

# EXPLORING DIGITAL FINANCIAL INCLUSION STRATEGIES FOR URBAN AND RURAL COMMUNITIES IN BOTSWANA, NAMIBIA, SOUTH AFRICA AND ZIMBABWE

*Theme: Digital financial inclusion for urban and rural communities*

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## **Abstract**

This chapter explores digital financial inclusion strategies for rural and urban communities in Botswana, Namibia, South Africa, and Zimbabwe. Financial inclusion has taken centre stage in academic discourses due to its criticality in enhancing socio-economic development. Digital financial services refer to services that are made available through mobile phones and the internet. The World Bank indicates that in developing countries, more households own mobile phones as compared to those who access water and electricity which highlights high mobile penetration rates in developing countries. Digital financial services are key in enhancing financial inclusion, by including the previously marginalised people into the formal financial system. Statistics reveal that more than 60 percent of the global population now has access to digital financial services hence regulators and policymakers must focus on this burgeoning issue. Huge disparities are evident in the levels of digital financial inclusion between the rural and urban communities for the countries under study, largely because of the marginalisation of rural communities and their depressed spending patterns. Proposed digital financial strategies should, therefore, address this anomaly and include the rural communities into the manifold of digital services to ameliorate the vagaries of poverty rampant in rural communities.

**Keywords:** Financial inclusion, digital financial inclusion, digital financial services, rural communities, Southern African Development Community

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## Introduction

This chapter explicates how digital technologies are aiding the development of digital financial services. A plethora of studies has focused on financial inclusion in the past two decades due to the multiplicity of benefits it offers to the socio-economic development of a country. Countries across the globe are now focusing on the promotion and uptake of financial inclusion in their respective domains as a bulwark for addressing a myriad of challenges confronting them from an economic, political, and social dimension. Financial inclusion refers to a situation where businesses and individuals have access to useful financial products and services which are affordable in meeting their multi-faceted needs in terms of transactions, payments, savings, credit, and insurance that are offered in a responsible and sustainable manner.<sup>4</sup> Furthermore, The World Bank posited that from the 2018 global population of 3,8 billion people, 1,7 billion were financially excluded,<sup>5</sup> implying that they do not have bank accounts to access formal financial services, and have no access to mobile money providers. It is also noteworthy that most of the financially excluded people are from developing countries, mostly African countries. Financial inclusion has been witnessed to be a major catalyst for attaining the United Nations Sustainable Development Goals, that includes the eradication of poverty and enhancement of gender equality. Furthermore, financial inclusion has also been confirmed to play a significant role in ameliorating the levels of social inclusion in a diversity of societies across the globe. In view of all these benefits, policy makers have been seen committing substantial financial resources in their countries to increase the levels of financial inclusion.<sup>6</sup>

Related to financial inclusion is digital financial inclusion (DFI). Studies confirm that DFI is an extension of financial inclusion which employs technology and enables people to have access to financial services such as savings, lending, insurance and

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<sup>4</sup> World Bank, 'Financial inclusion is a key enabler to reducing poverty and boosting prosperity', (2018), <<https://www.worldbank.org/en/topic/financialinclusion/overview>> accessed on 8 July 2021.

<sup>5</sup> A. Demirgüç-Kunt, L. Klapper, D. Singer S, Ansar, and J. Hess 'The Global Findex Database' (2020) *World Bank* 4.

<sup>6</sup> P.K. Ozili, 'Financial inclusion research around the world: A review. In *Forum for social economics*' (January 2020) *Routledge* 2

advance economic growth and progress in underserved segments of the market,<sup>78</sup> especially those who live below the poverty line. DFI is further defined by other scholars as referring to those financial services that can be accessed through the usage of electronic devices in a cashless manner without exerting much effort, through which both the service providers and receivers can benefit.<sup>9</sup> In the current age of the Fourth Industrial Revolution(4IR) that we are in, DFI is the way to go in alignment with the new technological realities that are prevailing in the current volatile, uncertain, complex and ambiguous (VUCA) environment. DFI has created a myriad of positive changes to the unbanked and underbanked global population in accessing financial services through digital technologies, for instance mobile phones.

The use of mobile technologies and mobile phones globally has experienced phenomenal growth from 750 million users in 2000 to 6 billion users by 2011. A distinction should be made between mobile money and mobile banking. Mobile money is normally run by mobile network operators (MNOs) and includes transactions that are performed using mobile phones by accessing the funds for the customer stored by the MNO. As for mobile banking, it refers to the usage of mobile phones to access a bank account and services offered by the bank, and this is mostly run by the banks and other financial service providers. In addition, DFI has been progressing well which has resulted in some people especially the poor and rural communities being financially included in countries such as India, China, and Sub-Saharan Africa (SSA),<sup>10</sup> with billions of people now able to communicate using mobile phones and transact in some instances by employing the internet. Across the globe, people are now making use of mobile phones to purchase agricultural products, send money in and outside the country through mobile platforms, as well as executing other purchases, for instance, groceries. However, it should be noted that while DFI offers a multiplicity of benefits, there are some challenges which come with it such as constrained

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<sup>7</sup> Y, Shen, W., Hu, & C.J., Hueng, (2020). 'Digital Financial Inclusion and Economic Growth: A Cross-country Study' (2020) *Procedia Computer Science*, 187, 219.

<sup>8</sup>A.B., Chu, 'Mobile technology and financial inclusion. In *Handbook of Blockchain, Digital Finance, and Inclusion*, (2018) Academic Press, (1),131.

<sup>9</sup> L. Klapper, 'How digital payments can benefit entrepreneurs' (2017) *IZA World of Labour*. 1 <https://wol.iza.org/articles/how-digital-payments-can-benefit-entrepreneurs/long> > accessed 14 July 2021.

<sup>10</sup> A.B. Chu, 'Mobile technology and financial inclusion. In *Handbook of Blockchain, Digital Finance, and Inclusion*, (2018) Academic Press, (1),132.

infrastructural capacities which inhibit transacting due to intermittent networks and high levels of financial illiteracy in some countries.

The advent of the Covid-19 pandemic in December 2019 ushered in a new era in which digital platforms are mostly sought after in view of the threats posed by the virus most especially when people are in proximity. Governments across the globe instituted policies and measures that were meant to curtail and contain the spread of the virus which include lockdowns, imposition of curfews, and restrictions in business trading hours. The impact of the pandemic on the economy has been severe. This chapter, therefore, argues that DFI plays a critical role as a pillar of resilience to absorb the external shocks brought about by Covid-19, while ultimately reaching the generality of the population, most especially the underserved population who need access to these financial services as confirmed in literature.<sup>1112</sup> This view is also buttressed by the World Bank which postulates that the importance of DFI in providing secure, low-cost and contactless financial tools to individuals and businesses has become more pronounced in the Covid-19 era. In addition, the current pandemic has magnified the urgency in the provision of DFI targeted at the most vulnerable rural populations.<sup>13</sup> DFI strategies will be explored in the four countries under review which are Botswana, Namibia, South Africa, and Zimbabwe. The next sections of the chapter provide an overview of digitisation from a global perspective and delve into digitisation efforts in the countries under discussion. Policy recommendations will be proffered at the end of the chapter.

## **Global Overview of Digitisation**

The information and communication revolution that has evolved considerably over time has resulted in a marked increase in DFI. The rapid deployment of mobile technology has accelerated global mobile inclusion in both developed and developing countries,<sup>14</sup> and this has had far reaching consequences on DFI. As postulated by the

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<sup>11</sup> R. Ayadi, and M. Shaban. 'Digital Financial Inclusion: A Pillar of Resilience amidst Covid-19'. *Euro-Mediterranean Economists Association*, (2020) 1.

<sup>12</sup> Financial Inclusion Global Initiative (FIGI) (2019)

<<https://www.worldbank.org/en/topic/financialinclusion/brief/figi>>, accessed on 8 July 2021.

<sup>13</sup> World Bank, 'Financial Inclusion Global Initiative' (2019),

<<https://www.worldbank.org/en/topic/financialinclusion/brief/figi>> accessed on 8 July 2021.

<sup>14</sup> A.B. Chu. 'Mobile Technology and Financial Inclusion,' (2018) In: [Handbook of Blockchain, Digital Finance, and Inclusion, Volume 1](#) Cryptocurrency, FinTech, InsurTech, and Regulation 2018, 133. Academic Press.

World Bank President Jim Yong Kim in 2016, more than 40% of the global population had access to the internet, with previous statistics indicating the tripling of the number of people who had access to the internet in 2005 standing at 1 billion, skyrocketing to 3.2 billion in 2015. He also noted that among those who are classified as the poorest 20% of households, nearly seven out of every ten people own a mobile phone, while these poorest households are likely to have access to mobile phones than to toilets or clean water,<sup>1516</sup> which reflects high mobile penetration rates. By 2017, one billion financially excluded adults already owned a mobile phone,<sup>17</sup> offering opportunities for expanding financial and DFI.

Digital technologies that encompass the internet, mobile phones and all other tools that are used to store and analyse data have phenomenally grown in the last decade, with results showing a marked increase in the introduction of new products and services to the financial services system. The usage of the internet has resulted in an increase in conducting trade, coupled with the low cost of doing business globally, resulting in improved business efficiencies, as well as enhanced customer service.

Globally, DFI has been on an upward trajectory for a considerable period, although more than 300 million people globally are excluded from digital financial services. Africa and Asia and The Pacific have outpaced other continents in terms of the growth of DFI, for the period 2014-2017 as highlighted in Figure 1 below. For Africa, there has been greater reception to mobile phones and mobile technologies, resulting from the high mobile penetration rates. The major gainers for the 2014-2017 period were Ghana, Kenya, Benin, and Senegal while China, Bangladesh and Malaysia led in the Asia and Pacific group. Latin America, Dominican Republic and Chile dominated in Latin America and the Caribbean.<sup>18</sup>

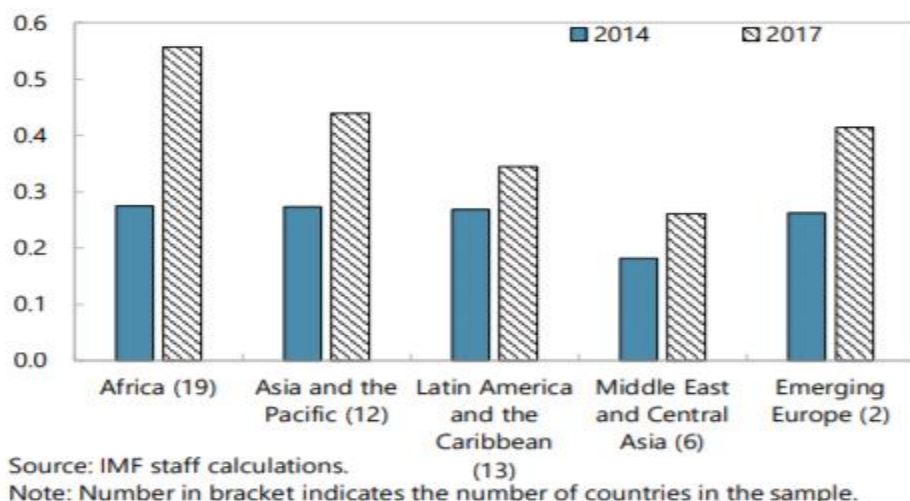
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<sup>15</sup> World Bank. 'World Development Report 2016: Digital Dividends' (2016). Washington, DC: *World Bank*. 1 xiii. <http://www.worldbank.org/en/publication/wdr2016> accessed 10 July 2021.

<sup>16</sup> World Bank. 'World Development Report 2016: Digital Dividends' (2016). Washington, DC: *World Bank*. 1 9. <http://www.worldbank.org/en/publication/wdr2016> accessed 10 July 2021.

<sup>17</sup> A. Demirgüç-Kunt, L. Klapper, D. Singer, S. Ansar, and J. Hess 'The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution' (2018) *World Bank* xii.

<sup>18</sup> P. Khera, S., Ng, S., Ogawa, S., & R. Sahay, R. (2021). *Measuring Digital Financial Inclusion in Emerging Market and Developing Economies: A New Index*. (2021) IMF Working Paper No. 21 International Monetary Fund, Washington, DC. 12.



**Figure 1: Digital Financial Index for various continents**

**Source:** Khera, Ng, Ogawa and Sahay (2021): Measuring Digital Financial Inclusion in Emerging Market and Developing Economies: A New Index.p12<sup>19</sup>

Despite the marked differences in terms of DFI discussed above obtaining in different continents, there are positive impacts on the globe envisaged by 2025, as highlighted in Figure 2 below. The figures indicate that DFI is expected to boost the global Gross Domestic Product (GDP) by 6% which translates to \$3.7 trillion; the creation of 95 million jobs, the attraction of \$4.2 trillion in new deposits, coupled with the DFI of 1.6 billion people.<sup>20</sup> Based on these statistics, one could argue that DFI is a catalyst of financial inclusion, social development, and a source of economic growth.



**Figure 2: The Impact and prospects of DFI globally**

<sup>19</sup> Ibid. p12

<sup>20</sup> J. Manyika, S., Lund, M., Singer, O., White, and C. Berry, C. 'Digital finance for all: Powering inclusive growth in emerging economies.' *McKinsey Global Institute*. (2016) 3.

**Source:** McKinsey Global Institute (2016), In J. Manyika, S., Lund, M., Singer, O., White, and C. Berry. (2016). Digital finance for all: Powering inclusive growth in emerging economies. McKinsey Global Institute. p3<sup>21</sup>

Based on the preceding information, and previous research studies, DFI presents the following benefits to a country:<sup>2223242526</sup>

- DFI assists banks lower costs by reducing queuing lines in banking halls, reduce manual paperwork and documentation and resultantly have fewer bank branches. This comes about because of people using their mobile phones in conducting business transactions, hence there will not be any need for visiting banks, thus limiting customers from social interactions in this Covid-19 era.
- With DFI, many depositors can easily switch banks within minutes; and this forces banks to provide superior services to their customers or risk losing depositors to competitors. Resultantly, customers will benefit from the enhanced customer service provided by banks, coupled with the fact that there will be choices for selecting efficient banks who deliver the best service resulting in customer delight.
- Regarding financial and monetary system regulators, DFI also helps to curb inflationary pressures on the economy by reducing the amount of physical cash in circulation especially in poor and developing countries. This will be made possible through the usage of mobile and internet transactions, and other related mobile technologies.
- DFI can improve the welfare of both businesses and individuals that possess reliable digital platforms to have access to funds in their bank accounts and transact without visiting the physical structures of the banks. Customers may derive the maximum payoff of using digital platforms when the costs of acquiring the digital transactional platforms are very low, coupled with instances

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<sup>21</sup> Ibid. p3

<sup>22</sup> P.K. Ozili, 'Impact of digital finance on financial inclusion and stability' (2018) *Borsa Istanbul Review*, 18(4), 330.

<sup>23</sup> M. Saal, S. Starnes, and T. Rehermann, T. 'Digital Financial Services'. (2017) *IFC*. 2 Available: <<https://openknowledge.worldbank.org/bitstream/handle/10986/30368/118736-BRI-EMCompass-Note-42-DFS-Challenges-and-Opportunities-PUBLIC.pdf?sequence=1>>, accessed on 16 July 2021.

<sup>24</sup> L. Klapper, 'How digital payments can benefit entrepreneurs.' (2017). *IZA World of Labor*. 2.

<sup>25</sup> A.B. Chu. 'Mobile Technology and Financial Inclusion,' (2018) In: [Handbook of Blockchain, Digital Finance, and Inclusion, Volume 1](#) Cryptocurrency, FinTech, InsurTech, and Regulation 2018, 142. Academic Press.

<sup>26</sup> A. Demirgüç-Kunt, L. Klapper, D. Singer, S. Ansar, and J. Hess 'The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution' (2018) *World Bank* xi 1.

where a digital transactional platform requires the use of personal computers, mobile phones, personal computers, and related digital devices.

- Related to the above, mobile technologies capacitate the unbanked by enabling them to have access to digital financial services. Therefore, mobile phones can be used in addressing and solving the local problems and needs of the unbanked and underbanked members of the population. Mobile technologies can assist the unbanked with basic access to a bank account, or somewhere to store their money and perform financial transactions.
- Digital financial transactions offer great security and convenience to a wide array of stakeholders such as individuals, business entities and governments across the globe. For individuals, there will not be any need for carrying huge sums of money which can be risky. For businesses and governments, digital transaction costs are less than handling cash which is costly in terms of handling and insurance.
- DFI has resulted in customers having confidence and trust with tech-based financial solutions, offered through the usage of mobile phones and personal computers. Resultantly, there has been an upsurge in the demand for customized products and services. In this regard, FinTech companies are offering these products and services at a low cost and implementing convenient ways to transfer money, borrow, and invest, thus enhancing financial activities in the formal financial services sector.
- Digital payment systems allow entrepreneurs to make payments for goods and services using electronic means and methods such as mobile phones, the internet, and retail point of sales, as compared to using cash or cheques which may not be readily available. As a result, this measure assists the government in curbing the spread of the Covid-19 virus through limiting movements and contact of people.
- Digital financial services can also help people manage financial risk, especially the vulnerable poor rural communities by making it easier for them to collect money from distant friends and relatives when they fall on hard times, mostly during economic hardships.

Whilst DFI offers innumerable benefits, it is critical to have a balanced view and have a cursory analysis of the downside of DFI. Several research scholars have put forth some of these challenges as evidenced below:<sup>272829</sup>

- Infrastructural challenges pose a great strain on digital payments. This issue may not be prevalent in developed economies but in most developing and poor African countries, there are indeed infrastructural challenges associated with the delivery of digital services. Electricity is a major challenge that constrains the powering of mobile phones and cell towers, limitations in mobile network coverage, coupled with poor transport networks that hinder the expansion of digital financial services, most especially in remote rural areas.
- Furthermore, to open a bank account, mobile money account or utilising digital financial systems require that one provides the banks or mobile phone operators with the relevant identification documents such as national identity cards or birth certificates. However, prior research carried out by the World Bank in 2014 revealed that more than 2 billion people globally did not possess any form of identity. **By 2019, women were disproportionately affected: 45 percent of women in low-income countries, mostly Africa lacked a formal ID compared with only 30 percent of men.**<sup>30</sup> Considering this, enhancing DFI becomes a mammoth task to national governments across the globe.
- The low levels of financial literacy, digital literacy and numeracy among the global populations also militate against the usage of digital financial systems which ultimately hinder the progression of DFI in an economy. Previous research established that 33% of adults in 140 countries had difficulty in interpreting simple financial statements which results in poor financial decision making. The Organisation for Economic Cooperation and Development (OECD) also found out that low levels of financial inclusion normally result from low levels of financial literacy.

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<sup>27</sup> L. Klapper, 'How digital payments can benefit entrepreneurs.' (2017). *IZA World of Labor*. 6.

<sup>28</sup> K. Chetty, J. Josie, B. Siswana, E. Mashotola, K. Kariuki, C. Johnson, D. Saunders, H. Smit, S. Ben, Z. Wang, and E. Brient, 'Review of Fintech Strategies for Financial Inclusion in Sub-Saharan Africa.' (2019). *International Financial Architecture For Stability And Development/Crypto-Assets And Fintech*. 2-3.

<sup>29</sup> H. Banna, M.K., Hassan, & M.R Alam. 'Digital financial inclusion, Islamic banking stability and sustainable economic growth.' (2020). *Islamic perspective for sustainable financial system*,133.

<sup>30</sup> Bill and Melinda Gates Foundation 'A G7 PARTNERSHIP FOR Women's Digital Financial Inclusion in Africa' (2019) *Bill and Melinda Gates Foundation* 9.

- The rapid increase of DFS by both bank and non-bank financial institutions may disrupt the regulatory and supervisory activities by regulatory authorities in different countries, confidential data may also be leaked in cyberattacks, money laundering and financing in terrorism may increase. Resultantly, this may compromise the financial system of a country and expose it to several vulnerabilities.
- In East and Southern African countries, the mobile-wallet transaction costs for low-value transfers are astronomically high for the low-income segment. Based on the unstable incomes prevalent in the informal sectors of these countries and the high costs of mobile devices and intermittent internet access, the costs of mobile transactions are unaffordable for the poor segment of society, resulting in limited usage of the products.
- Another challenge has been the regulatory environment especially in the Southern and East African regions. Normally regulations are instituted to protect and standardise the financial-services ecosystem in a country. On the other hand, restrictive regulations will negatively impede on innovations. The regulatory frameworks in these sub-regions remain hazy and opaque, resulting in innovators being unaware of how to develop new technologies that are in sync with the regulatory requirements and needs of a country.
- Products are not designed appropriately for the needs of the low-income segment. Instead, the products are normally designed for the middle- and top-income group hence the low-income consumers have not been able to save, access credit or have access to insurance in the formal financial system.

Having considered the benefits and challenges associated with DFI, the next section presents the status of DFI in Africa, with a particular focus on Botswana, Namibia, South Africa, and Zimbabwe.

### **The State of DFI in Africa**

African governments are employing different strategies to enhance the usage of digital technologies to build inclusive economies. Research shows that more than 400 million adults in Africa and 60 percent of them being women lack access to digital financial

services, especially the rural poor.<sup>31</sup> The G20 Global Partnership for financial inclusion encouraged governments in 2017 to promote a digital approach for financial inclusion, and this has resulted in a marked improvement in the levels of financial inclusion globally. Recent data by the Findex database show that 69% of adults globally own a bank account or another type of account at a financial institution or have reported personally using a mobile money service in the past 12 months. In Africa, mobile money accounts have been successful in reaching individuals who are otherwise excluded from the formal financial system on the continent. For instance, in Kenya, when the M-Pesa service was launched in 2007, 73% of adults reported using mobile money.<sup>32</sup> M-Pesa was the first mobile money service scheme introduced by Safaricom, an MNO in Kenya that has been a success story in Africa. The 2017 Global Findex highlights that SSA has demonstrated the power of financial technology in expanding access to and the use of accounts, with 21% of adults now having a mobile money account.<sup>33</sup> These mobile money accounts are important in transacting, which could be in the form of making deposits, withdrawing from a bank account, or making online payments using mobile phones. Within the Southern African Development Community (SADC), statistics indicate that 45.8 million people are financially excluded in the region.<sup>34</sup> Furthermore, in the SADC region, the sophistication of a country's Information Technology (ICT) sector positively impacts financial inclusion.<sup>35</sup> Countries with high levels of financial inclusion, such as Botswana, South Africa, Mauritius, Namibia, and Lesotho tend to have high rates of mobile penetration, which suggests a more developed ICT sector, and the size of the existing user base. Furthermore, as countries broaden their financial service offerings such as mobile money, the demand is met for these products and services through the offering of digital platforms which widen and deepen the levels of financial inclusion by creating a wider customer base.<sup>36</sup>

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<sup>31</sup> Bill and Melinda Gates Foundation 'A G7 PARTNERSHIP FOR Women's Digital Financial Inclusion in Africa' (2019) *Bill and Melinda Gates Foundation* 8.

<sup>32</sup> R. Ayadi, and M. Shaban. 'Digital Financial Inclusion: A Pillar of Resilience amidst Covid-19'. *Euro-Mediterranean Economists Association*, (2020) 4.

<sup>33</sup> P. Shipalana. 'Digitising Financial Services: A Tool for Financial Inclusion in South Africa?' (2019) *South African Institute of International Affairs* 15.

<sup>34</sup> Finmark Trust. 'Measuring Progress 2019. Financial Inclusion in SADC.' (2019) 3  
<[https://finmark.org.za/system/documents/files/000/000/183/original/ME\\_Report\\_2019.pdf?1601964365](https://finmark.org.za/system/documents/files/000/000/183/original/ME_Report_2019.pdf?1601964365)> accessed 18 July 2021.

<sup>35</sup> SADC 'Financial Inclusion Strategy, 2016-2021' (2016) *SADC* 29.

<sup>36</sup> SADC 'Financial Inclusion Strategy, 2016-2021' (2016) *SADC* 31.

The discussion below focuses on the state and level of DFI in the four selected countries under discussion in this chapter.

### **South Africa**

South Africa is an upper middle-income country and has one of the most complex and advanced financial system in Africa and leads in the SSA region. In fact, the country has the highest level of access to financial facilities in emerging economies. Paradoxically, customers experience concomitant challenges in accessing the financial facilities, resulting in the low rates of usage for these financial services and huge dependence on cash. Based on the high rates of access to a banking account or mobile-wallet facility, the rates of poverty in the country have remained high, and the expected benefits of financial services for the low-income strata have not materialized,<sup>37</sup> twenty-seven years after democracy. The financial services sector is well regulated and stable, that withstood the global 2008 turmoil. The sector has provided access to numerous financial products and services through the usage of a wide physical and digital network. There have been great strides made in financial inclusion, especially the previously marginalised and excluded people. These positive developments have been largely attributed to the advent of digital channels which have contributed to widening access to the sector and improving efficiency in the financial service sector.

Despite being one of the financially advanced economies, it remains one of the most unequal countries in the world due to the high levels of poverty, with almost half of the population living below the poverty datum line. Literature further supports the fact that improved digital services are not available everywhere, for instance, rural areas. The low-income segment of the population cannot afford these services, which results in them financially and digitally excluded.<sup>38</sup> **Statistics reveal that about 30 million South Africans, mainly the previously marginalised black population are still living in poverty and some of them face hurdles in accessing financial services and financial products**

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<sup>37</sup> K. Chetty, J. Josie, B. Siswana, E. Mashotola, K. Kariuki, C. Johnson, D. Saunders, H. Smit, S. Ben, Z. Wang, and E. Brient, 'Review of Fintech Strategies for Financial Inclusion in Sub-Saharan Africa.' (2019). *International Financial Architecture For Stability And Development/Crypto-Assets And Fintech*. 2.

<sup>38</sup> P. Shipalana. 'Digitising Financial Services: A Tool for Financial Inclusion in South Africa?' (2019) South African Institute of International Affairs 13.

due to lack of the required documentation to open a bank account, low incomes, lack of trust in the banks, exorbitant bank fees, coupled with financial illiteracy.<sup>39</sup>

A significant number of South Africans make use of digital payments monthly (approximately 37 percent), and despite an increase in the number of smartphone users, about 40 percent tend to use their smartphones in conducting various transactions on their smartphones.<sup>40</sup> South Africa has high mobile penetration rates, with about 150 subscriptions per 100 people, which indicates multiple ownership of mobile phones per individual. In South Africa, all the big banks offer mobile banking, as an additional access channel to existing bank accounts, and such mobile banking models, like WIZZIT and MTN Mobile Money are predominant in the financial services sector.

Based on the operations of these models, a customer's bank account is fully integrated with the mobile phone, thus allowing the customer to use the mobile phone as an additional access channel as well as a conduit for effecting payments.<sup>41</sup> Despite South Africa's digitisation efforts, high mobile penetration, and lower transaction costs for using digital distribution channels, most customers still prefer to transact on a face-to-face basis through branches. This fact may be attributed to a lack of digital literacy, and the fear of fraud involving Automated Teller Machines (ATMs) and mobile/ internet banking.<sup>42</sup>

## **Botswana**

Research conducted in 2015 showed that more than two-thirds of Botswana adults were formally served in the financial services sector, with a further 8% usage in informal services only, and 20% were totally excluded. The usage was mainly driven by savings products, followed by remittances, insurance and credit.<sup>43</sup> The Botswana

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<sup>39</sup> H Chitimira and M Ncube 'Legislative and Other Selected Challenges Affecting Financial Inclusion for the Poor and Low Income Earners in South Africa' (2020) 64 *Journal of Africa Law* 339; F. Allen, L Klapper, A Demirgüç-Kunt and MSM Peria "The foundations of financial inclusion: Understanding ownership and use of formal accounts" (2016) 27 *Journal of Financial Intermediation* 1 at 18-27.

<sup>40</sup> Abrahams, R. (2017). Financial inclusion in South Africa: a review of the literature. *Southern African Accounting Association*, 648.

<sup>41</sup> A. Bara, 'Mobile money for financial inclusion: Policy and regulatory perspective in Zimbabwe.' (2013) *Journal of Science, Technology, Innovation and Development*, 5(5), 351.

<sup>42</sup> Financial Sector Conduct Authority 'Financial Inclusion Strategy' (2019) 14 < [www.fsca.co.za](http://www.fsca.co.za)> accessed on 10 April 2021.

<sup>43</sup> Making Access Possible (MAP). "Botswana - Demand, Supply, Policy and Regulation. Diagnostic Report 2015," (2015) Draft Final Report. xv

Financial Inclusion Roadmap Strategy 2015-2021 laid the foundation for the enhancement of financial inclusion, which is implemented by the Ministry of Finance and Economic Development. The report indicated that some groups which are more financially excluded than others include women, rural poor, and other remote or hard-to reach populations, as well as informal micro and small businesses are also affected.<sup>44</sup> Informal employees have a great challenge in accessing the formal banking products and services hence they are digitally excluded. Previous research studies in Botswana regarding financial inclusion show that most people who are financially included are males who reside in urban areas. Results showed that financial inclusion is higher among adults who reside in cities/towns, with 86 percent being financially included compared to urban villages (78 percent) and rural areas (64 percent), while males (79 percent) were mostly financially included as compared to 73 percent of females.<sup>45</sup> These results confirm that the poor, rural communities are financially and digitally excluded to a greater extent as compared to the urban population. Commercial banks have been found to be fuelling the high levels of financial exclusion of the rural population due to the limited number of bank branches and ATMs operating in the rural areas. In addition, banking regulations have been outlined yet another reason that contributes to financial exclusion in Botswana. The Know Your Customer (KYC) drive by banks require establishing the source of your income which precludes people in informal employment to have access to bank accounts and credit facilities and consequently resort to loan sharks who fleece customers by charging exorbitant rates.<sup>46</sup>

The Botswana population census survey of 2017 showed that 33.4% of the adult population lived in the rural areas which are serviced by 50 Post offices, one commercial bank branch and 60 mobile money operators.<sup>47</sup> These glaring statistics confirm the extent and magnitude of an underserved market, the rural poor community which is highly excluded in terms of financial access and digital financial access.

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<sup>44</sup> Botswana Stock Exchange Limited News, "Advancing Financial Inclusion" 7 (July-September 2019) 10.

<sup>45</sup> K. Molefhi 'Financial Inclusion and its Impact on employment creation in Botswana' (2019) *Botswana Institute for Development Policy Analysis* 9.

<sup>46</sup> Botswana Stock Exchange Limited News, "Advancing Financial Inclusion" 7 (July-September 2019) 10.

<sup>47</sup> Finmark Trust. 'Measuring Progress 2019. Financial Inclusion in SADC.' (2019)1 35 <[https://finmark.org.za/system/documents/files/000/000/183/original/ME\\_Report\\_2019.pdf?1601964365](https://finmark.org.za/system/documents/files/000/000/183/original/ME_Report_2019.pdf?1601964365)> accessed 18 July 2021.

However, to a lesser extent, the use of digital technologies such as internet banking, mobile banking and mobile money appear to have reduced the need for physical structures such as banking halls since there was a slight reduction in the proportion of bank branches per 100 000 adults.

Since mobile money has been confirmed to play a significant role in enhancing the level of financial inclusion, it is worth mentioning that between 2017 and 2018, there has been a reduction in the number of mobile money agents, from 91 to 77. This confirms that in the context of Botswana, digital financial services are mainly driven by commercial banks as opposed to mobile money.<sup>48</sup> On a positive note, the financial services system is highly integrated due to the interoperability between mobile money access points and commercial banks. Therefore, to increase the level of access to digital financial services, possibly the mobile money agents could intensify their presence in the rural areas to serve the financially, and digitally excluded people.

### ***Namibia***

Namibia since gaining independence in 1990 has come up with policies that are meant to increase the levels of financial inclusion to the previously disadvantaged majority. This resulted in the country crafting its Financial Sector Strategy for 2011-2021 to address the inherent weaknesses in the Namibian financial system. This was meant to bring changes in the country's financial sector to positively contribute to the socio-economic development of Namibia through poverty reduction and increased access to financial services as contained in developmental plans, such as National Development Five (NDP5) and Vision 2030.

However, despite the Government of Namibia's efforts to increase the levels of financial inclusion, access to DFI has remained limited, especially for previously disadvantaged low-income group, and small and medium enterprises (SMEs). The high cost of services coupled with the limited outreach of commercial banks, especially in the rural areas of the country implies that the rural poor remain unserved.<sup>49</sup> This implies that some segments of the populace remain digitally excluded and would not

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<sup>48</sup> Ibid.p35.

<sup>49</sup>E. Haiyambo 'An impact assessment of the regulation of microfinance institutions in Namibia (Doctoral dissertation, Stellenbosch: Stellenbosch University) (2016) 75.

be able to participate in the formal economy by enjoying the benefits available in the financial services sector.

Regarding financial inclusion, Namibia is among a few SADC countries that exhibit women being more financially included as compared to men, which is not the norm on the Africa continent. Prior studies conducted in Namibia regarding DFI indicate that it is observed that on average, 75% of Namibians have a formal account with a financial institution, 62% have savings at a financial institution and only 16% could access formal credit from a financial institution around May 2017, when data collection for the study started in October 2017.<sup>50</sup> The above statistics imply that a greater proportion of the population relies on credit from the informal sector which in most instances charges punitive rates for cash lending.

Furthermore, literature confirms that in countries such as Botswana and Namibia, two thirds of adults have a bank account, there are already more mobile phone subscriptions than inhabitants and yet the volume of mobile money transactions is extremely low.<sup>51</sup> In this regard, mobile infrastructure is not the major constraint, therefore digital financial inclusion has a high unrealised potential in many countries, including these two countries.

### **Zimbabwe**

Zimbabwe crafted the National Financial Inclusion Strategy in March 2016 (2016-2020) that was geared at ensuring the existence of an inclusive financial sector, catering for the needs of everyone in the population in accessing and using financial services which would ultimately translate into positive socio-economic development. The major stakeholders in the implementation of strategy are government ministries and agencies, financial institutions, regulatory bodies, development partners, business associations and MNOs.<sup>52</sup> The promulgation of the National Financial Inclusion Strategy highlights the commitment of the Government of Zimbabwe in making sure

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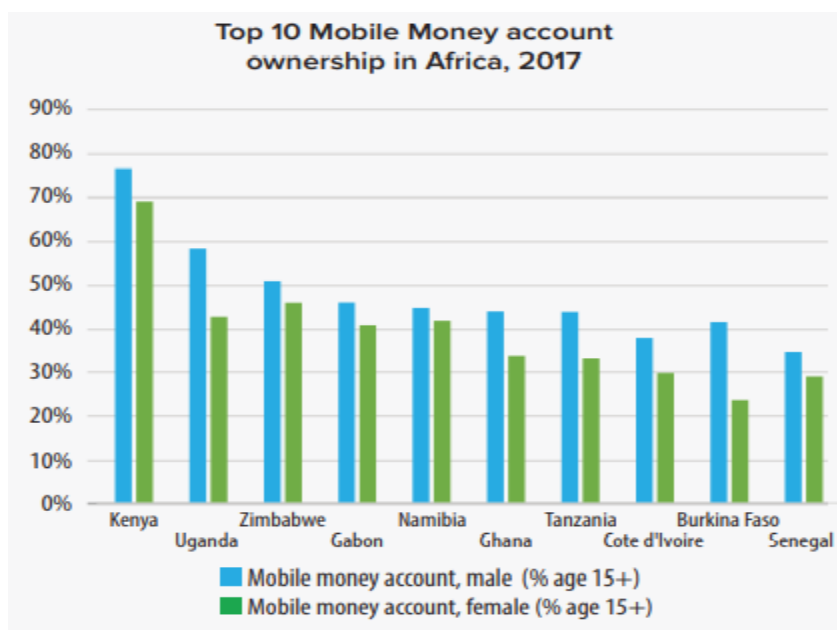
<sup>50</sup> A. Mukong, N. Shwayu and T. Kaulihwa 'A decomposition of the gender gap in financial inclusion: Evidence from Namibia' (2020) 15 *African Journal of Business and Economic Research* 155.

<sup>51</sup> J.P Stijns, S. Borysko, & B. Marchitto, Banking in sub-Saharan Africa: Interim report on digital financial inclusion (2017) Regional Studies and Roundtables. European Investment Bank. 7

<sup>52</sup> Reserve Bank of Zimbabwe 'National Financial Inclusion Strategy' 2016-2020 (2016) *Reserve Bank of Zimbabwe* 3.

that every individual within the population has total access and usage of formal financial services, thus reducing the levels of financial exclusion.

Mobile money services have been evidenced as major contributors to financial inclusion since they can be used for the payment of goods and services, wages, and government related payments. Zimbabwe is among the top ten countries in Africa utilising mobile money (number three), with Kenya topping the list, thus enhancing financial and DFI as portrayed in Figure 3 below. It is also apparent that in all the ten African countries highlighted, males constitute a larger percentage of those who owned a mobile account.



**Figure 3: Top 10 Mobile Money account ownership in Africa, 2017**

**Source:** I.N. Machasio. 'COVID-19 and Digital Financial Inclusion in Africa.' (2020) *World Bank* (p1).<sup>53</sup>

All banks in Zimbabwe are capitalising on the high mobile phone penetration rate of over 90% by partnering MNOs to offer a range of efficient, fast, safe digital financial services to different segments of the market, thereby widening the choices of consumers. In addition, prior studies reveal an exponential increase in the total number of mobile money agents from 40,950 in 2014 to 49,663 in 2018. Mobile money has been seen as an alternative to the traditional banking models and has been

<sup>53</sup> I.N. Machasio. 'COVID-19 and Digital Financial Inclusion in Africa.' (2020) *World Bank* 1(4) 1.

viewed as a catalyst in broadening and expanding DFI.<sup>54</sup> The above statistics corroborate the data presented in Figure 3 above which places Zimbabwe in number three out of the top ten African countries offering mobile money services.

Statistics provided by the Reserve Bank of Zimbabwe in 2016 for the last Finscope Survey carried out in 2014 highlight that the level of financial inclusion is skewed in favour of the urban population (89%) as opposed to the rural population (62%). Paradoxically, more than two thirds of the country's population (67%) are in rural areas. The view above is also supported by other researchers who echoed that usually the most financially excluded in Zimbabwe are the low income individuals and or households in marginal areas such as the rural areas, those engaged in agriculture, microenterprises as well as the informal sector.<sup>55</sup> Furthermore, most of Zimbabwe's adult population rely on informal savings as opposed to formal savings as only 20% of the adult population made use of formal savings channels in 2014, whilst 23% utilised informal channels.<sup>56</sup> These statistics reveal that people who make use of informal channels for savings are both financially and digitally excluded from the financial services system, hence are denied the benefits which accrue from these formal systems which include having access to short term loans and financing.

Commercial banks work very closely with MNOs hence this interoperability has resulted in an increase in the value of bank to wallet transfers especially during the period 2014-2018. Since all banks are linked to the mobile network operators, this ultimately gives bank customers flexibility and choice to access their funds and bank accounts using the mobile platforms anytime, which also enhances the levels of DFI.

### **Opportunities for DFI in Africa**

DFI has grown in the last decade and continues to grow in the foreseeable future. DFI poses many opportunities within the context of Africa, and particularly to the four

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<sup>54</sup> Finmark Trust. 'Measuring Progress 2019. Financial Inclusion in SADC.' (2019) 30 <[https://finmark.org.za/system/documents/files/000/000/183/original/ME\\_Report\\_2019.pdf?1601964365](https://finmark.org.za/system/documents/files/000/000/183/original/ME_Report_2019.pdf?1601964365)> accessed 18 July 2021.

<sup>55</sup> N. Masiyandima, K. Mlambo and S. Nyarota 'Financial inclusion and quality of livelihood in Zimbabwe' (2017) *14th African Finance Journal Conference-Africagrowth Institute* 8.

<sup>56</sup> Reserve Bank of Zimbabwe 'National Financial Inclusion Strategy' 2016-2020 (2016) *Reserve Bank of Zimbabwe* 10.

countries under study. The following are some of the envisaged benefits of DFI based on extant literature:<sup>575859</sup>

- a) Africa is the second largest continent with an expected population of 2.5 billion people by 2050, whose median age is 18 years. Given such a youthful population which is techno savvy, opportunities abound on this continent especially in terms of product offerings through DFI, which are more likely to be embraced by the youth.
- b) Low levels of formal financial services: Innovations such as mobile money can take hold more completely in emerging markets where there is a strong need and no incumbent service to displace. Building on the mobile money ecosystem, innovative mobile service providers are offering customised services to serve the underserved population and outcompete traditional brick and mortar structures.
- c) Low- income levels: Setting up and operating bank branches is expensive in both emerging and developed markets, and the use of digital channels in offering digital financial services helps reach more customers at lower cost across different market segments.
- d) Weak infrastructure: In instances where the financial infrastructure is lacking, the networks and infrastructure of the operational banks still have significant value. Banks must leverage their position of already having payments, identity and trust assets in place as new infrastructure comes online. Banks can collaborate with Fintechs (technology companies which assist in the delivery of digital financial services) based on their resource capabilities, customer bases, and brands to expand rapidly fill gaps in banks' channels, product sets, and processing capabilities.
- e) Global Findex data found that about 1.1 billion adults are unbanked globally. Two thirds of those without an account possess a mobile phone, which presents

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<sup>57</sup> M. Saal, S, Starnes, and T. Rehmann, T. 'Digital Financial Services'. (2017) *IFC*. 7 Available: <<https://openknowledge.worldbank.org/bitstream/handle/10986/30368/118736-BRI-EMCompass-Note-42-DFS-Challenges-and-Opportunities-PUBLIC.pdf?sequence=1>,> accessed on 16 July 2021.

<sup>58</sup> UN Population Division, 'World population prospects 2019', [https://esa.un.org/unpd/wpp/Publications/Files/WPP2017\\_KeyFindings.pdf](https://esa.un.org/unpd/wpp/Publications/Files/WPP2017_KeyFindings.pdf) , accessed 16 July 2020.

<sup>59</sup>I.N. Machasio. 'COVID-19 and Digital Financial Inclusion in Africa.' (2020) *World Bank* 1(4) 4.

a great opportunity for unbanked households to directly embrace mobile payments and the benefits associated with financial services.

The preceding information attests to the fact that DFI remains a force to reckon with, in any country given the innumerable benefits that it offers in aiding to the enhancement of financial inclusion efforts by various governments.

### **Policy Recommendations for DFI**

Given the socio-economic contributions of DFI, governments need to make concerted efforts in digitizing the financial services sector and a host of other sectors in service delivery which ultimately benefits most of the population. Based on the discussions in the previous sections, the following policy recommendations are proffered to increase the levels of DFI in the countries under study:

- i) Given the ravages of the current Covid-19 pandemic, more concerted efforts should be put on accelerating the levels of digital technologies hence eliminate the need for direct contact. Mobile money services such as MTN Mobile Money (MoMo) in South Africa, Ecocash in Zimbabwe, Orange Money in Botswana, and Mobipay in Namibia could enhance DFI swiftly as compared to the traditional banking operations. Botswana hugely presents a great opportunity especially in terms of increasing the number of mobile agencies particularly in the rural areas which are underserved, with very few MNOs and commercial branch networks.
- ii) Governments should enhance the formalization of services by promoting the use of mobile saving platforms such as digital wallets and other digitalization services that could also support inclusion.<sup>60</sup> Governments which offer pension payments through account transfers could incorporate digital pension payments to pensioners monthly. A case in point in Zimbabwe is the National Social Security Agency (NSSA), which is an organisation dealing with social security issues that pays pensioners through crediting savings accounts when payments fall due. Some people must travel to cities and towns to access their monthly pension, yet digital

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<sup>60</sup> Ibid. p4

technologies can be employed to speed up the process by directly transferring the money into a mobile account which is easily accessible.

- iii) Related to e-wallets, many SMEs in developing countries are using cash and cheques to pay salaries.<sup>61</sup> In this instance, there is a need to promote the use of digital wallets to support the unbanked members of the population who are financially excluded and rely on cash transactions.
- iv) One of the impediments to DFI is the lack of financial literacy among some segments of the population. In this regard, there is a need by Government agencies to intensify the level of digital awareness to enhance financial literacy. People should be encouraged to adopt the use of mobile and digital financial services. The merits of using such platforms should be communicated to the vulnerable groups, the less educated and poor, who are financially excluded using various media platforms and fora. Financial literacy programmes can also be introduced in schools, even starting at the primary level to acquaint the future generations with the financial tools which they should be prepared to use in future. Communities should also be involved in the process, hence the need to identify community-based trainers.
- v) Infrastructural challenges have been identified as exerting a great strain on the efficient and effective utilisation of digitisation as earlier stated. Considering this, governments should make firm commitments on infrastructural spending, especially the marginalised rural communities to enhance digital and internet connectivity, to make sure that the internet is readily available to everyone in the country. Related to this aspect, there is also a need to step up electrification programmes in the rural communities so that the MNOs can offer digital services without resorting to the use of generators which may become expensive to offer the services.
- vi) Working with regulators: A recent study in East and Southern Africa found out that respondents were of the view that there is a need to cultivate a healthy relationship between the regulators (who are mostly government

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<sup>61</sup> R. Ayadi, and M. Shaban. 'Digital Financial Inclusion: A Pillar of Resilience amidst Covid-19'. *Euro-Mediterranean Economists Association*, (2020)16.

agencies) and fintech companies which play a great role in DFI.<sup>62</sup> In that regard, the regulators would clarify to the fintech operators how they are supposed to comply with the policy requirements of digital financial services; and that regulators should be kept informed of the technological trends and their possible impact on the operations of the financial services sector. Furthermore, digital financial inclusion efforts of a country should not be conducted in isolation but should be anchored in a country's broader digital framework/strategy, from efforts aimed at expanding the electricity grid to policies to enhance broadband coverage.<sup>63</sup>

## Conclusion

This chapter explored the strategies employed in the provision of digital financial services in the rural and urban communities of Botswana, Namibia, South Africa and Zimbabwe. DFI has been proven to play a significant role in the socio-economic growth of a country and acts as a catalyst to financial inclusion. Evidence from the four selected countries in SADC indicates that the rural marginalised population still bears the brunt of digital financial exclusion as exemplified by the low rates of financial service operators and mobile agencies operating in rural areas as compared to their urban counterparts. This calls for deliberate policy prescriptions that are geared towards the amelioration of digital financial services in the rural areas since most of the population reside in rural areas except for Botswana which has a high number of urban dwellers in cities and towns, there is a need to boost infrastructural development in rural areas to increase network availability and increased use of the internet. Truly, mobile money plays a greater role in increasing the level of DFI, hence it should be promoted further in the selected four countries. MNOs can leverage on interoperability which exists between themselves and banking institutions.

Poverty levels in the four selected countries are astonishing and have reached alarming levels despite these countries possessing huge mineral deposits, and the

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<sup>62</sup> K. Chetty, J. Josie, B. Siswana, E. Mashotola, K. Kariuki, C. Johnson, D. Saunders, H. Smit, S. Ben, Z. Wang, and E. Brient, 'Review of Fintech Strategies for Financial Inclusion in Sub-Saharan Africa.' (2019). *International Financial Architecture For Stability And Development/Crypto-Assets And Fintech*. 10.

<sup>63</sup> Bill and Melinda Gates Foundation 'A G7 PARTNERSHIP FOR Women's Digital Financial Inclusion in Africa' (2019) *Bill and Melinda Gates Foundation* 14.

rural poor are the ones who suffer most. The Government of Botswana, Namibia, South Africa and Zimbabwe need to come up with friendly regulatory policies that are pro-poor which encourage businesses to invest heavily in remote, rural areas and offer them lucrative incentives meant to uplift the standards of living of the poor. These rural communities have suffered for a long time and have been marginalised especially regarding DFI, hence this is the right time to act so that everyone enjoys the benefits that are offered by the financial services sector. Residents of towns and cities are the major beneficiaries of these financial products and services. To attain this goal which is related to the United Nations Sustainable Development Goals, especially number one (eradication of poverty), concerted efforts should be made by the respective Governments in educating the rural communities on the benefits of financial literacy, financial inclusion, products, and services offered by financial institutions, and DFI. This is the era for DFI, given the ravages brought about by the Covid-19 pandemic. Products and services can be accessed remotely through the utilisation of digital financial technologies, regardless of one's location.

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