracy, cut by 2/3 the opportunity cost of lost wages to the community due to participation in the program, and demonstrated the potential to speed-up the time to delivery by 18 days (from 35 days to 16 days) as shown in columns A and B of Table 2. The data-based targeting approach clearly out-performed community-based targeting, and as such was prioritized as the basis for phase two of pilots.

TABLE 2: Results from Phase 1 of the IRC's New Operating Model for Cash Relief Delivery

	A	B
	Community Based Targeting	Use of pre-existing beneficiary information
Number of beneficiaries reach	150	150
Time to Delivery (days)	35	16*
Cost-Transfer Ratio	1.78	1.71
Non-transfer (Admin) Cost per household	\$ 122.97	\$ 118.05
User-experience- Monetary value of community time use (equivalent lost wages based on self-reported income)	\$ 12.27	\$ 4.20
User-experience- satisfaction with beneficiary selection	96%	95%
User-experience- satisfaction with payment process	99%	100%
Targeting Accuracy, % in lowest 2 wealth quintiles	99%	97%

*This figure assumes pre-positioning of data

Phase 2: An end-to-end operational model

Phase two of the work continued to draw on BISP pre-existing household-level socio-economic data as the basis for identifying vulnerable households in disaster prone areas. The household data was integrated into the Segovia beneficiary management system and an algorithm was used to automatically sort and clean the data in order to produce a preliminary beneficiary list based on the poverty score assigned by BISP to each family in the specified geographic area. Program staff conducted community visits to verify, and if necessary to update, this data using android devices and the mobile data collection system directly connected to the beneficiary database in the Segovia platform. Once all the information for a given beneficiary was collected and confirmed in the Segovia platform, they were approved for payment. When compared to the community-based targeting approach which required 35 days to deliver cash to 150 people, this new model reduced the time to delivery to 19 days to reach six times as many beneficiaries. This step-change in time to delivery dramatically cut the opportunity cost of lost wages to beneficiary households due to participation in the program, and reduced by approximately 2/3 the cost transfer ratio, as shown in column C of Table 3.

TABLE 3: Results from Phase 2 of the IRC's New Operating Model for Cash Relief Delivery

	A	C
	Community Based Targeting	Use of pre-existing beneficiary information + technology
Number of beneficiaries reach	150	900
Time to Delivery (days)	35	19
Cost-Transfer Ratio	1.78	0.63
Non-transfer (Admin) Cost per household	\$ 122.97	\$ 43.38
User-experience- Monetary value of community time use (equivalent lost wages based on self-reported income)	\$ 12.27	\$ 1.51
User-experience- satisfaction with beneficiary selection	96%	92%
User-experience- satisfaction with payment process	99%	99%
Targeting Accuracy, % in lowest 2 wealth quintiles	99%	Not measured

Conclusion

> **'Piggybacking'¹ on the national social protection system** to deliver cash relief in emergencies cuts time and improves the cost efficiency of delivery. The findings offer practical lessons on how donors, humanitarian agencies, national governments and the private sector might work together to deliver humanitarian assistance more efficiently.

> **Preparedness is critical** – having arrangements in place to secure the data, the technology available to make use of that data, and the pre-agreements with payment providers. Without these three components in place in advance of a crisis, the model will not result in substantial time or cost savings.

> **Technology platforms are critical for optimizing use of the pre-existing data** - given the different types and structure of existing data sources, technology tools to make best use of this data are necessary to drive time and cost efficiency; to reach more people faster during a crisis; and to improve program activity analysis and risk assurance and auditability.

> **Program performance measures**, such as speed, cost efficiency and user satisfaction, are effective tools to compare across programs, and are useful to understand beneficiary outcomes from improved service delivery (such as reduced opportunity costs for program beneficiaries). Performance metrics allow us to benchmark delivery models against one another as well as hone in on the elements of design that need further efficiency improvements

Further research

Further research is needed to test the suitability of the proposed operational approach:

- > in the aftermath of a crisis
- > in contexts where digital national social protection registries do not exist
- > for displaced and refugee populations
- > for male and female clients

Expansion of measures of the 'user experience' and cost would help test the potential risks and gender implications of the approach. All transfers in the Pakistan pilot are made to women who are registered recipients of the social protection scheme, but anecdotally we know that the transfers were primarily cashed out by male household members in our program areas. Further research is required to examine whether there are differences in how men and women receive or use the mobile transfer as well as any unanticipated risks such as increased physical or emotional abuse linked to the transfer. Alternative proxies for 'cost to users' other than lost income may also point to a gender differentiated 'user experience'.

¹A recent report by Oxford Policy Management (2015) presents five main options for scale-up using an existing social protection system in response to covariate shocks. According to their typology, IRC's current cash project utilizes the 'piggybacking' option, i.e. it uses one administrative element, the national socio-economic registry, of an existing social protection system to deliver a separate program.



This project was funded with UK aid from the UK government.



This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the International Rescue Committee and do not necessarily reflect the views of USAID or the United States Government.



NETHOPE
COMMITTED TO IMPROVING THE HUMAN CONDITION

