

DELIVERING DIGITAL G2P PAYMENTS TO URBAN INFORMAL POPULATIONS

Lessons and Future Policy Implications from COVID-19 Responses



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DELIVERING DIGITAL G2P PAYMENTS TO URBAN INFORMAL POPULATIONS

Lessons and Future Policy Implications from COVID-19 Responses

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This paper is part of a larger regional study (P169171) to understand the social protection and jobs needs of the African urban informal sector. This paper benefitted from the insights, inputs, and reflections of a large team. We are grateful to Joachim Boko and Jamelino Akogbeto for insights on the Togo case study; to Julian Casal, Samantha Zaldivar Chimal, and Fiorella Paola Riso Brandon for guidance on the Mozambique case study; and to Karol Karpinski for direction on the Rwanda case study. Melis Guven, Harish Natarajan, and Mazen Bouri provided peer review guidance to the team. We are also grateful to our colleagues in SPJ Africa, who have shared experiences from their own work. Thanks as well to Caroline Pulver, who co-authored the Nigeria study.



The COVID-19 response in many Sub-Saharan African countries included the rapid deployment of social protection programs leveraging digital systems to counteract the income losses that were disproportionately experienced by urban informal populations. Using data from three in-depth country case studies, this paper finds that these digital government-to-person (G2P) payments contributed to countries reaching beneficiaries quickly and safely and that G2P payments may be particularly viable in urban, as compared to rural, areas due to greater access to digital and financial infrastructure, creative use of big data, and population density that allows for mass communication. However, there are still pockets of exclusion in urban areas emerging from incomplete digital access, limited financial inclusion, underdeveloped financial ecosystems, and high population mobility. It is particularly challenging to identify, communicate with, assess, and deliver G2P services to informal workers in urban areas due to their non-registration status, variable income flows, the blending of the home and household enterprises into a single entity, and the governments' limited experience in identifying eligible beneficiaries within this segment. While adopting a digital G2P architecture provides a promising avenue to strengthen the safety nets for this segment in the region, exclusion challenges remain. Given the ubiquity of urban informality in the region, countries will need to work to include the urban informal in foundational digital systems, such as national IDs and social registries, adopt flexible regulatory and hybrid delivery models to address the sector's varied needs, and seek to foster robust digital payment ecosystems to maximize the potential for spillover benefits.

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1. Introduction

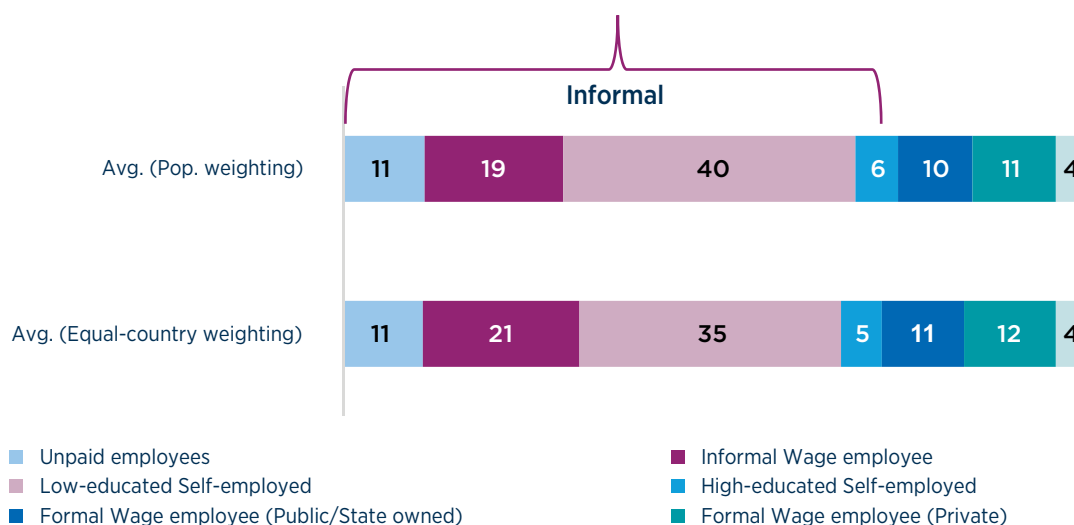
The urban population in Sub-Saharan Africa (SSA) is growing, with implications for labor market structure. Between 1960 and 2021, the share of SSA's total population living in cities grew from 15 percent to 42 percent (UN Population Division 2018). Urban population growth in SSA can be attributed to high birth rates, as well as migration driven by both voluntary and involuntary displacement. The rural-to-urban movement is accompanied by a shift out of agricultural work and into urban services and manufacturing jobs (De Vreyer and Roubaud 2013). There is a general consensus that urban jobs can be a source of inclusive productivity (that is, better jobs for the poor or vulnerable), characterized by higher earnings and levels of well-being, due to the many benefits offered by urban areas.¹ An alternative view, however, is that the urban environment can be a source of constraints—overcrowding, crime, weak land tenure—leading to employment that is neither more welfare improving nor more productive than the agricultural jobs that were left behind (Lall, Henderson, and Venables 2017). Approximately 55 percent of Africa's urban residents live in informal settlements or slums (Gentilini, Khosla, and Almenfi 2021).

Informal employment in SSA's cities and towns is both ubiquitous and diverse. Seventy percent of urban employment in SSA is informal (Cunningham et al. 2023a), and the size of Africa's (rural and urban) informal economy² in terms of gross domestic product is the third largest in the world, contributing between 20 percent and 45 percent of gross domestic product across the region (Güven, Jain, and Joubert 2021). While the formal private sector employs approximately 15 percent of urban workers in SSA, the informal sector is the source of most jobs (figure 1.1). It includes a diverse set of individuals, including wage earners, unpaid workers, and the self-employed. Small farmers, street vendors, small traders, and artisans are also considered urban informal sector workers. Women are large participants in the urban informal sector as well; over 70 percent of employed women work under informal conditions (Cunningham et al. 2023a).

1 The literature on the economic benefits of urban agglomerations is well established. For example, urban areas provide more access to public and private infrastructure (water, electricity, sewerage) and services (security forces, banks, schools), greater diversity in production, and thus opportunities for trade, larger markets of suppliers and clients, and knowledge spillovers. However, as Lall, Henderson, and Venables (2017) argue, the economic benefits characteristic of urban zones are often absent in African cities.

2 Within this study, the informal economy encompasses the self-employed (who do not have paid employees), household enterprise owners (often self-employed who do not have paid employees), and unpaid or wage employees who do not receive social benefits, a work contract, or other legally mandated protections. A small fraction of the informal sector are employers. See ILO 2018 and Cunningham et al. 2023a.

FIGURE 1.1: Distribution of Urban Employment by Employment Types (26 African Countries from the SSA Region)



Source: Cunningham et al. 2023a.

Notes: Data are from the global monitoring database for 26 SSA countries. Informal wage employees do not receive social benefits or work under a contract, while formal wage employees meet at least one of these conditions. Low-educated self-employed are a proxy for informal self-employed (who are not registered as firms), while high-educated self-employed and employers may or may not be informal. (See source paper, which shows that a significant share of high-educated self-employed and employers are not legally registered.)

The COVID-19 pandemic highlighted the need for social protection for urban households that rely on informal employment for their income. Prior to the pandemic, most of the population working in the informal economy did so without social safety nets, and particularly without social programs designed to assist in case of job loss (Razavi et al. 2020). The lack of social protection³ is a major source of vulnerability for urban informal populations. Where programs do exist, lack of awareness further impedes access (ILO 2021). The lockdowns and other impacts of COVID-19 led to income loss for many households and firms in the informal economy and, without social protection coverage, pushed them toward negative coping mechanisms, such as selling productive assets such as livestock or tools, potentially undermining their ability to recover financially (World Bank 2022a). For example, data from Liberia, Niger, and Senegal (Cerkez et al. 2023) and from Kenya and Uganda (Kansiime et al. 2021) indicate that urban informal household enterprise owners used savings and reduced consumption, among other strategies, to cope with the economic impacts of COVID-19. More generally, data from Rwanda, Togo, and Zambia show that an estimated 72.3 percent, 65.1 percent, and 70.7 percent of households, respectively, resorted to negative coping mechanisms in response to a variety of shocks (Guyen, Jain, and Joubert 2021).

³ Social protection, as described by the 2022 Social Protection and Jobs Compass (World Bank 2022b), generally refers to social assistance and social insurance, as well as policies related to labor, economic inclusion, and care. While this paper adopts the broad term *social protection* to ensure that all G2P payment-related programming is captured, the activities described are typically in the realm of social assistance—that is, noncontributory cash transfers.

The COVID crisis accelerated the use of digital technology in the delivery of G2P payments, particularly in previously underserved urban and informal households in the Africa region. Many countries have been investing in the development of social registries, national ID systems, and digital payment mechanisms that collectively can enable the efficient administration of social protection programs. These tools took on greater importance in rolling out COVID-19 responses that primarily targeted urban informal populations (Gentilini 2022; Marin and Palacios 2022). By expanding existing targeting approaches, leveraging mobile technology and machine learning, and utilizing digital payment modalities, many countries were able to expand existing programs and implement new interventions to deliver aid to urban households, cushioning the effects of the pandemic.

This report seeks to understand and to extract relevant policy lessons from how social protection programs leveraging digital systems throughout the delivery chain interacted with the urban informal sector of SSA during the COVID-19 pandemic. It uses three G2Px case studies covering Togo, Nigeria, and Mozambique to determine whether and under what circumstances governments were able to use digital tools to deliver monetary benefits to this growing population.⁴ The report describes policy lessons drawn from this analysis that are relevant to governments both within the SSA region and globally, incorporating other country experiences when relevant to broaden the scope and applicability of the lessons. The concepts and lessons in this paper are generally presented at a high level, intended to inform policy in multiple areas related to the execution of, and potential spillovers from, social protection programs that utilize digital delivery systems. These include but are not limited to communication strategies, social registry design, screening methodologies, agent networks, and financial inclusion. While the lessons presented relate most strongly to programs involving rapid rollouts of emergency monetary assistance, social protection programs generally can benefit from these insights. More robust G2P architectures could conceivably improve any activity that involves governments making payments to individuals and may be applicable to other initiatives involving the urban informal sector, such as programs designed to enhance savings or participation in other social assistance activities.

The study documents how leveraging digital systems and mechanisms helped governments to identify and deliver assistance to the urban informal in an adaptive and effective way. With higher mobile phone penetration in urban areas, the use of new forms of data, such as call detail records, and self-registration via USSD platforms made it feasible and easier to identify and register potential beneficiaries. Likewise, the higher penetration of financial access points in urban areas meant that delivering payments through mobile money or bank accounts could give beneficiaries more flexibility and convenience than assigning a specific payment point or organizing a cash-out event. However, the shadow nature of the informal sector and the fact that the informal urban reside in peri-urban areas mean that leveraging only digital approaches will still exclude intended beneficiaries unless a flexible approach is adopted.

The study finds that members of the urban informal sector can be successfully served by digitally delivered social protection programs, though doing so optimally requires adjustments to program design, outreach and registration processes, and program delivery mechanisms, as well as developing larger digital financial ecosystems. While the case studies demonstrate that the shift in

⁴ A case study focused on Rwanda is not included, as the digital G2P system that was anticipated when this paper began was not realized. The more limited set of lessons drawn from Rwanda were not substantive enough to merit a complete note. Instead, the lessons are presented directly in this paper.

program focus from addressing poverty to shock response was effective, it still suffered from flawed targeting, particularly among informal enterprise owners. Outreach, registration, and onboarding successfully relied on mass media for communication and beneficiary sensitization, instead of relying on the usual community outreach channels that rural-targeted programs tend to use. Furthermore, new forms of data, including big data, proved to be effective in identifying potential beneficiaries and supporting registration and onboarding. Wide mobile phone access enabled self-registration, and other (nonsocial) registers that could be cross-referenced with unique identifiers were effective in identifying urban informal beneficiaries. On payment delivery, countries with more mature digital payment infrastructure were able to distribute digital transfers to urban informal beneficiaries quickly, mostly leveraging mobile money accounts and reduced know-your-customer⁵ (KYC) requirements to ensure greater inclusion of the more vulnerable informal population. Digital payments reduced the cost of last-mile delivery for the program and potentially increased convenience for beneficiaries who could access their payment more flexibly (Klapper and Singer 2017; Hare and Parekh 2020). However, the reliance on (or preference for) cash by members of the informal sector limits the usage of beneficiary accounts beyond cash-out, such as for peer-to-peer transactions, for merchant or bill payments.

More broadly, the case studies, as well as the experiences of other countries, suggest that governments should pay particular attention to building foundational digital systems in support of programs that perform G2P payments. The presence of widely held IDs, comprehensive social registries, interoperable digital payment systems, and clear data-sharing protocols all enable governments to deliver G2P payments more efficiently. Equitably including the urban informal into these systems, as well as other key areas such as mobile communications and financial markets, is critical to ensuring that they are reliably reached by digital G2P delivery systems. Given the unique and varied needs of the urban informal, policy makers must remain flexible and should consider using hybrid approaches to benefit distribution. Over the long term, however, they should prioritize developing robust digital payment ecosystems to maximize the potential for positive spillovers emanating from G2P transfers.

The report proceeds in five sections. Following this introduction, we describe selected characteristics of urban and informal populations that are relevant to the design of digital social protection delivery systems, particularly digital G2P payments. We then put forward a structure to organize the analysis, adapted from the Social Protection Delivery Chain and the Modern G2P Architecture framework to frame the presentation of the lessons learned. We go on to present the lessons gleaned from the case studies (complemented by learnings in other countries) and highlight the features of digital G2P delivery systems for urban informal populations, as compared to those serving rural beneficiaries. We close the report with key recommendations based on what country experiences reveal about how to reach the urban informal.

⁵ For the purposes of this paper, KYC refers to due diligence performed by financial companies to establish the identity of their customers. See Chatain et al. 2011.



2. Factors that Make Urban-Informal Populations Unique

The COVID-19 pandemic highlighted how vulnerable urban and peri-urban households, which rely on informal employment for their income, are to shocks.⁶ Outside of the unique COVID period, there is growing recognition of the need to support urban informal workers, both in terms of increasing the productivity (and thus earnings) of informal household enterprise owners and in providing social benefits to urban informal (paid and unpaid) employees to cope with a range of shocks.⁷

Until recently, G2P payments made to social protection beneficiaries have typically been conducted using cash. Beneficiaries of social assistance have primarily been rural households, with interventions on average about 10 percentage points higher in rural areas than in urban settings, across income groups and regions (Gentilini, Khosla, and Almenfi 2021). This rural predominance has led to the development and optimization of G2P delivery systems (digital and non-digital) for that population. To serve urban informal populations effectively, the design or operation of G2P delivery systems may benefit from modifying existing systems as needed to fit the specific urban informal context.

Urban informal populations differ from their rural counterparts, particularly in terms of their access to digital and financial services and the predictability of their circumstances. These differences present both unique challenges to, and opportunities for, the efficient and equitable delivery of G2P payments. To improve understanding of urban populations that are predominantly engaged in informal work, this section highlights key factors that are unique to, or particularly prevalent among, this population and that have a bearing on the design of digital G2P delivery processes.⁸

6 A recent study finds that 60 percent of urban SSA households experienced income loss in the first months of the COVID-19 pandemic, while urban informal households were an additional 26 percentage points more likely to have lost income (Cunningham et al. 2023b).

7 Data collected from poor urban household enterprise owners in Liberia, Senegal, and Niger in 2022 find that more than half of the respondents reported having experienced a shock in the year prior to the survey. Other than the COVID shock, the respondents listed a range of economic, social, and disaster-related shocks. Approximately half of those who experienced a shock did not employ any coping strategy. The other primary coping strategies were to reduce household consumption and draw down on personal savings, both of which affect future shock-management ability (Cerkez et al. 2023).

8 This section is drawn primarily from three sources: Avalos et al. (2021b), Gentilini (2022), and Urban Poverty GSG (2022), which compiles findings from research on urban Africa.

URBAN CHARACTERISTICS TO CONSIDER IN G2P PROGRAM DESIGN

Urban and peri-urban areas typically have more developed digital infrastructure and penetration of financial services than rural areas, as their greater levels of population density lend themselves to economies of scale. The more developed digital infrastructure increases access to, and the ease of leveraging, digital payment modalities in urban areas. A recent report by ITC Africa using data from seven African countries finds that urban cell phone ownership averaged 77 percent, versus an average of 59 percent in rural areas (Gillwald, Odufuwa, and Mothobi 2018). Some countries exhibit a wider urban-rural divide. In Zambia, for example, the 2021 Findex estimated that cell phone penetration was 27 percent higher in urban areas. Higher rates of cell phone penetration translate into greater access to digital financial services. Within the SSA countries with available data in the Findex (excluding high-income countries), mobile money account ownership among urban adults averaged 45 percent, versus 31 percent in rural areas (Demirgüç-Kunt et al. 2021). Urban areas have better access to physical bank branches, ATMs, and a growing number of payment agents that can facilitate cash-outs and perform other financial transactions as well. Urbanites, therefore, generally have an advantage in accessing tools that enable efficient digital G2P payments. This can be less true in poorer urban communities, however, as evidenced by the unequal access to the financial system in Mozambique.

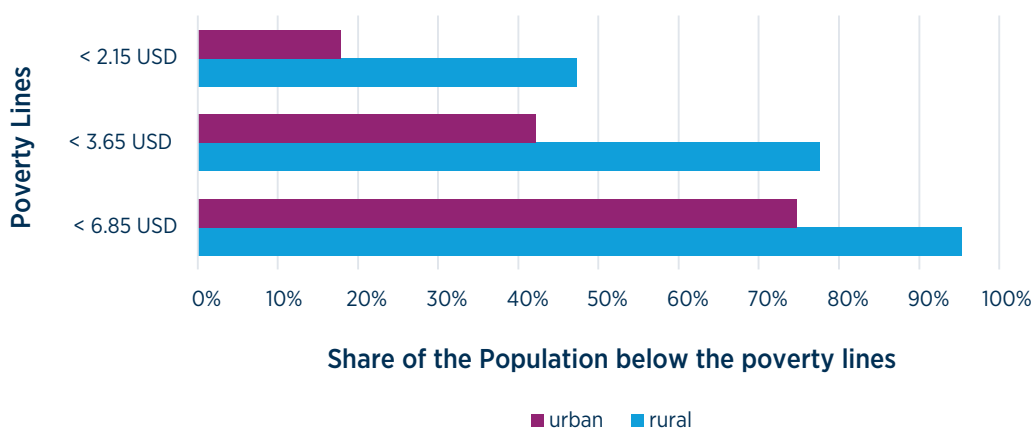
Urban areas are generally more dynamic than rural areas in the distribution of the population. Cities often attract large numbers of internal migrants, and the relatively high cost of living frequently causes individuals to change residences, leading to elevated turnover in communities and lowering social cohesion (Avalos et al. 2021a). These factors make social registries difficult to build and maintain, especially since characteristics such as address, employment status, and income level may change frequently. Furthermore, urban areas have a greater degree of inequality—in income, access to services, and connectivity, among other factors—than rural zones, and the urban poor often suffer exclusion on various fronts, including financial and digital (Chen and Ravallion 2007; Potts 2008; Bishoge 2021).

Defining an urban “household” and a “community” can be challenging. The standard approach to specifying households as “people living under the same roof” generally functions well in rural areas, where households tend to be composed mainly of family members. Urban living arrangements, however, often involve multiple families sharing the same room, the same housing unit, or living in multistory buildings but not pooling other resources, such as income (Gentilini, Khosla, and Almenfi 2021). This dynamic blurs the normal definition of households and requires a rethinking of how the targeting of social programs is carried out. Similarly, community arrangements are present in urban settings but differ in their levels of strength and functionality. While strong social cohesion and a village structure has been an asset for the implementation of social programs in rural areas, the reduced social cohesion in urban areas, emerging from the turnover of community members and high density, can lead to the challenge of who knows whom, as experienced in a Mauritania community-based approach for urban areas. However, this limitation is not always observed, such as in Côte d’Ivoire, where urban neighborhood chiefs were instrumental in program preregistration (Gentilini, Khosla, and Almenfi 2021). Virtual communities that are tied through common interests, rather than geography, such as professional associations, serve community functions in some urban areas.

Urban communities engage in a wider variety of professions than rural areas, where agriculture is the predominant economic activity. Urban employment is mostly blue collar, day-wage or self-employed, and precarious in nature (Cunningham et al. 2023a). The nature of such work results in unstable incomes; informal workers may generate sufficient earnings one day and nothing the next.⁹ This dynamic may limit opportunities to engage in savings that require regular periodic contributions (Jain 2023).

Due to the poverty profile of the urban population, its members may not be the focus of most existing social protection programs. Social protection programming in SSA has concentrated mostly on poor households located predominantly in rural areas. A larger share of the rural population is poor, as compared to the urban population (figure 2.1), which justifies the greater attention to poverty reduction in rural areas. However, while urban populations are not the poorest, they still suffer significant deprivation (Bishoge 2021). Applying various poverty lines to the World Bank’s Global Monitoring Database, 57 percent of the urban population falls between the poorest poverty line (less than \$2.15) and the higher international poverty line (less than \$6.85). This “missing middle,” whose members may not be poor enough to be eligible for antipoverty programs, is still poor by other definitions. The majority work in the informal sector and thus do not have access to public insurance safety nets, leaving a large segment of the urban poor unprotected (Guyen, Jain, and Joubert 2021). Following the COVID-19 pandemic, and with new attention to adaptive social protection to manage shock responsiveness, policy makers are giving greater attention to social protection for urban populations, though still focusing on rural targeted programs.

FIGURE 2.1: Share of SSA Population below Each Indicated Poverty Line, by Urban and Rural



Source: author’s calculations using the Global Monitoring Database.

⁹ Empirical studies regularly find that the mean level of earnings of wage workers and self-employed is quite similar, though the variance is much larger for self-employed workers.

INFORMAL CHARACTERISTICS TO CONSIDER IN G2P PROGRAM DESIGN

Participants in the informal economy share characteristics that affect both the ability of governments to identify and transfer monetary assistance to them quickly and the potential for recipients to utilize their benefits. As stated in the footnote above, for the purposes of this paper, the term *informal* refers to the self-employed, who do not have paid employees; household enterprise owners, who are often self-employed and do not have paid employees; and unpaid or wage employees, who do not receive social benefits, a work contract, or other legally mandated protections. A small share of the informal sector is employers. Several key papers profile SSA informal-sector membership (Danquah, Schotte, and Sen 2021; ILO 2018; Cunningham et al. 2023a).

Urban informal workers are poorer and less educated than formal workers. An average of 20 percent of urban informal workers in SSA can be classified as “extremely poor” (daily per capita consumption less than \$1.90), as compared to 5 percent of urban formal workers. While most of the urban informal have completed no more than primary school, 60 percent of formal workers have at least some secondary education (Cunningham et al. 2023a). These conditions imply that they are in turn less likely to own cell phones, less able to use more advanced functions on those phones, and less likely to use mobile banking.

Informal enterprise owners or employees are, by definition, not registered. Such enterprises,¹⁰ therefore, may not be captured by municipal or national social security programs, business registries, or other formal registries. Similarly, informal workers would not appear in registries for contributory social protection programs (such as pensions and health insurance). This may present challenges in finding potential program beneficiaries and in using data-based targeting mechanisms.

Informal enterprises have high turnover rates. Seventy percent of SSA informal businesses are five years old or younger, and 40 percent are a year old or younger (Cunningham et al. 2023a). This churn further frustrates the ability of registries to maintain accurate data, as information that may have been captured on these businesses may quickly become outdated.

Participants in the informal economy are spatially mobile. Informal enterprises, such as taxis or street vendors, are highly mobile. Informal businesses also have a high propensity to operate out of homes, rather than separate establishments (Fox and Sohnesen 2012). These factors complicate capturing the location of an informal enterprise within a registry. Registries are also challenged by the need to distinguish between household enterprises and the household itself, as it can be unclear if individuals are employees, family members, or both.

The use of cash for transactions is a common feature among informal populations. Informal enterprises are usually small businesses, tend to transact largely with nonformal entities, and rely heavily on cash-based transactions. While use varies by context, many self-employed members of the informal sector have not adopted digital forms of payments, and those outside the financial system cannot access formal credit. As noted by Cunningham et al. (2023a), owners of informal enterprises often mix their personal and business finances (almost 80 percent on average) and use more informal

¹⁰ Informal enterprises refer to businesses that, as described by Aga et al. (2022), are noncompliant in registration or licensing, employment standards, or tax payments.

savings mechanisms than formal enterprises. For those owners who do not maintain separate accounts, this leads to inefficiencies, as it is good practice to keep business and household finances separate.¹¹

The interaction of informal businesses with formal supply chains is limited. The reliance of informal enterprises on cash transactions limits them to interacting with the general public and other informal businesses and impairs their ability to engage with formal wholesale suppliers. As a result, informal businesses may face increased financing costs and higher prices when restocking goods or acquiring inputs. The restricted network of economic activity also implies that wealth generation is stifled, with existing money circulating within communities, rather than new funds entering them.

Informal businesses have less access to financial capital. Informal enterprises often operate outside the financial system. Ninety percent of such businesses lack bank accounts (Cunningham et al. 2023a). Less engagement with financial services, and restricted wealth generation, constrain access to financial capital. In turn, informal enterprises generally lag formal businesses in physical capital and productivity.

Informal households and enterprises have very limited risk-management practices. Informal enterprises face multiple sources of risk, and these are made more difficult to manage due to informal enterprises' limited capacity to generate savings or access insurance products. These risks include unpredictable income flows due to shifting demand or competition, extreme sensitivity to prices shocks, exposure to asset theft, lost earnings from illness or injury, and urban climate disasters due to poor urban planning. However, a three-country study in SSA found that more than half of household enterprise owners “do nothing” when experiencing an economic, weather, or personal shock, while another 30 percent run down personal savings (Cerkez et al. 2023).

In delivering social protection programs targeting urban-informal populations, the characteristics of urban and informal poor need to be accounted for. We next consider the Social Protection Delivery Chain and the Modern G2P Architecture framework and how urban and informal factors may play a part.

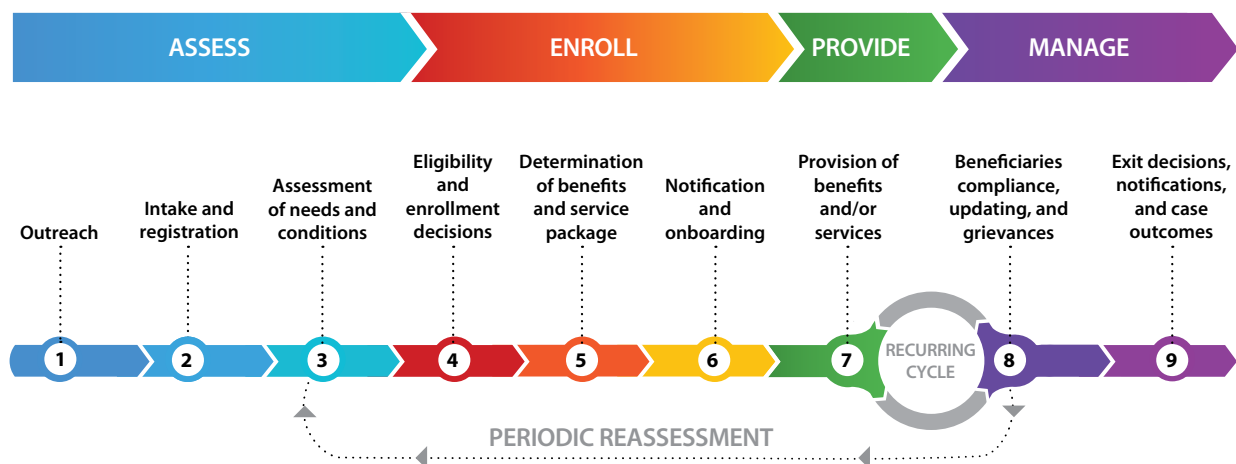
¹¹ ILO (2018) uses separation of accounts as a proxy for formality.

3. Organizing Structure to Present the Study Findings

To describe the delivery of G2P payments to urban informal populations, we draw inspiration from two existing models: the Social Protection Delivery Chain and the Modern G2P Architecture. We draw elements out of each and organize the rest of the paper accordingly.

The Social Protection Delivery Chain has been used as a framework to describe the various implementation phases of social protection programs (Lindert et al. 2020). The delivery chain broadly describes the progression of programs from the assessment phase, which includes outreach, intake and registration, and assessment of needs and conditions, through an enrollment phase, a provision phase, and a management phase, which entails case management, compliance monitoring, and exit arrangements. Virtually all social protection programs pass through similar implementation phases as described along the delivery chain. The delivery chain is shown in figure 3.1.

FIGURE 3.1: Social Protection Delivery Chain



Source: Sourcebook on the Foundations of Social Protection Delivery Systems

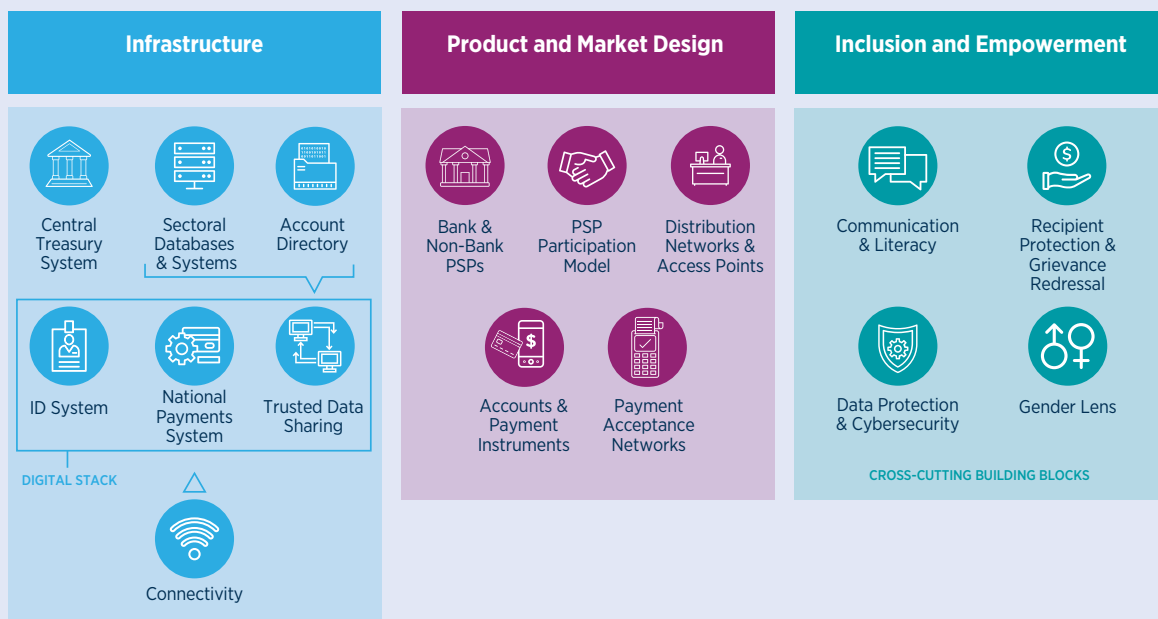
The Modern G2P Architecture is a framework that describes 16 building blocks, organized into three pillars, alongside design principles. The building blocks enable and characterize the end-to-end digital delivery of G2P payments, encompassing all systems, infrastructure, regulations, policies, and design choices (World Bank 2022c). The framework also highlights some of the main design principles that a G2P architecture should adopt in order to achieve long-term development outcomes. This framework provides a starting point for countries to assess their current G2P architecture and to define and work toward their own ideal scenario, where shared infrastructure is leveraged across programs and recipients' needs, barriers, and preferences are at the center of the design. (See box 3.1 for more on the Modern G2P Architecture.)

Box 3.1: Building Blocks of the Modern G2P Architecture

A country's G2P architecture encompasses all systems, infrastructure, regulations, policies, and design choices that enable and characterize the end-to-end delivery of G2P payments. A modern G2P architecture is one that increases recipients' welfare, enables government-wide fiscal savings, and stimulates the private sector to develop the financial ecosystem. By definition, it follows a recipient-centric design and should address barriers and gaps to ensure effective inclusion.

In general, there are 16 building blocks that are needed to deliver digital G2P payments in a way that can lead to long-term development outcomes. These building blocks, shown in the figure below, are organized around three pillars: Infrastructure, Product and Market Design, and Inclusion and Empowerment. The framework also includes design principles that should be considered in the design and implementation of the building blocks to create an inclusive, empowering, and efficient G2P architecture. Leveraging shared infrastructure, making payments into transaction accounts, providing recipients with choice of payment method and provider, and ensuring that recipient needs, barriers, and preferences are at the center of design and implementation and will be key to achieve long-term development outcomes.

FIGURE 3.2: Next-Generation G2P Payment Building Blocks



Source: World Bank 2022c.

(Continued)

(Continued)

Infrastructure: In a modern G2P architecture, multiple agencies and programs making G2P payments leverage the same infrastructure to manage and distribute their payments. This includes sharing sectoral databases (for example, a comprehensive social registry), leveraging digital ID systems, distributing payments through the national payment systems (real-time gross settlement systems/automated clearinghouses [RTGS/ACH], card switches, mobile money switches, and faster payment systems [FPS]), pooling resources and payment instructions at the treasury, and using account directories/central mappers, where appropriate, to manage payee information.

Product and Market Design: For many recipients, a G2P payment into their account is their first (or only regular) interaction with the financial system. Therefore, programs and agencies making G2P payments are uniquely positioned to support financial-inclusion goals. To achieve the financial-inclusion benefits of digital G2P payments, sending payments into accounts is not enough; the characteristics of recipient accounts are equally important. Recipients should be paid using a transaction account that enables them to cash out, store money safely, make payments, and access other financial services. Furthermore, the broader digital payment ecosystem should also have adequate access points and acceptance networks, as these are vital to stimulating usage and enabling meaningful financial inclusion. Finally, the recipient should have the option to choose the provider and payment method that is most convenient to them, including cash especially when the digital ecosystem is still nascent.

Inclusion and Empowerment: Digital G2P payments do not automatically lead to inclusion and empowerment. While digital G2P payments have the potential to increase convenience, inclusion, empowerment, and efficiency, these outcomes are not automatic. The policies and accompanying measures put in place are critical to ensure that digital methods do not lead instead to the exclusion of intended recipients, further digital divide, or new (unfamiliar) risks to recipients. The building blocks in this pillar underline the importance of providing recipients with the necessary information to use digital payments confidently and make informed choices. It also highlights the need for adequate consumer protection and privacy safeguards, as well as mechanisms to redress grievances, to ensure that recipients can find digital transfers safer than cash transfers. Finally, the building blocks underline the need to design with the recipients in mind, especially groups that might experience higher exclusion, such as women.

Source: World Bank 2022c.

The organizing structure that we use to present the analysis in this report is drawn from both the Social Protection Delivery Chain and the Modern G2P architecture framework. The illustration in figure 3.3 shows the structure with which the analysis in this paper is presented.¹² This organizing structure focuses on specific implementation blocks relevant for the programs targeted at urban-informal populations as drawn from the case studies and other country examples. The structure also draws from the Modern G2P Architecture by reflecting on the larger system and context within which a specific program's delivery system operates. The analysis is presented in four phases: the program design phase; the outreach, registration, and onboarding phase; the delivery of payments phase; and the post-payment phase.

¹² Notably, figure 2.2 is not a conceptual framework. It is a visual diagram of the thematic areas that emerged from the data, which reference established conceptual frameworks.

FIGURE 3.3: Urban Informal G2P Organizing Structure



Source: Authors' rendering.

Program Design: Encompasses the steps and considerations made when designing programs targeted at the urban informal population. The nature of the program and what the intervention focuses on are defined in this phase. Taking stock of the characteristics of the existing building blocks, described in the Infrastructure and Product and Market Design pillars of the Modern G2P Architecture, that can be leveraged—such as the coverage of the existing ID system, the connectivity coverage, and the availability of easily accessible payment service providers and adequate accounts for the intended recipients, among others—happens here. How much existing programs contribute to the new program design is also reflected upon. The characteristics of urban and informal populations are taken into consideration while defining the specific intervention, especially when reviewing the Inclusion and Empowerment building blocks defined in the Modern G2P Architecture.

Outreach, Registration, and Onboarding: Draws on parallel topics under the delivery system's "assess" and "enroll" phases, and includes the processes of communication and awareness building, to ensure that the intended populations and vulnerable groups are informed and understand the intervention. In general, given the penetration of digital technologies and connectivity coverage in urban areas, providing the option for urban informal populations to register using digital channels should be considered. Countries having more advanced G2P architecture building blocks will have less need for in-person verification or census sweep-type processes, as they, for example, will be able to rely on online ID-verification services and integrated social registries. In line with the Inclusion and Empowerment blocks of the Modern G2P Architecture, however, the outreach processes should include sensitizations about account-opening processes, with registration modalities ensuring that vulnerable and marginalized populations are not excluded from the intervention. Data-collection processes would require data-protection regimes that safeguard beneficiaries. Registrations—either processes or use of existing registries—are relevant in this phase to allow for verification and onboarding into the program, and to provide payment credentials (account information). This phase should leverage and, as need be, adapt existing delivery systems.

Delivery of Payments: The delivery of cash benefits should be made into accounts that are adequate for beneficiaries, both in terms of opening requirements aligned to those available to beneficiaries and in allowing them to access other financial services, such as savings and digital transactions. As much as possible, beneficiaries should be given the choice to use the payment method and payment service provider of their choice to maximize inclusion and convenience. On the back end, the program should

leverage existing national payment systems (such as clearing and settlement systems supporting interoperability across financial providers), when available, to deliver payments directly into beneficiary accounts of their choice.

Post-Payment: Once the payment is received, urban-informal beneficiaries still need to access and use their transfers for household or economic activities. This means that they will need either to make cash withdrawals or to keep the transfer in their account to make digital payments at merchant shops, transfer funds digitally to peers or suppliers, or save. The building blocks under the Product and Market Design pillar of the Modern G2P Architecture highlight the need to have a wide distribution network and access points that can enable beneficiaries to cash out if they so desire, especially in ecosystems where acceptance of digital payments is still nascent. With improved access to digital financial service infrastructure, and as payment acceptance networks expand, beneficiaries are better able also to use their transfer digitally, thereby further enhancing convenience. This phase includes the last-mile ecosystem, various modalities and strategies for users to take advantage of existing digital modalities. Ensuring that consumer protection, grievance redressal, and especially digital financial education strategies are in place are key to ensuring that beneficiaries can safely access and use their digital payments.

Using the blocks illustrated in figure 3.3 as a guide, the next section presents lessons on the design of digital G2P payments for poor informal urban, as opposed to rural, populations. The lessons are underpinned by examples and a discussion of the pros and cons of the traditional and the urban-adapted G2P system design.



4. Digital G2P Delivery Systems for Reaching the Urban Informal: Lessons from Case Studies

Reflecting on the unique characteristics of urban informal populations and the implementation of COVID-19 response programs across three case-study countries—Mozambique, Nigeria, and Togo¹³—this section highlights key lessons on how existing systems can be altered and new programs can be designed to function in this context. The lessons also explore vulnerabilities and opportunities that are present as programs are rolled out. The lessons are presented using the organizing framework introduced in section 3, grouping lessons along the phases of Program Design; Outreach, Registration, and Onboarding; Delivery of Payments; and Post-Payment. Box 4.1 presents brief descriptions of the programs that were analyzed in each case study.

Box 4.1: A Summary of COVID-19 Responses in Togo, Mozambique, and Nigeria

With roughly 80 percent of the population as mobile users, **Togo's** Novissi Program relied on an entirely digital payment process, making it unique among countries in SSA (Webster, Boko, and Akogbeto 2023). At the outset of the pandemic, Togo lacked a social registry and a widely held foundational national ID system. Instead, the government was able to leverage the functional voter ID registration records, which encompassed over 90 percent of the adult population (18 years of age and older) and were up to date due to a recent election. To cushion the economic effects of the pandemic, Novissi offered cash transfers of \$19 (\$22.50 for women), generally extending over two to five months and delivered through mobile money accounts. Applicants were required to text their voter card number and other basic personal information, which was then verified against Election Commission data. These records were simultaneously used to screen applicants for eligibility based in part on their occupation and location, which was also collected during voter registration. If approved, beneficiaries received transfers directly into mobile accounts, with the monetary authorities allowing for the remote opening of accounts by

(Continued)

¹³ Countries were selected for the case studies based on the following criteria: an ongoing World Bank social protection lending operations supporting COVID-19 response, the program included coverage in urban areas (providing an opportunity to support the dialogue to digitize G2P payments for the informal sector in these countries), and countries that are of interest to the G2Px Initiative.

(Continued)

mobile network operators to mitigate the potential for exclusion. Novissi was able to distribute benefits to roughly 500,000 members of the informal sector in its first phase, the majority of whom were women.

Faced with relatively low rates of cell phone ownership and uneven access to the financial system, **Mozambique** used both digital means and cash to deliver G2P payments (Webster, Risso Brandon, and Zaldivar Chimal 2023). Prior to COVID-19, a limited number of vulnerable people (primarily in rural areas) were covered by social protection and public works programs; Productive Social Action Programme beneficiaries were selected by local officials, screened by the central government through household visits, and paid in cash. In response to the pandemic, Mozambique expanded transfer payments in urban areas under the Post-Emergency Direct Social Assistance Program. At-risk communities were identified using a geotargeting poverty map. Local leaders within selected areas were responsible for choosing beneficiaries, and government household visits were eliminated to speed onboarding. While many beneficiaries were paid in cash, some were incorporated into a pilot digital payment program, perhaps most notably in Maputo. As part of the pilot, recipients were enrolled at prescheduled events in which they were issued a cell phone and assisted with opening a restricted mobile money account for receiving transfers. Opening accounts for G2P payment recipients was made easier by loosening Mozambique's substantial KYC documentation requirements. Measures were also taken to ensure that recipients were not affected by withdrawal fees. Approximately 800,000 people received assistance under Mozambique's COVID-19 response, the majority of whom were women; 206,000 were paid digitally.

Nigeria piloted its Urban Cash Transfer Program in March 2021, intending both to expand social protection coverage in urban areas and to inform future rapid response efforts (Webster, Ubah, and Pulver 2023). Whereas before the pandemic Nigeria relied on community structures and on cash as part of its flagship social protection program, its pilot leveraged high rates of cell phone penetration to communicate and deliver payments. Vulnerable urban wards were selected using an AI-driven poverty map, and mass text messages were sent soliciting applications in chosen areas. Applicants submitted personal information by dialing a USSD code and were later visited by a government official to confirm their eligibility. Beneficiaries could use existing bank or mobile money accounts to receive transfers of \$11.60, but financial agents sometimes accompanied officials on site visits to assist with opening new accounts. For those with limited ID documents, Nigeria's tiered KYC rules enabled the opening of restricted accounts. By May 2022, Nigeria had distributed transfers to about 700,000 beneficiaries registered in its Rapid Response Registry through bank accounts or mobile wallets.

ADAPTING PROGRAM DESIGN TO SERVE URBAN INFORMAL BENEFICIARIES

New programs targeted specifically at urban populations were launched by adapting existing targeting mechanisms and delivery systems using digital technology. To reach populations effectively in urban locations affected by the COVID-19 pandemic, many countries replicated their rural programs in urban areas but with digitally adapted versions of the existing delivery systems. Traditional rural-focused programs, for instance, leveraged social registries, but these have little coverage of urban populations. Payment delivery systems had been optimized to meet the specific needs of rural populations,¹⁴ but these same systems did not exist in urban areas.

¹⁴ The rural safety nets program in Nigeria specifically engaged payment service providers to set up pay points for rural beneficiaries to access their transfers.

The programs that were implemented in urban areas were designed to address structural poverty, but several were adapted to provide emergency relief to temporary shocks. Similar to the rural programs, beneficiaries of the urban programs in two of our case studies were targeted using poverty variables, rather than variables to capture temporary shocks (Webster, Risso Brandon, and Zaldivar Chimal 2023; Webster, Ubah, and Pulver 2023). However, the program objectives were more aligned with emergency relief. The COVID-19 responses in our case studies were all designed as short-term cash transfers¹⁵ aimed at providing immediate support to households that may have suffered job and income losses or other effects of the crisis and lockdowns. Nigeria piloted a COVID-19 urban cash transfer program in two states and is leveraging the lessons from the urban cash transfers to develop a shock-response system for the country.¹⁶ In Togo, over 500,000 urban beneficiaries received two months of cash transfers through a program specifically responding to shocks related to COVID-19 (Webster, Boko, and Akogbeto 2023). In South Africa, the emergency Social Relief of Distress Grant (SRD 350) was created to provide income support to informal workers or the unemployed to cope with the extensive COVID-19 economic disruptions, but the program has been slower to refocus as a shock-response system. While the program has tightened the validation of its eligibility criteria, it still provides grants, equivalent to \$20, to more than eight million beneficiaries monthly in the post-COVID period.

Countries in the case studies leveraged adapted forms of their targeting system to expand to urban areas. Togo's social protection program had virtually no presence in urban areas and did not make use of a social register (Webster, Boko, and Akogbeto 2023).. To reach the targeted population, Togo's Novissi leveraged nonstandard forms of data, cross-referencing information from the Election Commission and telecommunications data. A fully digital delivery system was developed, and payments were made directly into beneficiaries' mobile wallets. In Nigeria, the geographical targeting used in the COVID-19 urban cash transfer program was adapted by incorporating high-resolution poverty maps built from satellite imagery,¹⁷ which enabled more precise targeting of urban locations with predominantly informal workers. Incorporating digital technologies enabled new programs to roll out, sometimes in very short timelines (for example, Togo), and enabled the use of systems that reached the urban-informal population better. This shift toward digital, however, created the potential for exclusion, as poorer informal populations may have lacked access to digital resources.

In spite of the complexities in identifying “households” in urban areas, many social protection programs were designed as household support, even if the program was intended to support informal enterprises. Social protection programs, including those targeting urban informal populations, have mostly implemented household-level interventions. Looking at the social protection interventions in the case studies, the primary focus was shock-affected households in urban areas. There was a noticeable lack of intentional programming that focused on informal enterprises. The Post-Emergency Direct Social Assistance Program in Mozambique targeted shock-affected households (Webster, Risso Brandon, and Zaldivar Chimal 2023), and the Nigeria COVID-19 urban cash transfers targeted households in urban locations (Webster, Ubah, and Pulver 2023). However, a second program in Nigeria, the COVID-19 Action Recovery and Economic Stimulus Program included a component focused on supporting the recovery of micro and small-scale enterprises. The component was designed to encourage self-

15 Gentilini (2022) reports that the average duration for COVID-19 responses was 4.5 months, with an average extension of 6.3 months where an extension was done.

16 The Nigerian government has designed the National Social Safety Net Program Scale-Up to provide time-limited cash transfers to shock-affected poor and vulnerable populations, predominantly targeted in urban areas.

17 See Blumenstock et al. 2021.

registration, with successfully selected firms receiving support for operations and digitization (World Bank 2020).¹⁸ Similarly, the Recovery of Economic Activity for Liberian Informal Sector Employment (REALISE) Project provided grants to micro-household enterprises that were at risk of shutting down due to the pandemic and its aftermath (World Bank 2021b). Togo may have achieved a good balance by using the variable “Occupation” to identify people working in low-skilled trades, many of whom are self-employed or household enterprise owners (Webster, Boko, and Akogbeto 2023).

OUTREACH, REGISTRATION, AND ONBOARDING IN AN URBAN INFORMAL CONTEXT

Communication in urban areas relied more on mass media than on community mobilization, as compared to rural-targeted programs. Effective communication is important for program awareness and beneficiary sensitization to boost program participation. While rural areas would normally depend on community leaders and village meetings to share information about new social programs, the case studies found that other mechanisms were used in urban areas. The greater proximity to digital infrastructure and better connectivity in urban areas presented opportunities for utilizing other communication channels, such as SMS messages, or mass media, such as radio. For example, program-implementing authorities in Nigeria worked with the telecommunications agencies to blast SMS messages to cell phone clients in targeted urban areas (Webster, Ubah, and Pulver 2023). In Togo, most focus group participants said they heard about the Novissi Program via radio (Webster, Boko, and Akogbeto 2023). Mozambique was an exception, however, as community leaders still played a key role in sensitizing beneficiaries (Webster, Risso Brandon, and Zaldivar Chimal 2023).

While these urban-centric mechanisms were generally successful, they had some drawbacks. The SMS protocol, for instance, is considered unreliable, as its design and implementation does not guarantee the delivery of sent SMS messages to their intended recipient.¹⁹ Other challenges were present as well. For example, there were reports in Nigeria that the communication SMSs were received on the phones of rural residents who lived in locations different from the targeted urban area (Webster, Ubah, and Pulver 2023). More broadly, there may be cases where government data-protection policy prevents access to individuals’ call detail records or restricts the use of phone numbers for data cross-matching. The use of mobile phone numbers also assumes that there is one user per cellular device, though data suggest regular sharing of handsets. For many individuals receiving these messages, literacy may be an issue. Confidence in the veracity of the message, and in national authorities generally, could also be factors that prevent people from reading the received messages.

The use of big data may be more efficient than door-to-door data collection to identify the poor when targeting urban-informal populations, as compared to the rural poor. While proxy-means tests (PMTs), which rely on data that are collected from individuals at the household level, have been commonly used to identify poor beneficiaries of rural social protection programs, the mobility restrictions instituted during the COVID-19 pandemic (which disallowed face-to-face data collection) and the need to collect data quickly in dense urban areas, led to creative uses of big data, alongside other existing sources of information, to identify potential beneficiaries. In Mozambique and Nigeria,

18 Outcomes of the COVID-19 Action Recovery and Economic Stimulus Program are currently unknown, as implementation is still in early stages.

19 See <https://en.wikipedia.org/wiki/SMS#Unreliability>.

satellite images provided high-resolution regional poverty maps available at the lowest administrative levels (wards in Nigeria, bairros in Mozambique). These images were used in geotargeting, identifying “catchment areas” (Mozambique) and prioritizing locations (Webster, Risso Brandon, and Zaldivar Chimal 2023; Webster, Ubah, and Pulver 2023). In Togo, a USSD²⁰ application was used by potential eligible beneficiaries to self-register, collecting voter ID to authenticate against the electoral database (Webster, Boko, and Akogbeto 2023). In a second phase of the Novissi Program in Togo, call detail records from mobile service providers were used alongside AI algorithms to determine program eligibility. As big data becomes more available, and more evidence emerges regarding its effectiveness in proxying variables used for targeting social programs (see box 4.2 as an example), these data sources may become preferred in dense urban areas, as compared to face-to-face data collection. This may be true especially in the context of urban slums, since big data and machine-learning concepts can be used to do better geographic targeting of spatially mobile informal populations.

That said, using big data is not without its challenges. Ensuring data privacy may mean that the use of certain data that could be used in identifying the socioeconomic status of households is limited.²¹ While many informal enterprises operate out of the owners’ homes, big data geographic identification of poverty may not capture enterprises’ shocks or well-being.

Box 4.2: Using Big Data and Machine Learning to Locate the Poor in Nigeria

Nigeria is a diverse multi-ethnic federation of 36 autonomous states and the Federal Capital Territory, with over 200 million people and a young and dynamic society. The COVID-19 pandemic impoverished urban Nigerians who were highly dependent on service-sector incomes. To support this “temporarily poor” and to build a sustainable shock-response delivery platform, the Nigerian government launched the COVID-19 urban cash transfers, which has been piloted in two states, with plans to expand to all 36 states and the Federal Capital Territory through the National Social Safety Net Program Scale-Up.

As with existing social safety net programs, the targeting approach used poverty maps for geographic targeting. Poverty maps show the specific communities in which poor people live, thereby using geographic targeting to identify communities that may be eligible for a social protection program. Historically, such poverty maps have relied on a combination of household surveys and censuses. Nigeria’s most recent census was in 2006, implying the need for new data to inform the geographic targeting.

To provide more up-to-date and more granular poverty estimates for Nigeria, recent advances in deep learning were used to construct high-resolution poverty maps using data from satellite imagery and other sources of geospatial big data, deviating from the older survey-based data. These techniques work by “learning” how to identify poverty by being exposed to a large dataset that matches ground-truth labels of poverty (from geolocated household surveys) to imagery and other geospatial data. Intuitively, the algorithms learn the visible features that are predictive of poverty, such as road quality, building density, and land topology. (See figure 4.1.)

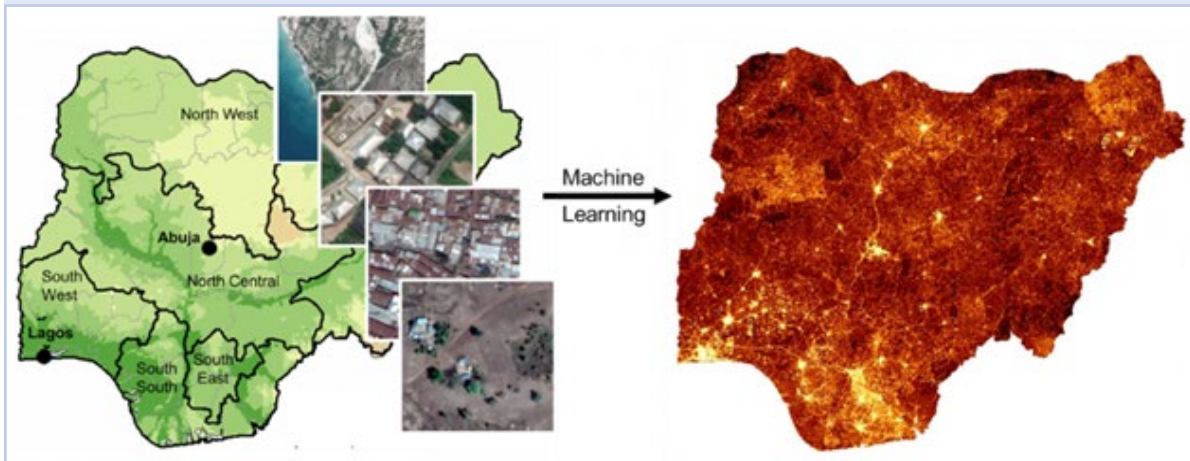
(Continued)

20 See https://en.wikipedia.org/wiki/Unstructured_Supplementary_Service_Data.

21 Nigeria’s current data-protection policy, captured in the Nigerian Data Protection Regulation of 2019, prevented social programs from accessing call detail records, as such variables could not be used while identifying the urban poor.

(Continued)

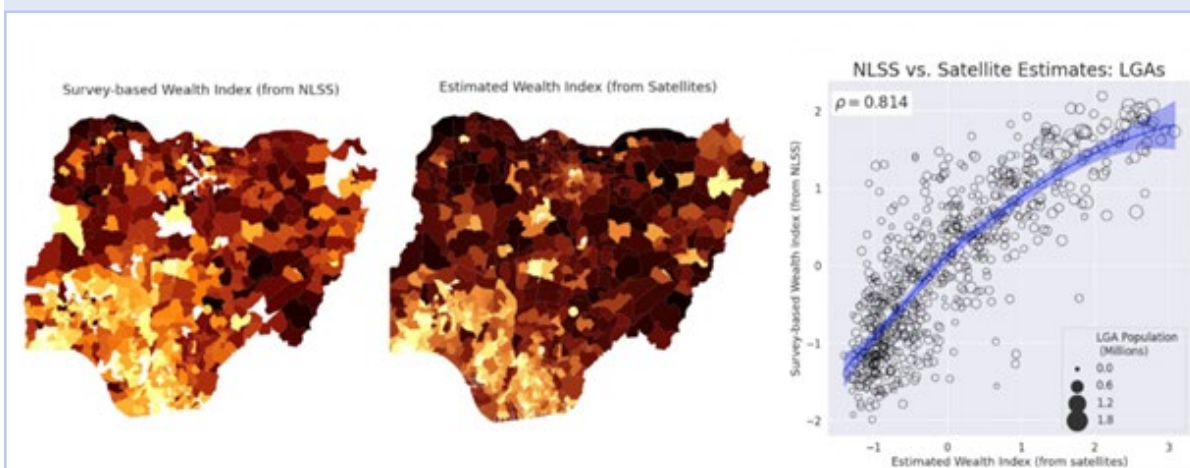
FIGURE 4.1: Using Deep Learning to Construct a High-Resolution Poverty Map from Satellite Imagery and Other Sources of Geospatial Big Data



Source: Blumenstock et al. 2021.

After constructing these poverty maps, they were carefully validated in Nigeria, using several independent sources of survey data. In particular, the original poverty maps were trained using data from the nationally representative 2018 Demographic and Health Survey but were cross-checked and validated using the 2018/19 National Living Standards Survey (NLSS). This step is vital because the 2018/19 NLSS is used to calculate Nigeria's official poverty and inequality statistics. These validation exercises confirmed a strong correlation between the welfare estimates from the machine-learning approach and those of the 2018/19 NLSS. (See figure 4.2.) In this sense, far from replacing existing household surveys, digital solutions built on the solid foundations provided.

FIGURE 4.2: Validation of the Accuracy of the High-Resolution Poverty Maps, Produced Using Big Data and Machine Learning



Source: Blumenstock et al. 2021.

(Continued)

(Continued)

Smythe and Blumenstock (2022) present the following three intuitive results, which argue for the superiority of high-resolution poverty maps based on machine learning, as compared to maps based on surveys:

1. The machine-learning poverty map provides for better geographic disaggregation, improving the performance of programs targeting smaller administrative units, to direct benefits more precisely to the poorest regions.
2. The coverage of the satellite-based poverty maps is not dependent on ground surveys, which many times are unable to occur in all parts of the country for varying reasons. Using machine-learning methods allows for fuller coverage of the geographical targeting.
3. The targeting outcomes of methods based on machine learning show a high correlation when compared with survey-benchmarked wealth estimates.

In short, the machine-learning approach provides an objective targeting approach that delivers a higher proportion of benefits to the poorest people.

Sources: Smythe and Blumenstock 2022; Blumenstock et al. 2021; NAN 2021.

By definition, the urban informal are not registered and typically will not appear in administrative databases of firms, nor is their job status recorded in social registries, requiring alternative strategies to identify informal entrepreneurs. Social registries have traditionally covered the informal poor in rural areas and usually include only a small percentage of urban residents. Firm registries in many countries were used to direct cash support to defray the losses incurred by mobility restrictions, to keep employees on their books, or to encourage them not to shut down permanently. These registries largely missed informal enterprises.²² Instead, the countries in our case studies used two different strategies. Nigeria used the Rapid Response Registry, which targeted benefits to the urban poor but did not take into consideration household enterprise ownership (Webster, Ubah, and Pulver 2023). Other countries used alternate (not social) registries to identify households running informal enterprises. For example, Togo took advantage of the variable “Occupation” in a recently collected voter registration database to identify people working in low-skilled trades, many of whom are self-employed or household enterprise owners (Webster, Boko, and Akogbeto 2023). A third methodology was used in Liberia’s REALISE Project, where household representatives in geographically targeted communities (where activities would be carried out) visited project recruitment centers for an assisted self-registration process.²³

In spite of advances, registration is still a significant challenge for informal enterprises. Togo’s story is one of luck—the database happened to have been collected right before the pandemic began, and the variable “Occupation” was included—but it also points to the needs (i) to identify the variables that can be collected via registries that can be used to identify informal workers and entrepreneurs, and (ii) to collect and update the data regularly in preparation for the next crisis. Also, the intended population of different registries may exclude potential populations that should be captured by an informal enterprise survey. For example, Togo’s voter records worked very well, but only for Togolese who are eligible to vote. This excluded from the registry foreign informal workers.

22 A nationally representative Business Pulse Survey was conducted by the Bank of Industry in Nigeria. Almost 90 percent of firm respondents reported that they did not receive a support measure since the outbreak of COVID-19. The survey also indicated a reduction in demand for products and a decrease in cash-flow availability.

23 See REALISE Support to Small Businesses (SSB) Operations Handbook.

Wider access to cell phones enables more beneficiaries to self-register, making the enrollment process more efficient. While registration done face to face at village meetings or by means of door-to-door visits is commonly employed in rural areas, dense urban areas required a more hands-off process. Due to broad access to cell phones and connectivity, self-registration through a USSD application was common among programs rolled out in the wake of COVID-19 (Gentilini, Khosla, and Almenfi 2021; Gentilini et al. 2022). This process allowed owners of feature phones to self-register and provide sufficient information that allowed for concurrent registration and enrollment into interventions. In Togo, information was collected from potential beneficiaries through a USSD application. This information was used by the Novissi platform to screen eligible recipients automatically.

While digital registration worked well, it risked excluding the most vulnerable beneficiaries. Cell phone coverage is high in urban areas, but it is not universal (table 4.1), especially for women, who are 13 to 25 percentage points less likely to own mobile phones in three of our case-study countries. The type of phone individuals own will also determine their ability to engage with a program. A USSD application can work on a basic mobile phone, but more intuitive and visual web-based or mobile applications may be accessed only using a smartphone. Additionally, there are differences between what a mobile phone can do in areas with 2G mobile network coverage versus 3G,²⁴ though coverage is not universal, either. Calling credits cost money that the most vulnerable do not have, thus limiting their potential to register.²⁵ Low financial and digital literacy may also be constraints.

TABLE 4.1: Digital Access Statistics (Percentages)

Statistics	Year	Nigeria (%)	Mozambique (%)	Togo (%)
Adults that own a mobile phone	2021–22	73	55	68
Female adults that own a mobile phone	2021–22	61	47	62
Male adults that own a mobile phone	2021–22	86	63	75
Rural dwellers who own a mobile phone	2021–22	65	54	64
Urban dwellers who own a mobile phone	2021–22	79	56	79
Population covered by at least a 2G mobile network	2020	74	82	91

Sources: Global Index Database 2021; International Telecommunication Union.

PAYMENT DELIVERY

Because the digital ecosystem is developed more in urban areas than rural areas, digital payment methods can effectively and efficiently reach urban-informal populations, though additional efforts may be needed to include more vulnerable urban dwellers. Countries with developed digital ecosystems—such as those with high ID system coverage and widely accessible digital payment systems—were able to use these platforms for social protection. For example, both Rwanda and Nigeria tapped into the existing ecosystem to make digital payments (Webster, Ubah, and Pulver 2023).

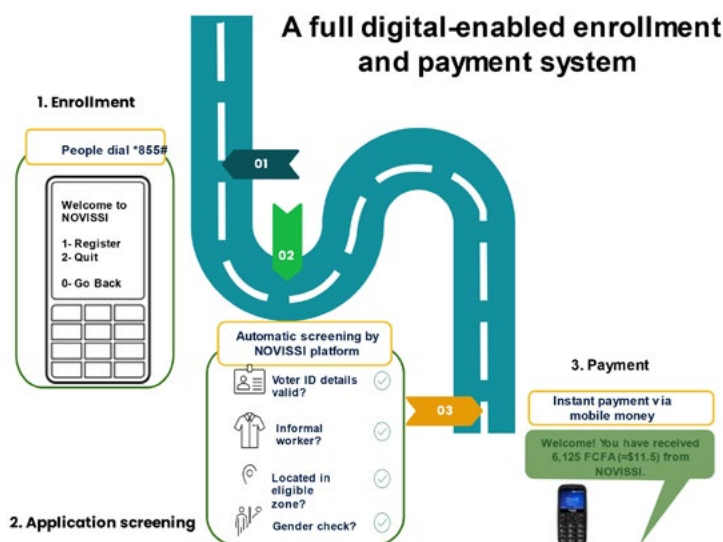
24 2G is the GSM specification intended for providing mobile communication for voice, and 3G is the specification for mobile communication with enhanced capabilities for mobile users other than voice. Applications such as video calls, high-speed internet, multimedia applications, video streaming, video conferencing, and location-based services can operate on mobile phones only in 3G areas.

25 To encourage the registration of the most vulnerable, the USSD channel used in Nigeria was toll-free. The effectiveness of this is still to be determined.

However, in some cases, additional investments were needed to help people bridge the digital divide. Mozambique was able to leverage its digital ecosystem, but recognizing that cell phone ownership was not universal, the country handed out cell phones and registered beneficiaries into mobile money accounts to enable the use of digital transfers (Webster, Risso Brandon, and Zaldivar Chimal 2023). While this process minimized exclusion of intended beneficiaries due to lack of mobile phones, its initial implementation faced some challenges. These included delays in procuring the phones, which were shipped from Asian trading partners during COVID-19, and the added cost to the program to purchase the mobile phones. Additionally, issuing phones and accounts in all cases created the potential for duplication; beneficiaries possibly possessed multiple phones or mobile money accounts as a result. Such circumstances increased the risk of missed communications if messages were sent to program phones that were used only when payments were expected.

The countries that had sufficient building blocks of a digital G2P architecture in place were able to implement electronic transfer methods in urban areas in a relatively timely manner. Togo is an exemplary model of a program that was able to deliver payments less than a month after the World Health Organization declaration of a pandemic, and a week after their national state of emergency was declared. The success was largely attributed to the use of an end-to-end digital process (see figure 4.1) that precluded the (potentially slow) human-to-human interaction that is common of traditional social protection programs. The digital process was made possible by the Novissi platform, which has a technical integration with the electoral database (Commission Electorale Nationale Indépendante du Togo, or CENI) and the telecommunications platform. The Government of Togo used radio to communicate the program to the potential beneficiary population, and a USSD-based self-registration process was opened. Applicant screening was done automatically by the Novissi platform, and payments were transferred electronically to all beneficiaries through mobile wallets. (See figure 3.2.) This not only proved efficient in delivering the transfers to the predominantly urban recipients but also helped in terms of inclusion, as 65 percent of recipients in Phase I were women (Webster, Boko, and Akogbeto 2023). However, building such a digital delivery system for a program requires having the necessary G2P architecture building blocks already in place, pointing to the need to invest in developing these prior to facing a shock.

FIGURE 4.1: Novissi Payment Journey



Source: Boko and Akogbeto 2022.

Even in urban areas, a significant share of the informal population is digitally excluded, particularly the most vulnerable, whom social programs are intended to benefit. In addition to nonuniversal coverage of mobile phone ownership, as mentioned above, the digitally excluded may not be able to afford internet access. In other cases, they may lack the skills to manipulate their digital device to register, receive benefits, or spend the transfer. They may not be able to afford the cost of calling credits as well, possibly preventing their registration into programs or cashing out of mobile money, as has been observed in urban South Africa. Other factors needed to engage digital transactions may be limited, even in urban areas. For example, Nigerians report sharing mobile phones among multiple potential beneficiaries, which complicates the registration and mobile money account process used in Nigeria’s pilot, since the program needed unique phone numbers to reach the intended beneficiaries. There are also gender gaps in digital literacy. For example, in 2020, 62 percent of men went online globally, compared with only 57 percent of women.²⁶ Women generally also have lower levels of phone ownership than men. (See table 4.1.)

Lacking a government issued ID can be an especially noteworthy barrier to digital and financial inclusion for individuals. In the world, 850 million people cannot prove their identity, and about 470 million of those live in SSA (World Bank 2021a). In Nigeria, for instance, only about 40 percent of the estimated population has a National Identification Number. Furthermore, over 20 percent of the countries in SSA have not yet digitized their national ID systems (DigiFI Africa 2023). Prior to the pandemic, a majority of countries required that some form of ID be presented to activate prepaid mobile SIM cards. Even now, in Nigeria, all active SIM cards have to be tied to a valid National Identification Number. Banks normally require government-issued IDs as well as other documentation as part of customer due diligence to open accounts (Gelb, Mukherjee, and Navis 2020). Not having a widely accepted way to demonstrate one’s identity can impair an individual’s ability to engage with such services.

Mobile money can be a quickly scalable option for delivering social protection cash benefits, given its growing presence among Africa’s urban populations. As seen in the focus countries and other countries in Africa, mobile wallets (alongside traditional bank accounts) are being adopted as a modality for digital payments. Togo and, later, Mozambique used mobile wallets to deliver COVID-19 social protection benefits (Webster, Boko, and Akogbeto 2023; Webster, Risso Brandon, and Zaldivar Chimal 2023), and Nigeria plans to incorporate mobile wallets into social protection delivery channels in the future. Not only is mobile money a fast and secure way to deliver social payments to urban informal populations, it also has the potential to build a path toward financial inclusion unlike traditional cash-only payments.

However, there are still barriers to digitizing the delivery of social protection payments through mobile money accounts, with women being particularly affected in urban Africa. Women lag men in ownership of mobile financial accounts (as well as financial account ownership more generally). According to individual-level data from the latest Findex report, just over a third of urban men in Togo and Mozambique own mobile money accounts, whereas only 25 percent and 17 percent, respectively, of women do. In Nigeria, a mere 2 percent of urban women own mobile money accounts, versus 6 percent of men. While mobile phone ownership is higher in cities, similar gender gaps are present. In Mozambique, 52 percent of urban women report owning mobile phones, as compared to 63 percent of

²⁶ International Telecommunication Union, “The Gender Digital Divide” (web page), <https://www.itu.int/itu-d/reports/statistics/2021/11/15/the-gender-digital-divide/>.

men.²⁷ To minimize potential gender exclusion risks, some programs have opted to provide phones to new social protection beneficiaries,²⁸ as was done in Mozambique (Webster, Risso Brandon, and Zaldivar Chimal 2023). In other cases, transfer amounts were higher for women to incentivize their participation as recipients, as was done in Togo (Webster, Boko, and Akogbeto 2023). These interventions have helped to increase female participation in programs while also leading to their inclusion in the financial system, potentially empowering them and providing them with more autonomy.

Meeting account-opening requirements can be challenging for the urban informal. Customer due diligence measures, including KYC regulations, require financial service providers to verify the identity and assess the risks involved with maintaining a business relationship with an individual.²⁹ Although KYC requirements are essential for safeguarding the integrity of digital financial flows and preventing money laundering and terrorist financing, they may pose challenges for informally employed individuals who lack the necessary documentation to comply with these requirements. To address these challenges, some countries have implemented simplified KYC regimes that establish risk-based and proportionate customer due diligence processes, to facilitate access to financial services for underserved populations whose volumes and value of transactions are lower. For example, the Central Bank of Nigeria has adopted a tiered approach to KYC, where Tier 1 accounts can be opened with minimal identity verification but are subject to limits on daily transactions and maximum account balances, while Tier 3 accounts require biometric identity verification but offer full transaction flexibility. Authorities in Togo also relaxed the KYC requirements for opening mobile money accounts during the pandemic, allowing mobile network operators (MNOs) to open mobile money wallets remotely for individual beneficiaries (Webster, Boko, and Akogbeto 2023). Although cash transfers to businesses were not featured in the case studies, countries might want to target social protection programs to informal enterprises, especially in the context of shock response. In these cases, delivering the monetary grants or benefits to business accounts would be preferable. However, account ownership is likely to be even lower among informal businesses than among individuals working in the informal sector, given the stringent KYC requirements for business accounts that often require firm registration. In this context, informal enterprises may make use of the owners' personal accounts for business transactions. While this is not a good business practice—ideally, personal and business accounts are kept separate—it may be a good option in the short run to facilitate the rollout of benefits to informal enterprises in the context of shock response.

27 Demirgüç-Kunt et al. 2021

28 While ensuring that beneficiaries, particularly women, have access to a mobile phone and SIM card to receive a program's mobile money transfer, evidence from Mali and Côte d'Ivoire, among other countries, has shown that handing out phones and/or SIM cards to beneficiaries who already own phones leads to beneficiaries using these numbers only on payday, therefore limiting reception of messages sent to beneficiaries and reducing potential usage of mobile money accounts. A potential solution that has been considered is providing stipends for the purchase of a mobile phone instead, to minimize mobile phone and SIM card duplication.

29 Customer due diligence is a set of measures that financial institutions are required to take to identify and verify the identity of their customers, assess their risk, and monitor their transactions to ensure that they are consistent with their known profile. A component of customer due diligence, KYC focuses specifically on the customer identification and verification process, including collecting and verifying information about a customer's identity, occupation, source of funds, and other relevant information, to assess the risk of money laundering or terrorist financing. See FATF 2012-2023 and FATF 2013-2017.

POST-PAYMENT

Using digital payment methods for social protection transfers has advantages for implementers and could be convenient for beneficiaries in urban areas with more financial access points. Social protection programs in rural areas regularly delivered payments manually (in cash) to beneficiaries, although they are increasingly digitizing their processes and delivery. With increased financial infrastructure access, urban-focused transfers naturally tilt toward leveraging digital payment methods. Payment into accounts can lower the overall delivery cost for program implementers, as payment processing can be centralized, and leverage a national payments switch, rather than utilizing a service provider's proprietary processing system, as was done in Nigeria's rural-targeted cash transfer program. Urban beneficiaries can leverage the growing number of financial access points within urban and peri-urban locations to make withdrawals or carry out digital payments. In Nigeria, the Shared Agent Network Expansion Facilities (SANEF) has supported the growth of agents to over 1.4 million across the country.³⁰ As agents are more densely located in urban and peri-urban areas, recipients are more likely to be able to access or use their transfer conveniently. Up to 85 percent of focus group respondents in Togo reported that they easily withdrew the received transfers from mobile money agents (Boko and Akogbeto 2022). In Mozambique as well, mobile money agents are more widespread in urban areas and provide access points to beneficiaries for their funds (Webster, Risso Brandon, and Zaldivar Chimal 2023). While the case-study countries show that agent numbers are growing and there is less potential for issues in terms of accessing cash-out points in urban areas, this is not the case in all contexts. Furthermore, as higher-frequency transactions drive the agency model, they may still be scarce in more informal urban settlements, potentially translating into long queues to cash out.

Urban informal households and enterprises often rely on cash, but digital social protection payments could be a potential opportunity to develop digital financial services at the last mile. There is space for greater use of digital payments by urban informal recipients. Although agent networks are growing, merchant uptake of digital payments is still nascent in many countries. A characteristic feature of informal populations, not unlike rural populations, is their reliance on cash for economic transactions. Informal enterprise owners often rely on cash transactions, rather than using digital accounts or wallets, for person-to-business payments, such as when a household grant recipient purchases from an informal enterprise, or for business-to-business payments, such as when a business grant recipient purchases inputs from another business. The Togo case study's focus groups reported that they immediately cashed out their payments, thus foregoing the benefits of digital money management (Webster, Boko, and Akogbeto 2023). The limited use of other transaction types could be due to a lack of availability of use cases, a lack of trust, or a lack of knowledge about available services (Demirgüç-Kunt et al. 2021), leading to quick cash-out as the norm for urban informal recipients. Beyond digitizing payments, for beneficiaries to reap the full benefits of a digital last mile, complementary digital financial education activities should be incorporated into urban cash transfer programming, to sensitize and increase recipients' awareness of, and confidence with, digital financial services.

³⁰ See Shared Agent Network Expansion Facilities (SANEF) Ltd., <https://www.sanefng.com/>.



5. Looking Forward: Policy Implications

Looking forward, reliably and efficiently delivering cash transfers to a more urban informal population will become a greater concern for policy makers throughout SSA. By 2050, 20 of the world's largest cities are expected to be in the region, up from seven in 2010 (Hoorweg and Pope 2017). It is possible that by 2100, Africa will have nearly 40 megacities, with Lagos and Kinshasa becoming the largest megacities in the world (Bearak, Moriarty, and Ledur 2021). Additionally, youth (ages 15–24) and women are particularly likely to be employed in the urban informal economy—two of the most important target groups for G2P payments (Cunningham et al. 2023a). As a result, the lessons gleaned from Africa's pandemic experience in delivering social protection benefits will likely become increasingly important.

Analysis of the relevant case studies suggests that leveraging a digital G2P architecture is well suited to distributing monetary transfers to the urban informal. The country experiences indicate that leveraging digital systems for the delivery of social protection benefits may be more advantageous in urban than in rural environments due to a combination of factors. Urban areas have greater access to the digital and financial infrastructure necessary to facilitate digitalizing the programs; they have a higher penetration of mobile phone and accounts; and they have higher levels of population density, which allow for mass communication. That said, uneven access to, and adeptness with, digital tools and financial systems create pockets of exclusion, a problem exacerbated by high mobility in urban areas, which makes the use of traditional social registries challenging. The variable income, blended finances, and non-registration status of informal workers in urban areas make it particularly difficult to identify, communicate with, assess, and deliver payments to such workers. These problems are compounded by KYC requirements that may not be proportional to risk, creating barriers for under-documented individuals to access any accounts, and limited experience on the part of governments in identifying urban informal recipients. However, some countries have found creative ways to manage these challenges, such as implementing risk-proportional KYC requirements or using occupation to identify potential recipients (Webster, Boko, and Akogbeto 2023; Webster, Riso Brandon, and Zaldivar Chimal 2023; Webster, Ubah, and Pulver 2023).

This section draws from, and expands on, these insights to offer policy recommendations regarding the design and implementation of digital G2P payment systems to deliver social protection benefits intended to serve the urban informal. It does so by emphasizing the importance of foundational

digital systems and the need for inclusion while outlining other more specific measures. The section draws from the experience of the case-study countries, as well as insights from other regions. Although tailoring digital payment delivery systems to the urban informal sector will be of particular importance in Africa, these lessons will likely be relevant to officials globally.

FOUNDATIONAL SYSTEMS

The pandemic experience points to specific actions that can be taken to support the urban informal better in the next crisis. While the case studies demonstrate that digital delivery systems are particularly well suited to urban populations, it is important that these systems be put in place before shocks to allow for the quick implementation of emergency relief programs. This requires making concerted efforts to establish or further develop the existing building blocks encompassed by the Modern G2P Architecture to deploy such programs in a timely manner in response to an economic shock.

Governments must establish a foundational, unique, and verifiable ID for the population, prioritizing universal coverage for the urban informal sector from the outset. While urban areas may be more conducive to digital delivery systems, for such systems to operate efficiently at scale, each potential beneficiary must be included in a national ID database that is free of duplicate entries and allows for verification either remotely or at a point of service. Such IDs and accompanying databases enable governments to reduce redundancy in existing programs and design new ones especially for the urban informal. India, for instance, leveraged its universal ID (Aadhaar) to remove “ghost” beneficiaries from a cooking gas subsidy program that used direct transfer, targeting those most in need and expanding the program to rural and urban informal sector households in the process (Mittal, Mukherjee, and Gelb 2017). For members of the urban informal sector to participate willingly in such an ID system, however, will require both low costs to individuals and clear benefits, such as a monetary incentives or the ability to open a mobile money account.

Ideally, comprehensive digital registries of both individuals and businesses should be built and maintained to enable screening and targeting. By definition, informal workers and enterprises are not registered, creating a long-term challenge for policy makers. The unregistered status of the informal complicates efforts to target and screen them for benefits digitally. When information can be captured, financial accounts, phone numbers, addresses, and basic socioeconomic information are among the most vital. Several options are being used across countries. First, nontraditional registry variables may be used in existing surveys or databases. Profession, for instance, proved an effective indicator of informal status in Togo (Webster, Boko, and Akogbeto 2023). Colombia used similar information in targeting the informal sector for COVID-19 assistance, drawing employment data from a registry of hawker licenses (IPA 2022). Second, tapping into registries held by organizations within informal communities, such as professional associations of informal workers in specific trades, may be a possible approach to identifying candidates for assistance. Third, governments may find it exceedingly costly to compile and update numerous databases and instead access beneficiary information through a single window that can draw, with proper consent, from different databases across agencies when designing new programs offering economic assistance. For example, before 2001, each social program in Brazil had a separate targeting methodology, usually via unverified means testing. In 2001, the Federal Government of Brazil established a single registry database to serve the numerous social protection

programs run by the government.³¹ For such registries to capture individuals within the informal sector effectively, they must extend beyond the poorest income percentiles, given that informal incomes are often highly volatile. It is also vital that such digital registries incorporate a foundational national ID to enable interoperability. Türkiye, for instance, leverages the country's national ID as a unique identifier to integrate data from various government institution databases to manage beneficiary information under its integrated social protection system (Republic of Turkey and World Bank 2018).

When available, governments can leverage databases encompassing broad segments of society to achieve universal ID coverage. Such databases include population censuses, civil registries, or electoral records, as in the case of Togo (Webster, Boko, and Akogbeto 2023). For example, Pakistan crossed its foundational ID system with a recent census to identify people who did not have an ID and targeted outreach to those individuals (Mascellino 2022).³² This strategy may be a challenge in SSA, since few countries have recent census data,³³ the civil registration is typically not comprehensive,³⁴ and only a handful of countries have widely held electoral IDs³⁵ or social security beneficiary databases (DigiFI Africa 2023). If present, however, these resources can be utilized to broaden coverage of foundational ID systems. In cases where these tools are unavailable, governments can prioritize the gathering of such data. Alternatively, policy makers can seek to access data generated by elements of the private sector that engage the urban informal, such as the client lists of large mobile phone companies.

Trusted data-sharing protocols need to be established as an integral part of the digital delivery mechanism, to allow for secure exchange of information between different registries and databases. This is particularly important for the urban informal who may have low trust in public authorities and who are not usually included in registries, either by circumstance or by choice. Trusted data sharing may be able to improve the ability of governments to identify and screen urban informal candidates where data gaps are present in registries. During the pandemic, it was hard to establish data-sharing agreements without the proper protocols already in place. In the Democratic Republic of the Congo, for example, the government wanted to access mobile data to build a social registry, but network operators were reluctant to supply the data unless they were assured that it would not be accessed by their competitors (Mukherjee et al. 2023). Similar considerations are also true of the banking system, where privileged private information is critical not only for competitive reasons but also for regulatory compliance.

Data-protection laws can mitigate the risks of sharing sensitive information. At least 16 SSA countries have a data-protection authority in place to enforce laws related to the collection, processing, and sharing of personal data, many modeled on the General Data Protection Regulations of the European Union (DigiFI Africa 2023).³⁶ This provides a basis on which to build the protocols for digital G2P

31 This single registry, *Cadastro Único*, improved efficiency and coordination and reduced the duplication of administrative costs across various social programs (de la Brière and Lindert 2005).

32 For efficiency, effectiveness, transparency, and accountability reasons, countries should move away from assigning IDs associated with a beneficiary registry created for a specific program and instead provide a unique and verifiable digital ID for the population to be used across programs (and beyond). Thus, beneficiary registries are useful to fill gaps in universal foundational IDs, but they should not be the only source of data.

33 With the exception of Kenya, Mozambique, and Botswana.

34 With the exception of Botswana and South Africa.

35 Togo, Kenya, and Nigeria.

36 The countries are Angola, Benin, Burkina Faso, Cabo Verde, Chad, Côte d'Ivoire, Gabon, Ghana, Kenya, Mali, Niger, Nigeria, São Tomé and Príncipe, Senegal, South Africa, and Uganda.

architectures. Governments can also set up data-sharing frameworks for collaboration with the private sector especially in the context of the urban informal sector, where the social protection program and corporate objectives coincide, such as in the inclusion of beneficiaries and acquisition of customers, respectively. Any protocols developed should be as stringent as possible without hindering the service delivery process; they should be understood and followed by users; and they should include safeguards for personal beneficiary information.

BEYOND FOUNDATIONAL SYSTEMS

Programs delivering social protection payments should ensure that communication is inclusive and reliable. Traditional channels of mass communications, such as billboards and television, can be effective means of reaching the urban informal sector, which is exposed to these media through dense neighborhoods. This was particularly true of radio in the case of Togo (Webster, Boko, and Akogbeto 2023). Social media also holds potential as a powerful communication tool, given the depth of mobile internet penetration in many cities. During the pandemic, South Africa relied on both traditional and social media to provide relevant and accurate information on its COVID-19 grant (Gronbach, Seekings, and Megannon 2022). Such communication channels are vulnerable to impersonation, however, rendering beneficiaries as potential victims of social engineering attacks. The effectiveness of both traditional and digital forms of communication is reduced as well when populations lack confidence in authorities.

In poorer urban communities with limited access to traditional banking infrastructure, mobile money offers a promising option for inclusive digital social protection payments. Though banking infrastructure is much more developed in towns and cities than elsewhere, urban slums often have limited formal financial services, as was the case in Mozambique (Webster, Risso Brandon, and Zaldivar Chimal 2023). However, access to a mobile network and mobile phone that can be used to deliver assistance to digital wallets is almost universal in most urban areas of SSA. Governments can accelerate the mobile money trend by creating regulatory space for mobile money providers (including fintechs) to offer “banking-light” services, which entail fewer services at lower cost. While such financial products may be appropriate to the simpler needs of the urban informal sector, it is important that accounts created for the purpose of receiving social protection payments not be so limited as to undermine potential gains in financial inclusion.

Expanding agent networks facilitates the use of mobile money, especially in areas where digital merchant payments are less prevalent. A recent study by GSMA of agents within SSA found that agent activity is currently growing, but at a faster rate than the cash-in, cash-out transactions that generate much of their incomes. Shortages in working capital, burdensome levels of taxation, and the risk of severe losses from fraud or robbery were among the challenges identified by agents (Awani 2023). While governments may not be able to address these concerns directly in all cases, they should seek opportunities to do so. Furthermore, offering incentives to mobile money agents to expand their operations in underserved communities can be effective. In Kenya, tiered commission payments encouraged payment service providers for Inua Jamii to service relatively sparse rural areas (Gelb, Mukherjee, and Webster 2023a). Ensuring that G2P payment service providers have a sustainable business model to service beneficiaries is critical to ensuring proper access and quality of service.

The urban informal can gain greater access to the financial system through reform of KYC requirements as well. The urban informal often do not have the necessary documentation to meet

stringent KYC requirements. By adopting risk-based proportional KYC requirements, as was done in Mozambique (Webster, Risso Brandon, and Zaldivar Chimal 2023), and enabling electronic KYC, which allows individuals to open accounts remotely, governments can facilitate account opening, thereby simplifying the rollout of a digital social protection program.

Further development of the broader digital financial ecosystem will enhance the usage of digital social protection payment instruments. In the case-study countries, the first mile of digitalizing the social protection payments generally worked well, as programs were able—though with some challenges—to deliver payments into bank accounts and mobile wallets. However, there were limitations at the last mile of the payment delivery chain. Namely, beneficiaries quickly cashed out their transfers, rather than using digital payments for purchasing goods and services that could have further improved convenience and safety. As the number of merchants and service providers (including government agencies) that accept digital payments increases, the use of digital G2P systems will become more efficient and effective. Digitalizing social protection payments itself can spur the growth of digital payment ecosystems, as over time beneficiaries can become a profitable market. Bangladesh’s Primary Education Stipend Program, for instance, appears to have provided a customer base for a new entrant into the mobile money market (Gelb, Mukherjee, and Webster 2023b). In the absence of one dominant provider, interoperability between payment services is important to ensuring that users can transact with the largest possible number of individuals and businesses without being burdened with managing multiple services. National payment switches, such as India’s Universal Payments Interface, are critical to facilitating interoperability, which in turn can encourage competition among digital payment services (Gelb, Mukherjee, and Webster 2022). For users, access to affordable telecommunications technology broadly, and smartphones specifically, enables digital payments, as demonstrated by India’s experience. While smartphone usage is increasing across SSA, significant gaps in ownership exist, particularly among women. Literacy, affordability, and lack of digital skills are key barriers to smartphone and mobile internet adoption (GSMA 2022).

In the near term, however, what is needed is a hybrid model of digital social protection delivery that provides choice to beneficiaries and incorporates exceptions for those with limited digital access. Although mobile phone ownership is growing and is typically higher in urban areas, a significant share of the urban informal population does not possess one, especially within marginalized groups. Including human points of contact and delivery mechanisms that do not require a phone (including cash in exceptional circumstances) can improve access to G2P payments for such individuals, albeit in a less efficient or cost-effective manner. There is growing evidence of the benefits of providing choice not only for the recipients but also for the governments and the development of the financial market (Gelb, Mukherjee, and Webster 2023a). Beneficiaries can collect their payments more conveniently, they are more likely to use their financial products actively, and the services and costs within the market are likely to improve, among other benefits.

Digital and financial education is essential for social protection beneficiaries when delivering payments digitally. For many social protection beneficiaries, a digital transfer is their first interaction with the financial sector. As such, they often lack the digital and financial skills needed to access their payment safely and confidently, and even less so to take full advantage of digital financial tools. Incorporating components of digital and financial education into social protection programs can help improve the understanding and capabilities of beneficiaries. In Jordan, payment service providers offered training sessions and other resources to onboarded social protection beneficiaries, providing

information on using their digital wallets (G2Px). Such approaches need to be tailored to the specific population segment, leveraging relevant teachable moments, making beneficiaries engage through edutainment and other methods, and avoiding classroom lecture approaches that have proven to be ineffective.³⁷ In India, for example, banking correspondents were used both to assist poor female G2P recipients in using their bank accounts and to provide information on financial resources such as insurance (Shetty, Arora, and Kumar Vutukuru 2018).

Finally, a flexible and responsive regulatory framework can better enable governments to design digital social protection programs for the urban informal sector. As discussed in the case of Togo, central bank officials allowed for the remote opening of balance-restricted accounts by MNOs, smoothing the process of payment delivery to eligible beneficiaries (Webster, Boko, and Akogbeto 2023). Alternatively, the Democratic Republic of Congo's central bank temporarily reduced KYC requirements for opening mobile money accounts for one year to support the rapid rollout of emergency assistance; any beneficiary registered with the social fund, a large majority of whom were urban-informal workers, was deemed to have fulfilled KYC requirements, allowing them to open accounts and the government to transfer payment digitally. In contrast, Nigeria's low bank account penetration and restrictive mobile money regulations delayed the implementation of its COVID-19 emergency relief program targeted at the urban poor (Webster, Ubah, and Pulver 2023). These cases provide a blueprint for countries to use regulation appropriately to support financial inclusion and expand the digital payment ecosystem over the long run.

Further research is needed to understand how the building blocks of a digital G2P architecture could also support the digital implementation of person-to-government payments. Although both involve monetary exchanges between governments and individuals, they often occur in very different contexts than those examined by this study, such as emerging programs that facilitate informal-sector payment into publicly run social insurance or pension systems.

In conclusion, the urban informal sector can be successfully served by programs leveraging a digital G2P architecture. Doing so will require G2P architectures to be designed with this specific population segment in mind. As argued in this paper, the urban informal sector is a large and growing population in SSA that can benefit from government support delivered using a modern G2P architecture. However, the characteristics of urban residents and of informal workers limit the effectiveness and efficiency of digital social protection delivery systems designed for rural contexts or registered formal workers. This points to two broad areas in which improvements are necessary for a digital, modern, G2P architecture to be used to serve this population effectively: First, there is a need to bring the urban informal into the existing systems through tailored, proactive outreach, especially in the context of national IDs, financial markets, and digital technology, given that this population is currently not included in standard registries, is highly mobile, and has different social organizations than have been used to reach other communities. Second, program and system designs may need to be adapted to serve urban informal beneficiaries better and more efficiently, such as by adopting flexible regulatory and hybrid delivery models to address the sector's varied needs, and seeking to foster robust digital payment ecosystems to maximize the potential for spillover benefits. As the pandemic illustrated, such policy reforms need to take place before the next crisis occurs, even as the urban informal sector continues to expand.

³⁷ For good practices and guidance, see World Bank 2018.

References

- Aga, Gemechu, David Francis, Filip Jolevski, Jorge Rodriguez Meza, and Joshua Seth Wimpey. 2022. *Surveying Informal Businesses: Methodology and Applications*. World Bank. <https://openknowledge.worldbank.org/server/api/core/bitstreams/c3135978-e847-57bc-9a4f-641d5368670f/content>.
- Avalos, Jorge, Sarang Chaudhury, Timothy Clay, and Puja Vasudeva Dutta. 2021a. *In Practice: A Path to Jobs for the Urban Poor*. Vol. 1. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/36594> License: CC BY 3.0 IGO.
- Avalos, Jorge, Thomas Bossuroy, Timothy Clay, and Puja Vasudeva Dutta. 2021b. "Productive Inclusion Programs in Urban Africa. Partnership for Economic Inclusion." World Bank. *Mimeo*.
- Awanis, Aramé. 2023. "Mobile Money Agents: Sustainability in a Digital Era." GSMA Blog, January 23, 2023. <https://www.gsma.com/mobilefordevelopment/blog/mobile-money-agents-sustainability-in-a-digital-era/>.
- Bearak, Max, Dylan Moriarty, and Júlia Ledur. 2021. "Africa's Rising Cities: How Africa Will Become the Center of the World's Urban Future." *Washington Post*, November 19, 2021. <https://www.washingtonpost.com/world/interactive/2021/africa-cities/>.
- Bishoge, O. K. 2021. "Challenges Facing Sustainable Water Supply, Sanitation and Hygiene Achievement in Urban Areas in Sub-Saharan Africa." *Local Environment* 26, no. 7: 893-907.
- Blumenstock, J., J. Lain, I. Smythe, and T. Vishwanath. 2021. "Using Big Data and Machine Learning to Locate the Poor in Nigeria." World Bank Blog, February 22, 2021. <https://blogs.worldbank.org/opendata/using-big-data-and-machine-learning-locate-poor-nigeria>.
- Boko, Joachim and Jamelino Akogbeto. 2022. *Leveraging Digital Payment to Improve Social Protection in the Urban Informal Sector: Togo Case Study*. Washington, DC: World Bank, *Mimeo*.
- Cerkez, Nicolas, Wendy Cunningham, Feliz Lung, and Sarika Gupta. 2023. "Aspirations and Constraints of Poor Urban Household Enterprises in West Africa." World Bank. *Mimeo*.
- Chatain, Pierre-Laurent, Andrew Zerzan, Wameek Noor, Najah Dannaoui, and Louis de Koker. 2011. *Protecting Mobile Money against Financial Crimes: Global Policy Challenges and Solutions*. World Bank. <https://openknowledge.worldbank.org/server/api/core/bitstreams/376c10d9-d2be-5584-b5da-1a4324c99b8e/content>.
- Chen, S., and M. Ravallion. 2007. "The Changing Profile of Poverty in the World." 2020 Focus Brief on the World's Poor and Hungry People. International Food Policy Research Institute. <https://core.ac.uk/download/pdf/6289149.pdf>.
- Cunningham, Wendy, Feraud Tchuisseu, Mariana Viollaz, Ifeanyi Edochie, and David Newhouse. 2023a. "Mapping the African Urban Informal Sector. World Bank Africa Region." *Mimeo*.
- Cunningham, Wendy, Feraud Tchuisseu, Mariana Viollaz, Ifeanyi Edochie, David Newhouse, and Federica Ricaldi. 2023b. "How Did Urban Household Enterprises in Sub-Saharan Africa Fare during COVID-19? Evidence from High-Frequency Phone Surveys." Policy Research Working Paper 10360. Washington, DC: World Bank. <https://documents1.worldbank.org/curated/en/099348503132322233/pdf/IDU05bdb518202c21042910b4a901cbe0cc9b544.pdf>.
- Danquah, M., S. Schotte, and K. Sen. 2021. "Informal Work in Sub-Saharan Africa: Dead End or Stepping-Stone?" *IZA Journal of Development and Migration* 12, no. 1. <https://doi.org/10.2478/izajodm-2021-0015>.
- DataHub (database). World Data. International Telecommunication Union. Accessed January 13, 2023. <https://datahub.itu.int/data/>.
- de la Brière, B., and K. Lindert. 2005. "Reforming Brazil's Cadastro Único to Improve the Targeting of the Bolsa Familia Program," Social Protection Discussion Paper 0527. Washington, DC: World Bank Human Development Unit.
- Demirgüç-Kunt, A., L. Klapper, D. Singer, and S. Ansar. 2021. *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. Washington, DC: World Bank. <https://www.worldbank.org/en/publication/globalfindex/Data>.
- De Vreyer, P., and F. Roubaud, eds. 2013. *Urban Labor Markets in Sub-Saharan Africa*. World Bank Publications.

- DigiFI Africa. 2023. "State of Digital Systems in Sub-Saharan Africa" (web page). <https://lookerstudio.google.com/reporting/e83902e2-df38-463a-8df0-78bec5f34993/page/wN8eC>.
- FATF (Financial Action Task Force). 2012-2023. *International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation*. <https://www.fatf-gafi.org/en/publications/Fatfrecommendations/Fatf-recommendations.html>.
- FATF (Financial Action Task Force). 2013-2017. *Anti-money Laundering and Terrorist Financing Measures and Financial Inclusion – With a Supplement on Customer Due Diligence*. <https://www.fatf-gafi.org/en/publications/Fatfgeneral/Financial-inclusion-cdd-2017.html>.
- Fox, L., and T. P. Sohnesen. 2012. "Household Enterprises in Sub-Saharan Africa: Why They Matter for Growth, Jobs, and Livelihoods." World Bank Policy Research Working Paper 6184. <https://openknowledge.worldbank.org/bitstream/handle/10986/12038/wps6184.pdf>.
- G2Px. 2020. "COVID-19 G2P Cash-Transfer Payments: Country Brief: Jordan." World Bank. <https://thedocs.worldbank.org/en/doc/229771593464525513-0090022020/original/WorldBankG2PxCOVID19JordanBrief.pdf>.
- Gelb, A., A. Mukherjee, and K. Navis. 2020. "Citizens and States: How Can Digital ID and Payments Improve State Capacity and Effectiveness?" Center for Global Development: Washington, DC. <https://www.cgdev.org/publication/citizens-and-states-how-can-digital-id-and-payments-improve-state-capacity>.
- Gelb, A., A. Mukherjee, and B. Webster. 2022. "Can Digital G2P Transfers Drive Financial Inclusion and Digital Payments? Evidence from India." Center for Global Development: Washington, DC. <https://www.cgdev.org/publication/can-digital-g2p-transfers-drive-financial-inclusion-and-digital-payments-evidence-india>.
- Gelb, A., A. Mukherjee, and B. Webster. 2023a. "Models of Social Payments through Inua Jamii." Center for Global Development: Washington, DC. <https://www.cgdev.org/sites/default/files/models-social-payments-through-inua-jamii.pdf>.
- Gelb, A., A. Mukherjee, and B. Webster. 2023b. "Can Digital G2P Payments Increase Financial Inclusion and Empower Women? Evidence from PESP in Bangladesh." Center for Global Development: Washington, DC. <https://www.cgdev.org/sites/default/files/can-digital-g2p-payments-increase-financial-inclusion-and-empower-women-evidence-pesp.pdf>.
- Gentilini, Ugo. 2022. *Cash Transfers in Pandemic Times: Evidence, Practices, and Implications from the Largest Scale Up in History*. Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/37700>.
- Gentilini, Ugo, Mohamed Bubaker Alsafi Almenfi, T. M. M. Iyengar, Yuko Okamura, John Austin Downes, Pamela Dale, Michael Weber, David Locke Newhouse, Claudia P. Rodriguez Alas, Mareeha Kamran, Ingrid Veronica Mujica Canas, Maria Belen Fontenez, Sandra Asieduah, Vikesh Ramesh Mahboobani Martinez, Gonzalo Javier Reyes Hartley, Gustavo C. Demarco, Miglena Abels, Usama Zafar, Emilio Raul Urteaga, Giorgia Valleriani, Jimmy Vulembera Muhindo, and Sheraz Aziz. 2022. "Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures." Living paper version 11. Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/37186>.
- Gentilini, Ugo, Saksham Khosla, and Mohamed Almenfi. 2021. *Cash in the City: Emerging Lessons from Implementing Cash Transfers in Urban Africa*. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/35003>.
- Gillwald, A., F. Odufuwa, and O. Mothobi. 2018. *The State of ICT in Nigeria*. Cape Town, South Africa: Research ICT Africa. <https://researchictafrica.net/wp/wp-content/uploads/2018/12/After-Access-Nigeria-State-of-ICT-2017.pdf>.
- Gronbach, L., J. Seekings, and V. Megannon. 2022. "Social Protection in the COVID-19 Pandemic: Lessons from South Africa." CGD Policy Paper 252. Washington, DC: Center for Global Development. <https://www.cgdev.org/sites/default/files/social-protection-covid-19-pandemic-lessons-south-africa.pdf>.
- GSMA. 2022. *The Mobile Economy: Sub-Saharan Africa 2022*. GSMA. <https://www.gsma.com/mobileeconomy/sub-saharan-africa/>.
- Guyen, Melis, Himanshi Jain, and Clement Joubert. 2021. *Social Protection for the Informal Economy: Operational Lessons for Developing Countries in Africa and Beyond*. Washington, DC: World Bank Group. <http://documents.worldbank.org/curated/en/946341635913066829/Social-Protection-for-the-Informal-Economy-Operational-Lessons-for-Developing-Countries-in-Africa-and-Beyond>.
- Hare, A., and N. Parekh. 2020. "Should Government Payments Be Digitized?" J-PAL Blog, October 13, 2020. <https://www.povertyactionlab.org/blog/10-13-20/should-government-payments-be-digitized>.
- Hoorweg, Daniel, and Kevin Pope. 2017. "Population Predictions for the World's Largest Cities in the 21st Century." *Environment & Urbanization* 29, no. 1: 195-216. <https://journals.sagepub.com/doi/pdf/10.1177/0956247816663557>.

- ILO (International Labour Organization). 2018. *Women and men in the Informal Economy: A Statistical Picture*. https://www.ilo.org/global/publications/books/WCMS_626831/lang-en/index.htm.
- ILO (International Labour Organization). 2021. *Extending Social Security to Workers in the Informal Economy: Information and Awareness*. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---soc_sec/documents/publication/wcms_749491.pdf.
- IPA (Innovations for Poverty Action). 2022. *The Digitization of Emergency Cash Assistance during COVID-19 in Colombia*. <https://poverty-action.org/sites/default/files/publications/Updated-The-Digitization-of-Emergency-Cash-Assistance-During-COVID-19-in-Colombia.pdf>.
- Jain, Himanshi. 2023. "Understanding the (UN)MET Saving Needs of Poor Urban Liberians in Informal Sector." Social Protection and Jobs/World Bank. *Mimeo*.
- Kansiime, M.K., Tambo, J.A., Mugambi, I., Bundi, M., Kara, A. and Owuor, C., 2021. COVID-19 implications on household income and food security in Kenya and Uganda: Findings from a rapid assessment. *World development*, 137, p.105199.
- Klapper, L., and D. Singer. 2017. "The Opportunities and Challenges of Digitizing Government-to-Person Payments." *World Bank Research Observer* 32, no. 2: 211-26.
- Lall, Somik Vinay, J. Vernon Henderson, and Anthony J. Venables. 2017. "Africa's Cities: Opening Doors to the World." World Bank, Washington, DC.
- Lindert, Kathy, Tina George Karippacheril, Inés Rodriguez Caillava, and Kenichi Nishikawa Chavez. 2020. *Sourcebook on the Foundations of Social Protection Delivery Systems*. Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/34044>.
- Marin, Georgina, and Robert Palacios. 2022. "The Role of Digital in the COVID-19 Social Assistance Response." Washington, DC: World Bank. <https://doi.org/10.1596/38104>.
- Mascellino, A. 2022. "New NADRA Offices to Enroll Biometrics of Pakistani Individuals with Household Changes." *Biometric Update.com*, November 9, 2022. <https://www.biometricupdate.com/202211/new-nadra-offices-to-enroll-biometrics-of-pakistani-individuals-with-household-changes>.
- Mittal, N., A. Mukherjee, and A. Gelb. 2017. *Fuel Subsidy Reform in Developing Countries: Direct Benefit Transfer of LPG Cooking Gas Subsidy in India*. Center for Global Development. <https://www.cgdev.org/sites/default/files/fuel-subsidy-reform-developing-countries-india.pdf>.
- Mukherjee, Anit, Laura Bermeo, Yuko Okamura, Jimmy Vulembera, and Paul Bance. 2023. *Digital-First Approach to Emergency Cash Transfers: STEP-KIN in the Democratic Republic of Congo*. Social Protection and Jobs Discussion Paper 2302. The World Bank. <https://documents1.worldbank.org/curated/en/099935104272316767/pdf/IDU05debc9500bf004a580a48b0c6c201068bdc.pdf>.
- NAN. 2021. "1m Nigerians to Benefit from COVID-19 Cash Transfer, Osinbajo Says." *The Guardian*, January 20, 2021, National. <https://guardian.ng/news/1m-nigerians-to-benefit-from-covid-19-cash-transfer-osinbajo-says/>.
- Potts, D. 2008. "The Urban informal Sector in Sub-Saharan Africa: From Bad to Good (and Back Again?)." *Development Southern Africa* 25, no. 2: 151-67.
- Pulver, Caroline and Ubah Thomas Ubah. 2022. *Leveraging G2P Architecture: G2Px Nigeria Case Study*. Washington, DC: World Bank, *Mimeo*.
- Razavi, S., C. Behrendt, M. Bierbaum, I. Orton, and L. Tessier. 2020. "Reinvigorating the Social Contract and Strengthening Social Cohesion: Social Protection Responses to COVID-19." *International Social Security Review* 73, no. 3: 55-80.
- Republic of Turkey Ministry of Family and Social Policy and World Bank. 2018. *Turkey's Integrated Social Assistance System*. Washington, DC: World Bank Group. <http://documents.worldbank.org/curated/en/515231530005107572/Turkey-s-integrated-social-assistance-system>.
- Risso Brandon, Fiorella and Samantha Zaldivar Chimal. 2022. *G2Px Deep Dive Case Study: The Mozambique Experience—Shifting the Paradigm: SP Digital Payments in FCV Context*. Washington, DC: World Bank, *Mimeo*.
- Shetty, Shobha, Amit Arora, and Vinay Kumar Vutukuru. 2018. "Enabling Digital Financial Inclusion for Rural Women: Emerging Findings from India." *World Bank Blog*, April 5, 2018. <https://blogs.worldbank.org/endpovertyinsouthasia/enabling-digital-financial-inclusion-rural-women-emerging-findings-india>.
- Smythe, I. S., and J. E. Blumenstock. 2022. "Geographic Microtargeting of Social Assistance with High-Resolution Poverty Maps." *Proceedings of the National Academy of Sciences* 119, no. 32: e2120025119. <https://doi.org/10.1073/pnas.2120025119>.

- UN (United Nations) Population Division. 2018. *World Urbanization Prospects: 2018 Revision*. United Nations: New York City.
- Urban Poverty GSG (Global Solutions Group). 2022. “Supporting a Resilient Recovery: Africa ACT—Adapt, Connect, and Transform, People First” (Powerpoint presentation).
- Webster, B., J. Boko, and J. Akogbeto. 2023. *G2Px in Togo: End-to-End Digital G2P for the Urban Informal*. Washington, DC: G2Px.
- Webster, B., F. Risso Brandon, and S. Zaldivar Chimal. 2023. *G2Px in Mozambique: A Gradual Transition*. Washington, DC: G2Px.
- Webster, B., U. Ubah, and C. Pulver. 2023. *G2Px in Nigeria: Piloting Rapid Response for the Urban Informal*. Washington, DC: G2Px.
- World Bank. 2022a. *A Better Future for All Nigerians: Nigeria Poverty Assessment 2022*. World Bank: Washington, DC. <https://openknowledge.worldbank.org/handle/10986/37295> License: CC BY 3.0 IGO.
- World Bank. 2022b. *Charting a Course towards Universal Social Protection: Resilience, Equity, and Opportunity for All*. World Bank: Washington, DC <https://openknowledge.worldbank.org/entities/publication/84ba2380-624c-553a-b929-2882e72c7468>.
- World Bank. 2022c. *Next Generation G2P Payments: Building Blocks of a Modern G2P Architecture*. Washington, DC: World Bank Group. <http://documents.worldbank.org/curated/en/099600110202238143/P173166068e4220430a0ff03279b01c83db>.
- World Bank. 2021a. ID4D Global Dataset - Volume 1 2021: Global ID Coverage Estimates. Washington, DC: World Bank Group. <http://documents.worldbank.org/curated/en/099705012232226786/P176341032c1ef0b20adf10abad304425ef>.
- World Bank. 2021b. “Liberia—Recovery of Economic Activity for Liberian Informal Sector Employment Project.” Project Appraisal Document. Washington, DC: World Bank Group. <http://documents.worldbank.org/curated/en/748571615860093398/Liberia-Recovery-of-Economic-Activity-for-Liberian-Informal-Sector-Employment-Project>.
- World Bank. 2020. “Nigeria—COVID-19 Action Recovery and Economic Stimulus Program Project.” Project Appraisal Document. Washington, DC: World Bank Group. <http://documents.worldbank.org/curated/en/142411608260520935/Nigeria-COVID-19-Action-Recovery-and-Economic-Stimulus-Program-Project>.
- World Bank. 2018. *Integrating Financial Capability into Government Cash Transfer Programs*. <https://documents1.worldbank.org/curated/en/866461531462775238/pdf/Integrating-financial-capability-into-government-cash-transfer-programs-toolkit.pdf>.



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