

Electronic G2P Payments: Evidence from Four Lower- Income Countries

Increasingly, governments and donors are looking to move their social cash transfer payments from cash to electronic and, in some cases, incorporate financial inclusion objectives into these payment schemes. This momentum toward electronic payments (e-payments) rests on the promise of improving transparency, decreasing costs, and reducing leakage on the one hand, and facilitating value-added services through financial access on the other. In 2012, the CGAP Focus Note “Social Cash Transfers and Financial Inclusion: Evidence from Four Countries” (Bold, Porteous, and Rotman) considered the case for financially inclusive social cash transfers by analyzing evidence from government-led cash transfer programs in four middle-income countries (MICs), in which the programs and the e-payments systems on which they relied were relatively mature and robust.

The Focus Note, which investigated the large social cash transfer programs in Brazil, Mexico, Colombia, and South Africa, looked at the value of e-payments for the different stakeholders involved: the affordability of financially inclusive services in social cash transfer programs for the government; the profitability of offering such services for the payment service provider (PSP); and the likelihood of recipients using the services for more than just receiving the transfer. The research found that, in the case of the cash transfers in these MICs, building inclusive financial services can be affordable to the government and profitable to the PSP if the government pays adequate fees, but recipients were not quick to adopt the services and use them for personal needs beyond receiving the transfers.

But what about the experiences in less-developed countries? In contrast to MICs, these countries typically have more difficult operating conditions stemming from less-developed transportation and mobile infrastructure, being at an earlier stage of development in the banking and payment systems,

and having less experience administering social cash transfer programs, to name just a few. The transition from cash to e-payments will undoubtedly look different in Brazil than in Uganda. We wanted to further examine the opportunities and challenges in implementing electronic social cash transfers in less-developed countries¹ from the perspective of the same three core stakeholder groups: program funders (government and/or donors), PSPs, and recipients.

This Focus Note presents the evidence gained from a comprehensive study of the experiences in developing and implementing e-payment schemes linked to financial inclusion in four lower-income countries—Haiti, Kenya, the Philippines, and Uganda (see Table 1 for country backgrounds).² The research aimed to uncover (i) the development and evolution of the program; (ii) the current delivery and payment process(es); (iii) the costs and benefits to programs and providers of using e-payments; and (iv) the experiences of e-payment recipients and staff at the field level.

Through a comparative analysis of the four programs’ design and implementation experiences, this report offers six key findings and five specific lessons for cash transfer program managers and PSPs (particularly but not exclusively in lower-income countries) to consider when planning for electronic government-to-person (G2P) payments.

Program Overviews

The four cash transfer programs—Ti Manman Cheri (TMC) in Haiti, Cash for Assets (CFA) in Kenya, the Pantawid Pamilyang Pilipino Program (4Ps) in the Philippines, and Social Assistance Grants for Empowerment (SAGE) in Uganda—were selected from a broader range of programs in lower-income countries based on the programs’ adoption of

1 We refer to “less developed” countries and “lower income” countries throughout this report to account for the varying levels of development among the four countries of the programs studied. Haiti, Kenya, and Uganda are low-income countries, while the Philippines is a lower-middle-income country. The Philippines was selected for this study, despite its lower-middle-income country status, to maximize variation across country and payment system contexts.

2 Detailed case studies on each of these programs are also available at <http://www.cgap.org>.

e-payments, the type of e-payments they employ, the PSPs they partner with, their geographic diversity, their target recipient group, and whether they are government- or donor-led programs. The

programs' characteristics are shown in Table 2 and further described below. Timelines of the design and implementation of the programs can be found in Annex A.

Table 1. Country Backgrounds

	Haiti	Kenya	Philippines	Uganda
Population (in millions)	10.2	43.2	96.7	36.3
Population % urban	55	24	49	16
Gross domestic product per capita (current US\$)	771	865	2,587	547
Human Development Index ranking	T161	145	114	T161
Adult literacy rate (%)	49 (2006)	87 (2010)	95 (2008)	73 (2010)
Corruption Perception Index country rank	165	139	105	130
Account at a formal financial institution (% age 15+)	22	42	27	20
Bank branches/100,000 people	2.7	5.2	8.1	2.4
ATMs/100,000 people	N/A	9.5	17.7	3.9
SIM penetration (%)	61	70	106	47

Sources: World Bank (2011 and 2012), Findex (2011), and GSMA (2012). Human Development Index ranking out of 186 countries (UNDP 2012). "T" signifies a tie with another country. Corruption Perception Index country rank is out of 174 countries (Transparency International 2012).

Table 2. Program Characteristics

	Haiti	Kenya	Philippines	Uganda
Region	Latin American and Caribbean	Sub-Saharan Africa	Southeast Asia	Sub-Saharan Africa
Program name	Ti Manman Cheri (TMC)	Cash for Assets (CFA)	Pantawid Pamilyang Pilipino Program (4Ps)	Social Assistance Grants for Empowerment (SAGE)
Administered/ managed by	FAES (Government of Haiti's Social and Economic Assistance Fund)	World Food Programme (donor)	Department for Social Welfare and Development (government)	Ministry of Gender, Labor and Social Development (government)
Funded by	Government of Venezuela (donor)	World Food Programme (donor)	Government and donors (World Bank, Asian Development Bank, AusAid)	DFID (donor) and government
Target recipients	Mothers of school children	Food insecure households	Parents—school and health requirements	Senior citizens (primarily) and vulnerable households
Year started	May 2012	Pilot: January 2010 to December 2011 Full scale: January 2012	February 2008	Pilot: April 2011 to February 2015 (expected)
Conditionality	Yes	Yes	Yes	No
Number of recipients	75,000 (May 2013)	62,500 (July 2013)	3,712,953 (August 2013)	95,000 (July 2013)
Delivery method	Mobile money and cash	Debit card and bank account	Debit card and cash	Mobile money and cash

TMC is the first ever government-led cash transfer program in Haiti, reaching 75,000 mothers of school children after one year of operation and funded by the PetroCaribe Fund of the Government of Venezuela. From its start in 2012, the program transferred cash to recipients, conditional on their children's continued enrollment in school, using mobile money through mobile network operator (MNO) Digicel's TchoTcho Mobile product. Digicel was a close partner in both the design and early implementation of the payment scheme, which is led by FAES (Government of Haiti's Social and Economic Assistance Fund) within the Haitian government.

CFA is a joint World Food Programme (WFP)/Government of Kenya cash transfer scheme reaching food insecure households in seven³ arid and semi-arid counties in eastern and coastal Kenya where recipients work on community asset projects to build resilience against drought. Financial inclusion has been a core objective since the program's inception. Working with Equity Bank from the design and prepilot phases in 2009, the CFA program provided bank accounts to each recipient to receive his or her payments. WFP Kenya has recently conducted a competitive bid process and selected Cooperative Bank as its new PSP.

The 4Ps in the Philippines is a government-run, donor-supported conditional cash transfer program targeting poor households with a pregnant mother and/or children between 0 and 14 years old.⁴ The primary PSP is the Land Bank of the Philippines (LBP), the largest of three government-owned banks in the country, providing a cash card with which recipients can withdraw from LBP and partner automatic teller machines (ATMs). Forty percent of the 3.9 million recipients use this cash card, while the remaining payments are made over-the-counter (OTC) by several other contracted PSPs.

SAGE is the Government of Uganda's first major cash transfer initiative, targeting senior citizens and

vulnerable families. The Expanding Social Protection agency under the Ministry of Gender, Labor, and Social Development, with funding from various international donors, designed the unconditional SAGE payment scheme with several core objectives in mind: transparency, scalability, and financial inclusion. Currently being piloted in 14 districts around Uganda from 2011 to 2015, the government-led program pays recipients through the MNO MTN. Though working with MTN's Mobile Money Unit, the program does not use MTN's commercial mobile money product. Given MTN's limited network coverage in SAGE target areas, it provides either electronic or manual payments, depending on network availability. The e-payment is through a SIM-embedded card that recipients present to MTN agents to insert into portable pay phones.

Box 1. Financial Inclusion as an Explicit Objective?^a

The role of financial inclusion varies within each program's design and implementation, though there was an explicit focus of the programs in Haiti, Kenya, and Uganda. In the Philippines, the 4Ps did not design its payment system with an explicit objective to provide financial access or promote financial inclusion: it employs e-payments for efficiency's sake only. This may be influenced in part by the age of the program, as its design began before governments and donors considered adding financial inclusion as a desirable component of cash transfer programs. While SAGE and TMC both initially had financial inclusion as an objective, the programs had to deprioritize this objective to focus on reliably delivering payments to recipients. In contrast, CFA has stayed true to its financial inclusion objective and, while it has influenced the expansion of bank agents in participating counties, a vast majority of recipients have not yet begun to use their accounts or banking services beyond withdrawing to collect their CFA payment.

a. Financial inclusion is defined as providing customers with access to formal financial services and ensuring they know how to use them and are comfortable using them to increase their financial services options (whether they choose to use formal methods or not).

³ It is now reaching six counties, but at the time of the research, it was seven.

⁴ The Pantawid Pamilyang Pilipino Program, DSWD. <http://pantawid.dswd.gov.ph/index.php/about-us>

Comparing Payment Approaches

The payments categorization used here remains the same as that which was introduced in our previous research on MICs: cash, limited-purpose instrument, and mainstream financial account.⁵ The programs' use of these approaches is as follows, with Table 3 also showing the characteristics.

- In Haiti, TchoTcho Mobile would be considered a limited-purpose instrument as of May 2013 because recipients can withdraw and deposit money only at TchoTcho Mobile agents and specified partners.
- In Kenya, CFA's debit cards (previously from Equity Bank and now from Coop Bank) are linked to a

mainstream financial account, as the card is "open-loop" and can thus be used at any payments infrastructure (rather than just Equity Bank's and now Coop Bank's ATMs, point-of-sale [POS] devices, and branches).

- In the Philippines, the 4Ps offers a limited-purpose instrument, the "cash card," that recipients can use at Land Bank branches and Land Bank, Metro Bank, and Bank of the Philippines ATMs to withdraw their 4Ps payments. Recipients' names are linked to the account where the money is stored, though the card is not publicized or used as a typical debit card.
- In Uganda, SAGE's MTN SIM cards are limited-purpose in that they may be used only at specialized MTN pay phones, which are deployed at 390 pay points throughout the country.

Table 3. Current Payment Approaches^a

	TMC—Haiti	CFA—Kenya	4Ps—Philippines	SAGE—Uganda
Payment frequency	Bi-monthly	Monthly (but rarely on time)	Bi-monthly	Currently monthly but moving to bi-monthly
Payment provider(s)	Digicel, Unitransfer	Cooperative Bank (previously Equity Bank)	Land Bank, rural banks, pawnshop M Lhuillier, PhilPost (and previously GCASH)	MTN
% of payments in physical cash ^b	69% from Unitransfer	0%	59% from post office, M Lhuillier, rural bank or, previously, GCASH	20% from MTN agents
% of payments through limited-purpose instrument	31% through mobile money "mini-wallet" ^c whereby at least a portion of the funds must be withdrawn within 3 months of receiving payment at a Digicel agent	0%	41% through Land Bank and First Consolidated Bank "cash cards" (debit cards)	80% from an MTN agent
% of payments through mainstream financial account	0%	100% through a debit card at a bank agent, branch or ATM ^d	0%	0%

- a. As modifications to these programs are frequent, the payment approaches detailed here are as of the dates when the research took place.
- b. "Physical Cash" is a nonelectronic method of receiving cash transfers; recipients must withdraw the amount in full at a particular time and location.
- c. Customers register for the mini wallet through a USSD code on their phone and may maintain a balance of up to HTG 4,000 (US\$94); no form of ID is needed. Customers can register for the full wallet by presenting a photo ID to an agent who will register them in the mobile money system. Full wallet customers may maintain a balance of up to HTG 10,000 (US\$250).
- d. The program used magstripe cards with Equity Bank. As it starts working with Cooperative Bank, the program is now moving to smart cards.

⁵ Whereas limited-purpose instruments transfer the grant to the recipient through a notional account, these accounts are restricted in at least one of the following ways: (i) funds cannot be stored indefinitely; (ii) funds must be withdrawn only at dedicated infrastructure; and (iii) additional funds may not be deposited into this account from other sources. In contrast, mainstream financial accounts have none of the limitations of the limited-purpose account and are typically available to nontransfer recipients as well. For more information, see Bold, Porteous, and Rotman (2012).

Comparing Payment Costs

In most cases, PSPs across the four programs charged the programs transaction fees between 1 percent and 4 percent of the grant amount. These rates are similar to those charged by most of the PSPs in the MICs studied in the previous Focus Note where payment system infrastructure was already relatively mature. Strikingly, however, the absolute values of these fees are significantly lower per payment in these lower-income country programs.

That is, while the mandate of the PSPs in these lower-income environments was much more difficult to carry out than in the MICs, their compensation was about the same. For instance, even in Uganda where infrastructure and capacity are weak, SAGE pays MTN a fee of 3.5 percent of the amount of each social cash transfer, which includes the withdrawal fee, the transaction fee, and the operating fee. TMC, with its cash delivery options, pays significantly more to Unitransfer (just over 11 percent) than to Digicel (3 percent) for payments, and significantly more

for Unitransfer's services than any other program studied. The 4Ps' low fee to Land Bank (0.7 percent) is less than half of the fee paid to other PSPs (called "conduits") (average of 1.5 percent). However, conduits incur considerably more expense to ensure their OTC cash payments are reliable.

Additional subsidies to PSPs exist, however, to varying extents: resources for staff or one-off set-up fees are paid to Digicel in Haiti and MTN in Uganda, and the programs pay a fee per card issued to both Equity and Cooperative Bank in Kenya and to Land Bank in the Philippines. In all programs, the recipients' first withdrawal from their e-payment instrument is free (excluding any indirect travel costs), while subsequent withdrawals are subject to typical withdrawal fees charged by the PSP. In the Philippines, if recipients withdraw from an out-of-network ATM, they incur charges of which the program covers up to US\$0.45. In the case of manual payments, recipients receive their money without incurring additional fees, other than any travel costs.

Table 4. Cost of Payment to Government/Donor Agencies^a

	TMC— Haiti	CFA—Kenya	4Ps—Philippines	SAGE—Uganda
Average grant per recipient	\$15.00	\$34.12	\$63.01	\$19.34
Payment frequency ^b	"Bi-monthly"	"Monthly"	Bi-monthly	Bi-monthly
Weighted average fee per payment (all methods)	\$1.36	\$0.53	\$0.75	\$0.68
As % of average grant	9.1	2	1.2	3.5
Cost by type of instrument				
Cash payment	\$1.67 (11%)	N/A	\$0.96 (1.5%)	\$0.68 (3.5%)
Limited-purpose instrument	\$0.50 (3%)	N/A	\$0.45 (0.7%)	\$0.68 (3.5%)
Mainstream financial account	N/A	\$0.53 (2%)	N/A	N/A
Rate used in conversion (conversions used in country case studies)				
USD 1 =	HTG 40.00	KES 85.00	PHP 44.44	UGX 2,585.00

- a. Recipients are not required to maintain a minimum balance for any of the program accounts. Fees exclude one-off and flat fees paid to PSPs for expenses, such as seconded employees or full-time project managers. These costs are those fees specifically paid per payment for each program.
- b. Quotation marks indicate notable variability between the intended and actual payment frequency. The programs have struggled to achieve this schedule.

Six Findings

The design and implementation processes of each of the four programs varied based on the specific contexts in which the cash transfer programs were rolled out. Yet despite clear variations, several common themes emerged when evaluating the experiences of each, indicating a cross-cutting set of issues any program could expect to face when planning a shift to e-payment mechanisms.

1. Country-Level Readiness, Especially for Mobile Solutions, Was Overestimated.

Infrastructure is the backbone of e-payments. To varying extents, these cash transfer schemes rolled out before adequate infrastructure had been established outside of urban areas. To deliver payments to all recipients, several programs had to resort to cash payments in some areas or at the very least adjust their expectations around financial inclusion. All programs attempted to use mobile payments platforms to some degree and with varying degrees of success, though mostly wrought with challenges and frustrations. While the appeal of mobile solutions, and the will to employ them, is strong, programs should carefully consider what needs to be in place before executing a mobile-led scheme.

In Haiti, mobile money has received enormous attention and donor support. For TMC, in particular, the MNO played a central role in the conceptualization, design, and implementation of the payment scheme. In fact, the program design was led by a staff member seconded from Digicel to work with the Haitian government. As such, the government assumed that the designated areas were ready for mobile money and they did not thoroughly consider other payment options or contingencies. Yet, Digicel's mobile money agent network was not strong enough outside of Port au Prince to support the immediate and unanticipated call to scale the program across the country. Staff struggled to continue to manage cash transfer

payments in the absence of sufficient agents, leading to the introduction of a second PSP—the remittance provider Unitransfer—to improve payment delivery, albeit by returning to cash payments at a significant cost to the program.

In Uganda, SAGE had very few viable e-payment options when it began. The program originally explored using a bank-linked POS solution with biometric identification, as financial inclusion was one of many program objectives. Yet the financial sector infrastructure in the country could not support the design without significant added cost due to the high price of the biometric solution, the limited availability of POS terminals already deployed (three for every 100,000 adults in 2011), and poor mobile and internet network coverage. The program turned to MTN to devise a new payment solution through mobile money. But MTN lacked sufficient agent or network presence to employ an actual mobile money product, and instead had to deploy specialized pay phones to process payments on a mobile money platform. As a result, what MTN is able to offer does not leverage its standard MTN Mobile Money platform and diverges in many ways from the mobile money business it is trying to grow. MTN even facilitates 20 percent of the payments in physical cash.

Even in Kenya, well-regarded for its robust banking and mobile money agent networks, WFP was unable to offer a mobile-based payment solution for CFA. Originally working with Equity Bank to prepilot the bank's M-KESHO product, linked to Safaricom's M-PESA, WFP Kenya found that network connectivity was not strong enough to process payments. WFP Kenya thus moved to a debit card-based system that provided each recipient with an Equity account and debit card.

2. The Technical Capacities Required to Shift from Cash to E-Payments Were Often Underestimated.

Delivering cash transfers electronically requires a high-quality management information system (MIS) to manage the data needed to make e-payments,

along with sufficient technical capacity for (i) cleaning enrollment data, (ii) gathering information for know your customer (KYC) and other regulatory standards, as well as (iii) reconciling payment records among implementing partners. All of the programs struggled to create functional, coordinated systems, which caused errors and delays that detracted from the envisioned efficiency benefits of e-payments and weakened their ability to provide a reliable, consistent experience for recipients.

In Kenya, WFP originally used Microsoft Excel spreadsheets to manage the prepilot caseload, but quickly realized that the need to manage, clean, and maintain (let alone protect) such a high volume of detailed data would require a more powerful MIS. As a result, WFP invested in creating an MIS for its cash transfer programs, but faced a host of problems related to migrating data into the new system. The shift from food aid to e-payments required a seismic operational shift for WFP's partners. Most partners had been working in a nearly entirely paper-based environment when distributing food and were not required to record as much specific recipient data as needed for bank accounts. With e-payments, this had to change. Delays in registration due to inaccurate data not only delayed payments to recipients but also impacted Equity Bank. After three months without usage, Equity's accounts go dormant, meaning that it had to reopen thousands of accounts once the data cleaning process was finally complete.

TMC in Haiti originally planned to use a computerized system for efficient TMC registration, but the registration process was often more tedious and challenging to manage than expected. For instance, TMC staff reported "having 10 staff to do 300 registrations, but 1,000 people would show up, making it hard to handle all the people demanding to be registered" and making staff feel unsafe among the larger-than-expected crowds. By the time the program staff found errors in recipients' information, it was too late to troubleshoot: they could not return to each location to verify recipients. In the early

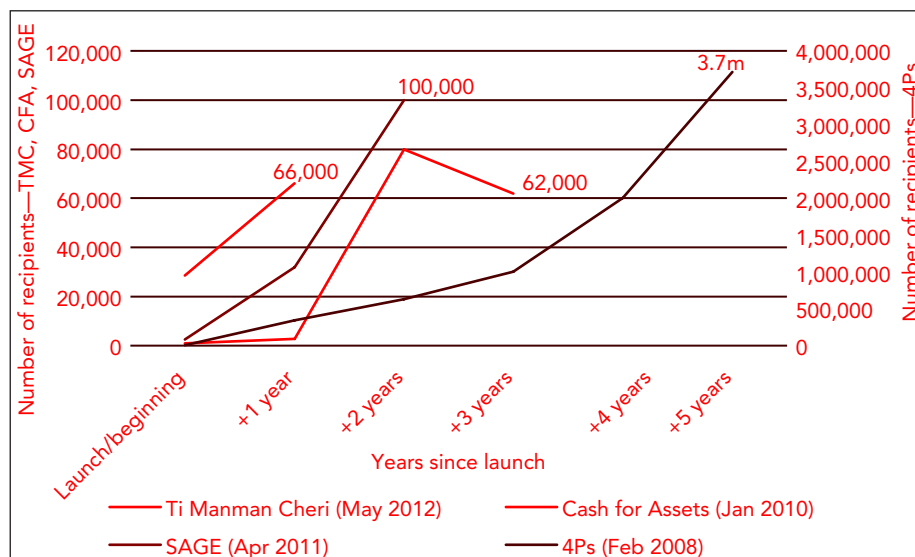
stages of the program, Digicel would consistently have to reject at least 15–25 percent of payments in every payment cycle because of data errors and inconsistencies between data in Digicel's and FAES's systems. By January 2013, only 36 percent of TMC recipients were properly registered to TchoTcho Mobile and TMC and consistently receiving payments.

In the Philippines, nearly 10,000 staff are needed to manage the 4Ps program. Staff capacity has had to develop even as systems are being developed, instituted, and even modified or changed altogether. For instance, staff have had to adjust to multiple changes in conduits and payment mechanisms in each municipality, particularly with the increased competition among payment conduits and the evolving payment system hierarchy managed by Land Bank. With the program holding bids for PSPs in different regions twice a year for the past two years, a recipient's PSP could change after only three pay periods, potentially requiring recipients to adapt to different forms, processes, and locations for payment.

3. Internal and External Pressure on Design and Implementation Was Inevitable.

Programs often found their plans undermined by pressure from either donors or government to modify the scheme in some way (e.g., to expand it more quickly or to different areas than originally planned). These pressures tested the programs' abilities to manage implementation of payments processes well.

TMC was the first-ever government-led social cash transfer program in Haiti. The government's urgency to create and implement new programs to decrease extreme poverty put unexpected pressure on Digicel to expand payments to areas where its agent network was not yet fully developed. While the circumstances under which the scale-up occurred were unique to Haiti, the political pressure to scale up is something the Philippines experienced as well. After launching a pilot for 6,000 recipients in

Figure 1: Program Growth since Launch

Source: CGAP research.

Note: Numbers reflect the number of recipients paid over a specific time period, which may differ from number of total recipients enrolled in the program. The 4Ps' growth is shown on the secondary vertical axis.

late 2007, the Philippines' then-president mandated the program's growth, leading to the program expanding from 6,000 to 4 million recipients in five years. As a result, neither the program nor its associated PSPs succeeded in implementing the payment scheme as originally designed.

Figure 1 shows the quick growth of the four programs, which contributed to their diversification of payment methods and the adoption of new PSP partners.

4. Agents Affected the Experience of Recipients and While the Agents' Control of PINs Was Expeditious, It Also Carried Risks.

All four programs struggled with the logistics of making payments through an agent network in distant locations. As recipients learned to use a new payment method, in certain areas the recipients were exposed to PSPs only through their interaction with the PSP's agents, meaning a recipient's negative experience with an agent could reflect poorly on the PSP. As programs were keen to make payments quickly, in some cases agents "controlled" the payment process to improve efficiency and speed. This

called into question the extent to which recipients understood the payment method and the extent to which recipients should be pushed to "control" the payment process and transact by themselves.

In Uganda, MTN described transporting large amounts of cash to the districts where payments occurred as a "logistical nightmare." Where agents existed, there was not always a way to supply them with the necessary cash for all the payments. Thus, MTN had to create the ability for the agents to make cash-out payments to recipients, and starting in 2013, MTN contracted "franchise dealers" (master agents) to move physical cash to subcounties to make payouts. There were some instances in which MTN could not execute e-payments, for example, due to network outages, and there was a period in which staff could not issue SIM cards/e-wallets because of a faulty batch of cards. In such cases, MTN made manual payments, which involved a cumbersome and laborious process that was very much outside of the business model underpinning mobile money and the core business practices of an MNO.

For Equity Bank agents in Kenya, the challenge of ensuring agent presence and liquidity has had

an adverse impact on the program, particularly at the field level. WFP and Equity both described the payout process as chaotic. Despite the program often urging recipients to spread out their trips to agents to retrieve their money, due to unreliability and unpredictability of when the payments would arrive, recipients, not surprisingly, continued to gather on the same day to withdraw their payments, causing long lines, insufficient agent liquidity, agent frustration, and recipient confusion. In some cases, recipients reported that insufficient liquidity led to agents insisting that the recipients buy goods from the agent's store or come back several times instead of withdrawing the full payment at once. The cost of managing and maintaining the necessary agent liquidity eventually led Equity to adjust its agent fee schedule such that agents received a higher amount for larger withdrawals. This came as a surprise to CFA, which was not originally consulted on the modification and thus no longer sufficiently covered the withdrawal fees incurred by many recipients as intended.

In all programs, there appeared to be a clear tension between processing a single payment as quickly as possible and teaching recipients a new payment method. In Uganda, the program efficiently distributed money to the recipients so that, even if they had to travel a distance, once they arrived at the agent, they were not waiting in a slow-moving, long line. Likewise, agents were better managed, and few recipients voiced any concerns over trust or agent behavior. However, this efficiency came at the price of handing control of the payments process to agents who entered the PIN on behalf of recipients. SAGE elected to put aside its original objective of financial inclusion and the possibility of agent theft or misconduct for the sake of more efficient payments, leaving recipients completely dependent on agents to conduct their transactions. In contrast, TMC and CFA recipients waited in long lines because the agents would often need to call the TchoTcho Mobile customer service line or the bank, respectively, to resolve issues with the PIN and account. The extra work required of agents also resulted in poor customer service in some cases, as

agents became tired and frustrated with recipients who did not understand the payment method. At the same time, at least the recipient PINs were not being compromised for the sake of efficiency. The long lines and pressure to remember the PIN also created anxiety for recipients, though this may subside as the program matures and the PSPs and recipients become more familiar with the payments process. Regardless, in all cases, programs and PSPs struggled to monitor and enforce consistent agent behavior.

5. Recipient Capability Was Greatly Affected by Program and Payment Method Training as Well as the Availability and Timeliness of Payments.

Recipients' feedback about their understanding of the program—and, in some cases, lack thereof—reflected a need for programs to train recipients on “program literacy,” not just “financial literacy” to improve recipients' initial understanding of the program, payment process, conditional payment calculation, and recourse mechanisms. Given recipients' experiences of the payment methods and processes, not all the programs sufficiently educated recipients about using and remembering their PINs, understanding how much money they should receive each payout period, and knowing what to do if something went wrong. Where recipients felt comfortable with the payment process and instrument, they seemed to benefit from consistently using the instrument every time there was a payment; for programs where payments were not available at reliable intervals or the agent did not have sufficient liquidity to serve all recipients, recipients struggled to remember and adapt to the process, and trust the system. If recipients do not understand how the program works and if payments are inconsistent, reaching financial inclusion objectives will be even more difficult.

Recipients were often unclear about how the program worked, what their eligibility was based on, how often payments were made, and the values of their payments. Recipients' lack of program literacy was clear in Kenya, where interviewed recipients reportedly received 13 weeks of financial literacy

training from Equity, but were often still unclear about why they received the amounts they did and how much the agent was to take for commission. While some recipients understood the work norms and the fluctuating payment amounts that often depended on the number of months of back pay they received, others thought they were missing money. One woman explained that when her most recent payment was less than half of previous payments, she assumed the agent stole her money. CFA recipients also often did not know how to use their PIN, and either brought a family member with them who could enter the PIN or asked the agent to enter their PIN (even though program rules prohibited this). Although Equity's financial literacy training covered how to use a POS device, it did not provide an opportunity for recipients to practice entering their PINs themselves.

SAGE recipients did not have the same questions about their payment amounts as seen in Kenya. Since their payments were typically on time and not conditional, they knew exactly how much they should receive for each payment, reducing confusion and possible fraud and helping to build trust. However, confusion over the payment method persisted: one group of SAGE recipients explained that it "failed" the training about the payment method. As a result, agents conducted the transactions for those recipients. A local SAGE staff member, however, explained that this "training" was actually a 45-minute program sensitization and was not intended to teach recipients how to use the pay phone or keypad. Another group was hardly aware that they had a PIN, and was not at all aware of what their PINs were.

Whereas recipients' lack of understanding around the amount they should receive is a matter of program literacy, timely payments can contribute to recipients' comfort with using a PIN and the new payment method that comes from repeated use. Even with thorough, interactive training on the payment method at the beginning of a program, if recipients do not receive their payments at reliable intervals, they are more likely to (i) forget how to use the payment method, (ii) be less likely to commit to learning the payment method if they find

the payments to be unreliable (and might stop at any time), and (iii) be more likely to opt to cash out immediately due to lack of confidence in the program or the payment system. By contrast, the 4Ps recipients, many of whom had been in the program for four or five years, expressed no anxiety or concern about using a PIN at ATMs and understood the payment conditionalities and thus how much to expect at each payment cycle. However, 4Ps recipients explained that when they were new to the program and using the ATMs, security guards helped them use the machine, until they were subsequently comfortable with the process.

Overall, recipients' lack of knowledge about and trust in the program and an inconsistent use of the payment system due to irregular payments may undermine the use of accounts and any related financial inclusion objectives.

6. Appropriate Recipient Recourse Mechanisms Built Confidence and Trust.

Some recipients viewed the cash transfer as a "gift" and were reluctant to submit formal complaints if they did not receive their full payment amounts, whether due to program error or misconduct or errors at the pay point. While programs taught recipients about the recourse mechanisms to varied extents, recipients did not necessarily benefit from the mechanisms; recipients did not always trust that they were entitled to voice such issues and feared removal from the program or another penalty. In other cases, recipients were not even aware of recourse mechanisms and were unsure of who to tell about issues. In cases where recipients told program staff about an issue, some did not see their problems resolved, leading to confusion about the recourse mechanisms.

Some recipients, particularly those who recently began receiving cash transfers for the first time, were reluctant to admit any problems or challenges with their payment methods because they thought they were receiving "free" money and they were not always treated the same as "regular" customers of

the PSPs. The recipients of TMC most exhibited the need to trust the program to successfully manage a recourse mechanism. Digicel had the foresight to implement a TMC-only call center, which became particularly useful when recipients would arrive at agents and could not remember their PINs.

From the beginning of the program, SAGE had extensive recourse mechanisms (separate from MTN's recourse system) in place to protect recipients. The recipients interviewed for this study hardly used these mechanisms since payments almost always arrived within the expected dates and recipients were aware of how much they were to receive each pay period. This was also due in part to MTN agents being responsible for having sufficient liquidity, and being able to guarantee sufficient liquidity because they were aware of the number of recipients they would serve each pay period.

Similar to SAGE, the 4Ps recipients typically knew how much they should receive and also knew the complaints process if they did not receive their full amount. The 4Ps, as a more mature program, also grappled with and has had more time to resolve payment delays than the other programs studied. With nearly 10,000 staff to serve the program and its recipients, the staff interviewed for this study suggested that recipients did not refrain from expressing grievances to the staff. Still, while the program reports on recipient complaints ranging from faulty cards or ATMs, to rude service at a conduit, to disputes over the amount of the payment itself, DSWD reported only 26,194 formal grievances in the first quarter of 2013 (with over 3.9 million households enrolled and over 3.7 million recipients as of June 2013).

Five Lessons

The six findings draw from the apparent trends across four programs that vary significantly across contexts. Based on these experiences, we offer five lessons for programs and PSP partners to consider when exploring, designing, or implementing e-payments—particularly if there is a desire to incorporate financially

inclusive features into the scheme—for low-income people in low-infrastructure contexts.

1. Ensure Reliable Payments First.

Getting payments reliably to recipients is a necessary precondition to meet most other program priorities and objectives, including ultimately any financial inclusion objectives. Using an e-payment system will not be effective and could even have adverse effects if it does not work well. Payment delays or working with agent networks in which liquidity is a problem will undermine the entire program, as recipients fail to trust or understand the new system. Recipients would benefit from the iterative process of receiving payments at a consistent interval so they know it is worth investing in learning the payment method, and they are able to practice using the payment method until they feel comfortable. If recipients do not see the value in the system or do not trust it, they will not continue to use it for reasons other than receiving their social cash transfers, which could undermine agent network development, the long-term business case of the provider, and financial inclusion objectives.

In both Haiti and Kenya, unreliable payments hampered the e-payment system as well as the customer and PSP experience and may have lessened the probability that recipients would eventually use the financially inclusive features offered to them. SAGE, on the other hand, offers a prime example of setting financial inclusion aside to focus on delivering timely payments. It has not deserted financial inclusion, but rather has shifted (and perhaps sequenced) its priorities. It remains to be seen if and when financial inclusion will once again become a central objective of the program. Overall, sequencing is important to administer e-payments well, particularly if financial inclusion is an objective.

2. Create Sufficient Communication Channels with Recipients.

Programs and PSPs would benefit from creating proper communication channels when introducing, implementing, and scaling up the program. Programs

communication with recipients can be important to not only improving recipients' awareness and understanding of the program, but also to reducing the number of complaints and questions that program staff must manage once the program is under way. With this in mind, we have identified several instances where clear communication with recipients is critical:

- Explain to recipients how much their payments should be. This includes explaining to them where the money comes from and why they are receiving it.
- Teach recipients how to conduct payment transactions. This should occur more than once to ensure recipients really understand the process, and should involve the recipients practicing the transactions themselves.
- Inform recipients when there is a delay in receiving their payments. Before recipients even arrive at the agent to withdraw their money, programs would benefit from advising recipients when payments are delayed, such as by SMS. For example, in Kenya recipients reported going to the agent on the date they expected their money, but when the money was not yet available, they wasted precious time and money taking unnecessary trips to the agent.
- Teach recipients where to go for troubleshooting. When recipients do not receive their full payment, have a question about the amount they receive, have a problem with an agent, or encounter a technical glitch with their SIM, card, or phone, they should know who to call and how to rectify the situation.

Who should be responsible for these roles? The program maintains a responsibility to, at a minimum, oversee that this communication occurs. However, PSPs should prioritize investment in and management of their agent network. With agents representing the PSP, recipients' negative interactions with agents could lead to negative perceptions of the entire PSP (again reducing the chances of recipients adopting the PSP for other services). The program thus must clearly define the roles of each partner to include communication responsibilities.

3. Ask "What If?"

Governments, donors, and PSPs should incorporate contingency planning and realistic risk assessments into the earliest stages of the design process, as well as revisit them as situations affecting the program inevitably change. At a minimum, this should manifest itself in three areas:

- Programs and PSPs should map the relevant infrastructure capabilities in target areas to consider the sequencing of investment in infrastructure; set geographic parameters for piloting, such as adjusting for urban/rural differences; and realistically cost the payments or other required subsidies.
- Programs and PSPs should know the level of recipients' payment services capabilities to design a mechanism that takes into proper account their abilities and limitations. The customer payment experience should be considered an integral part of a sustainable payments strategy, particularly if the objective is to build financial inclusion through the program.
- Programs and PSPs should acknowledge the various reasons (other than giving money to vulnerable populations) why governments and donors are implementing the program (e.g., politics, financial inclusion, education). They should be aware that these other motivations may very likely result in modifications to the program. While the functioning of the program may seem paramount to the design of payment systems, the political economy in which each program evolves should not be discounted given the very political nature of G2P payment schemes.

4. Ensure a Value Proposition for All Stakeholders.

By the very nature of G2P payment schemes, no single entity has complete control over all facets of its design and implementation. Therefore, it is critical that a clear value proposition exists for all stakeholders from the outset.

- For the program: Program management should ensure that government stakeholders see the

value in the e-payment system. If program staff are not sufficiently convinced of the value proposition offered by the new payment system, they may prefer to rely on the systems they already know.

- For the PSP: The PSP should consider the fixed and ongoing costs of infrastructure and also consider the benefits, whether they be profit, new client acquisition, opportunities for other work with the government, or corporate social responsibility.
- For the recipients: If recipients do not trust the program’s reliability or the PSP staff or the agents with whom they interact, they will do little more than use the method to withdraw their periodic payment, which may weaken their propensity to learn about the payment method or interact with it regularly. As a worst case, poor initial experiences with the payment system (or by extension a provider or agent) may inhibit their demand for e-payments or other such financial services in the future.

5. Be Willing to Invest.

Programs setting up electronic G2P payments in countries and regions with limited e-payment infrastructure might initially need to expend resources to ensure adequate infrastructure, such as a functioning agent network or well-built interoperable MIS for data management and reconciliation. For instance, while cheaper in the long run than cash-in-transit services, developing and maintaining robust agent or POS networks to enable convenient payments with sufficient liquidity can be expensive to create in environments where the infrastructure is not already in place. It is not likely that a PSP will make such an investment without a strong business case for doing so. In the four programs examined here, PSPs charged fairly nominal fees for their services and not surprisingly, several PSPs or their conduits (in the case of the Philippines) lacked a clear financial case for partnering with the program. In several instances, it was clear that the revenue-to-expense ratio—particularly as the design or implementation plans of the program expanded or changed without commensurate changes to the fee structure—was so low that it weakened the PSP’s commitment

and ability to deliver on program objectives. PSPs under these conditions are likely to require more investment and cross-subsidy from the program than PSPs that already have agent networks (e.g., PSPs in Brazil and South Africa). Whereas programs seem to assume that PSPs can easily leverage these types of payment schemes as a strategic way to improve agent ubiquity, liquidity, and cross-selling, in reality these factors need to be sufficiently strong before recipients use them to receive payments.

Conclusion

The evolution of the e-payments programs in Haiti, Kenya, the Philippines, and Uganda revealed several intriguing commonalities across different stakeholder groups involved in their design and implementation. While their contexts, sizes, and objectives varied, they all faced the realities of testing and rolling out electronic cash transfer schemes in areas with weak infrastructure and with populations largely unfamiliar with financial institutions or e-payment methods. The need for (i) upfront investment in program and payments infrastructure, (ii) adequate contingency planning and flexibility, and (iii) understanding of and communication with recipients permeated each program to varying degrees at design and operational levels. As these experiences also demonstrate, even where e-payment systems, particularly mobile money, already seem robust, these inherently complex cash transfer schemes will always be challenging to design and implement.

From the government or donor perspective, each program was originally motivated, to varying extents, to use e-payments to improve the efficiency and transparency of cash transfers; reduce their cost to the program; and provide value-added services to payment recipients, such as accounts that provide formal financial access. Yet the programs encountered challenges with creating consistently strong payment schemes in the face of limited resources and limited infrastructure. The programs frequently underestimated the challenges posed, which led to the disruption of well-laid plans. Notably, each program benefited from at least one “champion,” a

member of the implementation team who directed the program through uncharted waters, making various course corrections along the way to an appropriate and functioning payment solution for the program.

From the PSP perspective, the motivation to get involved in each e-payment scheme came more from the strategic value of partnering with the program on new and growing payment schemes (links to the government, perceptions of helping the poor, etc.) than on the financial attractiveness of either the client on an individual level or the program at an aggregate level. They in fact charged relatively little for their services compared to other benchmarks in G2P payment schemes. Yet all of them underestimated the challenges of serving the recipient population; setting up appropriate management and communications systems with the program; and preparing their own staff's capacity to implement the proposed payment scheme. Additionally, as internal and external pressures altered the payment process or

implementation plan in each, the PSPs often found their business case for involvement strained while increasingly locked into high-visibility partnerships.

From the recipient experience, it was clear from focus groups that certain components of the recipient "payment journey"—from learning that the payment is ready to traveling to the pay point to carrying out the transaction—most affected a recipient's payment experience and, ultimately, the desire to be financially included. Recipients' access to clear communication and appropriate recourse mechanisms throughout the journey is critical.

The collective experiences of these four programs toward e-payments and financial inclusion should temper the exaggerated enthusiasm in the promise of technology to solve all programmatic and payment issues in a cash transfer program. Yet it should also encourage stakeholders that progress is indeed possible, even in the most challenging of circumstances.

Annex A. Program Design to Implementation Process Highlights

Figure A-1. Ti Manman Cheri, Haiti
 TMC modified the payment scheme to improve payout efficiency, yet at a higher cost with a system providing less transparency. The program exposes lessons about planning, PSP bidding, and maintaining every stakeholder’s commitment to the program.

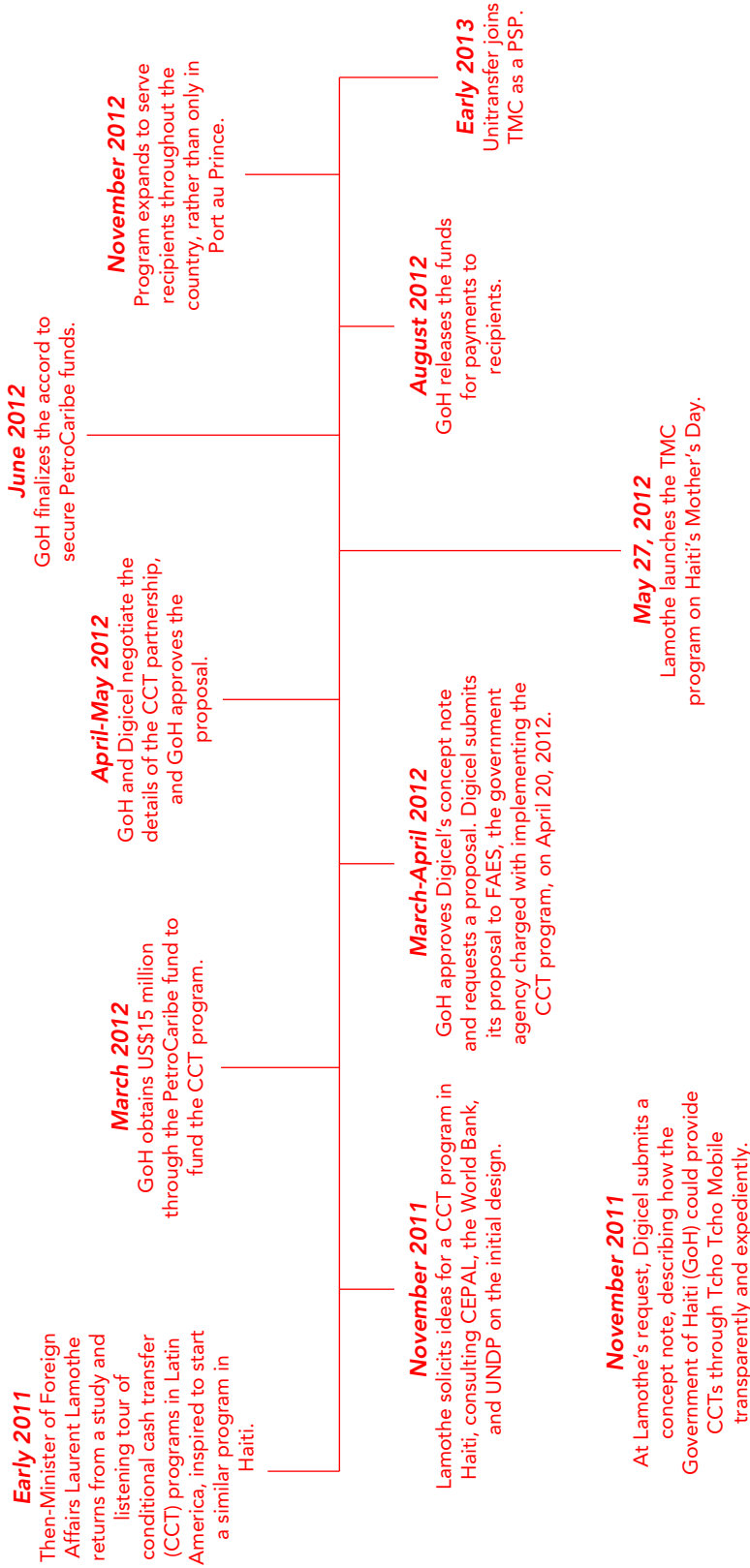


Figure A-2. Cash for Assets, Kenya

After working with Equity Bank to develop the CFA payment system, CFA shifted to partner with Cooperative Bank after its second procurement process. The procurement process is one of the UN's worldwide standard processes that sometimes constrains the forward-thinking WFP Kenya program, showing the effects of donor influences (in a case where government influences are minimal).

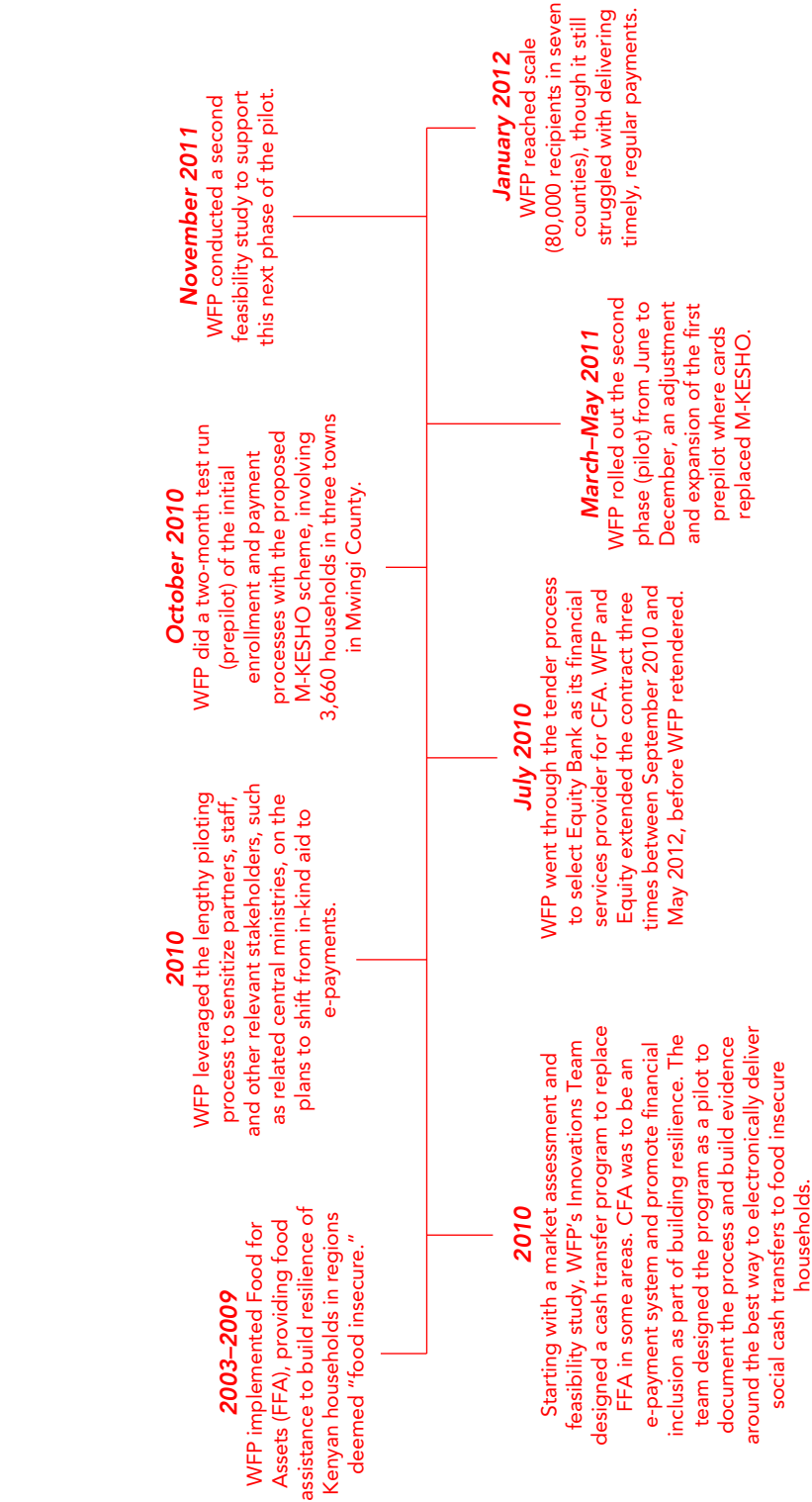


Figure A-3. The 4Ps, the Philippines

The 4Ps shows what continual modifications and persistence, even in spite of political pressure, can achieve, with the program serving nearly four million recipient households nationally. The program has maintained a focus on health and education, and does not appear to be considering adding a financial inclusion objective at this time.

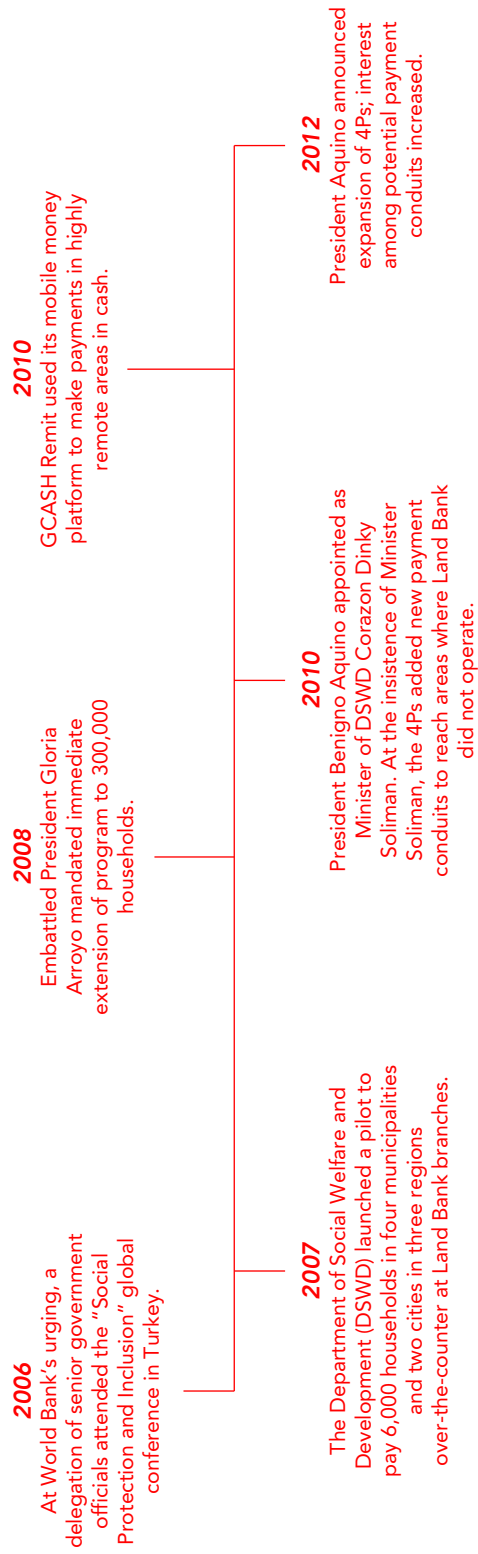
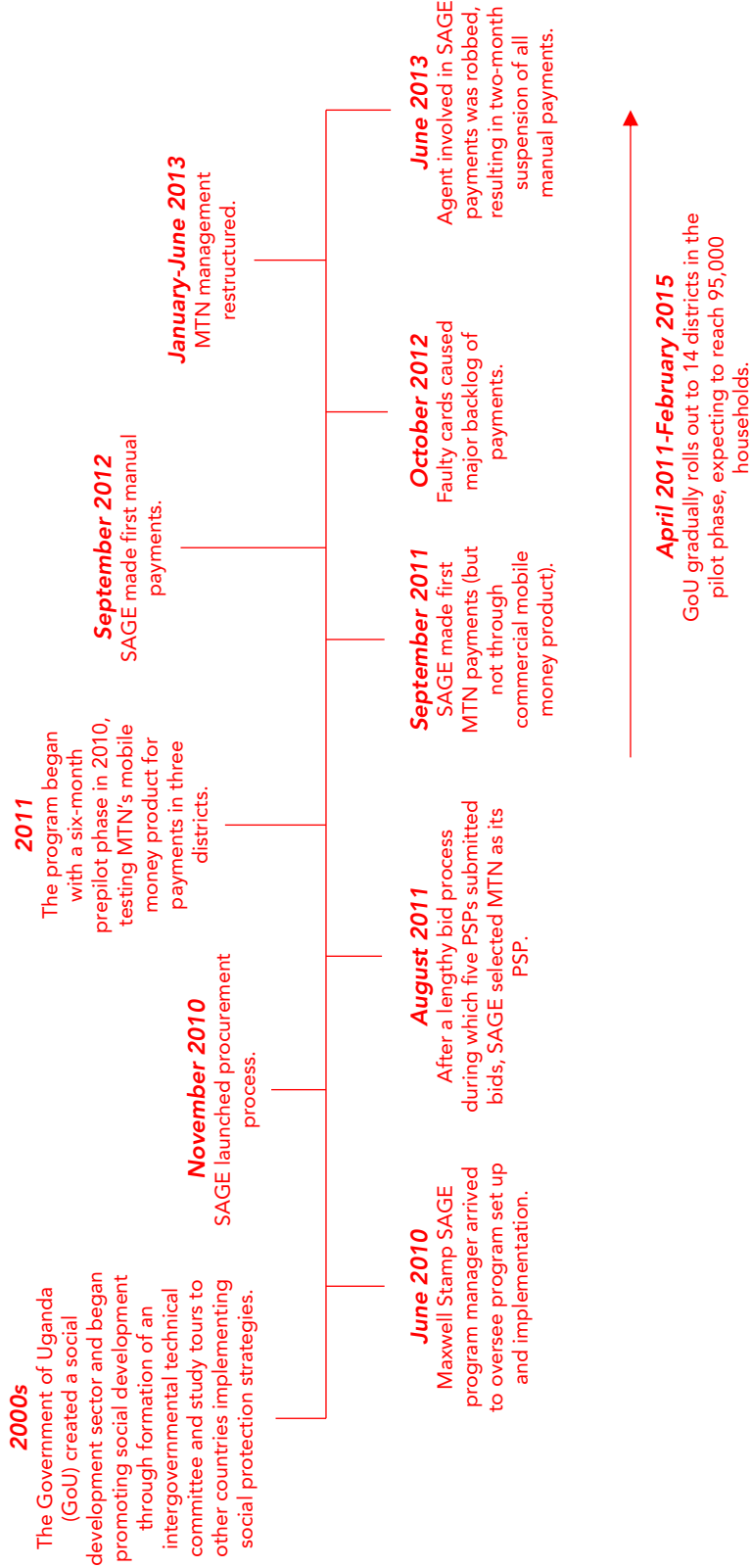


Figure A-4. Social Assistance Grants for Empowerment, Uganda

SAGE has modified its program with the longer-term view of establishing a pension policy, and thus with a need to solicit government buy-in and to create an efficient system. SAGE's commitment to fast and timely payments comes as the program is learning how to push e-payments in a country that may not be ready for such payments and in a way that, for the time being, disregards the financial inclusion objective.



Annex B. Recipients' Incentives to Use E-Payments

Table B-1 compares the recipient experiences across the four programs. In most cases, recipients did not fully understand how to use the electronic methods, even after some time in the program. Additionally, those recipients located in rural areas typically had longer to travel to reach pay points and as a

-result they rarely interacted with the PSP beyond withdrawing the entire transfer. Even 4Ps recipients in Manila, where some merely had to walk less than 10 minutes to reach the pay point, were not interested in using their Land Bank account beyond withdrawing their payments.

Table B-1. Comparing the Recipient Experience^a

	TMC—Haiti	CFA—Kenya	4Ps—Philippines	SAGE—Uganda
Cost and time spent traveling to collect	Up to \$2.50 roundtrip, taking 15–30 minutes (most commonly cited travel time in urban areas where respondents lived).	2 hours is most commonly cited travel time.	About 1.5 hours and \$3.60–\$4.49 round trip to ATM, GCASH, M Lhuillier (Pantabangan rural); 10 minutes and \$0.34 or less in Manila.	Up to 8 kilometers, costing up to \$4 round trip (Kiboga).
Financial costs to use service to withdraw payment	None, though some reported paying \$0.25 to withdraw at TchoTcho Mobile agents—likely an additional, unsanctioned payment the agent charged.	None, though some recipients complained about incurring costs—e.g., agent did not give full amount.	Up to US\$0.45 to withdraw from non-Land Bank ATMs.	None.
Additional financial services used/ preferred	“Save” in chicken and goats for children. Save in groups. Borrow from money lenders. Microloans.	“Save” in chicken and goats. Save at home. Save and borrow with savings groups.	Save at home. Save and borrow with savings groups. Rather than save, borrow (primarily from friends, family and money lenders) when they need money.	“Save” in chicken and goats. Save at home. Save and borrow with savings groups.
Social cash transfer reliability “ranking” ^b	Least reliable (third out of three income sources).	Range from second to fourth most reliable out of top five income sources.	Ranked first to third most reliable income source (out of five income sources) in and outside Manila (in urban and rural areas).	Most commonly ranked the most reliable income source.
Social cash transfer size ranking	Smallest income source.	Second to third largest income source.	Second through fourth largest income source. Those in Manila ranked it lower than those in LICAB and Pantabangan.	First through third largest income source.

a. From qualitative field research by Bankable Frontier Associates from May through August 2013.

b. Ranking compares social cash transfer payment to the reliability and size (amount) of other income sources, which include TMC recipients: Small businesses, support from their children's fathers not living in the households, and remittances from family members abroad. CFA recipients: Casual labor, selling poultry and goats, farm produce, selling food, charcoal, local brew, etc., savings group. 4Ps recipients: Farm produce and vegetables, skilled work, fishing, selling poultry and pigs, small business. SAGE recipients: Farm produce, selling poultry and goats, selling food, charcoal, local brew, etc., casual labor, skilled work.

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