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What a New Survey of Aadhaar Users Can Tell Us About Digital Reforms: Initial Insights from Rajasthan

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India's Aadhaar biometric identification scheme has registered over 1.1 billion people, including almost all adults in the country and over 15 percent of the global population. It underpins multiple programs that aim to reform India's complex systems of subsidies, benefits, and transfers, which together account for some $60 billion in annual spending. Of course, initiatives of this scale cannot escape controversy. While some have lauded Aadhaar-enabled digital reforms for reducing ghosts and leakage and improving efficiency, others have criticized their implementation, cost effectiveness, implications for privacy, and exclusionary effects, among others. What the debate has so far lacked, however, is data. We set out to help fill that gap with a survey focused on a digital governance initiative in the state of Rajasthan.

Key takeaways:

- The reforms have spurred financial inclusion. Virtually all households now have at least one bank account; most have several.

- Indications on gender empowerment are encouraging—but Rajasthan has a way to go.

- Service delivery has improved for many people—although problems remain.

Scope of the survey

To help inform the ongoing dialogue, we partnered with MicroSave, a financial inclusion consultancy, to carry out the first survey of program beneficiaries in the state of Rajasthan. In addition to going digital and shifting cash payments to bank transfers, Rajasthan has integrated multiple programs into a single "Bhamashah" program to create a unified state-level registry of households and their members. We

surveyed 633 households, balanced between rural and urban districts, and including a wide range of income and landholding categories. Sixty-four percent of the respondents were women. The survey included sections on financial inclusion and gender empowerment (both are goals of the reforms), perceptions of the Bhamashah enrolment process, and user experiences with the new systems of delivering benefits. The study also involved focus group meetings to supplement the survey data with qualitative information.

With a first report just out in India, we have started to unpack the data. Here's a first glimpse into what we are seeing.

Nearly all households in Rajasthan now have at least one bank account

At least on a household basis, Rajasthan is approaching 100 percent financial inclusion. Most households have two or more bank accounts (figure 1). Compared to their urban counterparts, rural households more frequently report having three or more bank accounts, possibly an oversaturation caused by linkages to multiple programs.

## Figure 1: Rural and urban bank account access in Rajasthan
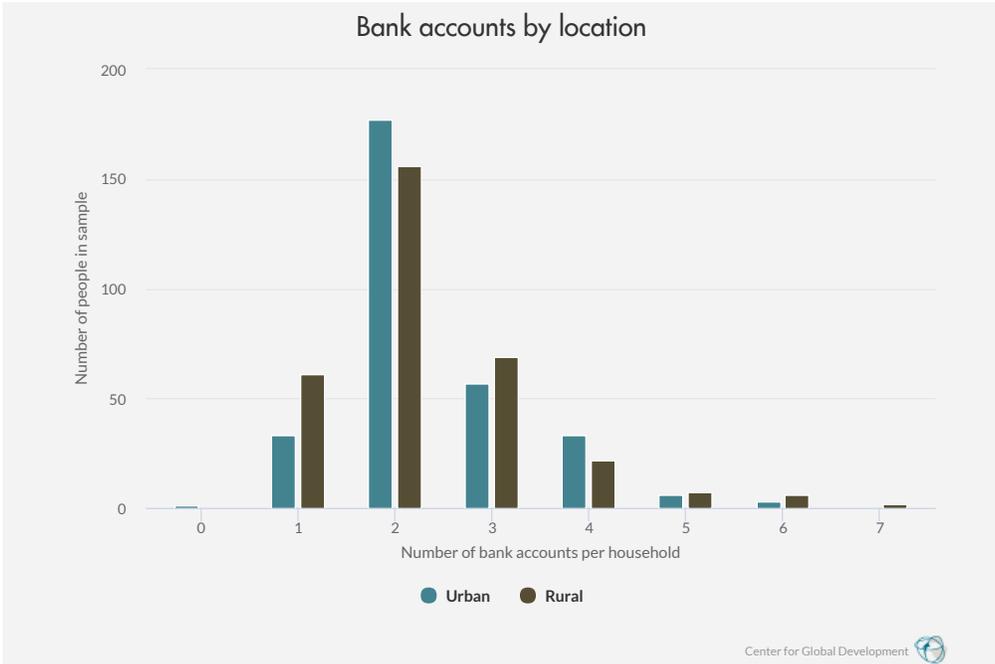
Encouraging signs on gender empowerment

Rajasthani society is famously patriarchal. Its Bhamashah program includes a gender empowerment goal requiring that the official head of family listed on the card

be female (with exceptions for families with no female members). Bhamashah registration required that the head of family open a bank account. Fully 66 percent of the Bhamashah female heads of family reported *not* having had a bank account prior to registration. The program requirement has—at least nominally—had a substantial impact on financial inclusion for women. Virtually all of the accounts are linked with the Aadhaar (figure 2).

Figure 2: The impact of the Bhamashah program on financial inclusion for women
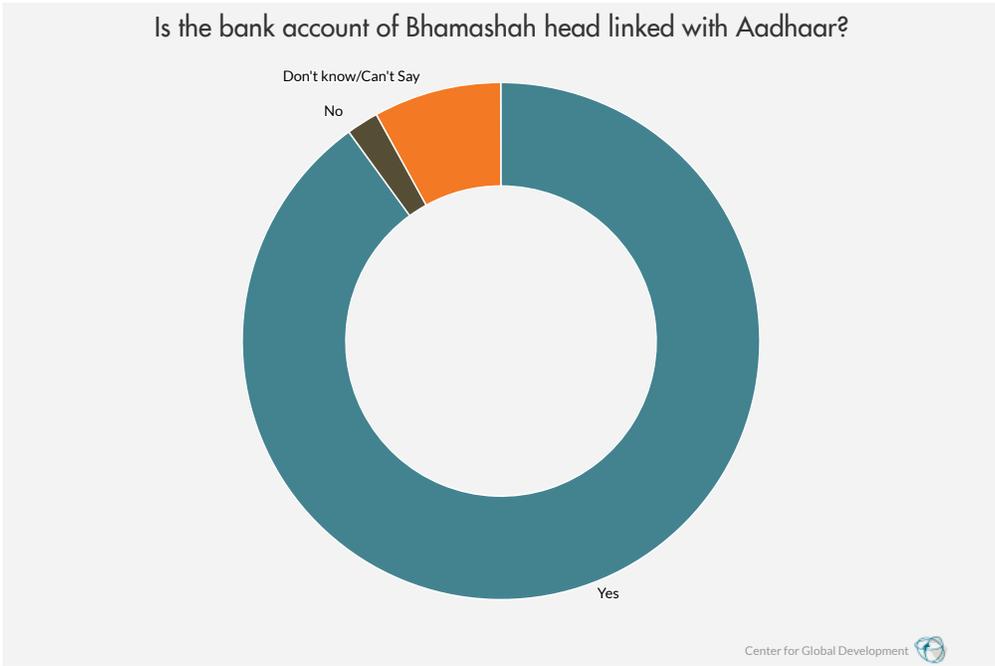
Who accesses cash and how? In our sample, 76 percent expressed a strong preference for bank branches and 23 percent preferred ATMs; almost none used bank or business correspondents. Remarkably, 54 percent of households reported that women travel to withdraw cash most often, more so when the cash point is not very close (figure 3). As distances to the nearest cash point become longer, however, more women are accompanied by a male—whether for security or to provide transport, we do not know. Nevertheless, the picture is encouraging.

Figure 3: Patterns of cash access

Who draws cash most frequently?
By distance to nearest cash point
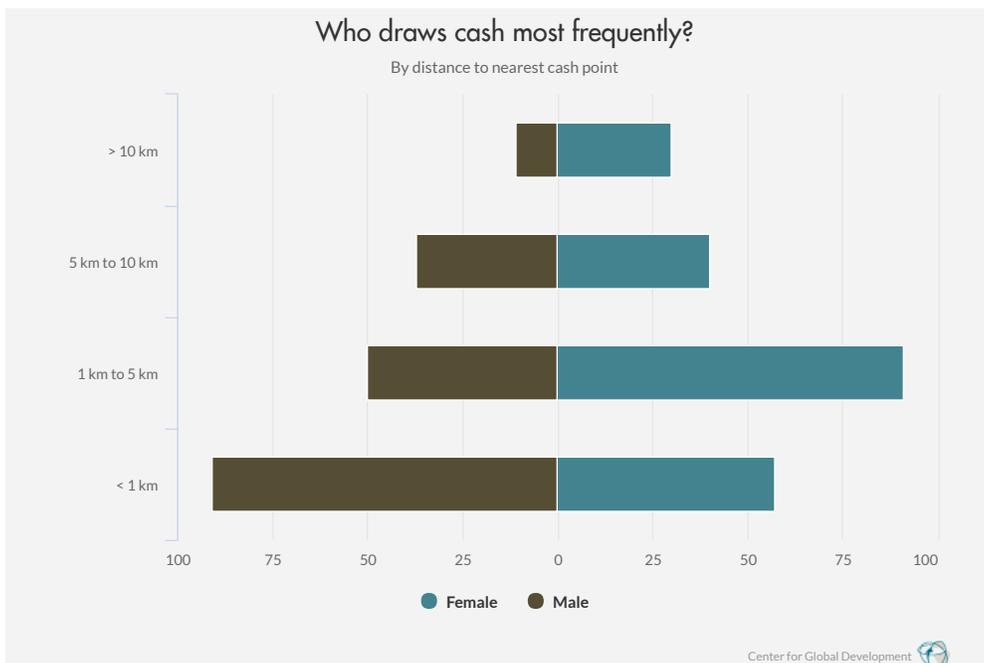
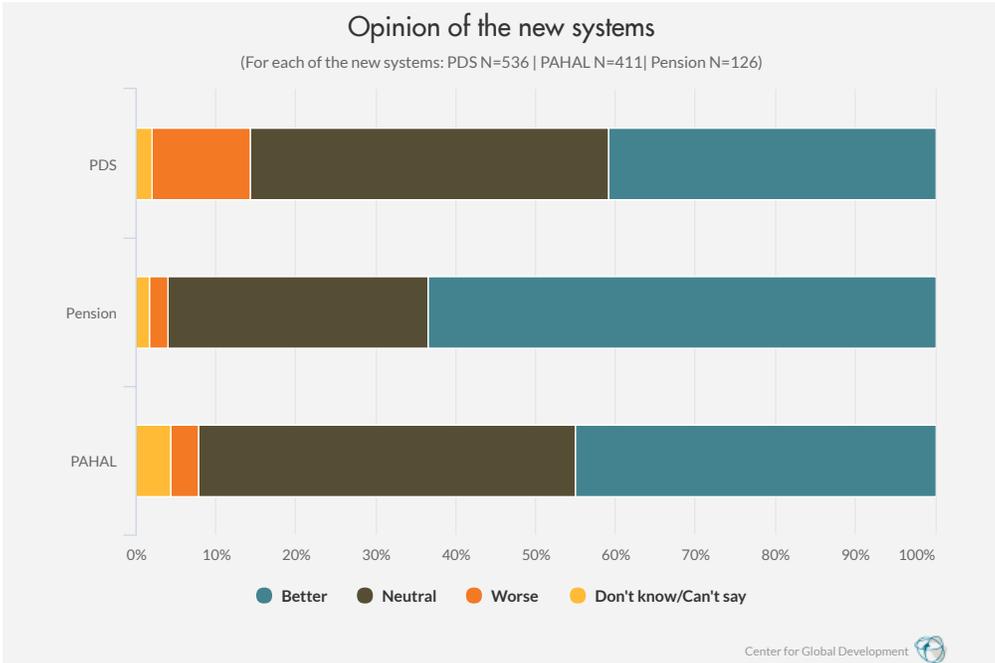## Gender norms may be slower to change

It is less clear whether the gender requirement for the Bhamashah head of family has had an impact on perceptions of actual family headship. While 99 percent of the households recognize a female as the Bhamashah head of family (de jure), only 17 percent of female respondents and 8 percent of male respondents designated a female as the de facto head of their family. Males usually control the mobile phones; while 58 percent of households include someone who can read or write SMS, in only 20 percent of households does the Bhamashah head of family read SMS or make phone calls. It is unclear whether the difference is driven by gender dynamics, low levels of mobile literacy among women, or other factors, and without baseline information, it is difficult to determine prior perceptions of familial leadership. But these results suggest that it will take time for gender norms and roles to change— there is still a way to go.

Digital reforms have often improved perceived service quality

We wanted to know whether the shift to digital systems and direct deposit of pensions and gas subsidies into bank accounts and, in the case of rations, requiring beneficiaries to authenticate themselves at point-of-service had changed perceptions of service quality and, if so, why. For the three programs—PAHAL (consumer LPG cylinders), pensions, and the public distribution of food ration system (PDS)—the response was generally positive. Many think that the new systems are better and only a few rate them as worse than the previous systems (figure 4). Those who like

PAHAL mostly cited better delivery of cylinders (dealers are less able to divert them to the black market). Many felt that pensions were paid more promptly or liked the direct deposit to their bank accounts. The most frequent positive comment on the new PDS system was that, because of biometric authentication at the service point, no one could divert their rations.

Figure 4: Digital subsidy systems and perceptions of service quality

Opinion of the new systems
(For each of the new systems: PDS N=536 | PAHAL N=411| Pension N=126)

Legend: Better, Neutral, Worse, Don't know/Can't say

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Problems remain with authentication and financial access points

Even with the Aadhaar system in place and apparent broad preferences for the new delivery systems, the technological infrastructure creates some bottlenecks. While 71 percent of ration recipients can generally authenticate themselves in one or two attempts, it still takes three to four attempts to authenticate for 25 percent of respondents, and 4 percent say that they are unable to do so in a timely manner or at all. We are still analyzing cases where respondents said they were denied rations or that they could not lift them. However, even when backup solutions are available, the new system is most likely to be rated as "worse" by those who are required to return to the dealer another day. The few who found the new systems worse for PAHAL and pensions usually cited the inconvenience of accessing bank funds as the main factor.

Questions for future analysis

As we continue to analyze the data, there are still a number of issues that we need to better understand. Why do respondents seem reluctant to use bank correspondents? We have seen bank correspondents working busily in other parts of India. How serious a problem for women's empowerment is the lack of mobile literacy? How effective are processes for handling grievances and exceptions? Some people report that they enjoy working with the new technology: what can we say about them? These and other questions will form the focus of the next stage of our work.

CGD will publish further analysis of the survey of Aadhaar users and accompanying data in the coming weeks.