



Scaling Up Social Assistance Payments as Part of the COVID-19 Pandemic Response

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About G2Px

The G2Px Initiative was launched in early 2020 in partnership with the Bill and Melinda Gates Foundation. This initiative contributes to the broader agenda of improving government-to-person (G2P) payments through digitization by shifting the paradigm beyond program-specific efficiency gains to one that simultaneously accelerates critical development outcomes such as financial inclusion, women's economic empowerment, and government fiscal savings. Through this initiative, the World Bank Group seeks to establish a global framework, develop best practices and provide upstream technical assistance to radically improve G2P payments globally, ensuring that all G2P programs aim and design for broader inclusion and empowerment outcomes through a focus on digitization.

The G2Px Initiative seeks to refine the understanding of both the benefits and challenges in order to create a roadmap to ensure that governments and the technical advisors that support them are empowered to design G2P programs not only for short-term efficiency gains for single initiatives but also for government-wide efficiency gains, and, for recipients, a seamless user experience in the short-term and maximum empowerment benefits in the long-term. This roadmap, complemented by in-country case studies and technical assistance, will help to build a global movement for ensuring that all G2P specifically state financial inclusion and women's economic empowerment as objectives and design programs accordingly.



Abstract

Globally, the expansion of social assistance is among the most common public policy responses to the COVID-19 pandemic. The scale of these programs is unprecedented both in terms of government spending and the share of the population receiving social assistance. The challenge of quickly determining who would be eligible for these transfers highlighted gaps in information about workers in the informal sector and their families and other vulnerable groups. A review of some of these experiences reveals the importance of certain 'assets' such as a robust digital identification system and other key registries in areas such as tax and social security. Countries with superior and more inclusive assets in this regard were able to move more quickly than those without them. This may lead governments to expedite the investments required in this infrastructure and better prepare them for future crises. In the meantime, the second wave of responses may have to rely on innovative methods of registration and targeting, using new data sources and leveraging the ubiquity of mobile phones in low and middle-income countries. The challenge in the years that follow will be to find a way to permanently integrate real time data on the majority of the population that operates in the shadows of the informal sector.

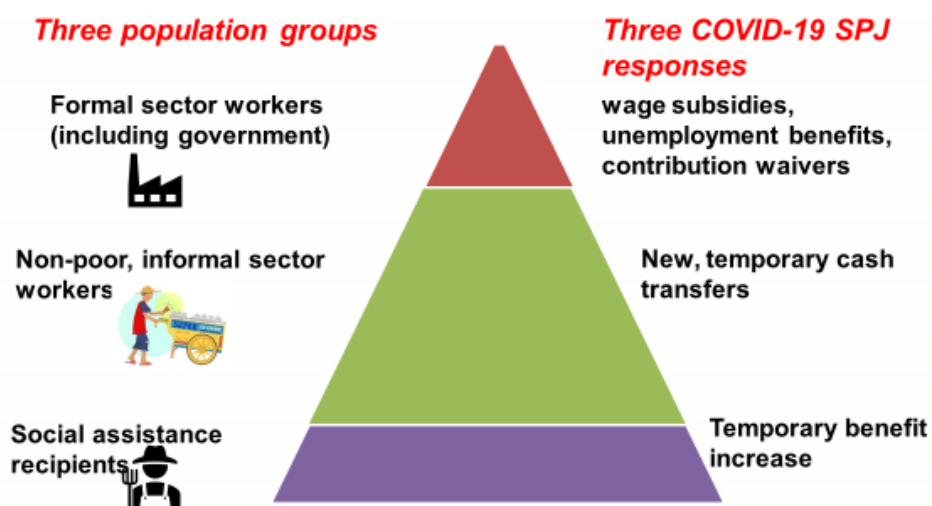


Challenges in scaling up social assistance in the context of a response to COVID-19¹

The first round of reports around the world confirmed that temporary social assistance payments² will be an important part of the response to the COVID-19 pandemic. As of June 30, more than 100 countries had announced plans to scale up social assistance payments by increasing benefit levels, coverage or both.³ Dozens of developing countries will spend unprecedented amounts to provide direct assistance to individuals and households suffering from the effects of the pandemic.

This raises two separate, but related challenges. The first is **to make social assistance payments safely and securely in the new context of the pandemic**.⁴ The subject of this note is the second challenge; to **expand the list of eligible social assistance beneficiaries**. Determining who is eligible for the new transfers quickly and with minimal physical contact is complicated by the fact that data on a large segment of the population is often not present in existing government databases. As illustrated in Figure 1, the social protection system in developing countries tends to cover workers in the formal sector through social insurance and poor households through social assistance.

Figure 1. Social Protection Responses to the COVID-19 Pandemic



Source: Own elaboration.

¹Drafted by Robert Palacios, Lead Social Protection Specialist, World Bank with contributions from Doug Johnson, World Bank consultant. Useful comments and suggestions were provided by Vyjayanti Desai, Ana Georgina Marin Espinosa, Luz Stella Rodriguez, Kenichi Nishikawa Chavez, Alan Gelb, Valentina Barca and Jonathan Marskell. The views expressed here are the author's and do not necessarily reflect the views of the World Bank.

² Social assistance can also take the form of in-kind benefits such as distribution of food. Social assistance here refers only to monetary benefits which can take various forms in addition to physical cash.

³ These are sometimes referred to as vertical and horizontal expansions. See Gentilini et al (2020).

⁴ See World Bank (2020a).



Typically, a relatively small share of the labor force is found in the formal sector. Their employment status and labor income can be monitored through their social insurance contributions or through public sector payrolls. These databases allow governments to introduce wage subsidies, provide loans or extend unemployment benefits (where these exist). At the same time, existing lists of social assistance beneficiaries can be used to channel emergency payments quickly. Dozens of countries have increased the amounts paid, relaxing requirements (e.g., residency status), suspended conditionalities and made payments in advance. In contrast, the new beneficiaries of the COVID-19 emergency transfers tend to be those in the non-poor informal sector, the so-called ‘missing middle’. In low and even middle-income countries, this is often the largest share of the population. These workers and their families may not appear in any government database and in the lower income countries, many do not have any form of identification.⁵

Some countries have created social registries⁶ that are used to assess needs and poverty status. The population coverage of these registries varies. Those that cover most of the population, including the non-poor, informal sector, can be used to quickly add to the beneficiary lists after applying certain criteria. In most cases, the expansion based on the social registry cross-checks other administrative databases such as income tax or social insurance to minimize inclusion errors. The use of existing databases expedites the process and minimizes the need for direct contact with the population. However, this approach depends on the accuracy and interoperability of databases being utilized.

Countries without this option must essentially create them from scratch. The nature of the pandemic in terms of minimizing physical interaction as well as the need to move quickly means that digital application and registration processes are strongly preferred. As in the case of an existing social registry, the newly collected data can be cross-checked against existing government databases to improve targeting. A few countries have used both approaches.

Countries with trusted and inclusive foundational identification systems⁷ that are digitalized and have close to universal coverage are at a distinct advantage for several reasons.⁸ First, in the case of new applications, the uniqueness of the identifier used in the process ensures that the same individual could not apply to receive more than one benefit. Double dipping can also be avoided by ensuring that someone already receiving benefits from another existing program does not become eligible for the new payment. To the extent that the identification system can be used for authentication, ‘ghost’ or non-existent

⁵ See, <https://id4d.worldbank.org/global-dataset>

⁶ Here we refer to both traditional social registries based on data collected at the household level, typically in ‘census sweeps’, which includes variables that are used to rank the households according to level of poverty often based on proxy-means tests (e.g, Pakistan or Rwanda) as well as more advanced systems, sometimes called ‘virtual’ social registries. The latter are typically based on application processes where data are pulled from multiple administrative databases in order to determine whether a household is qualified to receive a benefit (e.g., Jordan or Turkey).

⁷ The ten Principles on Identification for Sustainable Development, which have been endorsed by 25 organizations, offer a useful guiding framework to elaborate on what ‘trusted and inclusive’ means. For more information see: <https://id4d.worldbank.org/principles>.

⁹ An additional advantage of inclusive digital identification systems that is beyond the scope of this note is their ability to facilitate customer due diligence (CDD) requirements in order to open accounts to be used to channel payments for individuals that did not already have bank accounts, potentially enabling remote onboarding of beneficiaries with little to no information requested from them.

beneficiaries can be removed.⁹ An inclusive foundational ID with close to universal coverage can also be used to quickly expand coverage, starting with the entire population and filtering out only the most affluent.

Most importantly however, the ability to cross-check various databases using the unique identifier has made it possible to increase the precision of targeting. Prior to the crisis, Turkey used 28 government databases ranging from property and auto registries to income tax and social insurance registries to determine eligibility. The same system was harnessed to temporarily increase the number of eligible cash transfer recipients from 4 to 12 million households. This was an example of the expansion of an existing integrated social registry¹⁰ where no additional data had to be collected. This contrasts with static social registries where periodic door to door data collection of certain indicators is utilized for targeting purposes and which therefore may be outdated at the time of a crisis.

Some countries used on-line registration and then cross-checked different administrative databases using the national ID number. Thailand accepted 28 million applications in a few weeks and used various government registries to filter those that would not be eligible according to the criteria applied. The fact that the unique ID number was linked to existing bank accounts also expedited the response in countries like India, Chile and Thailand where this mapping for government payments was already standard practice. Finally, the identifier was used to convey whether someone was eligible for benefits in several countries. In Pakistan, the individual had only to send an SMS with the number to verify eligibility.

With a few exceptions, countries with social registries that covered almost the entire population also have digital identification systems with very high coverage. The power of the identification system was further magnified by the existence of other administrative databases, especially social insurance which helped quickly distinguish formal sector workers. Conversely, countries which do not have a strong, national level ID face difficulties ensuring uniqueness (deduplication) as well as using their administrative data to improve targeting of benefits.

As discussed below, the first wave of countries to expand social assistance payments to new beneficiaries tended to be those with better identification systems, social registries and other administrative data. The next section reviews the early international experience of scaling up social assistance in response to the pandemic.

The Early International Experience

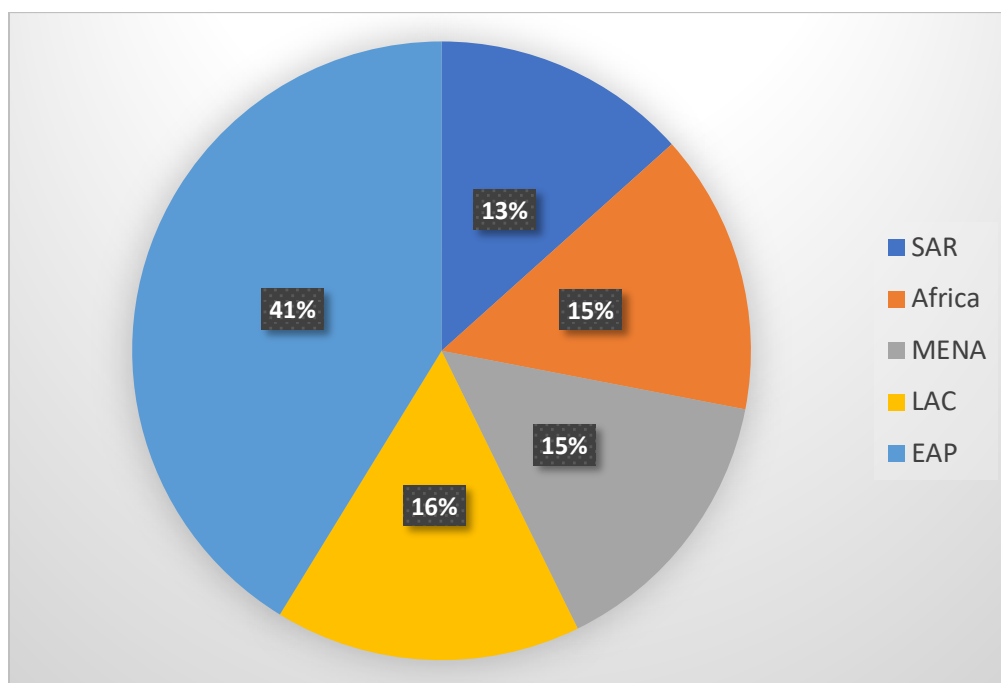
While more than 80 low and middle-income countries have announced new or expanded cash transfer programs to offset the impact of the COVID-19 pandemic, less than half have already identified the new

⁹ In the case of the United States stimulus payments, gaps in this system resulted in checks being sent to more than one million dead people. <https://www.gao.gov/products/GAO-20-625>

¹⁰ See Barca and Chirchir (2020) for a discussion of integrated social registries.

beneficiaries and started making payments. In some of these cases, the estimated number of new beneficiaries has been announced while in others, no estimates or targets are available. Based on actual and target beneficiary figures for 66 developing countries,¹¹ the total number of new social assistance beneficiaries is well over a billion. Excluding India, the figure is close to 900 million. Figure 2 shows that after excluding India, two thirds of the new beneficiaries live in Latin American and East Asia.¹²

Figure 2. Distribution of individuals in households receiving new cash transfers



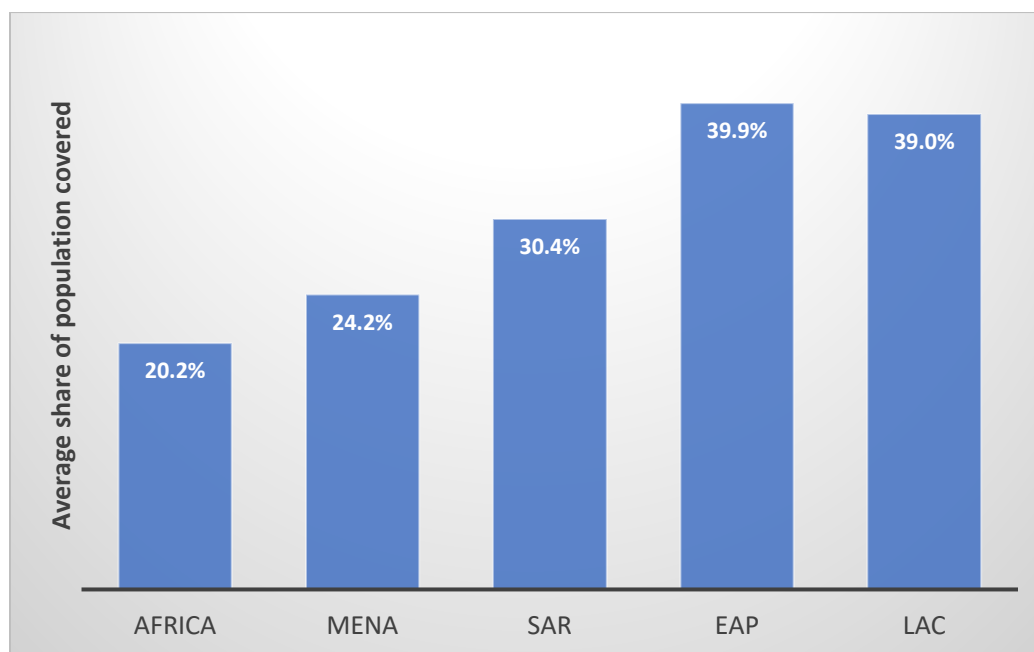
Sources: World Bank Social Protection COVID-19 Response database; UNDP COVID-19 response database; various World Bank project documents and unpublished notes.

The average share of the population living in a household receiving or targeted to receive a new benefit across the 66 countries is about 29 percent but this figure varies significantly across countries and regions. As shown in Figure 3, it ranges from about 13 percent in Africa to about 40 percent in East Asia and Latin America. In 10 countries more than half the population lives in a household receiving a new transfer. These are unprecedented figures and demonstrate the magnitude of the response.

¹¹ These figures exclude high income OECD countries as well as Eastern Europe and Central Asia as well as China.

¹² The estimate for India in Annex 1 of close to a billion people is based only on the number of women covered by the Pradhan Mantri Jan Dhan Yojana (PMJDY) program and their families based on average household size. However, it is possible that these women live in households already receiving a different transfer, so this figure is an overestimate. It is nevertheless important to note the unprecedented speed with which this huge program was implemented; the third month of payments was completed in June 2020 for a total of around US\$4 billion dollars. The other programs such as widows and the LPG subsidy are not new programs but receive top ups. Arguably, the construction workers welfare fund members represent new beneficiaries in which case the total for India would increase by about 100 million to the extent they were all new beneficiaries (based on the households of around 23 million construction workers). The bottom line is that the vast majority of households in India received either a top up, a new transfer or both.

Figure 3. Median share of the population receiving new social assistance payments as part of the COVID-19 response in each region



Sources: World Bank Social Protection COVID-19 Response database; UNDP COVID-19 response database; various World Bank project documents and unpublished notes.

Only about half of these new programs have been at least partially implemented and in about a third, the first round of payments is currently being paid or, in a few cases, have even been completed. The most common ways of reaching new cash transfer recipients to date are either to add households based on existing social registries or to accept on-line or mobile applications and determine eligibility. Several countries do both while a few have used paper-based applications. In the case of use of social registries, existing fields in the database such as age can be used. In most cases, there is an attempt to cross-check with other databases to ensure that, for example, the person is not receiving a benefit through the social insurance agency.

In the case of new applications, the approach in countries that have implemented quickly has been largely digital; individuals fill out online questionnaires or submit their data through mobile apps on their own or with assistance, such as from local governments or social workers. After the data are submitted (typically with at least a nominal check for consent by the applicant), these are checked against a set of eligibility criteria using different administrative databases. Advanced countries also verify identity at this stage, typically using some form of demographic matching. Thailand, for example, used a code on the back of its national ID card in a similar way to how online credit card transactions use the code on the signature panel to authenticate the holder. The applicants are then notified as to whether they were accepted or rejected. In some cases, an explanation is provided. Some systems allow those rejected to file their grievances with a process in place to respond and rectify as needed.

Table 1 shows how 16 of the countries that moved quickly – representing a little less than half of the developing countries that did so globally – were able to add to their existing social assistance rolls in a relatively short time.¹³ All of these countries have completed the vast majority of their first round of payments within a few months of announcing the policy. In eleven cases, new applications were received with only the Philippines using paper forms distributed by local governments. In five cases, most of the additions used only the existing social registries. Brazil, Egypt and Indonesia and Tunisia used both methods. Out of the 16 countries, 14 used a unique identifier to cross-check their beneficiary list against other databases to determine eligibility.

Table 1. Methods and Assets used for adding new beneficiaries to social assistance Programs^a

Country	Social registry based-expansion	New applications	Cross-checks with administrative databases	Assets used in expansion
Argentina		X	Yes	National ID, functional registries
Brazil	X	X	Yes	Social registry, tax ID, functional registries
Chile	X		Yes	National ID, social registry, functional registries
Colombia	X		Yes	National ID, social registry, functional registries
Ecuador	X		Yes	National ID, social registry, functional registries geographic (census data) and mobile usage
Egypt	X	X	Yes	National ID, functional registries
Indonesia	X	X	Yes	National ID, social registry, functional registries
Jordan		X	Yes	National ID, functional registries
Namibia		X	yes	National ID, functional registries
Pakistan	X		Yes	National ID, functional registries, social registry
Peru	X		Yes	National ID, functional registries, social registry
Philippines		X	No	Local government officials
South Africa		X	Yes	National ID, functional registries
Thailand		X	Yes	National ID, functional registries
Togo		X	No	Functional ID (voter)
Tunisia	X	X	Yes	Civil registry, functional registries

Note: a. All countries except Thailand provided additional benefits to those already receiving social assistance.

Not surprisingly, the method chosen reflected available administrative data in each country. Countries with traditional social registries with high population coverage used these exclusively and eschewed new applications. Those with partial coverage, such as Brazil and Indonesia, added on-line applications to supplement the limited scope of the social registry. Social registry-based expansions had the advantage of avoiding new application or enrollment processes, although additional information related to payments

¹³ Barca (2020) lays out a more detailed taxonomy to differentiate the mechanisms to add new beneficiaries.

channels was often still required.¹⁴ People were informed that they were eligible through mass-communication campaigns, combined with websites where people could check whether they had been declared eligible. In the case of Pakistan, potential recipients were asked to send a text message to a telephone number; a text message in reply confirmed whether they were eligible or not. The websites and messages also provided information on how to receive/collect/cash out payments. In all cases, the notification process relied on their unique ID numbers. This method allowed for new enrollments with no physical contact and minimal transaction costs. A major limitation of this approach was the fact that some of the registries were not up to date. At the same time, even had they been updated, the use of a proxy-means-test to determine poverty status would still be problematic since the correlation of the variables used for the calculation with consumption levels would have been structurally changed by the pandemic.¹⁵

Peru is a good example. Its social registry ranks about 80 percent of the population from poorest to richest. The first phase of its expansion of social assistance payments was achieved by increasing the cutoff score within this population resulting in an increase from around 724,000 to 2.7 million households or more than one third of the population. The second phase also took advantage of the data in this registry but then applied cross-checking filters using income and social insurance data to eliminate the remaining low-income households that had formal sector jobs. This was straightforward because the unique ID number which has almost universal coverage could be linked across databases. Peruvians could then simply go to a website with their national ID number and check to see if they had been declared eligible for the transfer.

Countries with no social registry took applications, typically in a matter of a few weeks, but in some cases much longer. In Namibia, for example, one million applications were received in two weeks. About 60 percent were declared eligible and paid into bank accounts within two more weeks. Its larger neighbor, South Africa, opened applications on May 11th and by June 18th had only managed to pay half of the 2.6 million accepted applicants.¹⁶ Most of the other countries using this approach have managed to pay out more quickly than South Africa with the exception of the Philippines where it has taken several months.

In countries that relied on applications, the Philippines stands out as an outlier in several ways. First, despite having a social registry that covered around 75 percent of the population, the government opted for an application-based process. This was due to the fact that the social registry was already five years old and the update that was already in progress was interrupted by the crisis. Second, the application process was done with paper forms with the consequent need for physical contact with the majority of the population. The data was encoded locally but with mixed speed and accuracy, which reduced the ability to verify and deduplicate beneficiaries. Finally, there was no real possibility to cross check with functional registries or even to deduplicate applications due to the lack of a foundational ID system.

¹⁴ In the case of Ecuador, the social registry approach was used to add 800,000 people while census data is being used to find an estimated additional 100,000 households in poor areas not yet registered. In El Salvador and Guatemala, electricity consumption levels were used to determine eligibility.

¹⁵ There are additional factors that affect how useful social registries can be in a crisis response. For a good discussion of these criteria see Barca and Beazley (2019) <https://www.dfat.gov.au/about-us/publications/Pages/building-government-systems-for-shock-preparedness-and-response-the-role-of-social-assistance-data-and-information-systems>

¹⁶ Gelb (2020), <https://www.sabcnews.com/sabcnews/sassa-working-on-appeal-system-for-r350-grant-applicants/>.



In fact, with this one exception, all countries listed in Table 1 were able to rely on a national level, unique identifier for deduplication, an important advantage in order to move rapidly while minimizing duplication and fraud. In thirteen of the fifteen countries, the solution was a national ID with high, close to universal coverage. In the case of Brazil, the tax ID was used effectively (albeit with some problems initially). In Togo, a biometrically deduplicated voter ID was used.¹⁷ An additional bonus for Togo was the fact that occupational status had been collected as part of voter registration and was available in the database allowing for targeting on this basis rather than a functional registry.

India also had a ubiquitous foundational ID that greatly facilitated the COVID-19 cash transfer response. However, it was unique in that most of the new beneficiaries were women that had been part of a financial inclusion program dating back several years. These accounts were opened using the biometrically deduplicated Aadhaar number ensuring that each beneficiary was unique. While the goal of that program was financial inclusion and there was an emphasis on opening accounts for women, the fact that such a registry existed and covered more than 200 million women made it possible to channel emergency transfers to them very quickly with the third monthly payment completed in June 2020.¹⁸

Each of the approaches had its own shortcomings.¹⁹ Traditional social registries were not up to date forcing countries to supplement beneficiary rolls with other methods. The case of the Philippines was already mentioned. In the case of Ecuador, geographic targeting using census data is being utilized to add close to 100,000 households to the beneficiary list. Pakistan's social registry was also in the process of being updated making it difficult to target accurately. Finally, social registries were not designed to capture information that would be relevant for the kind of economic shock that the pandemic represented.

The application-based approach faced several constraints. First, the speed with which data had to be collected led to technical problems as volumes exceeded website capacity in several countries. Digitally challenged applicants could also face hurdles in accessing the internet or navigating mobile application processes. Figure 4 is taken from a popular newspaper in Brazil. The cartoonist points out the difficulty the poor may have to access the app required to apply for the benefit. While this rapid, real time data collection potentially yielded more timely and relevant information, they were also difficult to verify. In cases where the governments relied on other administrative databases for cross-checks, the quality of various administrative databases was tested. As Gelb and Mukherjee²⁰ point out, it is important to have human back up processes in place to deal with problems. The actual performance of these systems will only become evident in the coming months when survey data is available and compared to reported administrative data.

¹⁷ The voter registry contains 3.6 million out of an estimated 3.85 million adults aged 18 and over. The database was up to date due to the fact that the elections were held in February 2020. See Boko et. al. (2020).

¹⁸ Studies suggest that a significant proportion of these benefits have not actually been cashed out by beneficiaries for different reasons including difficulty of movement during lockdown or lack of awareness. See for example, <https://www.indiaspend.com/40-of-jan-dhan-account-holders-could-not-access-govts-covid-19-relief-survey/>

¹⁹ For a more extensive discussion, see Barca et al. (2020) <https://socialprotection.org/discover/publications/space-guidance-note-rapid-expansion-social-protection-caseloads>.

²⁰ Gelb and Mukherjee (2020).

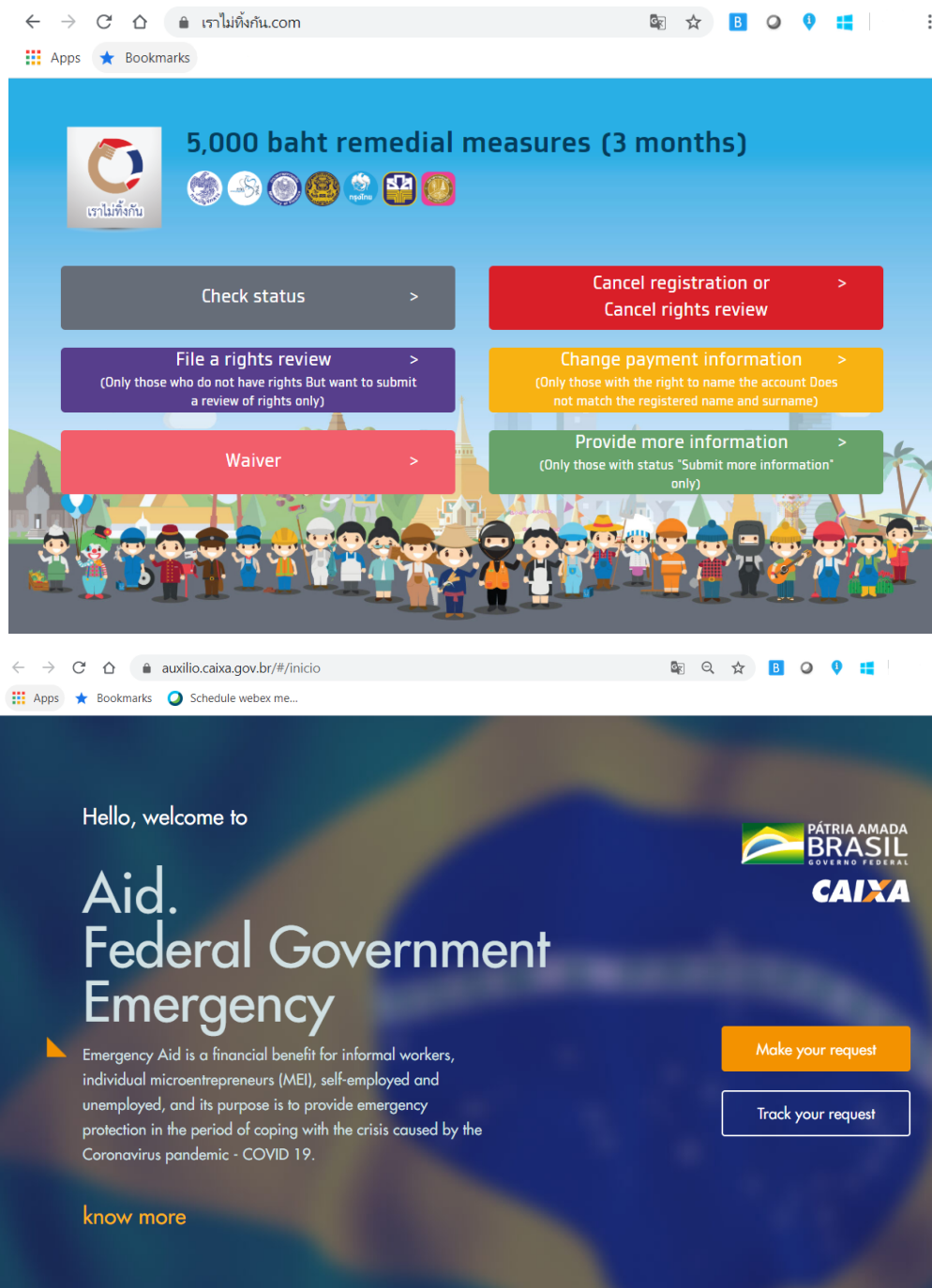
Figure 4. “Have You Downloaded the App?”



Source: Nando Motta (2020); see <https://www.brasil247.com/charges/baixou-o-app>

Thailand, which has various cash transfer programs but does not use a social registry to determine eligibility, targeted informal sector workers and set up a website to accept applications. More than 28 million people applied corresponding to about half of the working age population. This figure was much higher than the government expected forcing it to revise its original target from 3 to 9 and eventually to more than 15 million declared eligible. Brazil combined the social registry and application methods. First, around 11 million people already in the social registry were added as new beneficiaries (the others received a top-up). The social registry only covered about one third of the population so the remaining informal sector workers would have to use the application process. The website and mobile application were quickly rolled out and more than 100 million applications were received with 36.4 million declared eligible by the end of the first phase. In both countries, the massive number of applications were not anticipated and tested their systems. Nevertheless, these cases and several others (e.g., Namibia and Turkey) showed how quickly benefits could be extended to the majority of the population. The websites from each country are shown below. The role of mobile phone (including feature phones through USSD) and internet based self-application combined with the ability to check the information with other databases was crucial in most of the early implementers.

Figure 5. COVID-19 Crisis Cash Transfer Application Websites, Thailand and Brazil



As mentioned earlier, almost all countries used existing functional registries like social insurance to cross-check for eligibility. This has revealed deficiencies in these databases, especially in terms of their synchronicity. In many cases in Thailand for example, applications by individuals who had eligible jobs in urban transport or other services were rejected because they had not been removed from the registry of farmers. In South Africa, delays appear to have been caused partly by cross-checking with unemployment

rolls and unclear eligibility criteria. In many countries, civil registries cannot collect reliable data on deaths resulting in many 'ghost' beneficiaries. The rapid pace of the enrolments taking place during the crisis will inevitably result in errors of both inclusion and exclusion. Nevertheless, some countries will be in a better position to correct errors and add or subtract from beneficiary lists.

Finally, this type of data sharing or 'data aggregation' also raises questions as to whether it violates privacy or personal data protection regulations. While consent may be part of the application process, most individuals will not be aware of how their data are being used. Moreover, they are not in a strong position to object as it would result in foregoing the transfer. In Colombia, the government authorized public and private entities to share data but issued a decree mandating that they could only be used for this purpose and guaranteeing their confidentiality.²¹

The early experiences have revealed many challenges, but they have also demonstrated the feasibility of quickly expanding the role of social assistance to non-traditional beneficiaries to offset the negative impact of the pandemic. A key lesson has been the importance of infrastructure and data, especially the underlying identification system and functional registries such as social insurance. Fifteen of the sixteen countries reviewed here have robust forms of unique identifiers with high coverage while fourteen of the sixteen were able to leverage existing functional databases.

Figure 6 below expands the sample of countries in order to better illustrate the importance of initial conditions for rapid implementation of programs for informal sector workers and their families. All of the 66 countries shown in the figure announced a policy that involved adding new social assistance beneficiaries between the end of March and the first week of May 2020. The countries marked in yellow had finished a first round of payments before June 30th ²² while the countries marked in blue had not (although many had made top up payments to beneficiaries of existing programs). About half of the countries in the sample here were able to make their first round of payments quickly.

The y axis is an indicator based on the average of the coverage rate of the identification system and the coverage of the social insurance registry. As discussed earlier, a robust identification system that covers most of the population facilitates registration and determination of eligibility by ensuring uniqueness and allowing for cross-checking various administrative databases. It also facilitates account opening for payments for those without bank accounts. Digital, social insurance registries, especially when they can be mapped to the national ID, allow for rapid cross-checking of applications from workers claiming to be in the informal sector. Also, the larger the coverage of the formal sector schemes, the smaller the share of the population that must be added to the social assistance rolls since there are other mechanisms available to provide them with benefits. The y-axis is the estimated share of the adult population with bank accounts. The latter indicator serves as a proxy for the ease with which payments can be made.²³

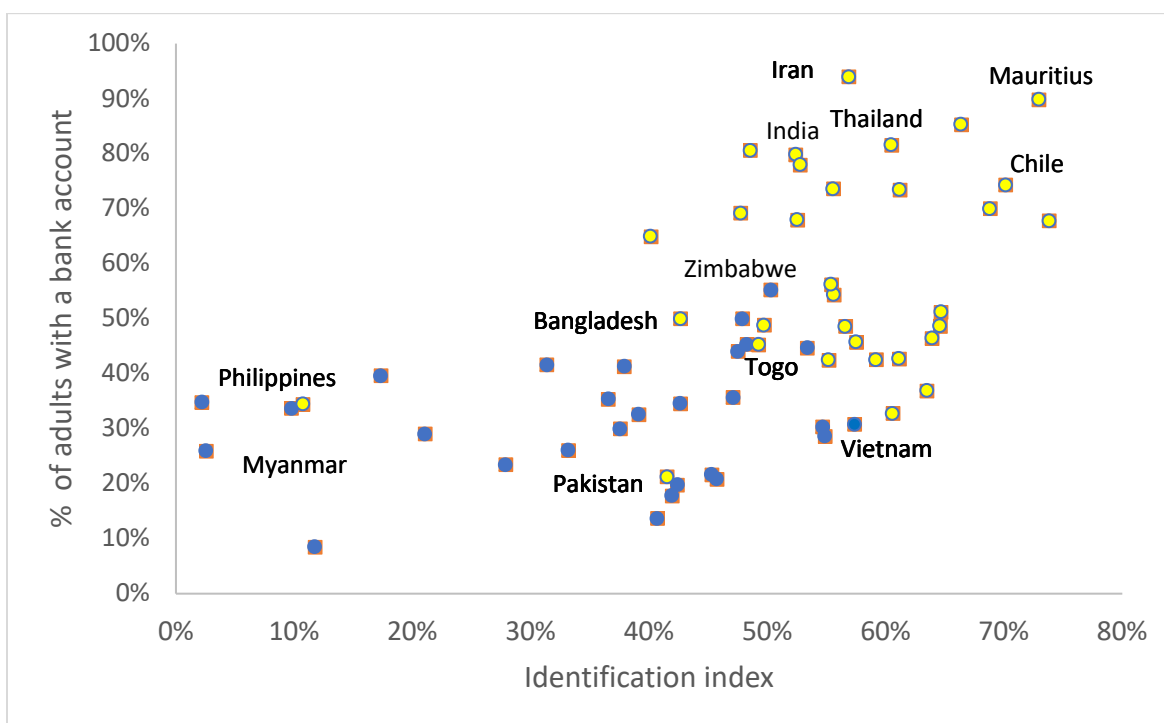
²¹ https://ingresosolidario.dnp.gov.co/documentos/DECRETO_518_DEL_4_DE_ABRIL_DE_2020.pdf

²² Some countries made a single payment but most made between three and six months of payments. India, for example, announced the scheme in March and completed three monthly payments by the end of June.

²³ The first wave countries averaged 90 and 58 percent on the financial inclusion and ID indicators compared to 34 and 68 for the late starters.

While there are many factors²⁴ that affected how quickly countries implemented these new payments, Figure 6 is suggestive of the importance of the initial conditions that allow for rapid registration and payment. Notably, most of the countries that were able to create a new list of beneficiaries and start to pay them during this period are found in the top right quadrant of the figure with high scores on both indicators.²⁵ There are two obvious exceptions, Pakistan and the Philippines. One explanation is the availability in Pakistan of a social registry that covered more than three quarters of the population, as well as the ability to cross check with bank account, passport, property and other databases using the unique national ID number. The Philippines also has a social registry with similar coverage. However, it was not used for the coverage expansion as it was outdated and a new census round was under way when the crisis struck. Moreover, it does not have a national ID and is therefore unable to cross-check other databases including social insurance.

Figure 6. Relationship between initial conditions and implementation of new social assistance payments



Source: Author's calculations using data in Annex 1, Global FINDEX for share with bank accounts, ID4D Global database for having an ID and World Bank pension database for social insurance coverage.

Note: The circles marked in yellow are countries that made or were close to completing their first round of payments by June 30, 2020.

²⁴ Additional factors include different levels of urgency depending on the impact of lockdowns, fiscal constraints and the capacity of the public sector generally. Seeking (2020) provides an example of limited government capacity in the case of South Africa.

²⁵ Note that coverage was also correlated with these initial conditions. The early implementers covered about 39 percent of the population on average compared to 19 percent for the late starters.

All the countries that were not able to complete a first round of payments had relatively low scores on both indicators. Vietnam, for example, issued the resolution establishing the new payments to informal sector workers (along with existing social assistance beneficiaries) on April 11th but was unable to register these individuals by the end of June. Zimbabwe is an interesting case and seemed likely to be among the first wave of countries responding. It has the advantage of a very high penetration of mobile money accounts and a national ID with high coverage and announced a package that would make three, monthly payments for one million vulnerable households on March 31st. A major obstacle is related to a question of personal data protection related to questions about MNOs sharing national ID data of their subscribers with the government. Payments had not been made as of early July. In contrast, Namibia announced a one-time payment on April 9th which was paid to most adults in the country by May 8th.

The second wave of COVID-19 cash transfer responses

The countries that have not yet started to make payments to new beneficiaries tend to be lower income and have larger shares of informal sector workers, many of whom do not have forms of identification that can be easily checked. In the longer run, the crisis may encourage governments to invest in systems that allow them to react more quickly and some projects were already in motion at the time of the crisis. Ethiopia, for example, had planned to launch a new digital ID along the lines of India's Aadhaar system. In the short run however, there is no digital ID in Ethiopia so that alternative approaches will be required. In contrast, Rwanda is likely to be in a good position to move quickly due to the high coverage of its digital ID system and a social registry that covers more than 90 percent of the population.

The experience of Timor-Leste, the lowest income country to have managed to complete its first payment by the end of June, is instructive for the second wave countries. Like Togo, it was fortunate to have recently had an election and voter registration rates were high. This provided a ubiquitous and relatively robust form of identification. While direct authentication with the voter database was not possible, checks for duplicates and erroneous number structures helped reduce potential errors and fraud. Combined with the demographic data that had been collected at the village level and digitized, this provided a reasonable starting point for the government teams to go out using software on tablets²⁶ and prepopulated data and issue cash payments (with social distancing). While not ideal, the digitization of the processes at each step including grievance redressal, increased transparency and appears to have limited diversion and fraud. Out of 310,000 households, complaints were filed by about 12,000 or four percent.

Similarly, Cambodia expects commune level officials to collect data using tablets already available from previous registration efforts for subsidized health insurance. The first-round payments started in July and used the existing health insurance registry that already contained about 550 thousand households. In the

²⁶ The tablets provided to the 452 teams that moved from village to village making and recording payments were available due to their use for the 2020 census. See Pinxen (2020).

last few months, they have added another 60 thousand households using the existing community-based process in rural areas. While the government is discussing further expanding to cover urban informal sector workers affected, this has not yet happened. Luckily, after a recent campaign, most Cambodians now have a relatively robust national ID and mobile penetration is very high in urban areas.

Figure 7. Data collection for targeting using a tablet in Cambodia



Source: <https://www.giz.de/en/mediacenter/75045.html>

Cambodia and Timor-Leste are predominantly rural. The task is more complicated in countries where the target populations are a subset of informal sector workers in urban or semi-urban areas. In Vietnam for example, commune level officers must collect data on occupational status with paper forms to be digitized and reviewed to determine eligibility. Aside from the physical contact required, there are several problems with this approach: First, the answers to these questions are very difficult to verify. Second, while Vietnam's national ID covers most of the population, it is not possible to authenticate individuals electronically to ensure uniqueness or to ensure that applicants are not actually covered by social insurance or social assistance programs already.

These constraints have reinforced the need to build identification systems that can be harnessed for rapid responses to crises and for more efficient government administration in normal times. It has also highlighted the gap in information about the so-called 'missing middle', the non-poor, informal sector which comprises anywhere from 40 to 90 percent of the labor force. Investments in these areas will take a few years to bear fruit, however. In the meantime, some countries are exploring innovative ways to take advantage of new techniques for targeting, especially methods consistent with social distancing.

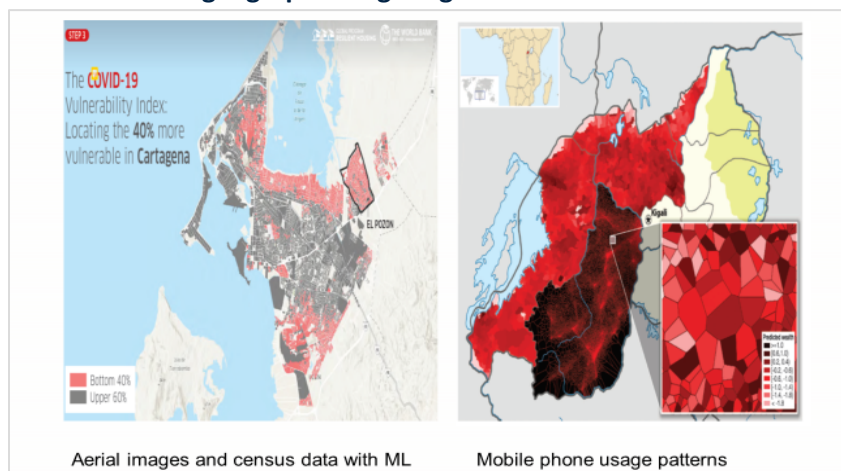


One of these techniques relies on the relatively recent phenomenon of high mobile phone penetration in poor countries²⁷. Where mobile penetration is very high, correlations between ‘ground truth’ data collected through sample surveys to estimate consumption and poverty at a specific point in time with mobile phone use patterns has been shown to predict the poverty status of households at least as accurately as traditional methods.²⁸ However, accuracy is directly related to the amount of information about individuals available raising new concerns over privacy, including consent.

An alternative is to use anonymized mobile phone data for geographic targeting. In Zimbabwe, for example, ground level data suggest a strong correlation between density in the capital, Harare, and poverty rates. Zimbabwe has the additional advantage of high mobile money penetration making it possible to make payments directly to the e-wallets of all phone numbers mapped to the targeted areas. These techniques have the additional advantage of tracking behaviors in real time so that the impact of the transfer is easier to monitor. Several countries, including Bangladesh, Nigeria and the Democratic Republic of Congo are currently considering this approach in the context COVID-19 pandemic but it could potentially be used in other situations such as natural disasters.²⁹

Another approach is to combine census data with high precision images from aerial drones or satellites in order to establish algorithms with machine learning that can predict various indicators relevant for eligibility. This has been demonstrated to work well at a neighborhood and reasonably at the level of households in the case of Colombia and is being explored in several other Latin American countries.³⁰ Figure 8 shows the level of geographic granularity in Cartagena and Rwanda using these two alternative targeting methods. It would be interesting to see how much accuracy might be improved by combining these methods.

Figure 8. Innovative methods of geographic targeting in real time



Sources: Terraza et al (2020); Blumenstock et al (2015)

²⁷ As shown in the last section, mobile phones can also be effectively harnessed for rapid data collection through a self-registration process that avoids traditional door-to-door surveys.

²⁸ See for example, Steele and others (2017) and Blumenstock, Cadamuro, and On, (2015).

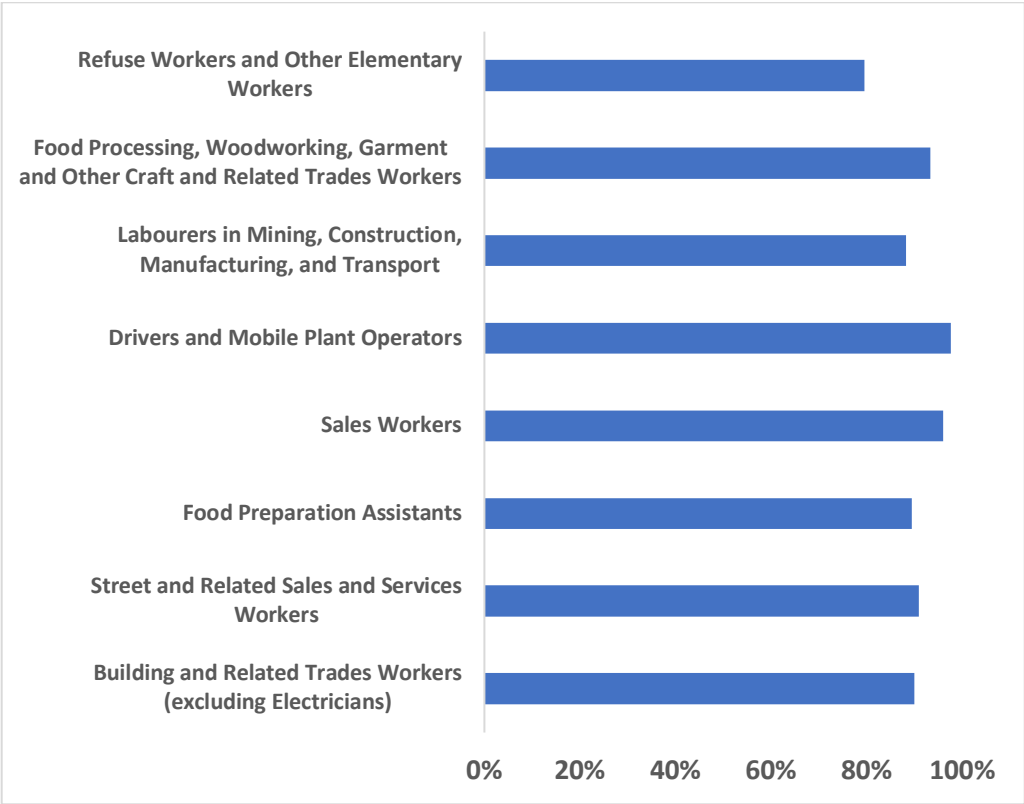
²⁹ It is important to distinguish between the use of granular data to help determine eligibility at an individual or household basis versus geographic targeting. While both are possible, the use of identifiable data raises important issues about consent and data protection.

³⁰ Terraza et. al., (2020).

These methods lend themselves especially well to urban areas. This is important in the COVID-19 context for two reasons. First, most social assistance beneficiaries in low income countries are found in rural areas where poverty rates tend to be higher. Second, many of the most seriously affected occupational groups are found in urban and semi-urban areas (for example, street vendors, rickshaw drivers, domestic help etc.). The first expansion of social assistance to a larger number of poor, rural households was relatively straightforward in countries like Indonesia and Vietnam. It has been a much slower process to identify urban, informal sector workers affected by the economic downturn. In Vietnam, vertical expansion of social assistance benefits took place within a month of their announcement. Three months since the new benefits for urban informal sector workers was announced, only 35 thousand out of the targeted 5 million workers have received any payment.

Myanmar is a useful example. In less than a decade mobile penetration has risen from negligible to more than 85 percent. Figure 9 based on census data from 2017 shows that even higher rates of mobile phone ownership prevailed for informal sector workers in the kind of occupations affected by the pandemic. These figures will almost certainly have risen by 2020. The government has recently announced a plan to provide social assistance to around five million households or about 40 percent of the population. In the context of few other assets for delivery, harnessing mobile telephony for targeting, registration and even payment seems worth exploring.

Figure 9. Mobile phone ownership by occupation in urban areas in Myanmar



Source: Myanmar 2017 census data.

Conclusions

The options available to governments seeking to provide financial relief to people in the context of the COVID-19 pandemic quickly are at least partly constrained by their infrastructure and the availability of data. The quality and coverage of identification systems and the availability of a trusted and inclusive foundational ID system, social registries, and the administrative databases used by social insurance, social assistance, tax, and other agencies are especially important when these transfers must be paid quickly. Out of 16 countries reviewed, 15 had robust foundational ID systems with close to universal coverage. It is also important to note that these assets allowed governments to implement the new social assistance relatively quickly while minimizing the risk of spreading the virus since data did not have to be collected through physical contact.

Nevertheless, the first wave of responses did reveal flaws in existing databases and raised important privacy concerns related to data aggregation. The crisis has brought the deficiencies of delivery systems in many countries into sharp relief and may speed up plans to improve identification systems and digitize government more broadly. It may also encourage governments to go beyond traditional social registries to harness public and private sector data in new ways that provide real time information, especially on the informal sector households that comprise the 'missing middle' in developing countries.

In the short run, more creative solutions will have to be employed particularly in poor countries where the assets required for these assets are limited. Geographic targeting using recent advances in data analysis and machine learning may offer some solutions and may even come to replace traditional, more invasive methods such as census-sweep based targeting approaches at a much lower cost. The ubiquity of mobile phones can be leveraged in some countries both to quickly collect data and process applications as well as for payments, whether through mobile money at a cash payout point.

One of the key lessons that the pandemic holds for social protection practitioners is the supreme importance of having data about individuals and households. Governments with robust and comprehensive data were able to respond quickly while those without have struggled.³¹ This is especially true for the expansion of emergency social assistance payments. Data in national identification systems that cover most of the population played a key role in ensuring that payments were not paid to the same person and combining information from multiple administrative databases for the purpose of determining eligibility. Some countries, like Turkey, were already doing this using more than two dozen administrative databases. Others like Brazil and Thailand were able to leverage the databases that they had quickly because they all contained the unique identifier. Many countries used the social security and income tax database to filter informal sector workers but there were many other useful databases ranging from electricity consumption (El Salvador and Guatemala) to auto and land registries (Jordan and Turkey) to registries for farmers and fishermen (Thailand, Maldives). Each of these countries were able to expand their social assistance programs dramatically in less than three months.³²

³¹ See Palacios (2020).

³² Notably, their main challenges and the reason for many complaints was the fact that some of these databases were not up to date.

In countries that lack such administrative data, innovative ways to harness other available data sources are being explored. Several Latin American countries are using satellite or drone imagery that can be correlated with survey and census data to predict which areas in cities are poor. Several African countries as well as Bangladesh are partnering with mobile network operators (MNOs) to use mobile phone behavior data such as call frequency and location to predict geographic distribution of poverty and drops in economic activity caused by the pandemic. Mobile penetration and the use of mobile money in some of the poorest countries (e.g., Somalia and Zimbabwe) is very high and matches that of much richer countries. In Myanmar, over 90 percent of informal sector worker affected by the pandemic have mobile phones and almost all would have access to someone with a phone.

Good data not only allowed for quick registration of new beneficiaries, it also facilitated digital payments. Millions of new bank accounts were opened in countries like Indonesia, Brazil and Morocco on the basis of credible beneficiary lists linked to unique identifiers. In India, digital payments to more than 200 million women could be made within days of the government announcement because their unique ID number was linked to their bank account. Regulators in many countries were able to relax customer due diligence (CDD) rules to open accounts specifically for COVID-19 payments using data provided by the agency responsible for social assistance.


The benefits of real time data were highlighted by the pandemic but those working towards extending social protection, including health insurance, to the informal sector have been aware of the information gaps for the 'missing middle' for a long time. Policies such as those outlined in "Protecting All"³³ that aim for universal coverage and to delink social insurance from formality require this information at all times, not just during crises. Now that so many countries are building these temporary registries for the COVID-19 response, the challenge is how to leverage this massive effort to incorporate the informal sector and permanently fill the data gap.

³³ Packard et. al. (2019).



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Annex 1. Country data

Countries	HHs or estimated unique recipients	Individuals in recipient HHs	share of Population	0-not started, 1-started
Algeria	322000	1899800	0.05	1
Angola	1600000	8258298	0.27	0
Argentina	5854000	20750438	0.47	1
Bangladesh	5000000	24710691	0.15	1
Bhutan	23000	115000	0.15	1
Bolivia		5279211	0.47	1
Brazil	33679000	102705000	0.49	1
Cabo Verde	42600	178920	0.33	1
Cambodia	610000	2806000	0.17	0
Cameroon	65000	325000	0.01	0
Central African Republic	70000	350000	0.07	0
Chile	2000000	7000000	0.37	1
Cote D'Ivoire	500000	2850000	0.11	0
Colombia	4500000	15750000	0.32	1
Congo, Dem. Rep	250000	1136548	0.02	0
Congo, Rep.	100000	430000	0.08	0
Costa Rica	532820	1864870	0.37	1
Dominican Republic	1951000	6828500	0.64	1
Ecuador	950000	3610000	0.21	1
Egypt	2500000	10250000	0.10	1
El Salvador	1026000	3283200	0.51	1
Ethiopia	855000	3933000	0.04	0
Guatemala	1600000	7680000	0.45	1
Guinea	150000	960000	0.08	0
Haiti	1500000	6600000	0.59	0
Honduras	500000	2000000	0.21	1
India*	200000000	960000000	0.71	1
Indonesia	21480000	85920000	0.31	1
Iran	7000000	24500000	0.30	1
Jamaica	379000	1174900	0.40	1
Jordan	300000	1092000	0.14	1
Lao	270000	1350000	0.19	0
Lebanon	200000	1000000	0.15	0
Liberia	40000	201414	0.04	0
Madagascar	189400	890180	0.03	0
Malawi	184248	811765	0.04	0
Malaysia	8500000	34000000	0.74	1

Maldives	20000	113997	0.22	0
Mali	75000	430898	0.02	0
Mauritania	30000	183000	0.04	0
Morocco	4300000	24811000	0.69	1
Mozambique	1000000	4444670	0.15	0
Myanmar	5400000	22680000	0.42	0
Namibia	576000	2851478	0.80	1
Nigeria	2028416	9330714	0.05	0
Pakistan	9000000	62100000	0.29	1
Panama	317845	1271380	0.30	1
Paraguay	330000	1518000	0.22	1
Peru	3580000	13604000	0.43	1
Philippines	13400000	62980000	0.59	1
Rwanda	100000	430000	0.03	0
Sierra Leone	64000	379125	0.05	0
Somalia	1200000	7080000	0.47	0
South Africa	8000000	29600000	0.51	1
South Sudan	430000	2557628	0.23	0
Sri Lanka	795324	3181296	0.15	1
Thailand	11280000	41736000	0.60	1
Timor-Leste	73328	393071	0.31	1
Togo	567000	3039120	0.39	1
Trinidad	97488	389950	0.26	1
Tunisia	883000	3532000	0.31	0
Turkey	8000000	32000000	0.38	1
Uganda	750000	3600000	0.08	0
Venezuela	5687000	22748000	0.80	0
Vietnam	6000000	24000000	0.25	0
WestBank and Gaza	68000	272000	0.06	0
Zimbabwe	1000000	4100000	0.28	1
Total	389,775,468	1,737,852,062		
without India	189,775,468	777,852,062		
Total number of countries covered		67		
Total number of countries started/finished by end June		36		
Simple average of share of population		0.29		
median of share of population		0.26		
weighted average of share of population		0.44		
weighted average excluding India		0.30		
<i>Note: Country table data was corrected on August 28, 2020</i>				



**India includes an unknown number of pre-crisis SA beneficiaries and is therefore an overestimate of new beneficiaries.*

Sources: Gentilini et al. (2020); UNDP (2020); various.

Notes: 1/ Figures in column 3 refer to cash transfer recipient households where the payment that is targeted to an individual is assumed to benefit the entire household. This is equivalent to the number of payments that would be made. Column 4 represents the number of people living in the households and is calculated by multiplying column 3 by the estimated number of household members. Column 5 divides column 4 by the total population.





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