Report

Cash transfers and digital financial inclusion

Regional evidence from Asia Pacific with a focus on Bangladesh, Cambodia, and Nepal

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Acronyms and abbreviations

BMGF	The Bill and Melinda Gates Foundation
DFI	digital financial inclusion
DRR	Disaster Risk Reduction (programme, Bangladesh)
EGPP	Employment Generation for the Poorest (programme) (Bangladesh)
FSP	financial service provider
G2P	government-to-person (programmes)
ID	identification
KYC	'know your customer' (regulations)
INGO	international non-governmental organisation
NGO	non-governmental organisation
PSP	payment service provider
SDGs	Sustainable Development Goals
SSA	social security allowance
UNCDF	UN Capital Development Fund
UNDP	UN Development Programme
UNICEF	UN Children's Fund
WFP	World Food Programme
WING	Wing (Cambodia) Limited Specialized Bank

Executive Summary

Despite substantial improvements across low-, middle- and high-income countries, access to formal financial services and technology remains far from universal. As part of broader efforts to improve and expand digital financial inclusion, there is a broad consensus that transfers of cash assistance by development partners and national governments could represent an opportunity to expand access to digital financial products and services among some of the world's poorest households.

To this end, the World Food Programme (WFP) commissioned this study to explore opportunities and barriers to strengthening digital financial inclusion for cash transfer recipients in the Asia-Pacific region. The study maps existing evidence on the landscape of digital financial inclusion and cash-based transfer programmes in the region, and explores cash transfer recipients' perspectives and experiences of digital financial inclusion. It draws on primary and secondary data, including qualitative research with recipients and providers of cash assistance programmes in three countries: Bangladesh, Cambodia and Nepal.

Across these three programmes and countries, the study adopts a broad view of inclusion, to look beyond access and use of digital financial products and services, to understand how financial products and services can also contribute to economic empowerment and financial resilience.

This Executive Summary provides an overview of the study's key findings across the three countries, as well as its main recommendations for humanitarian and development actors, governments and WFP to improve the realisation of digital financial inclusion through the digitalisation of cash assistance.

Figure 1 Case study countries and programmes

	Bangladesh	Cambodia	Nepal
Assistance programme:	WFP Disaster Risk Reduction cash-for-work programme in Cox's Bazar	Government cash relief programme for vulnerable pregnant women and children	Government social security allowance
Form of digitalisation:	Cash transfers to digital wallets (bKash)	Cash through payment service provider, SMS notifications	Transfers through banks, alongside some disbursement of (hard) cash through local government authorities

Findings

To what extent do different actors in the Asia-Pacific region emphasise financial inclusion or digital financial inclusion as part of their existing cash transfer programmes?

While there is a growing consensus among cash assistance providers of the potential for cash assistance to contribute to greater access to digital financial products and services by recipients, there remain many untapped opportunities to do so in a holistic and comprehensive way.

Governments pay relatively little attention to financial or digital literacy in cash-based transfer programmes. Development and humanitarian actors have acted as champions of digitalisation of cash and in-kind transfers, with the UN Capital Development Fund (UNCDF) playing a key advocacy role for financial inclusion. However, the offices responsible for cash assistance in international humanitarian and social protection actors often do not clearly link with the government bodies responsible for digital financial inclusion.

Cash assistance programmes mostly rely on private sector actors to distribute cash assistance. This can bring transaction fees or premiums to withdraw or use cash, which are generally borne by recipients or providers. There are also often hidden costs borne by cash recipients, including the time and expense of travelling to withdraw funds. Lack of financial infrastructure supporting interoperability and low interest among financial service providers to make systems interoperable can also increase the costs of digital cash transfers. Improving availability and access across financial service providers are important stepping-stones to financial inclusion.

What is the existing evidence for digital financial inclusion through digital cash-based transfers by humanitarian and social protection actors in the Asia-Pacific region?

Financial inclusion or digital financial inclusion should not be simply equated with ownership of financial accounts (such as bank accounts or mobile money accounts). Instead, access to financial accounts should be considered a first step towards financial inclusion, defined as access to useful and affordable financial products, contributing to wider financial health and resilience. Digital financial inclusion is a subset of financial inclusion that refers to digital financial products and services, in an increasingly digitalised financial ecosystem.

Existing evaluations highlight design of delivery models for cash assistance programmes as one barrier, among others, to the achievement of financial inclusion for cash-based transfer programme recipients. For example, the use of single-purpose debit cards limited recipients' ability to use the card to access different financial products and services. Beyond these specific cases, in general, understanding of the impacts on digital financial inclusion is limited by insufficient evidence. Cash transfer programme evaluations have seldom explicitly measured the impact of cash assistance programmes on financial inclusion. This indicates a current lack of emphasis on financial inclusion and also limits evidence of intended and unintended contributions to digital financial inclusion. Finally, assessing the extent to which digital cash transfers contribute to financial inclusion for groups such as low-income women and people with disabilities requires looking at digital cash delivery in relation to the traditional and embedded dimensions of exclusion in the contexts in which they live.

To what extent do cash recipients report changes to their payment, savings and credit behaviours as a result of receiving digital cash transfers from humanitarian and social protection actors?

Across the three country and programmatic contexts, mechanisms to access cash assistance remained largely non-digital. Recipients most frequently withdrew cash through cash-out at money agents, in large part because of the available financial infrastructure; in most cases market transactions were still conducted using physical cash, with even some resistance to digital payments by shopkeepers in Cox's Bazar, Bangladesh.

Use of a bank account for daily payments and savings by most respondents was largely unchanged before and after the transfer. Banks were often preferred by recipients for savings and payments, but respondents frequently viewed them as inaccessible to lower-income households, especially when cash was needed for daily expenses and immediate emergencies. Most recipients cashed out transfers within a short period from receipt. This lack of change in behaviour could reflect supply-side dynamics as well as a perceived security of using cash instead of digital payments.

There were however some changes in credit behaviour, as some respondents described using debt as a survival strategy when enabled by digital cash transfers. For example, in Bangladesh, some respondents purchased daily food on credit from local stores, based on expectation of future digital cash transfers. These practices could help recipients smooth out daily consumption. Yet debt could also carry risks for financial health and resilience.

Insufficient knowledge about digital financial products limited recipients' use of digital financial products and services. An absence of training incorporating the required information was frequently reported. Lack of familiarity with technology did not seem to be easily overcome by observing use, either by recipients on their own or with step-by-step instructions. For underserved groups, this suggests that the successful shift to digitalisation of recipients' financial transactions might not be an easy transition. Additionally, the delivery mechanism for cash payments was frequently less important to recipients than the location of the cash disbursement outlet. Waiting times were also considered an important factor. This indicates the importance of minimising hidden costs to cash recipients in order to make cash transfers – whether digital or physical – easy and efficient to use.

Do digital cash transfers by humanitarian and social protection actors improve digital financial inclusion for women and people with disabilities?

There remain important, unrealised opportunities for digital technologies to overcome barriers to access for people with disabilities and women. There was a gender difference in the mode of payments used for mobile top ups in Cambodia and Bangladesh, with younger (urban) men more likely to use banks and/or digital financial products and services. Further, there was a lack of sufficient evidence as to whether and how the mechanisms used for the cash transfer affected women's agency, especially among women respondents over the age of 46. Women more than men, and older women more than older men, indicated that they required support to top up mobile phone lines and/or to conduct transactions at the money agent. People with disabilities also generally continued to rely on family members or neighbours to register for and withdraw assistance.

Social expectations were one contributing factor, limiting the use of mobile phones and financial activity for women in particular. Also, often women respondents were less knowledgeable about digital financial products and services and were less likely to own their own phone.

What are the primary barriers around the realisation of digital financial inclusion through digitalised cash-based transfers, and how are they being addressed?

The study revealed a range of barriers and mitigation efforts affecting the realisation of digital financial inclusion through digitalised cash-based assistance, ranging from infrastructural to programmatic factors.

First, the use and success of digital cash-based transfer programmes in achieving financial inclusion outcomes rests on the availability of infrastructure for mobile payments, which includes banking, telecommunication and electricity infrastructure. These components are more often constrained outside of urban areas.

Looking at programme design, digital cash-based transfer programmes often rest on two key assumptions: that an individual has both a form of recognised identification (ID) and a phone number. In practice, both assumptions do not always hold. To mitigate this challenge, development and humanitarian agencies have used functional IDs, such as a household bills or health records, and/or a letter verified by local-level authorities or large-scale humanitarian agencies, to meet local 'know your customer' (KYC) requirements where local regulation allows.

Private sector firms' incentives and understanding of humanitarian contexts are also a barrier to the implementation of digital cash-based transfers in the Asia-Pacific region, and to these actors' overall contribution to recipients' choice in terms of financial products. There is an opportunity here for humanitarian and development actors to share knowledge about the specific conditions of cash recipients, and work with private sector actors to develop business cases for products suited to cash recipients' conditions, including specifically women and people with disabilities.

Finally, digital and financial literacy is also key to effective use of digital financial products and services, but trust in financial institutions might matter as much or more. Our respondents discussed digital and financial literacy as part of a wider set of factors that contribute to an enabling environment for the use of digital financial products and services. With this, digital literacy efforts must consider social norms, especially for women and people with disabilities.

Recommendations

Recommendations for social protection, humanitarian and development actors

1. **Advocate for and support a people-centred approach to financial inclusion in the Asia-Pacific region**, that focuses on financial outcomes and resilience in cash-based transfer programming. At the design stage, this could include ensuring that digital systems will not exacerbate forms of exclusion of poor and vulnerable groups. In programme implementation, we recommend investing in ongoing evidence collection to assess progress, specific to programme aims and to recipients' financial lives and preferences.

2. **Conduct a full assessment of the costs of enabling financial inclusion through digitally delivered cash-based transfers**, while aiming to reduce the costs borne by recipients. This includes identifying where additional investment is required to better enable recipients to take up opportunities to use digital financial products, such as greater investment in digital, financial and basic literacy to support confident and secure choices by cash recipients about choosing and using digital financial products.

3. **Advocate and support government, regulatory, and private sector actors to strengthen the enabling environment for digital financial inclusion**. For example, this includes working with financial service providers to build business cases for expansion in crisis and non-crisis settings, helping to demonstrate an alignment of incentives. With government policy and regulation, this could involve supporting the development of financial service and physical infrastructure for underserved communities.

Recommendations for government and regulatory actors

4. **Invest in greater coordination between social protection programmes and government agencies working on financial inclusion and digital financial inclusion**. More regular and formalised communication across government agencies responsible for providing cash assistance and those responsible for financial inclusion strategies could allow for a more joined-up approach to ensuring the financial inclusion of poor and marginalised communities.

5. **Seek to develop a regulatory environment for digital financial services that aligns multiple interests,** including supporting access to digital financial products by cash recipients, and encouraging innovation by financial service providers. Potentially relevant areas of regulation include know-your-customer, anti-money laundering, know-your-agent, licensing requirements, and interoperability.

Recommendations for WFP

6. **Continue to build the evidence base on the complementarity of digital financial inclusion and WFP's mandate on cash-based assistance across operations in the Asia-Pacific**. One opportunity is to ensure financial service provider landscape assessments adequately assess information on opportunities for digital financial inclusion *before* the onset of a crisis. Another may be to collaborate with public and private sector actors in research and development of recipient-centric payment solutions and regulations.

7. **Strengthen engagement with country and regional offices on how the digital financial inclusion agenda translates into specific operations,** to ensure that digitalisation of cash assistance is appropriate to recipients' financial lives and local market conditions.

8. **Ensure that recipients can exercise meaningful choice about the risks and benefits of using digital and data-based channels** through regular re-assessment and improvement of terms of consent and how they are communicated.

9. Together with regulators, financial service providers, humanitarian, social protection, and government actors, **participate in policy advocacy and evidence generation on financial inclusion,** leveraging WFP's expertise and networks (such as in-country cash working groups), to promote a more financially inclusive ecosystem.

1 Introduction

Innovation in digital financial products and services has opened new possibilities for financial inclusion for unbanked and underbanked groups. Digitalisation of financial products and services – e.g., from mobile saving accounts to currency exchange applications – provides new ways for people to access finance, and engage in payments, credit and savings. Attention to digital channels grew with Covid-19 as pandemic-related constraints on physical movement and activity provided an impetus to expand the use of digital channels for financial activity (Malpass, 2022). Digital technologies appear to present new opportunities for improving the well-being of recipients of cash transfers as part of a shared commitment (IASC, 2016) among donors and humanitarian actors to improving humanitarian outcomes and the efficiency and effectiveness of development and humanitarian action.

Despite substantial improvements in access to formal financial services and technology across low-, middle- and high-income countries, access is far from universal. Account ownership – either with a bank or a regulated institution (e.g., mobile money service provider) – reached 76% of people globally in 2021 (Global Findex, 2021). While there has been growth in account access globally, rates differ; for example, doubling in India over the last decade, versus only a 10% increase in Pakistan over the same period. Women in low-income countries remain 6 percentage points less likely than men to have an account (ibid.).

The unbanked[1] and underbanked[2] are often individuals belonging to historically marginalised groups such as women, the elderly, people with disabilities and low-income households (often living in rural areas), as well as forcibly displaced people. In the East Asia and Pacific region, 53% of unbanked adults are in the poorest 40% of households and globally, the poorest 40% of households make up nearly half of all the unbanked (ibid.). For them, access to and use of digital financial services are often constrained by multiple regulatory, infrastructural and household barriers including, for example, a lack of basic infrastructure (e.g., telephones, the internet and electricity), official ID and supportive policies and regulation. At the household level, intra-household dynamics can dictate membership of formal financial institutions, while intra-household power relations and low-income levels can determine ownership of digital devices and financial and digital literacy levels. Finally, rural and urban divides can accentuate challenges, with limited exposure to formal financial institutions in rural areas because of low supply.

The importance of digital financial inclusion (DFI) in the global discourse has risen with the Covid-19 pandemic (Agur et al., 2020), and in the Asia-Pacific region some countries have used technology to ease interactions within the financial systems (IMF, 2018). Yet challenges and disparities persist around digital financial inclusion both within and between countries in the region (IMF, 2018). Further, some of the benefits of

1 Without an account at a financial institution or through a mobile money provider (Global Findex, 2017).
2 People who may have access to a savings or a checking account but use other means of carrying out financial transactions (Library of Congress, 2022).

financial inclusion remain contested, specifically in relation to poverty alleviation and development (Mader, 2018).

Within broader efforts to improve and expand digital financial inclusion, cash transfer payments by UN agencies and national governments have emerged as a potential opportunity to expand access to digital financial products and services among the poorest households. While there is growing attention being paid to whether and how digitalisation of cash transfers can help to address disparities in digital financial inclusion, we identify a key knowledge gap in discussions and literature around how users perceive and experience such initiatives and how these fit into their social and economic lives. Listening and responding to cash recipients' preferences and needs is critical for effective and appropriate design of humanitarian and development programmes.

The World Food Programme (WFP) commissioned ODI Global to conduct this study to address this gap in the literature by mapping out the landscape of digital financial inclusion through cash-based transfers in the Asia-Pacific region. The study seeks to improve understanding of cash transfer recipients' perspectives and experiences of digital cash transfers and their contribution to digital financial inclusion. Recognising the substantial growth in digital financial products and services in the region, we aim to identify the opportunities and barriers to strengthening digital financial inclusion through changes in the delivery of cash transfers in the Asia-Pacific region.

To this end, this paper is structured as follows. First, we outline the research questions and methodology for this study and define the key concepts that frame it. Following this, we set out the regional landscape of digitalisation of cash transfers in the Asia-Pacific, to contextualise where and how this digitalisation is taking place and the key actors involved. Next, we investigate perspectives on the digitalisation of cash transfers and financial inclusion from the viewpoint of cash recipients , as well as the operational and policy actors involved in programme strategy and implementation. We then summarise the barriers and opportunities for financial inclusion through cash-based transfers that emerged from the interviews with cash recipients and humanitarian and development actors. We conclude with recommendations about what different stakeholders can do to better address key challenges faced by recipients, and support and enable them in using digital financial products and services to meet their needs and preferences.

2 Research approach and key definitions

2.1 Research questions

The study was guided by the following overarching research questions:

1. Who are the main actors[3] working on digital financial inclusion for unbanked and underbanked populations in the Asia-Pacific region, and how do they work? Which actors, with a focus on WFP partners, make digital financial inclusion a core policy and programmatic objective for digitally delivered cash-based transfers?
2. To what extent do digitally delivered cash-based transfers effectively advance financial inclusion for the target groups, and what are the key barriers? And what accompanying efforts (e.g. training) help to advance digital financial inclusion?
3. To what extent do financial products and their digital delivery meet recipients' needs and priorities?
4. What recommendations can be made to humanitarian and development actors, UN agencies, including WFP, and governments to more effectively address inequalities in access and use of digital financial products by unbanked and underbanked populations?

By focusing on recipients of cash, our approach is aligned with other studies that collect data and highlight issues relevant to low-income, traditionally marginalised households. The list of sub-questions used in data collection and analysis is provided in an annex.

2.2 Data collection

We drew on secondary and primary data to answer the research questions, including using existing literature to help to map key actors and countries of operation.[4] This included references provided by WFP,[5] additional academic (peer-reviewed) material and grey literature sources,

3 We consider governments, UN agencies, large international non-governmental organisations (INGOs), large donors and non-governmental organisations (NGOs). We also consider the private sector where the main government and non-government actors (e.g., UN agencies and NGOs) work with private providers to provide cash-based transfers to underserved populations.

4 Afghanistan, Bangladesh, Bhutan, Cambodia, DPR Korea, Fiji, India, Indonesia, Kyrgyz Republic, Lao PDR, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Tajikistan and Timor Leste.

5 References provided by WFP include: The new WFP Strategic Plan, WFP's 'Digital Transformation: Beyond the Annual Performance Report 2019 Series' and various lessons learned and guidance documents (including the Digital Advisory and Solution Services (DASS) Consultations Outcome Document), the WFP Strategy for Support to Social Protection, the WFP Regional Bureau Bangkok (RBB) Social Protection and Cash Based Transfers Emergency Preparedness and Response 5-Year Strategic Plan (2018–2022), and the WFP Cash Assurance Framework Technical Note, etc., to ensure alignment to WFP vision and strategic priorities in cash-based transfers and social protection. We also looked at existing WFP's digital financial inclusion initiatives and other relevant literature (e.g. WFP's Gender Strategy and WFP regional learning documents) and the Country Strategic Plan (CSP) (and CSP evaluation, if available) of each selected country to understand the overall strategic directions of the country office under analysis, as well as strategic objectives, goals, and whether and how inclusion and digital transformation issues are addressed in cash-based transfers and social protection programming.

and internal evaluation reports where these were available or accessible to us through our networks. We also reviewed publications on debates on digitalisation and financial inclusion relating ~~to~~ to low-income and traditionally marginalised households, individuals and populations.

Primary data collection was used to explore barriers, opportunities and digital financial inclusion outcomes through the use of digitally delivered cash-based transfers, and to fill in gaps in the secondary data analysis. We relied on three qualitative approaches: focus group discussions, in-depth interviews and key informant interviews. Through these, we explored recipients' experiences of cash-based transfers and digital financial products in three focus countries: Bangladesh, Cambodia and Nepal. These countries enabled us to explore digitally delivered cash-based transfers in a set of countries where such transfers have been a key part of social protection strategies for more than five years. Here too, actors within WFP country offices have viewed linking cash-based transfers to financial inclusion as an important aim. We carried out 18 key informant interviews with global and regional experts involved in financial inclusion to triangulate findings from the literature, probe expert views on links between cash-based transfers and financial inclusion, and to seek guidance on gaps in knowledge. Additional key informant interviews were carried out in our three countries of focus.

In each country, we carried out focus group discussions with recipients of cash-based transfers (6–8 participants): in Bangladesh, we interviewed recipients of the WFP Disaster Risk Reduction programme in Cox's Bazar; in Cambodia, we interviewed recipients of the government Covid-19 emergency cash-based transfers and women in receipt of the child nutrition and grant allowance; and in Nepal, we interviewed recipients of the government Social Security Allowance (SSA) (see details of the programmes in the section titled 'Findings on financial inclusion'). We discuss the programmatic and policy context for these programmes in detail in Section 4. We carried out separate focus group discussions with men and women (89 men and 144 women) to ensure female participants were not restricted in expressing their views by the presence of male participants. Also, where possible, we carried out in-depth interviews in pairs with people living with a disability who received each of the cash transfers. When unable to recruit a paired interview, in-country teams carried out key informant interviews with persons with a disability individually, for a total of 44 people with a disability (20 women and 24 men).

Table 1 Distribution of key informant interviews

Geographical tier of commentators/experts	**Stakeholder group (*including WFP global and regional staff*)**	**No. of interviews**
Global	Global DFI-social protection and cash-based transfer experts	12
Regional	Regional DFI-social protection and cash-based transfer experts	6
Country-level interviews (across Bangladesh, Cambodia and Nepal)	WFP Country Office, in-country partners and government representatives	36
	Total	**54**

Table 2 Distribution of focus group discussions and in-depth interviews

Country	No. of focus group discussions	No. of in-depth interviews
Bangladesh	8 in peri-urban areas	8 paired key informant interviews (peri-urban)
Cambodia	5 in urban and 5 in rural areas (split between the Covid-19 grant and the child nutrition grant)	8 paired key informant interviews (4 in rural and 4 in urban areas)
Nepal	4 in urban, 4 in rural areas	11 paired key informant interviews (3 paired interviews in rural and 5 paired interviews in urban areas)
Total	**26 focus group discussions**	**27 paired in-depth interviews**

Finally, we sought to cover rural and urban locations given that, 'the gaps in usage between rural and urban populations, and between the poorest and the richest, are strikingly large in Asia-Pacific' (IMF, 2018). In Nepal and Cambodia, we carried out focus group discussions and in-depth interviews in one rural and one urban area, while in Bangladesh we conducted focus group discussions and in-depth interviews in two peri-urban areas, with one more remote. This was because no programme could be identified that fulfilled the other criteria (men/women and using digital transfers). In Bangladesh, we carried out interviews in Kutubdia *upazila* (an administrative unit under a district) and Ukhiya *upazila,* in Cambodia in the Damrei Choan Khla district (urban sample) and in the Kraya commune (rural sample), and in Nepal in Gauridanda (urban sample) and Bijalpura (rural sample).

2.3 Analytical framework and scope

In implementing our study, we took a broad view of cash-based transfers and digital financial inclusion to consider the potentially diverse ways they unfold in the region. This section outlines how three key concepts for this research – financial inclusion, digital financial inclusion, digital cash-based transfers – were understood and operationalised by actors in the region, and how we utilise them in this study.

Our point of departure was the mainstream definitions encountered in our literature review (see Glossary), from which we expanded based on primary data (particularly key informant interviews) and the literature on equity and financial inclusion.

First, 'digital cash-based transfers' can refer to a range of applications and aspects of delivery. Cash transfers give money directly to recipients and can take different forms with different conditions on spending, including 'physical banknotes, e-money, mobile money, debit cards or value vouchers' (WFP, 2022b). There is a spectrum of ways in which digitalisation takes place within the ecosystem of social protection and/or humanitarian cash-based transfers, as opposed to 'digitalisation' as a product or process where all aspects are digitalised. For example, at the recipient end, registration and/or application for enrolment on cash transfer programmes can take place through a digital interface, such as a smartphone app. Information about potential recipients can be recorded on a digital database.

The cash provider can also transfer money to a financial service provider (FSP) digitally, who may or may not use a payment system that allows a recipient digital access (through mobile money or an e-wallet). The multiple points of entry for digitalisation indicate the need for practitioners to specify which component is being digitalised. A key – but not the only – component of the discussion for social protection and humanitarian actors is the delivery of cash-based transfer programmes through digital means rather than through physical delivery of cash by the provider.[6] Such digital means include mobile money, payment cards (debit cards, credit cards or pre-paid cards), e-vouchers and mobile banking (via online bank accounts).

Second, we found that often the literature adopts a narrow view of the outcomes of financial inclusion and digital financial inclusion, focusing on access and use of products. We opted instead for a broader definition that takes into account financial health and resilience. Most often, definitions consider two aspects: access to financial products (i.e., available, affordable and convenient access) and the use of provided services (Koh et al., 2018; also compare with BMGF, no date).[7] However, from the perspective of social protection, financial inclusion goals are important in improving the ability of poor individuals and/or households to cope with shocks and improve resilience through their lifetime. Therefore, financial products are helpful only if they contribute to financial health and resilience – in other words, if they allow these individuals and households to make productive investments, smooth consumption in the face of volatility and income shocks, and give people agency and choice in their financial decisions within a household and their community. We consider financial resilience and financial health, defined in this way, as key outcomes, and keep these aims of social protection in relation to financial inclusion and digital financial inclusion in mind as we analyse our findings.

Digital financial inclusion is a sub-set of financial inclusion, i.e., financial inclusion does not have to take place through digital means or products.[8] With rising digitalisation, excluding low-income populations from digital financial products and services could widen inequalities in the future. While acknowledging these trends, we also suggest that focusing only on digital financial inclusion risks privileging a specific means of achieving inclusion and losing sight of why financial inclusion matters. A sub-set of our key informants expressed concern around the 'silver bullet' view of the push towards digital finance for low-income households and traditionally marginalised populations, since discussions around this agenda were weak in articulating how access and use would be converted to economic and social goals.

6 We recognise that digital delivery does not necessarily absolve the recipient from having to physically withdraw the cash for their use, and indeed this is a central feature of whether digital delivery promotes cash recipients to engage more with the digital economy, where this exists for them.

7 For example, the World Bank (2022a) defines financial inclusion to: 'mean(s) that individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way', and digital financial inclusion as: 'involv[ing] the deployment of the cost-saving digital means to reach currently financially excluded and underserved populations with a range of formal financial services suited to their needs that are responsibly delivered at a cost affordable to customers and sustainable for providers'.

8 Specifically these include: 1) digital payments, e.g., made through e-wallets, through mobile money, through the internet and through point of sale (POS) transfers or transfers conducted at an ATM; 2) digital savings, e.g., savings in online bank accounts, through digital products/certificates offered online; and 3) digital credit e.g., small, short-term loans that can be accessed instantly, automatically and remotely, offering borrowers access to funds even without a formal credit history.

Finally, when considering digital financial inclusion, global actors have begun to articulate different theories of change for how digital financial inclusion contributes to economic or social empowerment. The World Bank (2014, 2022a) defines digital financial inclusion as:

> The deployment of the cost-saving digital means to reach currently financially excluded and underserved populations with a range of formal financial services suited to their needs that are responsibly delivered at a cost affordable to customers and sustainable for providers.

The Centre for Financial Inclusion expands its definition in some iterations, considering access within a model of financial health, an outcome-focused concept that encompasses financial security, financial freedom and financial control (Rhyne et al., 2017).

The Bill and Melinda Gates Foundation (BMGF) also takes an expanded view, considering financial services serving the poorest households/individuals as one necessary strategy for individuals/households to manage, without detriment, the impacts of shock and income fluctuations associated with living in poverty (BMGF, no date). BMGF launched an initiative with WFP that tests whether and how cash programmes can be designed, digitised and directed to women in ways that facilitate their inclusion in the formal economy. This initiative is being rolled out in Bangladesh, as well as countries outside the Asia-Pacific region. WFP literature and documents have emphasised strengthening women's economic empowerment, with access to digital products and accounts seen as critical to women making better decisions around finance (WFP, forthcoming) and requiring building the financial capability of women (Arnold and Stark, 2022). There is also an increased focus among development and humanitarian actors, and scholars, on financial resilience, highlighting the importance of taking into account challenges associated with climate change (Augusta, 2022).

Still, global approaches to digital financial inclusion have not always spoken to the realities and constraints around digital financial inclusion within specific country contexts in the Asia-Pacific region. Within our focus countries, financial inclusion was usually taken to mean access to mobile bank accounts, as opposed to wider outcomes around financial resilience and financial health. In these contexts, key informants emphasised constraints in operational areas outside the remit of WFP's country roles, for example, access to devices and network infrastructure. The rationale for increased attention to digital financial inclusion and underserved communities in low-income countries was seen to be driven less by evidence on its transformative role in the lives of people, and more by the perception of a wave of digitalisation in payments.

Our approach recognises that there are different ways and degrees to which cash-based transfers can be digitalised. We take care within our findings to identify how this is taking place in the programmes and interventions considered. Second, we take the view that digital financial inclusion is valuable because of its potential to contribute to economic empowerment *through* access and use of digital financial products. This perspective gives scope for us to consider a range of outcomes of digital cash-based transfers. Finally, we note that country and operational level constraints and conditions, while not always highlighted in definitional debates over digital financial inclusion, are critical to understanding opportunities. We take them into account where possible.

2.4 Study limitations

Our study was designed to support efforts to strengthen financial inclusion through cash-based transfers in the Asia Pacific region. To this end, we explore general trends in the region, as well as providing more in-depth insights on cash recipient perspectives for specific programme and country experiences. The insights on recipient perspectives are intended to be illustrative, given the small number of focus group discussions and key informant interviews and the focus on one programme within each country. They cannot be taken as representative of any of the countries or the region. Instead, we draw out overarching patterns and views shared by most respondents, making note of diverging points of views when they were expressed.

Similarly, the literature review is intended to provide an overview of the intersection of social protection, cash-based transfers and digital financial inclusion within the region. While we provide a 'bird's eye view' of regional issues, separate analysis would be required for each country, given its financial systems, policy environment and social protection system. Therefore, at the regional level, we aim to provide an overarching picture of common trends and issues as opposed to country- or programme-specific strengths and weaknesses. Finally, because we focus on existing cash-based transfer programmes, we are limited by the eligibility criteria of these programmes in our definition of low-income, marginalised populations. This means we do not consider explicitly the potential for cash-based transfers and financial inclusion/digital financial inclusion for people who have not been included in the targeting or eligibility criteria (even if through a rights-based lens, they should be).

3 Mapping the regional landscape: key actors and their approaches to digital financial inclusion in the realm of cash transfers

In this section, we provide an overview of the main trends in how different actors – governments, humanitarian and social protection agencies – embed digitalisation in cash-based transfer programmes. We consider these trends through the lens of digital financial inclusion and assess ~~on~~ whether cash-based transfer programmes are currently implicitly or explicitly aimed at digital financial inclusion, as defined above.

3.1 Governments: generally low emphasis on financial inclusion or digital financial inclusion as part of cash transfers

Financial inclusion is a stated priority for most governments we looked at in the region, while most of these governments administer cash-transfer programmes that employ some form of digital technology in implementing the programme. However, digital elements in cash-based transfers in the region do not at present fully enable financial inclusion for the recipient of cash-based transfers. Digitalisation in cash-based transfers is largely limited to phases of the registration process and to the cash transfer from the government to the FSP. It very rarely involves a digital interface for cash recipients.

We identified a total of 41 government-led digital cash-based transfers among the surveyed countries (see Appendix 1), making the government the most important actor in the region relative to international humanitarian and development actors. Most of the cash-based transfer programmes were manged by the ministry of social services and/or social welfare or equivalent agencies.

Conditional cash transfers made up a significant portion of the transfers. However, while a few had some links to digital financial inclusion aims, most programmes under review did not offer financial products or information on financial products. This indicated a gap between the financial inclusion aims of the government and embodiment of these aims in cash-based transfer programmes.

The few cash-based transfer programmes that did link to financial systems did so implicitly rather than through an explicit commitment to make cash-based transfers a vehicle for improving recipient financial health. For example, a few government-led cash transfer programmes – 14 (out of the 41), largely across Bangladesh, India, Indonesia, Pakistan and Tajikistan – contained some implicit objectives towards financial inclusion for recipients in that they required or worked with citizens to open online or mobile accounts.[9] The Philippines' Government Service Insurance System (GSSIS), which provides financial security to public sector workers along with compulsory life insurance, gave recipients the option to receive retirement benefits, unemployment insurance or disability benefits for work-related contingencies. In Sri Lanka, the Divineguma Programme (formerly the Samurdhi Social Safety Net) opens Samurdhi Bank Accounts for all recipients, along with both compulsory and voluntary savings and credit programmes (depending on the income threshold) and vouchers that can be exchanged against contributions to the savings and credit programmes. A few programmes (15) conducted workshops on familiarity with accessing and using cash from the programmes, as well as on the use of accounts or preferential loans. However, it was not clear if these activities led to sustained use of accounts or improved ability to borrow credit.

We found relatively little attention paid to financial or digital literacy in cash-based transfer programmes. This was surprising given the widely held view among both governments and international humanitarian actors that financial literacy is low in the Asia-Pacific region. Hence it needs focus and attention in cash programmes (OECD, 2018a; UNESCAP, 2022) and in general, to promote financial inclusion. Only four programmes[10] offered some workshop or awareness component on financial literacy (Ministry of Women and Children Affairs, 2020; SPEC, 2020; WFP, 2021a, 2021b).

The gap between government commitment to literacy initiatives and absence of the same in the country landscape was prominent in our focus case study countries. For example, the Nepal Rastra Bank has in place a Financial Literacy Framework (2020), which is meant to provide guiding principles of financial education activities for banks and financial institutions in the country. In the country, banks and financial institutions are mandated to invest 5% of their Corporate Social Responsibility Fund (CSRF) in financial literacy training and programmes focusing on women and socially excluded groups in the population. However, data on the number of trainings conducted so far and their efficacy was not publicly available. Banks and financial institutions do not yet view financial literacy initiatives as part of their business strategy, and they have yet to incorporate financial literacy into their business strategies and governance. Financial literacy activities are carried out as part of corporate social responsibility (CSR) and are still generally viewed as representing compliance with philanthropic imperatives rather than as strategic business investments.

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9 The programmes opening e-wallet accounts were: Kartu Prakerja (Indonesia), Primary Education Sector Investment Programme (Bangladesh), Secondary Education Sector Investment Programme (Bangladesh), Mobile Voucher Scheme (Afghanistan – WFP); and E-Wallet Scheme (Myanmar – WFP). Other programmes made use of e-wallet accounts; however, it was uncertain if these accounts were opened for the beneficiary at the time of the benefit. These were: COVID-19 Response (Lao PDR), Building Blocks (Bangladesh – WFP and UN High Commissioner for Refugees – UNHCR), Forecast based Anticipatory Early Action to Support Disaster Preparedness for Flood Affected Vulnerable Households (Bangladesh – WFP and Red Cross), and COVID-19 E-Wallet Digital Solution (Kyrgyz Republic – WFP).

10 The programmes we identified in the literature were: VGD (Bangladesh), Pakistan Bait-ul-Mal (Pakistan), COVID-19 E-Wallet Digital Solution (Kyrgyz Republic), and COVID-19 Livelihoods Economic Recovery Programme (Nepal – WFP, Food and Agriculture Organization (FAO) and the UN Children's Fund (UNICEF)).

Similarly, the National Bank of Cambodia (NBC) considers low financial literacy in the country to be the greatest barrier to the adoption of digital payment systems. In line with its diagnosis, the NBC ran workshops on financial literacy with select participants in the microfinance sector in 2020. It has also launched the 'Let's Talk Money Campaign', which has issued videos on financial literacy. Our respondents (see below) had not heard of the campaigns and were unaware of any financial literacy trainings, indicating perhaps that the bottom income quintile was not the main target for these outreach activities.

In practice, there is a gap between the larger aims of financial inclusion and how they translate into mechanisms for delivering social protection. That is, government agencies leading on financial inclusion are often not in touch with or communicating financial inclusion aims to government agencies leading on social protection programmes and vice versa. Most countries we looked at (15 out of 17) have an existing plan or strategy to promote digital financial inclusion, whether through improving access to formal financial institutions, promoting literacy, promoting digital payment systems or striving to make government-to-person (G2P) payments fully digital. Out of the 15 countries that had an existing digital financial inclusion plan or strategy, 10 explicitly mentioned digital financial inclusion either as one of the general goals of their social protection policies or as one related to cash-based transfer programmes in the country. Most countries had made commitments to financial inclusion within the last decade, and some were relatively recent, limiting the time they have had to progress in enacting their strategies. For example, Sri Lanka's strategy is dated 2021. Meanwhile, Bangladesh's formal strategy was also published in 2021, with its origins dating back to 2008 – with plans for a digital government platform as part of election campaigns. Bangladesh's National Social Security Strategy gives specific direction for how to reform cash transfers within G2P platforms.

The 2019–2025 National Financial Inclusion Strategy by the National Bank of Cambodia (developed with the assistance of the UN Capital Development Fund – UNCDF) is the main framework for financial inclusion in the country (Royal Government of Cambodia, 2019). The government commitment is to (UNCDF, 2022a):

> Increase access to quality formal financial services, reduce the financial exclusion of women by 50% (from 27% to 13%), and diversify usage of formal financial services from 59% to 70% by 2025, as well as improve household welfare and support economic growth.

However, financial exclusion of women has increased during this period[11] and it is not clear from the strategy how the government will work with social protection actors and/or other cash-based transfer programmes to achieve this aim. The Ministry of Social Affairs, Veterans and Youth Rehabilitation (MOSVY) is one of the named implementers of the financial inclusion strategy – mainly via a role in promoting an inventory of small and medium-sized enterprise (SME) products. However, in interviews, it was not clear if any direct work was ongoing through MOSVY

11 In 2021, fewer women had access to formal financial services compared to men (60% of women versus 73% of men) and similarly fewer women had access to any financial service (formal or informal) compared to men (62% of women versus 76% of men) (UNCDF, 2022a).

in the early part of 2022. The National Social Protection Council (NSPC) was not a named implementer of the financial inclusion strategy, possibly demonstrating gaps in the integrated role of social protection and financial inclusion actors. Communication between agencies is potentially key, given that ownership of a bank account among the poorest 40% of households in Cambodia is limited to 23% of the adults within the quintile (Global Findex, 2021). Therefore, average statistics do not necessarily represent changes for low-income and traditionally marginalised populations, which are unlikely to improve without targeted active efforts.

In Nepal, the Digital Nepal Framework 2019 drafted by the government identifies eight areas of work in digital finance (Government of Nepal Ministry of Communication and Information Technology et al., 2019),[12] but the framework does not identify an overlap with government work on social protection, nor did key informant interviews with social protection actors indicate any clear knowledge of how financial inclusion or digital financial inclusion was related to their work. At the same time, the limited time in both Nepal and Cambodia thus far for implementation might help to explain limited evidence of change.

In Bangladesh, a key issue emerging from key informant interviews was around coordination of the multiple ministries involved in social protection programmes, with one estimate that there were approximately 30 ministries involved, in addition to government agencies working on financial inclusion. The number of actors involved in social protection was identified as a challenge for ensuring sufficient technical capacity and skill to manage and support digitalisation of payments.

3.2 International humanitarian and social protection actors: advocates for digitalisation of cash transfers and private-public partnerships

International development and humanitarian actors have taken up roles to champion digital interventions, both for cash[13] and in-kind transfers. Programmes that do not involve a government partnership or collaboration tend to have a shorter life span than those that are implemented by the government.[14] However, even short-lived programmes are important in setting precedents: e.g., inclusion of recipients who may not have identity cards (Save the Children in Cambodia). In other cases, international

12 1. A national payment gateway; 2. Credit ratings; 3. An information management system for Nepali migrants; 4. Mobile wallet services; 5. Digital payments; 6. Developing a single window for business and industry; 7. Developing and promoting e-commerce and an information technology; 8. A digital payment campaign.

13 In the region, UN agencies and NGOs also provide direct support to specific populations through digital cash-based transfers, in addition to supporting government social protection programmes. While there are likely more programmes, including more local or short term, we identified 18 programmes across the following countries: Afghanistan, Bangladesh, Cambodia, Kyrgyz Republic, Myanmar, Nepal, Philippines and Tajikistan, while the other countries in the sample did not have sizeable programmes led by non-government actors.

14 For sustainability reasons, a built-in aim within some of these programmes is transfer to government implementers (e.g., WFP school feeding programmes).

development and humanitarian actors invest in pilots (e.g., Lao PDR[15] and Cambodia[16]), which help to gain insight into opportunities and challenges of novel programme designs. In Nepal, the World Bank piloted social assistance delivery through commercial banks in 2013–14 (World Bank, 2016), but the delivery of cash-based transfers was mainly physical and relegated to social security allowance (SSA). However, the 2015 earthquake represented a turning point in the delivery of cash-based transfers in humanitarian assistance, where non-state actors played a major role given the lack of a national policy on cash transfers (Willits-King and Bryant, 2016). Currently, the government policy in the country mandates that SSA transfers should occur through a bank account.

Largely, however, the cash-focused offices of international development and humanitarian actors do not have clear links in most countries with government bodies responsible for/ working on financial inclusion or digital financial inclusion. While they are involved in promoting the creation and use of centralised registries (e.g., the World Bank, Deutsche Gesellschaft für Internationale Zusammenarbeit GmBH – GIZ, UN Development Programme – UNDP), and in working directly with the ministries responsible for cash transfers (e.g., WFP, Save the Children, UNICEF), our interviews and documentary review showed little overlap between the cash transfer agenda and financial inclusion. Recently, however, UNICEF has begun a pilot programme in Nepal as part of its Innovation Fund, which has identified blockchain investments with the aim of building financial inclusion in low-income communities. The start-up in Nepal – known as 'Rahat' – notes that the platform it is building will allow recipients to cash out a transfer; that is, the focus is on digitising the transfer of funds from international donors/aid agencies to FSPs (UNICEF, 2022). The UN hosts the Better than Cash Alliance, with private sector participants, governments and INGOs. The alliance is oriented to helping achieve the Sustainable Development Goals (SDGs) through responsible digital payments, with the aim of supporting governments through advisory services, research and advocacy. The World Bank has also played a role in generating evidence on why digital financial inclusion and women's economic empowerment matter, while organisations such as the Bill and Melinda Gates Foundation, with WFP, have been exploring the implementation of digital transfers aimed at women in pilot/case study countries, including Bangladesh.

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15 Lao PDR did not have a National Social Protection Strategy until 2018. Prior to this the only experience the country had as both in-kind and cash-based transfer programmes were short-term non-state led transfers. Cash transfers were piloted by the World Bank Community Nutrition Pilot Project, ADB's Basic Education for Girls Project, and DFAT's Resilient Livelihoods for the Poor Project. The WFP began in-hand cash delivery to banking institutions in 2020 for recipients to cash out in rural areas, and later relied on financial institution agents to deliver the cash in-hand as well.

16 At the start of the 2010s' humanitarian assistance in Cambodia was provided mainly in the form of in-kind assistance e.g., the USDA McGovern-Dole Grant Food for Education which lasted until 2019. The programme adapted and introduced the option of take-home cash rations in 2017. In the years from 2015 onwards, other agencies such as the Save the Children were already providing comprehensive cash-based transfers through the NOURISH program and leveraging the recently developed IDPoor database to identify recipients, (along with information gathered from local sources to identify residents without IDs) and partnering with the local microfinance bank AMK to open bank accounts and administer funds to recipients.

In the region, UNCDF is a key advocate for the financial inclusion agenda, extending beyond social protection and humanitarian support to a broad range of actors from the private sector, the UN and other development partners, as well as governments. In its mandate across the countries under review, UNCDF provided technical and capital support (via its Inclusive Digital Economy programme's flexible grant and loan instruments), with a stated aim to expand the digital ecosystem into different areas. It was also present in different conversations with social protection and humanitarian actors. Thus far, it emerged among some interviewees as a central actor advocating for greater digital financial inclusion.

UNCDF is a key actor in Nepal through its work on the Making Access Possible (MAP) programme in the country, under which it worked with the government to prepare a Financial Inclusion Roadmap and Action Plan in 2014 (Shakya et al., 2014), which was updated in 2022. All the activities concerning MAP Nepal were guided by a National Steering Committee (NSC) chaired by the central bank, with the participation of the Ministry of Finance (MoF), the Central Bureau of Statistics (CBS) and the donor agencies concerned (the Danish International Development Agency (Danida) and UK Aid).

UNCDF is also active in Bangladesh. Bangladesh is a member of the Better than Cash Alliance (since 2015), which has supported diagnostic and development work on digital payments. Women's economic empowerment has also been one key area of focus, in collaboration with UNDP and UN Women, as well as the advancement of an Integrated National Financing Framework in Bangladesh aimed at the SDGs, which involves working closely with the government and with the International Labour Organization (ILO), UNDP and UN Women.

3.3 Private sector: frontline providers of cash and creation of biometric databases

Cash programmes in the Asia-Pacific region currently rely on private sector actors for the distribution of cash across the country. This includes disbursement in different locations through bank branches and/or designated agents; and in the development of databases holding details of recipients. Private sector involvement allows programmes to use an existing FSP network. Where FSPs are amenable to it – in combination with government regulation and available financial infrastructure (e.g. a national payment switch or automated clearing house) – the same network can widen access through interoperability across service providers. In the Asia-Pacific region, both banks and fully licensed non-bank operators can and are being used for mobile money transfer operations where the latter often have lower fees. Private sector mobile payment systems like WING in Cambodia and bKash in Bangladesh are used in-country for digital cash-based transfers. However, in Bangladesh and Cambodia, bKash and WING are mainly used to receive cash, with recipients often simply cashing out payments (see section below on recipient experience).

Private sector companies also play a role in the region in assembling biometric databases. For example, Mainlevel Consulting AG and its partners played a key role in the development of IDPoor, a cloud-based service with country-wide accessibility (Hunt, 2019). This was developed in collaboration with GIZ and UNDP and is now Cambodia's poverty identification and registration system. WFP has also created the space for humanitarian–private sector partnerships through the Innovation Accelerator, which launched the Building Blocks programme using blockchain technology for humanitarian assistance, piloted in Pakistan and subsequently rolled out in Bangladesh.

The involvement of the private sector naturally imposes costs on accessing cash, which need to be borne either by the recipient or the cash provider (e.g., government or a humanitarian agency). In Bangladesh, key informant interviews highlighted that bKash transactions and withdrawals had a premium/ fee attached (1.85% on the amount withdrawn) for the account holder who wants to cash out, as most recipients of cash transfers do (see below). In Bangladesh, the WFP programme covered this cost; however, it was not always apparent to recipients that the total cash transfer amount also accounted for this cost. Recipients seemed to lack information that their cash transfer amount included the payment of this fee by WFP, and this led to some recipients perceiving the fee as money agents/banks ‘taking a cut’.

In Cambodia, as part of its anticipatory flood relief cash transfer, WFP covered another type of additional cost imposed on a cash transfer recipient in some areas – that of them needing to obtain a new mobile phone/SIM card. Eligible households received up to three rounds of cash from WFP via mobile money, as well as a fourth transfer to cover cash transfer-related expenses (e.g., to purchase a SIM card and to cover transport costs for registration/activation and to cash out). Cash transfer-related expenses occurred because WFP made disbursements in areas where people affected by the flood were linked to phone companies that were not compatible with the FSP. So they needed a new SIM card to register with a phone company compatible with WING.

There is a lack of regulation mandating interoperability among FSPs. Lack of financial infrastructure that supports interoperability, as well as low incentives among FSPs to make their systems interoperable, drives up the cost of delivery for cash transfers (e.g., in Cambodia). Interoperability in ideal practice would allow cash transfer recipients to access cash from any FSP and to transfer between FSPs. Reliance on one FSP in a policy/country context that does not support interoperability constrains financial inclusion. In Cambodia, our primary and secondary data showed that reliance by government as well as agencies such as WFP and Save the Children on WING – a mobile money operator with restricted interoperability – for cash transfer programmes, constrained choice and use for cash transfer recipients. International development and humanitarian actors have often tended to work with government-mandated FSPs. WING is perceived as a natural choice since it has an extensive physical network in the country and is preferred by government. However, its lack of interoperability meant that where it was not the mainstream option, WFP emergency cash relief had to work with recipients to access other phones to allow WING transfers.

It is less likely to be a constraint for governments and international development and humanitarian actors to rely on one single provider for cash transfers where interoperability exists and allows transfers across different FSPs. Cash-based transfer programmes become subject to challenges or limitations in the private sector if, for example, implementing bodies only work with one mobile money provider. Cash recipients can then become ‘locked in’ to that provider regardless of the quality of their services and products. Similarly, if there are inefficiencies or corruption, for instance, around mobile money access points or agents, these challenges can be transferred to the digital cash-based transfers. Interoperability is possible through both government regulation and financial infrastructure that require and facilitate FSPs to provide infrastructure capable of exchange across FSPs or through other media, such as application programming interfaces (APIs), national payment switches or automated clearing.

Since choice and agency to select the best provider and best financial products are key to financial inclusion for poor households and individuals, improving the availability of FSPs across the country is a necessary stepping stone to financial inclusion in general. It will also improve choice among FSPs for governments, and international development and humanitarian actors. Barriers to entry that prevent private sector actors from investing in services and products for the unbanked and underbanked can be both financial and regulatory. Telecommunication infrastructure and banking infrastructure comes with a high fixed cost (Cull et al., 2009; World Bank, 2014; Jahan et al., 2019). Here, actors such as governments, central banks and UN agencies might help to incentivise the private sector to expand their services both by advocating for improved regulation and by exploring the role of existing public infrastructure (e.g., post offices) in contributing to increasing FSPs. Interviewees noted that humanitarian and development actors often lost the opportunity on building in long-term incentives for FSP spread in the context of emergencies, given the need for a quick response. The fixed-term nature of projects and programmes can also limit influence on the private sector, in contrast to potentially longer-term, and more institutionalised, government programmes.

3.4 Across actors: furthering digital financial inclusion for cash transfer recipients

Digitalisation of cash-based transfers was seen by global expert interviewees to carry a sense of inevitability (a sentiment echoed in the organisational literature). However, this was in strong in contrast with the experience of cash transfer recipients we spoke to across the three countries. One set of our key informants noted that, 'there's no going back after 2020 with the acceleration of digitalisation worldwide', while another suggested that since digitalisation 'is everywhere', everyone including low-income households would eventually have to 'get on board'. However, this sense of universal inevitability did not necessarily get reflected by recipients; in research with this group, digitalisation instead emerges as a more complex and uneven process, with hard cash retaining an important role in their everyday activities.

A second set of key informants cautioned that the 'digital financial inclusion as inevitable' approach carried the risk of prioritising ease for the delivery agency over the needs and ease for cash recipients. This sense of inevitability provides an important point of comparison to our focus group discussions and in-depth interviews, where *how* to facilitate digitalisation in ways that are useful and accessible to cash recipients remained an open and still challenging question. Low-income recipients of cash-based transfers were at times – despite having bank accounts and mobile phones – unaware of digital financial products and/or digital technologies for payments in general.

Recipients were also clear in specifying that the digital financial technologies we were describing to them were not available in areas of their residence and work. At the country level, our key informants noted that their teams often adapted modes of providing cash to local financial infrastructure, for example, by switching to physical cash delivery/physical verification checks when needed during a disaster response, depending on the area. Teams also ensured that requirements for citizenship documents did not exclude the most vulnerable – for example, by relying on alternative documentation to prove residence such as a letter verified by another local.

While digital technologies carry the potential to overcome barriers to access for people with disabilities and women, we were not able to identify the use of the same in the programmes reviewed in our study. For example, while software designed to assist those who are audibly or visually impaired exists to facilitate use of digital technologies, we did not come across specific examples where this had been done successfully – either in the interviews or literature reviews (Leduc et al., 2016; CBM Global, 2019). Experts we interviewed also expressed caution about the extent to which the strategic aims of financial inclusion through digital means were currently being achieved in practice for people with a disability or women. In our interviews with respondents in the three case study countries, partially digital cash-based transfers did not seem to show evidence of increase of autonomy for women or people with disabilities.

For example, one interviewee in Bangladesh suggested that digital cash was seen to be the preserve of men. This meant that rather than giving added autonomy to women in the household, the provision of cash through digital means required women to negotiate with men for access to cash to buy food. This reinforces the importance of considering how digital cash intersects with gendered power dynamics in the household. Interviewees in our key informant interview sample indicated that there was a long way to go in prioritising financial inclusion for different underserved groups.

More generally, progress with the agenda on women's economic empowerment has not been matched by progress around economic empowerment for people with disabilities (including women with disabilities). Our review of government, development and humanitarian actors' digital cash transfer programmes reinforces this, as people with disabilities tended to be considered within a household, as opposed to their individual needs, and with less explicit/ clear commitment across the region to their financial inclusion.

3.5 Existing evidence of results on financial inclusion for cash transfer recipient through digital cash-based transfers

Existing evaluations highlight design of the delivery mechanism for cash as one barrier, among others, to achieving financial inclusion for existing programmes generally. In the case of Pakistan's Benazir Income Support Programme (BISP), recipients were given a single-purpose debit card to access their cash benefits, which could not be used to access other financial services from banks, such as saving products and loans (Women's World Banking, 2019). Similarly, Philippines's 4Ps conditional cash transfer and Social Amelioration Program (SAP) unconditional cash transfer uses a single purpose debit card to deliver benefits. This does facilitate the process on the disbursement side, but limits the ability of recipients to access various financial services (Pavanello, 2022).[17]

For the most part, cash transfer programme evaluations do not explicitly focus on measuring the impact of cash-based transfers on financial inclusion, highlighting a prevailing lack of emphasis on financial inclusion as a direct aim of cash transfers. Where financial inclusion is included, it is to highlight success around enabling access to an account.

Of the 61 cash transfer programmes we reviewed in the region, we found 11 programmes that had some assessments on the link of transfer with financial inclusion. Of these 11 programmes,[18] only three assessments showed positive outcomes for financial inclusion (see paragraph below on Bangladesh). The rest indicated low take-up of financial services (World Bank, 2019a; World Bank, 2019b; Karki et al., 2021). The programmes vary in design, but all make use of electronic transfers into the recipient's bank account and, in the cases of Pakistan and Philippines, a single-purpose card to withdraw the benefits. Implicitly, financial inclusion here is defined as increasing the accessibility of financial services for individuals without any mention of the quality/minimum standard of these services.

Many of the cash-based transfer programmes in place in the countries under review had been around for a considerable amount of time, with digital components added after the programme inception. For example, Indonesia's PKH – Family Hope Programme – which was introduced in 2010 but transfers and the targeting process were not digitalised until 2014. For such programmes, evaluations and assessments look at the impact of the programme as a whole, but do not isolate the effect of digital components. This makes it impossible to discern if financial inclusion was possible thanks to the delivery method or the cash itself. Last, since digital financial inclusion was/is not the main driver nor objective of these programmes (for example, Timor Leste's Bolsa Da Mae has carried out simulations to study the possible impact of the benefit on food security), most evaluations focus on assessing the explicitly intended objectives of cash-based transfers, which are to impact poverty, food security, health and education (Masino and Niño-Zarazúa, 2020).

Our primary research, both with recipients of cash transfers as well as conversations with two key informants, indicates that a key indicator of financial inclusion that needs to be explicitly included in definitions and evaluations is that of financial health and resilience. This is an outcome-focused concept that encompasses financial security, financial

17 Outside the Asia-Pacific region, data collected through field visits and interviews over 2018–19 found that, despite the size and level of digitisation, the humanitarian cash transfer programmes in Lebanon and Jordan did not appear to impact financial inclusion several years after the humanitarian response to the Syrian crisis. This was because transfers were not disbursed into an account held in the recipients' own name but went through a pooled account for the aid agency, which held the relationship with each individual recipient. While the pooled account decreased short-term, upfront costs, recipients did not gain access to a fully functional account – which the authors suggest would have led to financial inclusion.

18 These programmes are Martyr and Disabled Pension Programme (Afghanistan), Mobile Money Cash Transfer scheme (Afghanistan – DFID), Widow Allowance (Bangladesh), EGPP (Bangladesh), VGD (Bangladesh), Pradhan Mantri Matritva Vandana Yojana (India), COVID-19 Cash Transfer (Lao PDR), Benazir Income Support Programme (Pakistan), Social Amelioration Program (Philippines), 4Ps – Pantawid Pamilyang Pilipino Program (Philippines), and Pensions (Tajikistan).

freedom and financial control (see, for example, UNCDF, no date).[19] A very recent briefing from the Centre for Financial Inclusion and WFP (Arnold and Stark, 2022), shows progress in the area by frontloading the importance of financial capability in thinking about financial inclusion for women, whereby:

> Digital financial capability is having the knowledge, skills, behaviours, and understanding to access financial services delivered through digital technologies. A woman who is digitally and financially capable can evaluate, choose, and use financial services that enhance her life.

The definition centres on capability but does not link it directly to outcomes on financial health or resilience, which are normatively considered the end goal of financial inclusion.

Two of the key assessments with positive outcomes on some elements of financial inclusion were based on programme data from Bangladesh and showed a positive impact for women in managing income shocks and another helping them manage debt.[20] The Widow's Allowance programme directly deposits the cash into the recipient's account and provides an option for payment to be made via mobile phones. While the digital component of the programme was not a focus of the evaluations, recipients were assured an income stream and a bank account. These were seen to be critical to improved access to small loans for unforeseen care needs in comparison to non-recipients (World Bank, 2019a). Participants in the Employment Generation for the Poorest Programme (EGPP) were mandated to open a bank account, which would be used to deposit the money – much like the programmes we looked at in Cambodia and Nepal. Under the EGGP in Bangladesh, more than half the recipients were found to have made use of the savings accounts and reduced their outstanding loans (World Bank, 2019b).

A key difference between the cash-based transfers we considered in Cambodia and Nepal and the Cash for Work in Bangladesh was in the frequency of transfers. The EGPP was depositing monthly salaries into the account, while cash transfers in Cambodia and Nepal included people who were excluded from the labour market (elderly, people with disabilities). Here, the transfers were every four months in Nepal (SSA) and in Cambodia periodically for the child nutrition grant (linked to health checks and birth of the baby). Bangladesh has been considered the birthplace of microcredit which was – before the rise of the digital financial inclusion agenda – the main mechanism for financial inclusion advocated by development actors (Mader, 2018).

However, microcredit has been less successful outside Bangladesh in improving financial inclusion for the most vulnerable and especially women (Mader, 2019; Subramaniam et al., 2021). Reflections from commentators on the conversion of access in some cash-based transfer programmes to elements of financial inclusion have pointed at the strength and frequency of services that came with the microcredit (weekly meetings, community organising,

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19 This concept is also broadly in line with the aims of financial inclusion, related as relevant to social protection as enabling an outcome where financial services allow women and men to respond and cope better with shocks.

20 The third evaluation showed impact on access alone rather than financial inclusion outcomes, through the Vulnerable Group Development (VGD) programme. This was rolled out in earthquake-affected areas and resulted in a substantial increase in access to branch networks, with more than 820,000 beneficiaries on track to have access to formal services.

training opportunities, family planning, disaster management skills). These consistently worked at impacting norms and correcting informational asymmetries that hindered women (Jahan, 2021), as well as the long history of formalising a savings culture for low-income households – regardless of the amount of savings (Rutherford, 2021).

From the perspective of social protection, in Cambodia, borrowing from local microfinance institutions – a prevalent local practice labelled a 'slow crisis hidden in plain sight' (Brickell, 2020: 203) – **has been identified as a key threat to food security and nutrition** (LICADHO, 2019). Loan sizes in Cambodia have continued to rapidly grow over the years (MIMOSA, 2020), with very high debt levels in rural areas among the most marginalised (UNCDF 2022a). Human Rights Watch (2020) highlighted concerns about rights abuses in the microloan industry, particularly noting the phenomenon of coerced land sales in the country – where credit officers pressure borrowers into selling land to repay debts. Liv (2013) found in a pre-pandemic study of 1,480 over-indebted microfinance borrowers in the country, that the most common sacrifice or coping strategy was to reduce the quality of food (48%) or the quantity of food (44%). Cash transfers could help to mitigate the negative effect on food quality and quantity as a result of this challenge. Respondents from Cambodia in our focus group discussion samples emphasised the increased ability to buy food and 'delicious' food (i.e., a wider variety of food), when asked to reflect on shifts in households/individual practices because of the cash transfer.

4 Findings on financial inclusion from recipients of cash transfers in Cambodia, Nepal and Bangladesh

To gain greater insight into the experiences and perspective of cash recipients of digital financial inclusion, we focused on recipients of a selection of programmes in Bangladesh, Cambodia and Nepal, the context of which is outlined in Table 3, below.

We found and classified the government cash transfers in Cambodia and Nepal as only 'digital' at the cash provider end, not in terms of how recipients received cash. Digital technologies were integral to the construction and maintenance of a social registry and transfer of cash from cash providers (e.g., the government or a humanitarian agency) to the FSPs. In the case of Cambodia, the government transfers to the FSP WING through digital means, but the recipients need to physically walk to a WING agent to withdraw money against their ID card. In Nepal, the process for recipients does not have a digital component; that is, men and women walk to the local bank agent to withdraw money for the cash-transfer programme. In Bangladesh, although the transfer is digital – that is, respondents receive it on their bKash account linked to a SIM card – they typically use it in a non-digital way: that is, by cashing out at a bKash agent quite soon after their balance is updated.

The provision of cash transfers under the government social security allowance programme in Nepal for some respondents was their first link with the formal financial system. Meanwhile, most respondents (recipients of government cash-based transfers) in Cambodia had previous interactions and some respondents in Bangladesh had used bKash before for other relief programmes. In Nepal, several of our respondents (but not all) in both urban and rural areas reported opening their first bank account to receive cash transfers from the government. In Cambodia, most respondents were interacting with mobile money agents such as WING before the cash transfer, often for domestic remittances (Clark, 2020). Several respondents from Cambodia had used or were part of households that used ACLEDA bank accounts (mentioned in connection with pensions/retirement funds). In Nepal, younger respondents had asked banks to inform them about deposits via SMS and some had applied for an ATM card (in urban areas). In Bangladesh, for most of our respondents, bKash was their first link with a mobile money account. However, some reported previous experience with other relief programmes and two respondents indicated they used bKash to receive remittances from family members.

Table 3 Description of case study programmes

Bangladesh	Cambodia	Nepal
We examined experiences of cash recipients with the Disaster Risk Reduction (DRR) programme, run by WFP for host communities in Cox's Bazar. This is a cash-for-work programme for both men and women, which forms part of the support for Bangladeshi communities in the area surrounding the Cox's Bazar refugee camps. This programme has focused on renovation and rehabilitation of cyclone shelters. Cash is conditional on a day of labour. Unskilled labourers have been paid 400 taka per day and skilled labourers paid 600 taka per day. Individuals participate in the programme for a 15-day period, in order to maximise the number who benefit. Exceptions can be made for skilled labourers to participate for consecutive periods, depending on supply. In 2021, 83% of Disaster Risk Reduction (DRR) programme beneficiaries in Cox's Bazar received payments through bKash as did 100% of livelihood programme participants in Cox's Bazar and Chittagong Hill Tracts (WFP, 2022a).	In June 2020, the Cambodian Government launched a cash relief programme for those identified by IDPoor with payments staggered according to need. For example, a level 1 poor family member in the capital could receive up to $43 per month, a level 2 family member in rural areas could receive up to $24. This programme was delivered in parallel to the pre-existing cash transfer programme for poor pregnant women and children (0–2 years old) (Adapted from Bertelsmann Stiftung, 2022). The cash transfer programme for poor pregnant women and young children consists of three stages. The first entails a subsidy of 40,000 riel ($10) for each of four prenatal check-ups and can be claimed after the first visit and with each subsequent visit. The second stage provides 200,000 riel at childbirth. The third stage provides 40,000 riel for each of the first four postpartum health check-ups and six child health exams, including vaccinations, prior to reaching two years old (Samean, 2021). Payments for both programmes occur through G2P, where recipients provide their national ID and mobile number to the payment service provider (PSP) known as Wing (Cambodia) Limited Specialized Bank ('WING'). Recipients then collect money from a designated PSP agent after receiving an SMS notification of the transfer. Both payments require recipients to be on the IDPoor system. People are identified at the community level through a combination of proxy means testing and community identification.	The social security allowance (SSA) is the flagship national social protection programme, providing cash transfers through bank accounts to the following main populations: people aged 70 years and above; those aged 60 and above from the Karnali region and Dalit communities; widows and single women; and people with disabilities. In Nepal, social security schemes are administered by the Department of Civil Registration (DoCR), which is part of the Ministry of Home Affairs. The DoCR is currently implementing 11 different cash transfer programmes for various groups of people; benefits from such social security schemes are available to senior citizens, single mothers, and members of marginalised communities. Beneficiaries receive cash every four months from the local government authority. At the time of research (2022), the monthly rates were: NPR 2,000 ($17) for single mothers and widows; NPR 1,000 (± $9) for senior citizens; and varying from NPR 1,600 (± $14) to NPR 3,000 (± $26) for people with a disability. In some cases, banks have been used to disburse social security payments to beneficiaries' bank accounts, while in others (hard) cash is disbursed directly by a local government authority.

Mechanisms for accessing cash for recipients remained non-digital in the three countries. In all three countries, recipients withdrew cash from money agents. This method of disbursement is currently best suited to the physical infrastructure available in areas where populations of interest to humanitarian and social protection actors live. We found it difficult to locate data on access to financial services for the bottom income quintile in Nepal and Cambodia. In Nepal, as of 2020, only 38% of individuals had access to the internet (World Bank, 2022a) and, although outdated, the 2012 households survey indicates that only 0.7% of the population in the 50th percentile had internet access (Regmi, 2017). Therefore, we can speculate current access is likely skewed towards the top income quintile. In Cambodia, proxy indicators also fail to show the necessary infrastructure in place to encourage digital financial inclusion – only 49% of the country has electricity (Smith, 2019) and as of 2017, only 33% of the population had access to the internet (World Bank, 2022a).

While our respondents noted a lack of knowledge around specific financial products and their relevance to their daily lives, they also reported absence of training that incorporated this information. Respondents reported assistance on opening bank accounts from bank tellers required for the cash transfers; information seminars with commune officials (in Cambodia) on how to get the cash transfer; and the provision of general information on the necessity of opening a 'fixed deposit' account or a separate personal account that earned an interest rate and on the availability of an ATM card. The information and help were largely logistical and by no means universal. In Bangladesh, bKash recipients mentioned being warned against sharing their PIN for security of their account. Broader financial literacy training – knowledge and terms and conditions of different financial products linked to their account or their mobile phone – was not something experienced by most of our respondents, although younger respondents had higher awareness of non-physical forms of payments (see below).

4.1 Payments

Overall, in Nepal, Cambodia and Bangladesh for the majority of our respondents, access to a bank account for the cash transfer had not changed behaviour around payments for daily items. Most cashed out transfers within a short period of receipt – the minimum time noted was one day and the maximum period was 15 days. Respondents continued to withdraw cash and use cash for most expenses. Our analysis of interviews suggested that the behaviour could be reflective of supply-side dynamics as well as trust/security in cash. In the first instance, the markets the respondents operated in for groceries were all cash-based in both rural and urban areas, which encouraged reliance on a cash economy. There is considerable evidence that this continues to be the case, despite the modernisation of G2P payments (Gronbach, 2020), and that use of cash in businesses in communities and across trades reinforces the need for 'cash in hand' for recipients. Secondly, some respondents – generally those who were older and in rural areas, in our sample – articulated a preference for cash as a modality because of the trust and certainty they associated with having 'cash in hand' compared to cash that was not visible.

We observed a gender difference in our sample in the mode of payments for mobile top ups in Cambodia and Bangladesh. While almost all women (in rural and urban areas) in Cambodia used phone scratch cards for mobile top ups, younger men in urban Cambodia reported using ABA, ACLEDA and other banks to top up their phones. Those who bought scratch cards used the manual entry to top up mobile phones, with only a few respondents in Cambodia reporting using the QR code at the back of the scratch card. While some younger women reported using the scratch card, several women said they bought a scratch card and asked a neighbour or the shop keeper to upload it for them on their phone (or in Cambodia, they asked the WING agent). Older women highlighted using the phone to speak to their children in other locations of the country as also something they often needed assistance with. In Bangladesh, women described how they would walk to a bKash agent or a local shopkeeper, hand over the phone and ask him to top up their credit. The gender difference that emerged in our focus groups, with women seemingly less confident and knowledgeable in using mobile phones for financial transactions, aligns with findings elsewhere on the gender gap in mobile phone ownership and mobile internet use (GSMA, 2021). Women with a disability in particular face high barriers to adoption and use of mobiles (GSMA, 2020a).

The delivery mechanism of payment to respondents across urban/rural areas was less important to recipients than the location of the cash disbursement agency, as well as waiting times. In both Nepal and Cambodia, rural recipients spoke about both the location of points of transfer, as well as waiting time for receipt, as the main factors underlying their preferences for how they interacted with money. Waiting times and payment delays were also key concerns in Bangladesh. Participants in the DRR Cash for Work programme in Bangladesh were enrolled on 15-day basis, and cash was often used to address immediate household needs (e.g. daily food purchases). Digital transfers were often preferred, because they were seen to ensure timely and reliable payments within this short-term programme.

In both Nepal and Cambodia, most people live in rural areas, but the density of financial infrastructure does not match population density. For example, the Nepal Rastra Bank (2021) estimates that while on average there are almost 19 banks and financial institutions branches per 100,000 of the population in Nepal, the average is likely to hide uneven distribution between urban and rural areas. Bank and financial institution branches are concentrated in wealthy provinces (e.g., Bagmati and Gandaki), with the lowest concentration of branches in the Madhesh province (10 branches per 100,000 people) where we conducted primary data collection. This province is also the area where the Nepal Rastra Bank notes the highest presence of microfinance institutions compared to other provinces.

Some 33% of the total population in Cambodia is excluded from formal financial services. While disaggregated figures for financial access across rural and urban areas was not available, adults in urban Cambodia are almost twice as likely to have an account as adults in rural areas. In Cambodia, 35% of unbanked adults cited distance as a barrier, and yet 75% of them also reported owning a mobile phone (Global Findex, 2021) highlighting a lack in translation of mobile connectivity to financial connectivity. This is salient in a context where there are 8.3 bank branches per 100,000 adults, compared to 362.3 mobile money agents per 100,000 adults (as of 2019) (Madan, 2021) – demonstrating the significance of mobile outreach.

In urban areas in Cambodia, our respondents reportedly were less likely to have to wait because of the higher number of WING agencies in their area. In rural locations, where WING agents were in another village/town/neighbourhood, respondents highlighted having to budget direct (transport) and indirect (babysitting/work) costs for going to receive money compared to when they received it at a local commune office and vice versa. Respondents in Cambodia in rural areas said they used WING agents to pay off loans with other institutions (e.g., microfinance institutions) when the latter were in a different area to save on transport costs and travel time.

Debit card use was variable and people's preference for debit cards was similar across the three countries. Respondents held a strong belief that debit cards were only appropriate for those in possession of substantial cash that they could afford to deposit in a bank. Our respondents categorised the cash they used for daily expenses and the cash they needed for emergencies as an amount of money that needed to exist outside the bank, so that it could be accessed quickly and easily. Specifically, they did not associate bank accounts or mobile money agents with easy or immediate access. In line with this belief, money from cash transfers was withdrawn immediately and in full across almost all our range of respondents. The minimum wait from time of deposit to withdrawal was one day and the maximum was 15 days, with the latter reported more often in groups where people were engaged in daily work and/or required assistance in getting to a withdrawal point. Therefore, only when the amount of money they had was over and above the cash/saving they maintained physically for immediate payments or emergencies, would they consider putting that cash in a bank account.

The mechanisms of cash transfer did not appear to increase agency among women (especially the case from interviews with the women in the focus group discussions over the age of 46).[21] Women more than men, and older women (46+) more than older men in our sample indicated that they required support; i.e., they needed another person to help them to top up their mobile phone and/or conduct transactions at the money agent. In Cambodia, the WING agents themselves (who often also ran the local grocery store) would be the helpers, at other times a neighbour. Differences were visible within the household as well; a few female respondents in Nepal (in both rural and urban areas) noted that they had observed their husbands charging credit on their phones through QR codes but did not understand the mechanism themselves and asked their husbands or neighbours to perform the top up. Similarly in Cambodia (in urban areas), a couple of respondents said they had seen their husbands use a phone to make payments to charge up credit but were unfamiliar with the system themselves. Within households, women reported that decision-making on household expenditure had not changed as a result of the cash transfers in that they were – before and after – responsible for choices on food, but the transfer allowed to them buy a greater variety of food for consumption. Aker et al. (2016) in their work on the impact of cash delivery via mobile phone in a drought, noticed that existing infrastructure and familiarity could play an important role in increased use and autonomy within households by women.

For people with a disability, the mechanisms of transfer did not appear to increase agency – as they needed to rely on family members or neighbours to register and withdraw their cash transfer. Respondents with a disability – male and female – typically relied on female family members

21 We conducted focus group discussions separately with women and men between the ages of 18-45 and a separate one with women aged 46-upwards to distinguish between experiences of technology between younger and older men and women.

to take them to the venue of cash disbursement. They noted the necessity of a helper/'caretaker' because of the physical difficulty of navigating to the venue of disbursement, as well as the necessity of producing documents (IDPoor certificate or national identity cards) for verification and access.

In Cambodia, respondents under the age of 45 were aware of digital methods of payment (e.g., use of QR codes). In Nepal and Bangladesh, a similar cohort of our respondents were aware of mobile money transfer (e.g. e-Sewa and bKash, respectively) in use outside their communities for payments but they did not feel this was applicable to them. Respondents did not feel the practice was relevant to their individual circumstance or household. This was because of the preponderance of cash in the local economy and/or because of their self-reported lack of knowledge or understanding of how the mechanisms worked with their cash, making them reluctant to try them out. Older respondents and respondents who had minimal to no formal education worried that money they could not see and hold physically would be more liable to fraud, to 'disappearance' or payments would be made without consent, indicating a lack of trust in financial technology. Younger respondents reported that the lack of prevalence in the local economy – local shops or health facilities – meant that moving away from physical cash was not convenient for them.

Lack of familiarity with technology did not seem to be overcome by observing use (at least in the case of our respondents), either on its own or with step-by-step instructions. For underserved groups, this suggests that digitalisation of financial transactions is not an easy, or assured, future. This counters a more general sense among interviewees that digitalisation of financial transactions is not only inevitable, but always makes it easier to include underserved groups. It also points to the need for a more detailed assessment into the specific challenges that shape underserved populations' financial behaviours. For example, in Cambodia, the WFP short-term cash transfer delivered via WING agents to households affected by the flood in 2021 saw a drop-off in numbers between the people who were registered and eligible to receive the cash transfer and those who were able to activate that account (following instructions) to receive the cash (based on primary interviews). Informants noted the lack of familiarity, despite training, as a significant barrier in people's ability to take up the short-term cash transfer. Where people must rely on an intermediary, it is unlikely they will 'learn by doing' alone. However, Breza et al. (2020) found that learning by doing was high in unbanked populations who were involved in the workforce and encountered payroll accounts through their workplace. They do warn against generalising the results for a sub-set of their population to those who, from the start, have low financial literacy and low control over household finances:

> Individuals with comparatively lower literacy, financial experience, and prior control over household finances benefit from exposure to the technology primarily from accumulating savings but do not necessarily learn to use the financial technology in the most cost-effective manner. Individuals with higher levels of literacy, financial experience, and prior control over household finances, on the other hand, benefit by learning to use the technology more effectively and sidestepping common consumer protection risks (p. 27).

4.2 Savings

Among our respondents, the top ways of saving remained the same before and after the cash transfer programmes, whereby they used physical storage (e.g., 'piggy banks'/ locations in the house/assets such as livestock) and/or community saving groups and local cooperatives. The choice of saving in locations that are physically proximate to respondents, as well as in community savings groups, are self-explained by the amount of cash they can afford to save as well as the ease of access to the cash in times of need. Respondents did not feel they had enough cash to save outside their immediate needs. Almost all respondents reported that they withdrew cash immediately, usually to spend on daily needs (e.g., food and medicine and in Cambodia, to repay debt). As such, they did not deem that money leftover was substantial enough to justify saving in a bank compared to a community saving account. Respondents in Nepal said bank agents told them that they could earn interest on their account if they opened a second 'fixed deposit' account, though it was not apparent to them if a minimum amount was required and/or if they assumed a minimum amount was beyond their reach.

Savings in informal financial mechanisms such as community groups/local non-registered cooperatives hold the advantage that the amounts required to be part of the group were smaller and people could withdraw the loan without engaging in a lengthy process of filling out and submitting complex paperwork. Only one female respondent reported that she was saving part of her cash transfer for her child's higher education. She was able to do so because the cash transfer was not the only source of her income and hence she could afford to save for the long term. However, a larger number of respondents expressed an interest in keeping and maintaining savings at a bank because of safety, but did not think it suited their everyday lifestyle. Although our primary data effort was focused on examining 'ways' of saving rather than the amount, secondary literature supported the idea that cash transfers tend to increase people's ability to undertake precautionary savings (Bastagli et al., 2018). Our findings (though illustrative) also reiterate conclusions in extant literature that financial markets for low-income households (and often for higher-income households) are not exclusively formal or informal (Alvi and Dendir, 2009; Collins et al., 2009). Those who can access both formal and informal institutions continue to engage with both, as access to formal does not substitute for informal mechanisms (Alhassan et al., 2019). Field experiments in Uganda, Malawi and Chile – which found no evidence that a basic, no frills bank account made available to the rural poor led to an increase in positive outcomes in consumption, schooling or health – speculated that one reason for this was the mismatch of bank account operations and its offerings with the daily routine and needs of poorer individuals/ households (Dupas et al., 2016).[22]

While the findings above may suggest that the high transaction costs for depositing savings formally may be reduced by the introduction of digital saving products, secondary evidence from Sri Lanka shows that uptake is not linked to cost alone. De Mel et al. (2020) find that despite providing access to a simple digital savings

22 Compare with Masino and Niño-Zarazúa (2020) in Mexico, where a switch from cash payments to electronic payments delivered via savings accounts found a substitution effect – with the households favouring bank accounts over informal saving arrangements in the medium-term period after the intervention.

product (via a scratch card ranging from $0.45 to $9.09), few account holders in Sri Lanka used the service frequently, even when offered for free. Overall, they found that mobile-linked accounts had no impact on total savings and implied that mobile-linked savings products may have limited potential to expand financial inclusion (Batista and Vicente, 2019; Batista and Vicente, 2021).

Respondents in Cambodia (who were more aware of interest rates on credit compared to respondents in Nepal or Bangladesh) said they would prefer to save in banks because of perceived safety and a sense that borrowing at a later point would be associated with low interest rates. However, they did not feel they wanted to – in their present circumstances – because they did not have an amount of cash that they could put aside for some time (without the prospect of needing it for an emergency). The location of the banking branch and its accessibility, i.e., the ability to withdraw cash of any amount and at any time, in an emergency in a 24-hour period, featured strongly as a key reservation around using banks for savings.

4.3 Credit

Our respondents did not report a change in behaviour (as a result of cash-transfer programmes) on where they obtained credit in times of emergency or for productive investments. Top sources for loans remained relatives and family members, neighbours and community members, local institutions (community savings groups, cooperatives and microfinance institutions – the last of which can often be predatory, as in the case of Cambodia), followed by moneylenders. Reasons respondents gave for relying on relatives and community savings groups included ease and speed of access for borrowing small amounts of money, cheaper interest rates (relative to moneylenders) or no interest rates (from friends/neighbours), knowledge and familiarity with individuals who made up the community group, and comfort in the knowledge that there was flexibility in repayment, without too adverse an impact.

Respondents reported that while banks made sense for high-cost borrowing – e.g., for agricultural machinery or cars – because of the low interest rate, it was viable only for those who had the knowledge to submit the paperwork required for the loan and had collateral that qualified as sufficient. However, given that poorer individuals/households mostly borrow for short-term, small expenses, a bank does not make sense as a main source of borrowing in these cases.

Analysis presented in Global Findex (2021) emphasises that informal sources of financing remain important in low- and lower middle-income countries, with 46% of borrowers citing family and friends as their only source of credit. Here, less than 2% of adults borrowed semi-formally from saving clubs or credit associations (p. 93). Like saving practices, since we focus on the method of borrowing (rather than the amount), we have less to say on the impact of cash transfers on borrowing amount based on our primary data.

Use of debt as a key survival strategy for poor individuals and households can potentially worsen household/individual financial health and resilience in the presence of easy, digital credit. The amount and frequency of the cash transfer in Cambodia, and for some respondents in Nepal and Bangladesh, was central to the respondent's use of it in their debt cycle. The average microloan debt per borrower in Cambodia is the world's highest at $3,800 (Blomberg and Dara, 2020). The unregulated microfinance market in

Cambodia has been linked to the emergence of unfree labour (or modern slavery) (Natarajan et al., 2020), as people borrow against their future labour. In rural areas of Cambodia, respondents reported borrowing from WING agents against their future cash payment with interest, i.e., local agents disbursing cash for WING in this area acted as sources of credit, allowing individuals/households to use cash transfers to smooth expenditure on daily food items and expenditures related to schools. Respondents in rural areas of Cambodia also reported pawning their IDPoor certificate with neighbours for cash and/or shop owners in return for food/medicine and sometimes clothes. One respondent in rural Cambodia reported being indebted to three informal institutions at the time of interview and planned to use the cash transfer to pay off the loan with the highest interest rate.

In Nepal and in Bangladesh, some focus group discussion and key informant interview respondents used cash payments from SSA and bKash (respectively) to pay off debts related to food and medicines at shops in the local areas and/or with neighbours. For example, in Bangladesh, some respondents reported that knowing they were going to get bKash transfers helped them get credit at their local grocery store. Brailovskaya et al. (2022) note that the combination of lack of knowledge in conjunction with the use of debt as a key survival strategy for poor individuals can worsen financial health. This is because often consumers are not aware of the loan terms and many end up repaying late (thus incurring fees) or defaulting (thus hurting their future ability to borrow). Other harmful impacts include debt traps, debt stress, violation of data privacy and coercive repayment tactics, which have led observers to call for regulation.

5 Summary of barriers and opportunities for financial inclusion through digital cash-based transfers

This section unpacks the barriers and opportunities from contexts within the region and outside that were raised in relation to the implementation of digital cash-based transfers and their potential contribution to wider financial outcomes.

5.1 Contextual limitations in Asia-Pacific: policy environment and infrastructure settings

Digitalisation of cash-based transfers in ways that improve the financial inclusion of the unbanked/underbanked rests on a set of assumptions that the necessary public and private infrastructures and institutions are in place. Infrastructure requirements vary based on the digital delivery mechanism for cash; for example, a cash card will have different requirements than a transfer to a mobile money or bank account. The latter might show greater potential for linking up to other financial products and services, but also then depends on additional banking, network and mobile infrastructure. Both public and private sector actors can present opportunities and barriers to effective delivery of cash to recipients across different delivery mechanisms. Mobile-based solutions require access to mobile phones, working networks and registered SIM cards. Here, where cash is linked to a single provider whose systems are not interoperable, the potential of financial inclusion is severely limited. In some cases, where mobile payment systems work through registered mobile phones and SIM cards, recipients of cash-based transfers are required to be able to officially access and register mobile phones (GSMA, 2016). This can be a barrier where governments might resist the integration of refugee populations within the formal economy. In some contexts, ID possessed by displaced people allows them SIM registration, but not necessarily access to a bank or mobile money account (UNHCR, 2022).

However, humanitarian agencies have showcased instances where SIM registration can occur without KYC ('know your customer') requirements for identifying individual users, e.g., where agency-issued identification serves as a de facto identity document (Schoemaker et al., 2018). More generally, across different payment delivery mechanisms, some interviewees drew attention to variation in the degree to which governments were amenable to different displaced populations registering for SIM cards and linking up to national banks and financial services.

Private sector firms' incentives and understanding of humanitarian contexts were also identified by our interviewees as barriers to the implementation of digital cash-based transfers in the Asia-Pacific region, and to their contribution to dignity and choice in financial products. One interviewee noted:

> We're not there yet in in many markets. So, I think it's really understanding how can we incentivize the private sector to really focus on this market [of low-income/extreme poor households/ individuals]. What does financial inclusion mean beyond the cash transfer? How can we link with other programs, other organizations?

Outside the region, in Somaliland, the uptake of Zaad – a mobile money platform launched by the telecommunication provider Telesom – by a previously unbanked population highlights the potential of the private sector to innovate in the area (Iazzolino, 2014; Pénicaud and McGrath, 2013). However, whether this has led to increases in financial health is unclear in the present research.

Interoperability is critical if considering the potential for payment platforms used for digital cash-based transfers to link up with other extant digital financial products and services. For recipients of cash transfers, interoperability can allow for expanded choices about which payment systems and providers to use. Interviewees indicated that most institutions involved in digital cash-based transfers in Asia-Pacific lacked sufficient interoperability in their systems. This could be, for example, for QR code payments or to be able to transfer money into the recipients' existing mobile money or bank accounts, across different providers. At the same time, barriers to interoperability do not lie with the cash-based transfer programme provider, but extend to the larger framework of policies that regulate the creation of the financial landscape; and the existing financial infrastructure, as well as a country's approach to KYC (know your customer) regulations and obtaining operation licenses. The ability to choose between providers also requires a competitive financial market and sufficient/working enabling infrastructure. Therefore, technical interoperability alone is not enough to ensure technology translates into expanded choices for cash recipients.

The use and success of digital cash-based transfers rests on existing and planned infrastructure for mobile payments, which includes banking, telecommunication and electricity infrastructure. For example, the accessibility of either ATMs or mobile money agents matters, taking into account both accessibility/distance to payment points and their reliability (e.g., hours of service, reliable supply of cash etc). Often, we found that outside urban areas, it was difficult for individuals to make cash withdrawals, with individuals relying more on agents rather than on ATMs. This highlights the low level of infrastructure investment in these areas, where the majority of cash transfer recipients live. One interviewee emphasised how the infrastructure required for 'last mile delivery' – which overlaps with populations most in need of cash transfers – remains a critical area of consideration for digital cash-based transfers. This includes specific attention to access to mobile money agents, how agents are compensated and who pays the financial cost for accessing the distribution channels. Our key informants noted that an opportunity in the context of constrained financial infrastructure was for regulations to allow non-banking institutions to issue e-money. For example, if telecommunication operators are allowed to engage in issuing e-money, then liquidity distribution could have more success in rural areas.

Digital cash-based transfers in general, specifically those that use mobile money accounts, often rest on two key assumptions: that an individual has a form of recognised ID and that one person has access to one phone number. **In practice, both assumptions do not always hold, resulting in barriers to the implementation of digital cash-based transfers.** Individual access to phones and SIM cards often rests on some form of recognised ID, and is not guaranteed for women, refugees, or people with a disability within households. Additionally, government regulations require differing levels of KYC, which depend on the kind of account required for the cash transfer. Often a key function performed by humanitarian actors is linking up people to these services, both on the ground by functioning as the legal account holders on behalf of recipients (e.g. UNHCR, 2012, for refugees in Jordan), or by providing ID that helps with registration (e.g. UNHCR, 2020, in Rwanda). Agencies also work through partners on the ground to launch registration drives, in conjunction with advocacy to lower KYC requirements, for populations of interest.

Our work in Nepal highlighted that for many individuals, the cash programme was the first time they had opened a bank account; while in Cambodia, the cash programme was the first time that people had applied for an ID. Among our respondent sample – particularly in rural areas – individuals spoke of using a household mobile phone (often owned by a male member in the house) or using a phone belonging to a neighbour or relative. This can mean that the same phone number is registered to multiple individuals in a community, which creates challenges in monitoring who receives the cash and will be challenging in understanding financial inclusion outcomes for individuals within a household (particularly for agencies interested in reducing intra-household/ community inequality for women).

To fill the gap for those without a recognised ID, which state authorities may be unwilling to give to certain marginalised groups (refugees or ethnic minorities), development/humanitarian agencies have utilised functional IDs as opposed to foundational IDs in order enable digital cash payments. Functional IDs can include from a household bill, health record, birth certificate and/ or letters verified by local-level authorities or large-scale humanitarian agencies. Where governments have also tiered KYC rules, whereby different conditions are placed on different accounts so that minimal information of varying kinds can be used to 'verify' an identity (Kipkemboi et al., 2019), this can be used to create scope for individuals to participate in a digital cash-based transfer. Verification can take place in such circumstances without a foundational ID (though agencies often advocate bringing IDs to the affected population simultaneously). However, depending on the conditions of access, this can limit the extent to which this account can be used flexibly to access other financial products and services. For example, a tiered system could allow some individuals to use accounts for transfers up to a specific amount, excluding activity that involves higher transfers. Governments are important partners in digital cash-based transfers, by facilitating access to national IDs and through collaboration on campaigns to register people with national IDs to access digital cash-based transfers, but also other social services. However, as indicated above, this depends on government capacity and receptivity towards the inclusion of different groups within national systems/services.

5.2 Individual and social barriers

Digital and financial literacy are key elements for effective use of digital financial products and services where access to financial services is widespread (Hasan et al., 2021), but it is possible that trust in financial institutions matters as much or more. For example, in Bangladesh, interviewees pointed out how a lack of digital and financial literacy meant that some female recipients deprioritised possessing their own phones and used their husband's phones, as they were uncomfortable with the transactions, or recipients would share pin codes with associated implications for privacy/security risks. Even further, across both men and women, informants in Bangladesh raised concerns that banks and other formal financial institutions were only for 'the rich'; they expressed fear and uncertainty around using formal financial institutions for savings and credit. In Nepal, key informants who were highly educated, often lived in urban areas, and worked in government organisation, noted that they did not 'trust' formal financial institutions as key venues for savings or credit. Informants both within and outside government often cited personal examples of difficulties encountered with banks in urban areas as markers of low trust in these institutions.

Digital and financial literacy can be defined in different ways. However, our research points to the importance of considering digital literacy as more than a technical understanding, but rather the ability to understand and adapt digital technology within one's situation (O'Brien and Scharber, 2008). Recognising critiques of the idea that digital literacy is the key factor for financial inclusion (Matthews, 2019), our interviews discussed digital and financial literacy as part of a wider set of factors that all contribute to a complex enabling environment for the use of digital financial products and services. As mentioned above, digital devices can include software that is beneficial for persons with disabilities, but effective use requires familiarity, ease and trust of the software within their particular situation. Recent work in Peru (Galiani et al., 2022) found that workshops that built trust in financial institutions (but had no effect on financial literacy) were successful in increasing trust in banks and increasing savings.

Digital literacy in such cases is about ensuring knowledge of how to engage with technology is matched with space for individuals to make informed choices about their use of financial services and products that best align with their well-being and financial situation, and about them having recourse to channels to address issues as and when they come up. While numerous guidelines exist on what makes a good financial and digital literacy programme (AFI, 2021; GSMA, 2020a; OECD, 2018a), there is a clear need for research on whether these programmes work to improve financial health outcomes for low-income and marginalised populations.

Digital literacy interacts with social norms in a given context to influence uptake of digital financial products. While defined in a variety of ways, digital literacy can draw attention to the financial, technical and critical skills needed to use and adapt technology safely towards different ends. This means not only equipping individuals with the ability to use digital financial products, but also to critically assess when and how digital products suit their social and economic contexts, with them using and adapting products accordingly.

Providing digital cash without incorporating digital literacy – as critical and informed engagement with the technology – among unbanked and underserved populations can end up doing little to alter financial inclusion outcomes. While the provision of cash on its own delivers a critical resource for the most marginalised groups and opening an account is a potential first step to access to other government services or financial products, there is a limit to what can be expected to be achieved in terms of different outcomes. For example, literacy has often not been a barrier to extremely poor people performing complex calculations, because of reliance on physical features of bank notes and coins (Matthews, 2019). As such, reliance on icons on smartphone apps – by moving from the physical to the digital, non-tangible sphere – can remove incentives for uptake (Gelb et al., 2022).

Social norms play a critical mediating role in women's financial inclusion, as well as access for people with disabilities, both by prescribing gender roles as well as setting expectations around social treatment/attitudes towards people with disabilities. Social norms are defined as: 'the implicit and informal rules, attitudes, behaviours, and values that the majority accept and follow'" (Arnold et al., 2021). Digital cash transfers can result in new avenues for excluded populations, including women and persons with disabilities, to access financial products and services, at minimum directly in relation to payment systems. However, the extent to which digital channels address forms of exclusion depends on what factors contribute to that exclusion.

Social norms around women's participation in finance can still matter and can limit women's financial activity, whether digital or not. As noted in our country case studies, female respondents reported that men in their households were familiar with QR code payment and had access to mobile phones, while they did not and did not know how the code worked. Depending on norms around women's ownership and access to mobile phones, and to finance, digital cash transfers could even exacerbate gender divides, especially in the short term (Agur et al., 2020).

Similarly, factors that contribute to exclusion of people with disabilities are also likely to limit their financial activity. For example, people with disabilities can be dependent on household members for access to cash assistance, as highlighted in our primary work, whether digital or delivery mechanisms of transfer are used. In our work, we did not come across modifications made to the cash delivery mechanism that accounted for different disabilities – people with disabilities received the same information and dealt with the same interface for receiving cash transfers as those without disabilities and as a result, often relied on their carers for registration and cashing out.

More broadly, the literature review highlighted a singular focus on assistive technology as the main vehicle for making digital technology disability-friendly, rather than thorough planning and budgeting for how to meaningfully include people with disability in an autonomous manner. Dobranksy and Hargittai (2016) noted that focus for people with disability:

> tends to be on assistive technology – after-the-fact, add-on solutions such as screen readers, speech-to-text programs and other accessibility additions to workstations, which can be quite resource-intensive to obtain and make use of – with implementation uneven within and across domains (p. 19).

The development of technology is not accompanied by training and the level of support needed for its adoption, while technology often tends to be obsolete by the time it comes out.

CBM Global highlights principles of disability-friendly participation in communication campaigns around delivery, including considerations for people with a disability in the project cycle of a programme and monitoring and evaluation to check how an intervention is delivering those people (CBM Global, 2012). It includes specific guidance on cash assistance, with examples from Indonesia and Bangladesh in the region, for successful inclusion of people with disability on their own terms (CBM, 2021).

5.3 Measuring 'success' in achieving financial inclusion

Financial inclusion or digital financial inclusion should not be equated with ownership of or access to bank accounts (analogue or online) but should consider this to be a first step that needs to include the terms of access as a key component. For digital cash transfers to enable/support wider financial inclusion, they must be considered as part of a broader set of initiatives to help underserved/ unbanked people achieve certain outcomes, i.e., not just considering access to financial accounts but their meaningful use to improve people's financial lives on a day day-to-day basis. (This contrasts with findings from Cheesman's (2022) work in Jordan, where payments made via blockchain-based digital wallets complicated women's everyday interactions with financial systems).[23] Whether or not digital payment systems for cash transfers are used and adapted in ways that improve financial inclusion outcomes depends then on other factors – ranging from individual trust in the larger banking and mobile system, the use of technologies among trusted users and sellers in the community, to familiarity and literacy around products and interfaces, and social norms that make uptake and use normal. Further, attention is needed to the cost for individuals (e.g., individuals who do not want to give data for later use in profitable commercialisation) and requirements to broaden the use of digital financial products. For individuals to continue to use and expand their use of digital products, they must be able to sustain the costs of maintaining and upgrading digital devices, accessing network and electrical infrastructure, and paying for data access.

Assessing the extent to which digital cash transfers contribute to financial inclusion for groups such as low-income women and people with disabilities, requires a look at digital cash in relation to traditional and embedded dimensions of exclusion where they live. The use of digital channels/technology implicates far more than financial outcomes alone. One interviewee explained that by enabling communication over digital channels, phones could improve marginalised populations' sense of security/safety. At the same time, lack of consideration of non-financial forms of harm and exclusion (e.g., violence against women) might mean that mechanisms that enable digital cash (such as a smart phone) at best only provide for limited inclusion, or at worst, exacerbate violence (Messenger, 2017; Henry and Powell, 2016; Digital Rights Foundation, 2017; Council of Europe, 2021).

Women's financial lives are complex, and experiences of inclusion require attention to the complex and intersecting power dynamics and socio-economic realities that contribute to their exclusion. Similarly, for people with a disability, enabling social and economic autonomy via digital channels requires a universal design that people can navigate on their own, regardless of the nature of their disability (e.g., visual, hearing, speech, mobility, cognitive and/or psycho-social). A design with interfaces restricted for use by able-bodied members of a community may provide access to cash but deepen dependencies within households and community. Finding a universal design for a delivery mechanism that fits everyone is challenging and all delivery mechanisms will have some barriers for people for disabilities. However, accounting and making reasonable accommodation for these programme-specific barriers in planning and monitoring allows greater inclusion (CBM, 2021).

23 Recent ethnographic work on the UN Gen blockchain payment for women in refugee camps in Jordan (Cheesman, 2022) has highlighted how blockchain technology in cash transfers has increased labour for women, as they try to maintain their own records to ensure they are not short-changed for their work and cannot be seen to increase feelings of agency and power.

6 Recommendations for actors working to achieve digital financial inclusion / financial inclusion through digital cash-based transfers

This report has explored the landscape for digital financial inclusion through cash-based transfers in the Asia-Pacific region, highlighting cash recipients' perspectives on how digital cash-based transfers link to digital financial inclusion. While it is not designed to provide a representative view into digital cash-based transfers and digital financial inclusion in the case study countries or the region, it nonetheless reveals common patterns and trends in the opportunities and challenges in strengthening digital financial inclusion through digital cash-based transfers in the Asia-Pacific region. Reflecting on these findings, we recommend key areas for the attention of humanitarian and development actors to create supportive conditions for digital financial inclusion for the poorest through digital cash-based transfers.

6.1 General recommendations for humanitarian and development actors

1. **Advocate for and support a people-centred approach to financial inclusion in the Asia-Pacific region** that focuses on financial outcomes and resilience in cash-based transfer programming. At the design stage, this could include ensuring digital design does not exacerbate forms of exclusion of poor and vulnerable groups. Stress testing pilot interventions that focus on those who are most vulnerable and marginalised could help to mitigate against greater exclusion. In programme implementation, we recommend investing in ongoing evidence collection to assess progress, specific to programme aims and to recipients' financial lives and preferences. Different indicators will be appropriate for qualifying 'success' (Golla et al., 2018; Sarwar et al., 2020). One key area to explore is the intersection of cash-based transfers and remittances, a theme not covered in this research.

2. **Conduct a full assessment of the costs of enabling financial inclusion through digitally delivered cash-based transfers**, while aiming to reduce the costs borne by recipients. This includes identifying where additional investment is required to enable recipients to take up opportunities to use digital financial products, such as investing more in digital, financial and basic literacy to support confident and secure choices by cash recipients about digital financial products. A starting point for investments in literacy could be to compare evidence on learning outcomes through different approaches (e.g. considering guidance from AFI, 2021; CFI/WFP, 2022; GSMA, 2020b; OECD, 2018b; Khan, n.d.), especially for specific groups, including the elderly and people with disabilities.

3. **Advocate and support government, regulatory, and private sector actors to strengthen the enabling environment for digital financial inclusion**. This could involve working with financial service providers to

build business cases for expansion in crisis and non-crisis settings, by helping to demonstrate an alignment of incentives or by assuring a threshold of cash into the market and helping to manage agent networks, where budgets allow. With government policy and regulation, this could involve supporting the development of financial service and physical infrastructure for underserved communities. One way could be to help build a commercially viable environment for government partnerships with private sector actors in underserved areas through, for example, co-development partnerships, clarification of appropriate licensing regulations, and facilitation of licences and initial subsidies.

6.2 Specific recommendations for government and regulatory actors

4. **Invest in greater coordination between social protection programmes and government agencies working on financial inclusion and digital financial inclusion**. More regular and formalised communication across government agencies responsible for providing cash assistance and those responsible for financial inclusion strategies could allow for a more joined-up approach to ensuring the financial inclusion of poor and marginalised communities, for example through complementary literacy trainings.

5. **Seek to develop a regulatory environment for digital financial services that aligns multiple interests,** including supporting access to digital financial products by cash recipients, and encouraging innovation by financial service providers. Potentially relevant areas of regulation include know-your-customer, anti-money laundering, know-your-agent, licensing requirements, and interoperability.

6.3 Recommendations for WFP global/regional bureaus and country offices

6. **Continue to build the evidence base on the complementarity of digital financial inclusion and WFP's mandate on cash-based assistance across operations in the Asia-Pacific**. While our report has identified a clear link between cash and essential needs, the contribution of *digitalisation* of cash specifically to addressing intersecting essential needs was less clear. Additionally, how digital financial inclusion can best be strengthened through cash assistance was not fully clear. One opportunity is to ensure financial service provider landscape assessments adequately assess opportunities for digital financial inclusion *before* the onset of a crisis. Another may be to collaborate with public and private sector actors in research and development of recipient-centric payment solutions and regulations.

7. **Strengthen engagement with country and regional offices on how the digital financial inclusion agenda translates into specific operations,** to ensure that digitalisation of cash assistance is appropriate to recipients' financial lives and local market conditions. There is growing interest in digital financial inclusion among country offices and regional bureaus, though the global WFP office has played a central role in giving momentum to the agenda within WFP. Further expanding engagement with digital financial inclusion across all levels requires ongoing communication about operational priorities and regional- and country-specific challenges to financial inclusion outcomes.

8. **Ensure that recipients can exercise meaningful choice about the risks and benefits of using digital and data-based channels** through regular re-assessment and improvement of terms of consent and how they are communicated. This could include (re)assessing existing privacy impact assessments, as well as assessing information given to cash recipients and terms of consent. This information could inform training modules for field staff that clearly and concisely highlight the risks, terms and conditions of digitalised programmes and communicate these to recipients in tailored ways.
9. Together with regulators, financial service providers, humanitarian, social protection, and government actors, **participate in policy advocacy and evidence generation on financial inclusion,** leveraging WFP's expertise and networks (such as in-country cash working groups), to promote a more financially inclusive ecosystem. Where cash working groups are less established, there is an opportunity to push for more regular meetings and focus discussion on key issues in a country's regulatory and financial landscape.

Appendix 1 Government-led cash-based transfers (CBT)

Country	Actor	Programme	End user target group
Afghanistan	Ministry of Labour, Social Affairs, Martyrs & Disabled (MoLSAMD), World Bank	Martyr and Disabled Pension Programme (MDPP)	• Persons with disabilities • Retired freedom fighters, civil servants, military employee, or formal workers
Afghanistan	Ministry of Labour, Social Affairs, Martyrs & Disabled (MoLSAMD), World Bank	Afghanistan Social Protection Programme (ASPP)	• Poor households with children under 5 years of age
Bangladesh	Department of Social Services (DSS), Ministry of Social Welfare, Government of Bangladesh	Old Age Allowance (OAA)	• Elderly in situation of poverty
Bangladesh	Department of Social Services (DSS), Ministry of Social Welfare	Widow Allowance (WA)	• Separated, divorced or widowed women in poverty • Special quota for hard-to-reach and natural disaster-stricken areas
Bangladesh	Government of Bangladesh & World Bank	ISPP-JAWTNO	• Low-income mothers and pregnant women
Bangladesh	Government of Bangladesh	Covid-19 Cash Transfer	• Low-income households
Bangladesh	Ministry of Primary and Mass Education	Primary Education Stipend Program (PESP)	• Low-income households with primary school children
Bangladesh	Minister of Disaster Management and Relief	Employment Generation Programme for the Poorest (EGPP)	• Working-age population in poverty
Bangladesh	Ministry of Women and Children's Affairs, WFP	VGD	• Women of landless households (less than 0.15 acres) or without productive assets; preference given to female-headed households (widowed, divorced, separated, deserted women, or women with disabled husbands)
Bangladesh	Department of Social Services, under the Ministry of Social Welfare	Allowance for Financially Insolvent Persons with Disabilities	• People with disabilities
Bangladesh	Ministry of Education (MoE)	Secondary Education Sector Investment Programme (SESIP)	• Low-income households with children in secondary school

Country	Actor	Programme	End user target group
Bhutan	National Resilience Fund (NRF)	Druk Gylpo's Relief Kidy	• Residents who had their income affected by the Covid-19 pandemic
Cambodia	Ministry of Labour and Vocational Training (MoLVT) (Royal Government of Cambodia (RGC)	Covid-19 cash transfer to compensate lost wages for garment factory workers and tourism sector employees	• Garment workers whose income was affected by the Covid-19 pandemic
Fiji	Department of Social Welfare (DSW)	Care and Protection	• Households with children of single mothers, deserted spouses, widows, and prisoners' dependents living in poverty and with no source of income; children under the care of the state; children in foster care or cared by a guardian
Fiji	Ministry of Women, Children, and Poverty Alleviation, Family Services Division	Poverty Benefit Scheme	• Poor households
Fiji	Ministry of Women, Children, and Poverty Alleviation, Family Services Division	Social Pension	• Elderly without any source of income
India	Ministry of Finance	Covid-19 Relief Package	• Women and widows • Elderly • People with disabilities • Farmers
India	Ministry of Woman and Child Development	Pradhan Mantri Matritva Vandana Yojana (PMMVY)	• Pregnant and lactating mothers
Indonesia	Ministry of Social Affairs	'Family Hope' – Program Keluarga Sejahtera – PKH	• Poor, pregnant women and lactating mothers • Poor mothers with children under the age of 21 • People with disabilities • Elderly in situation of poverty
Indonesia	Ministry of Social Affairs	Kartu Simpanan Keluarga Sejahtera (KSKS) (Prosperous Family Savings Card)	• The poorest 25% of the population
Indonesia	Ministries of Education and Culture (MoEC) and Ministry of Religious Affairs (MoRA)	Program Indonesia Pintar (PIP)	• Poor households with children between the ages of 6 and 21 that are enrolled in school
Indonesia	Ministry of Social Affairs	BPNT – Non Cash-Food-Aid Program (Renamed Program Sembako)	• PKH recipients
Indonesia	Government of Indonesia	Kartu Prakerja (Covid-19 transfer, 'pre-employment' cards)	• Individuals who lost their income or saw their income affected due to the Covid-19 pandemic

Country	Actor	Programme	End user target group
Lao PDR	Lao Social Security Organization (LSSO)	Covid-19 Cash Transfer	• Garment workers (mainly female)
Myanmar	Government of Myanmar	Covid-19 Economic Relief Plan	• Vulnerable households
Myanmar	Ministry of Social Welfare, Relief and Resettlement	Myanmar Civil Servant Pensions	• Elderly retired civil servants
Nepal	National Recovery Authority (NRA) of 2015, Central Bureau of Statistics (CBS), Ministry of Federal Affairs and Local Development (MoFALD)	Private Housing Grant Payment Mechanism	• Households affected by the earthquake
Pakistan	Poverty Alleviation and Social Safety Division	Ehsaas Emergency Cash Programme (EEC)	• Ehsaas Kafaalat (EK) beneficiaries • Individuals who lost their employment due to Covid-19 • Poor households not covered by EK
Pakistan	Ministry of Finance, Revenue, and Economics Affairs and World Bank	Benazir Income Support Programme (BISP)	• Transfer to women in poor households with children between the ages of 5 and 12, conditional on school attendance
Pakistan	Poverty Alleviation and Social Safety Division	Ehsaas Kafaalat (EK)	• Women in situation of poverty • BISP recipients
Pakistan	Pakistan Bait-ul-Mal agency (PBM)	Pakistan Bait-ul-Mal (PBM)	• Poor households with children between the ages of 5 and 16 • Special focus to households with orphans, people with disabilities, the elderly and religious minorities
Philippines	Social Amelioration Program (SAP) enacted under the Bayanihan To Heal as One Act in March 2020, Government of the Philippines (GoP)	Social Amelioration Program (SAP)	• 4P – Pantawid Pamilyang Pilipino Program – recipients • Non-4Ps poor families with members with disabilities, elderly, pregnant women, single parents, displaced informal workers, and loss of income due to the Covid-19 pandemic
Philippines	Department of Social Welfare and Development (DSWD)	4Ps – Pantawid Pamilyang Pilipino Program (4Ps)	• Poor households with pregnant women and/or with children under the age of 18
Philippines	Government Service Insurance System	Government Service Insurance System (GSIS)	• Public Sector workers (active and retired)
Philippines	Government Service Insurance System	Social Security System (SSS)	• Elderly who contributed to the system
Sri Lanka	Department of Divineguma Development	Samurdhi Social Safety Net (renamed to Divineguma Programme)	• The poorest 25% of the population • Elderly without any source of income
Tajikistan	The Ministry of Health and Social Protection (MHSP)	Targeted Social Assistance Program (TSA)	• Poorest 15% of households

Country	Actor	Programme	End user target group
Tajikistan	Ministry of Labor and Social Protection of the Population (MLSPP)	Pensions	• Elderly who contributed to the system • People who contributed and developed a disability
Timor Leste	Ministry of Social Solidarity	Bolsa da Mae (Grant for Mothers)	• Vulnerable households with children (female headed, widowed, or with orphans)
Timor Leste	Ministry of Social Solidarity	Older Persons and People with Disabilities (Subsídio de Apoio a Idosos e Inválidos) (SAII)	• Elderly individuals • People with disabilities

Government programmes targeting the elderly

Country	Actor	Programme	End user target group
Afghanistan	Ministry of Labour, Social Affairs, Martyrs & Disabled (MoLSAMD), World Bank	Martyr and Disabled Pension Programme (MDPP)	• Persons with disabilities • Retired freedom fighters, civil servants, military employee, or formal workers
Bangladesh	Department of Social Services (DSS), Ministry of Social Welfare, Government of Bangladesh	Old Age Allowance (OAA)	• Elderly in situation of poverty
Fiji	Ministry of Women, Children, and Poverty Alleviation, Family Services Division	Social Pension	• Elderly without any source of income
India	Ministry of Finance	Covid-19 Relief Package	• Women and widows • Elderly • People with disabilities • Farmers
Indonesia	Ministry of Social Affairs	'Family Hope' – Program Keluarga Sejahtera – PKH	• Poor pregnant women and lactating mothers • Poor mothers with children under the age of 21 • People with disabilities • Elderly in situation of poverty
Indonesia	Ministry of Social Affairs	BPNT – Non Cash-Food-Aid Program (Renamed Program Sembako)	• PKH recipients
Myanmar	Ministry of Social Welfare, Relief and Resettlement	Myanmar Civil Servant Pensions	• Elderly retired civil servants
Pakistan	Pakistan Bait-ul-Mal agency (PBM)	Pakistan Bait-ul-Mal (PBM)	• Poor households with children between the ages of 5 and 16 • Special focus to households with orphans, people with disabilities, elderly and religious minorities

Country	Actor	Programme	End user target group
Philippines	Social Amelioration Program (SAP) enacted under the Bayanihan to Heal as One Act in March 2020, Government of the Philippines (GoP)	Social Amelioration Program (SAP)	• 4P recipients • Non 4Ps poor families with members with disabilities, elderly, pregnant women, single parents, displaced informal workers, and loss of income due to the Covid-19 pandemic
Philippines	Government Service Insurance System	Government Service Insurance System (GSIS)	• Public sector workers (active and retired)
Philippines	Government Service Insurance System	Social Security System (SSS)	• Elderly who contributed to the system
Sri Lanka	Department of Divineguma Development	Samurdhi Social Safety Net (renamed to Divineguma Programme)	• The poorest 25% of the population • Elderly without any source of income
Tajikistan	Ministry of Labor and Social Protection of the Population (MLSPP)	Pensions	• Elderly who contributed to the system • People who contributed and developed a disability
Timor Leste	Ministry of Social Solidarity	Older Persons and People with Disabilities (Subsídio de Apoio a Idosos e Inválidos) (SAII)	• Elderly individuals • People with disabilities

CBTs that target and/or deliver the transfer to mothers or women[24]

Country	Actor	Programme	End user target group
Bangladesh	Department of Social Services (DSS), Ministry of Social Welfare	Widow Allowance (WA)	• Separated, divorced, or widowed women in poverty • Special quota for hard to reach and natural disaster-stricken areas.
Bangladesh	Government of Bangladesh & World Bank	ISPP-JAWTNO	• Low-income mothers and pregnant women
Bangladesh	Ministry of Women and Children's Affairs, WFP	VGD	• Women of landless households (less than 0.15 acres) or without productive assets. Preference given to female headed households (widowed, divorced, separated, deserted women, or women with disabled husbands)

24 This table excludes programmes targeting garment industry employees who saw their income sources affected as part of the pandemic as they do not have specific provisions to target women. However, given the industry has a high female representation these programmes should also be able to target women as end users. These programmes are Cambodia's Covid-19 cash transfer and Lao PDR's Covid-19 cash transfer.

Country	Actor	Programme	End user target group
Fiji	Department of Social Welfare (DSW)	Care and Protection	• Households with children of single mothers, deserted spouses, widows, and prisoners' dependents living in poverty and no source of income, children under the care of the state; children in foster care or cared by a guardian
India	Ministry of Finance	Covid-19 Relief Package	• Women and widows • Elderly • People with disabilities • Farmers
India	Ministry of Woman and Child Development	Pradhan Mantri Matritva Vandana Yojana (PMMVY)	• Pregnant and lactating mothers
Indonesia	Ministry of Social Affairs	'Family Hope' – Program Keluarga Sejahtera – PKH	• Poor pregnant women and lactating mothers • Poor mothers with children under the age of 21 • People with disabilities • Elderly in situation of poverty
Indonesia	Ministry of Social Affairs	BPNT – Non Cash-Food-Aid Program (Renamed Program Sembako)	• PKH recipients
Pakistan	Ministry of Finance, Revenue, and Economics Affairs and World Bank	Benazir Income Support Programme (BISP)	• Transfer to women in poor households with children between the ages of 5 and 12, conditional on school attendance
Pakistan	Poverty Alleviation and Social Safety Division	Ehsaas Kafaalat (EK)	• Women in situation of poverty • BISP recipients
Philippines	Social Amelioration Program (SAP) enacted under the Bayanihan To Heal as One Act in March 2020, Government of the Philippines (GoP)	Social Amelioration Program (SAP)	• 4P recipients • Non 4Ps poor families with members with disabilities, elderly, pregnant women, single parents, displaced informal workers, and loss of income due to the Covid-19 pandemic
Philippines	Department of Social Welfare and Development (DSWD)	4Ps – Pantawid Pamilyang Pilipino Program (4Ps)	• Poor households with pregnant women and/or with children under the age of 18
Timor Leste	Ministry of Social Solidarity	Bolsa da Mae (Grant for Mothers)	• Vulnerable households with children (female headed, widowed or with orphans

CBTs that target PWD

Country	Actor	Programme	End User Target Group
Afghanistan	Ministry of Labour, Social Affairs, Martyrs & Disabled (MoLSAMD), World Bank	Martyr and Disabled Pension Programme (MDPP)	• Persons with disabilities • Retired freedom fighters, civil servants, military employee, or formal workers
Bangladesh	Department of Social Services, under the Ministry of Social Welfare	Allowance for Financially Insolvent Persons with Disabilities	• People with disabilities
Bangladesh	Ministry of Women and Children's Affairs, WFP	VGD	• Women of landless households (less than 0.15 acres) or without productive assets; preference given to female-headed households (widowed, divorced, separated, deserted women, or women with disabled husbands)
India	Ministry of Finance	Covid-19 Relief Package	• Women and widows • Elderly • People with disabilities • Farmers
Indonesia	Ministry of Social Affairs	'Family Hope' – Program Keluarga Sejahtera – PKH	• Poor, pregnant women and lactating mothers • Poor mothers with children under the age of 21 • People with disabilities • Elderly in situation of poverty
Indonesia	Ministry of Social Affairs	BPNT – Non Cash-Food-Aid Program (Renamed to Program Sembako)	• PKH recipients
Pakistan	Pakistan Bait-ul-Mal agency (PBM)	Pakistan Bait-ul-Mal (PBM)	• Poor households with children between the ages of 5 and 16 • Special focus to households with orphans, people with disabilities, the elderly and religious minorities
Philippines	Social Amelioration Program (SAP) enacted under the Bayanihan to Heal as One Act in March 2020, Government of the Philippines (GoP)	Social Amelioration Program (SAP)	• 4P recipients • Non 4Ps poor families with members with disabilities, elderly, pregnant women, single parents, displaced informal workers, and loss of income due to the Covid-19 pandemic
Tajikistan	Ministry of Labor and Social Protection of the Population (MLSPP)	Pensions	• Elderly who contributed to the system • People who contributed and developed a disability
Timor Leste	Ministry of Social Solidarity	Older Persons and People with Disabilities (Subsídio de Apoio a Idosos e Inválidos) (SAII)	• Elderly individuals • People with disabilities

Covid-19 Programmes

Country	Actors	Programme
Bangladesh	Government of Bangladesh	Covid-19 Cash Transfer
Bhutan	National Resilience Fund (NRF)	Druk Gylpo's Relief Kidy
Cambodia	Ministry of Labour and Vocational Training (MoLVT) (Royal Government of Cambodia (RGC)	Covid-19 cash transfer to compensate lost wages for garment factory workers and tourism sector employees
India	Ministry of Finance	Covid-19 Relief Package
Indonesia	Government of Indonesia	Kartu Prakerja (Covid-19 transfer, 'pre-employment' cards)
Myanmar	Government of Myanmar	COVID-19 Economic Relief Plan
Pakistan	Poverty Alleviation and Social Safety Division	Ehsaas Emergency Cash Programme (EEC)
Philippines	Social Amelioration Program (SAP) enacted under the Bayanihan To Heal as One Act in March 2020, Government of the Philippines (GoP)	Social Amelioration Program (SAP)

Appendix 2 Long list of research questions for data collection and analysis

1. Who are the main actors – governments, UN agencies, large INGOs, large donors and NGOs [25] – working on DFI for underserved populations in the Asia-Pacific region and how are they carrying out this work?
   a. How do the actors above define and operationalise DFI and success in achieving DFI – both in their global and country work – as it relates to CBT programmes they are working on, both within and outside the social protection system? Relatedly, how do governments in the three selected countries (see section on methods) define and operationalise DFI in their work as it relates CBT and what services do they provide alongside to further its uptake?
   b. What are the predominant digital financial products that the main actors and the three country governments deliver using digital means[26] and what services do they provide alongside to further its uptake? What are the key characteristics of the target populations for these transfers?
   c. What user/recipient information systems do the actors utilise to deliver the digital financial products identified above? Do the actors above have an explicit strategy for data protection? And/or what is the policy of actors towards data protection? What are some of the enabling elements and barriers and risks they present for end users?

2. To what extent is DFI a core policy and programmatic objective for digitally delivered CBT among external partners of interest to WFP[27] in Asia-Pacific?

3. To what extent do digitally-delivered CBT and other financial products (as identified in the literature review), and efforts towards their uptake/use – including services such as literacy (financial, numerical etc), management and entrepreneurship trainings – effectively advance financial inclusion for the target groups, and what are the key barriers?

4. To what extent do the products and their digital delivery meet individual recipients' needs and priorities?
   a. Do recipients find digital delivery cheaper, easier (to access and use), and more trustworthy compared to non-digital disbursements? If not, why?
   b. What is the evidence of recipients using these products and/or branching to use other formal financial products (beyond the product delivered in the programme) after external support has ended?

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25 We will look at the private sector only where government and non-government actors (e.g., UN agencies and NGOs) work with private providers to deliver cash-based transfers to underserved populations.

26 Please refer to Glossary on how we set the parameters for digital means in this study.

27 We will narrow in on actors in conjunction with WFP to focus on under this question after the first review of literature.

5. What is the current evidence around the link between DFI and improving food security and nutrition?

6. What recommendations can be made to WFP Regional Bureau Bangkok (RBB) (and linked to that to WFP global) and the governments it supports to address inequalities in the access and use of digital financial products by unbanked or underbanked populations, including to help achieve better food security and nutrition?

Glossary

Cash and cash-based transfers (CBT)

Cash/ CBT is an umbrella term for government and non-government programmes where cash or vouchers (equivalent to a value in cash) for goods or services are provided directly to end users, which can be individuals or households or even communities (CaLP Network, 2017). The term is used interchangeably with cash-based assistance (CBA), cash transfer programming (CTP) and cash-based interventions (CBI).

Cash/CBT within the realm of social protection is limited to government or donor (international or national) supported initiatives that specifically target income-poor citizens or residents with the purpose of meeting subsistence consumption needs (in emergency or non-emergency contexts) and to protect against shocks to livelihoods. Outside of social protection, cash/CBT can be delivered by a variety of humanitarian and/ or development actors, including UN agencies, international non-governmental organisations (INGOs), and locally based organisations (e.g., UN agencies), with or without other non-government partners. Outside of social protection, cash/CBT delivery does not have a role for governments (in the absence of financial/technical/advisory support from governments) other than for them to give permission for the programme to operate within a sovereign country's boundaries.

Our focus in this piece of research is the role cash/ CBT as an instrument can play in furthering digital financial inclusion (DFI), both within and outside social protection systems strengthening efforts, and the degree to which cash delivery contributes to formal financial inclusion when administered through digital means (discussed next). In our secondary and primary data, we will look for evidence on whether end users of CBT (as social assistance) show any evidence in the long run of taking up or using any other financial products which – at this preliminary stage – we note to be the 'end' of the process of DFI as defined in the wider literature.

Financial inclusion

Financial inclusion can be defined in different ways, and with different emphases. Most often, however, definitions consider two aspects: access to financial products (that is, available, affordable and convenient access) and the use of the services provided (Koh et al., 2018).

In initial discussions with the WFP Global Cash Transfer Team staff (19 January 2021), it was highlighted that the World Food Programme (WFP) began to consider financial inclusion within the context of its programming under the auspices of its dual mandate, of 'saving lives' and 'changing lives'. It was seen as an opportunity to ensure that WFP's operations supported and enabled broader inclusion among the people it served. Reflecting this, DFI and women's empowerment will sit at the centre of WFP's new cash policy, to be published next year.

For the purposes of this project, we distinguish between **financial inclusion** and **digital financial inclusion**, echoing distinctions made in wider literature. The World Bank defines financial inclusion as the following:

> individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way (World Bank, 2022a).

Meanwhile, digital financial inclusion focuses on financial inclusion **achieved through digital means**. Financial inclusion does not necessarily have to take place through digital means, but an emphasis on DFI assumes the current and likely future importance of digital technology to access and use financial products and services. For this project, we work with WFP's working definition of digital financial inclusion (currently):

the access to and use of affordable ***digital financial products and services*** (e.g. payments, savings, loans, insurance), suited to the customers' needs and delivered responsibly (definitions based on Lauer and Lyman/ CGAP (2015) and BMGF, no date). Ultimately, the objective is to improve people's financial health (as defined by UNSGSA, 2021) and resilience, which is determined by many interacting factors.

The WFP's interest in financial inclusion sits within a growing emphasis and agenda in the development sector more widely, given renewed impetus around the 2008 global financial crisis. In the 1990s, research drew attention to a problem of financial exclusion; in other words, structural discrimination by financial institutions towards poorer and disadvantaged groups (Gabor and Brooks, 2017), resulting in a group of people who are 'unbanked'. This has given way to a wider agenda in development to promote financial inclusion and address the factors that contribute to financial discrimination of poorer and disadvantaged groups.

The World Bank Findex Database provides a reference point for tracking and comparing progress around financial inclusion. It takes as the first step to financial inclusion the presence of an account at a financial institution or mobile money provider. From here, financial inclusion entails being able to use this account for different financial activities, including payments, savings, credit and insurance (Demirgüç-Kunt et al., 2020).

In this study, we begin with formal financial inclusion – that is, enabling participation through formal financial services for those who have been formerly excluded from them. This does not preclude discussion on informal financial inclusion (through community saving circles, for example) if these trends emerge in our primary work. However, for our literature review, we consider formal financial inclusion to be access to and use of banking services such as lending, savings and payments services, as well as banking services from 'specialised non-bank financial institutions' (e.g., postal banks, savings and loans institutions) (Pande et al., 2010).

Therefore, we ascribe formal financial inclusion to include both the formal financial products used, and the activities enabled through those products. We are thus interested in overcoming exclusion from formal financial institutions, which means lack of access to financial services and products that are tailored to the needs of groups receiving cash/ CBT. Inclusion therefore involves enabling access to accessible and affordable financial services and products that are tailored to these groups' needs, both through existing financial institutions and new private actors/firms. Inclusion raises some additional questions about the terms of inclusion – around privacy, information access and choice – which we also explore in our secondary and primary data to assess the degree of inclusion made available to end users.

Digital financial inclusion – pathways and success

Underlying WFP's definition of DFI are assumptions about pathways towards DFI, and what success looks like in practice. First, DFI for individuals is linked to an inclusive financial ecosystem 'that extends the reach of affordable digital financial products and services to all' (WFP, 2021d: 3). Second, increasingly WFP aims to link DFI with improving women's economic empowerment (WEE) (WFP, 2021e).

At the global level, WFP conceptualises DFI through a model of the user's journey, as users overcome different hurdles towards achieving access to an inclusive digital economy. Progressing towards DFI requires regulatory, supply and demand side developments; for example, responsible and sustainable financial service providers on one side, and on the other side, individuals and businesses having products that they can afford and use. The user journey situates the providing of money into digital accounts within a wider set of developments, including a government-recognised digital ID, customer protection and awareness of individual rights, and individual capabilities (e.g., financial, technical). Within this wider journey, in providing cash transfers, WFP's starting point for thinking about DFI (WFP, 2021f) is based on: 1) changing how it gives money to people, and/or 2) supporting and improving how WFP and governments (including when they work through private sector partners) give money to people. The main means to enable the first step towards DFI, then, is to provide cash through bank or mobile money accounts owned by beneficiaries. If WFP 'taps into' mobile money, bank accounts and other innovative financial services, the theory is that it is 'opening the door to digital financial inclusion' (WFP, no date). Therefore, WFP's anticipated contribution to DFI takes as a basic premise that access to a bank account can be the starting point for other opportunities: loans, savings, spending potential; and for women, it can bring financial independence, which in turn improves their decision-making power in the household (Ibid). This means that it can help to facilitate digital financial inclusion through **direct access to products and services,** as well as by **enabling end users to access other providers.**

WFP programmes can be involved to different degrees in enabling access to financial products and services. At a basic level, it can provide cash to formal mobile money accounts or bank accounts. This can involve creating a mobile account and thereby enabling first-time access to an account by the unbanked. This study explores the extent to which WFP helps to create mobile accounts and/or provides cash to mobile accounts. Mobile accounts can then potentially be used for receiving and making different payments (e.g., receiving social assistance payments or payment from clients and remittances, making payments to shops, and insurance) (WFP, 2021d). Also, depending on technical design, WFP can use these digitally based accounts with financial service providers (e.g. mobile money accounts) as a platform to directly provide other financial products to end users – for example, providing loans or insurance. Finally, through and around scaling access to mobile money accounts (as an example), WFP can help to facilitate interoperability and linkages to other providers' financial products and services that are not directly involved in the initial two steps.

Therefore, the end point of DFI – or what we can consider as success in DFI – is participation in and interaction with a variety of digital financial products through a variety of providers, in line with their varied, individual aspirations. It is likely that for several main actors that we come across in our literature review, some have an explicit aim of achieving or contributing to DFI through their programmes, products and/or policies. Part of our analysis in the research portion of the assignment assesses whether the explicit aim is likely to be achieved or has been achieved through the modality of the programme in question. In the same vein, we also aim to assess – for actors where sufficient data is available – whether DFI is achieved, even when there is no explicit aim towards DFI because of the mechanism of transfer used.

Finally, an important part of our consultancy project is to clarify the existing role that WFP is playing within the user journey, in terms of providing cash through mobile money accounts, providing other products and services directly through these accounts, and building opportunities to link to other external financial providers. In line with WFP's emphasis above, we begin this study by noting that DFI is both an end as well as means to other ends, e.g., specifically women's economic empowerment. The form that interventions around financial inclusion take can potentially vary, for example, depending on women's access to mobile phones or their digital capabilities. They can take the form, therefore, but are not isolated to, cash transfers into mobile money accounts. The focus of this delivery mechanism draws our attention therefore towards cash/CBT delivered by government and large non-government actors, which can have long-lasting impacts – including for populations traditionally excluded from the formal financial system.

Digital means

In the sections above, we highlight that the DFI agenda – both universally and for WFP – has as its end goal being the inclusion of recipients in digital financial ecosystems. In this section, we note that for WFP, the aim is also achieved through digital means, i.e., by delivering cash-based transfers through digital means rather than through a physical delivery of cash by the provider.[28]

Often reliance on digital delivery channels requires implementing actors, such as government ministries, UN agencies, donors and large INGOs/NGOs, to work with (Iazzolino, 2018: 7):

> established financial institutions, such as banks, and new types of financial service providers, such as mobile network operators (MNO), to explore the possibility to funnel G2P payments directly on accounts accessible to the beneficiaries by using either debit or smart cards or, in contexts in which mobile money services were already popular, a SIM card.

The incentives to shift to digital deliveries of cash emerge from considerations of both programme implementers and recipients. On the supply side (where digital and payment infrastructure are available), the management and administration of physical cash disbursement is expensive, risky and time consuming. Additionally, physical transfer of cash does not allow providers to accurately track the transfer until it has reached the intended recipient. For the end users, physical disbursement can be both time-consuming (needing to travel to where cash is deposited) and costly (both in terms of cost of transport and in transaction costs, such as bribes in some cases) (Chêne, 2016).

We focus our study on the use of technologies that allow providers such as governments and large donors, INGOs and NGOs to transfer cash/CBT in their programming. We use the comprehensive list developed by ISPA (2016: 19) to identify the electronic channels we explore in this study. These are as follows:

- E-vouchers: Unique serialised vouchers recorded in a database, which can be redeemed electronically in exchange for cash or goods by enrolled merchants, often using a combination of smartcards and mobile phones to process the transactions and verify their validity of the vouchers.
- Payment cards: For example, prepaid cards; reloadable; magnetic stripe debit cards (to withdraw cash at an ATM and to pay for goods and services at retail outlets using a point of sale or POS device); smart cards (powered by a microprocessor or memory chip, possibly personalised with the holder's biometric information such as a fingerprint or photo).
- Mobile money: E-money stored in a digital wallet.

28 We recognise that digital delivery does not necessarily relieve the recipient from having to physically withdraw the cash for their use, and indeed this is a central feature of whether digital delivery encourages end users to engage more with the digital economy (where this exists for them).

- No physical payment instrument: In some cases, a transaction such as a fund withdrawal can be completed by entering biometric information on a POS device.
- Online bank accounts.

Digital financial services/products

When speaking of digital financial inclusion, the focus is on digital financial products for traditional transactions (i.e., payments, savings and borrowing/credit). At the basic level, these include the following:

- digital payments, e.g., made through different transfer modalities, e-vouchers, mobile money transfers, transfers to digital wallets, internet-based transfers, and transfers through POS or transfers at an ATM;
- digital savings, e.g., savings in online bank accounts, through digital products/certificates offered online; and
- digital credit, e.g., small, short-term loans that can be accessed instantly, automatically and remotely, offering borrowers access to funds even without a formal credit history.

Digital payment instruments

When considering digital payment instruments, we focus primarily on payment instruments included in WFP's Country Office Monitoring and Evaluation Tool at the time of publication. This includes ATM and debit cards, SIM cards and mobile money, digital wallets from banks, monetary financial institutions and remittance companies, cryptocurrency wallets, and the WFP SCOPE card. Transfer modalities can utilise one or a combination of these instruments, e.g., e-vouchers that can use several instruments such as prepaid debit cards, SIM cards and the WFP SCOPE card.

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