Digital Delivery of Humanitarian Aid to Improve Food Security of Women in Afghanistan

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Sector(s): Crime, Violence, and Conflict

Sample: 2,409 women identified as vulnerable

Initiative(s): Crime and Violence Initiative (CVI)

Target group: Adults

Outcome of interest: Post-conflict recovery Food security Nutrition

Intervention type: Digital and mobile Unconditional cash transfers

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Partner organization(s): Community Driven Development Organization (CDDO), HesabPay, Uplift Afghanistan, UK International Development

Populations living in fragile and conflict-affected states face heightened food insecurity risks and can rely heavily on international aid. In 2021, Afghanistan fell into a severe humanitarian crisis following the Taliban's seizure of the government.[1] This crisis is ongoing. Researchers conducted a randomized evaluation to test the impact of delivering digital aid payments on food security and mental well-being for vulnerable female-headed households in Afghanistan. Digital payments led to improved food security and mental well-being for beneficiaries. Digital delivery of aid was also cost-effective and transparent, showing no evidence of diversion to the de facto Afghan authorities.

Policy issue

People living in fragile and conflict-affected states face heightened food insecurity risks and may depend heavily on international aid.[1] However, donors have considered withdrawing support to these areas due to concerns that the aid they send may not reach intended beneficiaries and could instead support hostile groups or regimes. For example, in 2023, the US House of Representatives passed a bill to halt the delivery of funds to Afghanistan that could support the Taliban, either directly or indirectly. Moreover, aid organizations are facing pressure to implement delivery strategies that are more cost effective, as donor resources fail to keep pace with need. Between 2018 and 2021, donors reduced humanitarian food budgets by 40 percent per person, from US$85 to US$51.

An increasing number of development organizations are transitioning to digital methods for providing cash assistance, but the evidence supporting its effectiveness is mostly limited to more stable settings. In contrast, there is less research on the impacts of digitizing aid payments during humanitarian crises, especially in settings with major cultural and political restrictions.

Context of the evaluation

In 2021, the Taliban seized control of the Afghan government. Following this event, the country experienced a severe economic collapse and humanitarian crisis. The GDP of Afghanistan contracted by 30-35 percent, and Afghan citizens have since been at an ongoing risk of famine. Additionally, the Taliban has implemented some of the world's most gender-repressive policies, which leaves women especially vulnerable. Oppressive regimes like the Taliban can hamper effective delivery of aid by diverting resources away from intended beneficiaries. Researchers have extensively documented these strategies in Afghanistan.

In this evaluation, the researchers worked with locally elected Community Development Councils (CDCs) in three cities, Kabul, Herat, and Mazar-i-Sharif, to identify-female headed households that were classified as very poor. According to baseline surveys, about fourteen meals in the week prior consisted of only bread and tea (of 21 total, assuming three meals per day), mean household income in the prior thirty days was about AFN 358 (about US$4), and employment was nearly non-existent. The majority of women in the selected group had either no schooling (63.3 percent) or at most primary schooling (33.9 percent). None of the women reported that they had transferred money using a digital payment platform before.



Women buying vegetables at a market

Photo credit: Alfa Net, Shutterstock.com

Details of the intervention

Researchers conducted a randomized evaluation to test the impact of digital aid payments to Afghan women on their food security and mental well-being. The researchers partnered with HesabPay, an Afghan digital payment system, to transfer digital vouchers valued at AFN 4,000 (about US$45) to beneficiaries' mobile phones every two weeks over the course of the two-month

program. The platform did not require a smartphone and was compatible across mobile operators, allowing participants to use their current phones without a new SIM card. The beneficiaries could redeem these vouchers for any available goods at local merchants who were part of the HesabPay network.

After CDCs assisted in identifying 2,409 women who were highly vulnerable, the researchers randomly assigned 1,208 households to an "early" group that received benefits between November and December 2022, and the remaining 1,201 households to a comparison "late" group that received benefits from January to February 2023. The effects for the early group were compared to the late group's baseline values before they were phased into the program. All beneficiaries were onboarded in a session where they received information about the program, provided consent, opened an account with HesabPay, and conducted a test purchase with a partner merchant using the platform.

The researchers conducted a baseline survey during onboarding and four surveys during the four months payments were taking place for both groups. Through their collaboration with HesabPay and with permission from the participants, the researchers also had access to transaction data that could be linked to the participants' survey data.

In addition to receiving ethical review and approvals from an institutional review board, researchers made efforts to address and account for ethical questions by including local- and internationally based Afghans to either lead or work with each of these collaborative organizations and fully participate in all decision-making. The coordinating international NGO, Uplift Afghanistan, was founded by Afghan women and survey data were collected by an all-female enumerator team. This helped to ensure representation of the views of the participants, sensitivity to possible risks, and fair distribution of the program's benefits and costs. After launch, the entire team continued to meet every week to assess progress and implement any changes deemed necessary. The team was committed to early termination of the program, the evaluation, or both, if adverse events were to occur. For more on the researchers' discussion of ethical considerations, see section D of the supplementary materials.

Results and policy lessons

The researchers found that digital aid payments led to improved food security and mental well-being of vulnerable beneficiaries. Digital payments were also a cost-effective and transparent method of delivering aid in perhaps the most restrictive political environment and showed no evidence of diversion.

Food security: On average, beneficiaries in the early group went almost one fewer day per week skipping meals than those in the late group. The share of households in the early group where all members were able to regularly eat twice a day in the week prior increased by 9.3 percentage points in comparison to the late group. Beneficiaries in the early group ate more diverse diets than those in the comparison group, increasing their consumption of rice, beans, chicken, and dairy.

Mental well-being: On average, 4.8 percent of individuals in the comparison group reported they felt their economic situation had improved in the past 30 days, while those in the early group were 33.5 percentage points more likely to report their economic situation had improved. They were also 28 percentage points more likely to report being very or quite happy, relative to 15.4 percent in the comparison group.

Diversion of digital aid: The digital payment platform automatically cross-checked beneficiary names with sanctions lists to prevent funds from reaching hostile actors. Additionally, through direct questioning and a list experiment, the researchers found that digital payments did not lead to more informal payments to authorities. Transaction data revealed that 95.1 percent of funds were used at registered merchants and, cumulatively, participants spent more than 70 percent of their funds the day they received them. Lastly, none of the registered merchants that participated in the onboarding reported paying extra-legal taxes, being asked favors, or being aware of other merchants doing so either.

Cost-effectiveness: The cost of delivering a single dollar was 6.7 cents in total, including recruitment costs. By comparison, the World Food Programme's global cost to deliver cash-based humanitarian aid is 17 cents per dollar. The researchers estimated

that if the World Food Programme had digitally delivered all of it cash-based aid in 2022, the organization would have yielded enough cost savings to support an additional 77,000 households or 538,075 individuals during the four-month lean season.

While these results mark a promising path for digital aid, the researchers urge further research on the timing and amount of digital aid, the costs and benefits of digital versus physical cash delivery, ideal enabling conditions for this method, and approaches for onboarding participants in fragile contexts.

Based on these findings, the World Food Programme is currently employing this approach with 14,000 households with potential plans to service an additional 17,000 households by the end of 2024.

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1. https://www.usip.org/publications/2023/01/wrestling-humanitarian-dilemma-afghanistan