

Why and how Public Development Banks (PDB) can help rural financial inclusion.

April 2025 Rome



Concept Note

1.	Intro	oduction	2
	1.1	The working group on Rural financial inclusion	2
	1.2	Key Considerations for Financial Inclusion and Economic Development	2
	i.	Key definitions	2
	ii. an e	Financial inclusion improves development opportunities; financial inclusion is a means nd, not an end	
	iii.	Supply and capabilities to enable the use of financial products and services	4
	iv. supp	Rural financial inclusion extends beyond agricultural finance but must provide strong port for agrarian activities.	5
2.	Rura	al financial inclusion today	7
3.	Why	v is rural financial inclusion a relevant goal for PDB?	10
;	3.1 Wh	nat is needed to expand rural financial inclusion?	11
3.3 Why is it relevant for Agri-PDBs?			12
(3.4 The	e comparative advantage of PDB in supporting rural FI	14
4.	Wha	It PDB is doing to advance rural FI, and what else can be done	15
5. inc	-	players and resources to learn more and get assistance to work in rural financial	19
6.	Refe	erences	23





1. Introduction

1.1 The working group on Rural financial inclusion

The Working Group on Rural Financial Inclusion, organized under the framework of the Platform of Public Agricultural Development Banks (Agri-PDB), is a global network that brings together around 140 public development banks from 96 countries. It aims is to exchange knowledge, promote best practices, and strengthen the strategic role of public banks in rural and agricultural development.

Financial inclusion means access and use of quality financial services by all population segments. According to the World Bank Group, financial inclusion refers to individuals and businesses accessing valuable and affordable financial products that meet their needs-such as transactions. payments, savings, credit, and insurancedelivered responsibly and sustainably.¹ On its part, the International Network on Financial Education - INFE (2013) defines financial inclusion as promoting affordable, timely, and appropriate access to a wide range of regulated financial products and services while expanding their use across all segments of society through innovative and tailored approaches. includina awareness and financial education activities to foster financial well-being and promote economic and social inclusion.

To effectively advance rural financial inclusion (RFI), it is essential to embrace a **people-**

centric approach that prioritizes the diverse financial needs of rural populations. particularly marginalized groups such as women, youth, and indigenous communities over a narrow focus on institutional expansion. Inclusive Rural Finance (IRF), as defined by IFAD, recognizes that financial services must accessible. useful. and affordable. be embedded within strategies that promote sustainable livelihoods, resilience, and climate adaptation. This perspective reframes financial inclusion as a toolbox of adaptable financial and non-financial services including savings, insurance, remittances, and advisory support tailored to the realities of rural economies and their transitions (IFAD, 2021).

1.2 Key Considerations for Financial Inclusion and Economic Development

i. Key definitions

Financial inclusion means that individuals and businesses have access to and use affordable financial products and services that meet their needs, which are delivered in a responsible and sustainable way. Financial inclusion is a catalyst for achieving seven of 17 Sustainable the **Development** Goals (SDGs). It fosters economic growth and employment, economic promotes empowerment of women, and contributes to eliminating poverty. Affordable financial products and services-such as transactions, payments, savings, credit and insurancehelp people manage risks, build wealth and invest in businesses (World Bank, Financial Inclusion Overview, 2025).

¹ <u>World Bank Group website. Understanding Poverty /</u> <u>Topics / Financial Inclusion</u>



Rural Financial Inclusion refers to ensuring the access and use affordable financial services in the rural context. The rural context requires the provision of financial services to serve a wide range of economic activities and households. It includes financial services that support agricultural as well as non-agricultural activities, and microfinancial services as medium and large scale financial services. (ILO, 2019).

Inclusive finance indicates that individuals and businesses have access to a wide range of useful and affordable financial products and services that meet their needs and are delivered in a responsible and sustainable manner, without any exclusion based on: location (urban versus rural, country income level or status of fragility); gender; age; income other level: and socio-economic characteristics. Inclusive finance covers the needs of a range of individuals and businesses, ranging from credit to payment, savings, risk management and insurance (IFAD, 2021).

Inclusive rural finance is a subset of inclusive finance that targets rural populations, organizations and businesses involved in agriculture (including farming, fishing and pastoralism), and non-agricultural activities. IRF beneficiaries typically work in food systems as entrepreneurs, business owners, employers or wage labourers, or are self-employed (IFAD, 2021).

To achieve financial inclusion, the first step is to connect people and businesses to the financial sector. Making or receiving digital payments or having a basic savings account usually constitutes the initial connection between citizens, households or businesses with the financial sector. And the entry opportunity for learning about other financial services. ii. Financial inclusion improves development opportunities; financial inclusion is a means to an end, not an end.

Financial inclusion positively impacts economic growth, poverty reduction, and inequality alleviation. Azimi (2022)concludes that financial inclusion is a key driver of economic growth, fostering rapid development based on data from the Financial Access Survey and World Development Indicators (IMF-World Bank) for 2002-2020. Similarly, Tabash et al. (2024) analyze evidence from Fragile and Post-Conflict African (FPCA) economies, demonstrating that financial inclusion stimulates productive activities and drives economic growth, while socio-political factors such as education, governance, and life expectancy further strengthen this relationship.

Additionally, Abdullah and Kazuo (2020) examine 116 developing countries (2004– 2016) using a composite financial inclusion index and find robust evidence that higher financial inclusion correlates with significantly lower poverty rates and a more equitable income distribution.²

Financial inclusion generates positive effects both at a microeconomic and a macroeconomic level. On the microeconomic level, access to microcredit has facilitated business creation and growth, while savings mechanisms have helped households manage cash-flow fluctuations and invest in assets. Insurance has proven to be a vital tool for risk management, especially in agriculture. On the macroeconomic level, the paper finds a positive correlation between financial inclusion, economic growth, and

² However, not all evidence is uniformly positive. A comprehensive *"review of reviews"* (synthesizing findings from many micro-studies) concluded that the effects of financial services on poverty metrics like

income or consumption tend to be small and vary across different groups and contexts (Duvendack and Mader, 2019).



employment, with broader access to financial services also contributing to enhanced financial stability (Cull et al., 2014 & Dabla-Norris et al., 2015).

Increased access to financial services leads to higher human development. Evidence in Africa shows that improved access to financial services contributed to lower poverty levels and more equitable income distribution. Financial inclusion supports financial stability by increasing bank credit for the private sector. These findings suggest that expanding financial inclusion, primarily through better access to banking services and credit, can foster economic development and reduce disparities (Khan et al., 2021).

Financial inclusion positively impacts ending hunger, achieving gender equality, and fostering economic growth. Yap et al. (2023) examined the correlation between financial inclusion and seven key Sustainable Development Goals (SDGs) across 76 countries from 2017 to 2020. Their findings indicate financial inclusion positively ending hunger, correlates with gender equality, and economic growth. At the same time, its effects on other SDGs may depend on factors such as financial literacy and infrastructure.

Financial inclusion improves overall financial health. Better access to banking services and credit makes people more likely to develop sound financial practices. For example, having access to a range of financial products enables individuals to build emergency funds to cover unexpected expenses, reduce reliance on high-interest debt by accessing more affordable credit, and invest in long-term goals such as education, homeownership, or retirement savings. These actions enhance personal economic resilience and lead to greater overall financial stability. Financial inclusion is one of the four key drivers of financial health (UNSGSA, 2021).

Transferring savings from cash to a bank account generates various economic benefits. The digitization of cash savings benefits both senders and =receivers of payments by improving efficiency and convenience through cost reduction and faster transactions, ultimately leading to higher income. On the other hand, formal savings, made through banks or other financial institutions, offer several advantages over keeping cash at home. Firstly, it is much safer, as cash at home is vulnerable to theft. It also encourages better money management by reducing impulsive purchases and limiting requests from family and friends while providing greater privacy (BFA, 2018).

Savings accounts can offer even more significant benefits for women. They give them more control over their finances and prevent others from accessing their savings. This empowers women to save more effectively and make decisions within the household. Additionally, borrowing from a financial institution removes the reliance on funds from friends and family, often providing more favorable terms (BFA, 2018).

Access to credit and savings enables individuals to manage risks, thereby enhancing food security. Empirical evidence from developing countries shows that improved access to financial services -notably credit and savings- reduces poverty and bolsters risk management and food security (Arshad, 2022). Furthermore, Yasmin et al. (2023) underscore the importance of financial inclusion as a key factor in building resilience against future crises, particularly given that the COVID-19 pandemic has exacerbated food insecurity by disrupting food supply chains.

Financial inclusion smooths consumption and allows us to face external shocks better. Financial services can mitigate the impact of adverse shocks by reducing the volatility of cash flows, facilitating the maintenance of minimum consumption levels, and reducing potential needs for



disinvestment in education or health (Demirguc-Kunt et al., 2017).

Financial inclusion fosters stable banking systems by reducing reliance on volatile funding and supporting economic growth. For example, Alvi et al. (2020) found in South Asia that broader access to banking services—such as a wider array of financial products—lowers dependence on unstable wholesale funding while increasing more reliable retail deposits. Their study also showed that improved financial inclusion enhances small business access to finance, further stabilizing the banking sector. Similarly,

Van et al. (2020) demonstrated that Asian countries with higher financial inclusion are better equipped to weather financial shocks due to increased savings, an expanded customer base, and reduced reliance on expensive external capital. Consequently, policymakers should promote financial inclusion to build resilient banking systems while carefully managing the risks associated with increased borrowing among low-income and underserved populations.

Ozturk & Tarazi (2020) found further evidence of financial inclusion's stabilizing effect on the banking system in Europe. The authors found that improving access to financial particularly services. for disadvantaged groups such as the young, undereducated, unemployed, and rural populations, significantly reduces the risk of bank defaults. By broadening the customer base, financial inclusion diversifies the risk pools for banks, thus improving economic stability.

Financial inclusion generates positive effects both at a microeconomic and a macroeconomic level. On the microeconomic level, access to microcredit has facilitated business creation and growth, while savings mechanisms have helped households manage cash-flow fluctuations and invest in assets. Insurance has proven to be a vital tool for risk management, especially in agriculture. On the macroeconomic level, the paper finds a positive correlation between financial inclusion, economic growth, and employment, with broader access to financial services also contributing to enhanced financial stability (Cull et al., 2014 & Dabla-Norris et al., 2015).

Supply and capabilities to enable the use of financial products and services

Financial products must be designed to meet the specific needs of target groups to be effective. According to Demirguc-Kunt et al. (2017), achieving greater financial inclusion is hindered by high transaction costs, inadequate financial infrastructure, and the need for tailored products.

Financial inclusion must provide a tailored suite of products and services that individuals can use effectively. Rural populations, for example, need more than just credit—they require savings, insurance, payment systems, and remittance tools to address their diverse financial needs. In this sense, financial inclusion can be viewed as a toolbox that enables each person to select and equip themselves with the specific financial tools they require. Not every tool suits everyone; everyone should fill their toolbox only with the resources they truly need, understand, and can use effectively.

Financial literacy and awareness are critical drivers of financial inclusion, particularly in rural areas. A case study in India found that financial literacy, along with financial advisors' guidance, significantly impacts rural households' inclusion in formal financial systems. Advisors help build trust with financial institutions and influence economic behaviors. It also emphasizes the role of community-based financial literacy campaigns led by advisors in fostering



inclusive financial behaviors (Dash et al., 2024).

In that sense, leveraging community-based financial education and adapting financial products to meet the specific needs of rural populations are key strategies for improving financial inclusion. In an challenges exploration of the and opportunities to enhance financial inclusion in rural areas, the Alliance for Financial Inclusion (2022) highlighted the importance of adapting financial products and services to meet these needs, emphasizing accessibility, affordability, and the reduction of barriers such as lack of financial literacy and trust in formal financial systems.

Effective policies should be based on understanding women's needs and providing tailored solutions. Rural women often deal with informal, irregular income streams and face cultural, social, and legal barriers, such as limited access to land or collateral, which affect their ability to secure credit. Women in rural areas are also constrained by household dynamics that can limit their financial autonomy. Despite these challenges, rural women utilize formal and informal financial services, including current accounts and government-to-person payments (Women's World Banking, 2023). This calls for gender-sensitive approaches to addressing the specific financial challenges faced by women and other marginalized groups (CGAP et al., 2024).

iv. Rural financial inclusion extends beyond agricultural finance but must provide strong support for agrarian activities.

The **rural sector is increasingly diversified**. While agriculture remains a significant source of employment and production, recent studies estimate that approximately 857 million people are primarily employed (not necessarily fulltime or exclusively) in agriculture, with an additional 375 million working in nonagricultural jobs within agrifood systems (Davis et al., 2023). The rural non-farm economy is widely recognized as a key pathway out of rural poverty (World Bank, consistently show 2008). Studies that households engaged in non-farm employment tend to have higher incomes than those relying solely on agriculture. At the turn of the 21st century. non-farm rural employment accounted for approximately 30% of full-time jobs in Asia and Latin America, 20% in West and North Africa, and 10% in Asia (Haggblade et al., 2010). When including employment in small towns, non-farm jobs add another 10% to 15%. Based on data from 13 countries, rural employment in manufacturing grows by about 1% annually, while employment in commerce and services expands at roughly three times that rate (Haggblade et al., 2007).

Farmers lack financing for long-term Smallholder farmers investments. face limited access to institutional credit due to high agricultural risks-such as climate change and production uncertainties—a lack of collateral, and inadequate infrastructure. Examining both public and private sources of agricultural credit, Khandker (2018) highlighted the role of microfinance institutions (MFIs) and agricultural development banks. However, he stated that while MFIs have effectively provided short-term loans to farmers, they have been less successful in supporting longterm agricultural investments.

Financial inclusion should help mitigate the inherent risk associated with financing agricultural activities. Operations in the farming sector face both correlated and idiosyncratic risks (those familiar to all participants and those specific to each operation). It is essential to implement strategies that mitigate these shared risks. Regardless of the collateral an agricultural debtor may provide, the interest rate offered will remain high due to the inherent risks of the sector. Furthermore, when climate risk



materializes, any financial institution exposed to the sector can be severely affected by widespread defaults across an extensive portfolio of loans. This challenge becomes even more critical in an elevated climate risk environment. For that reason, insurance products are frequently complemented with other public sector instruments (emergency funds, disaster funds, direct aid, among others) to be able to overcome covariate risks.

Finance must go beyond traditional agricultural loans and include innovative financial products like insurance and microfinance to mitigate risks. Agricultural and rural finance must evolve to address food security challenges and support small-scale farmers in developing countries. New. scalable financial models that extend beyond traditional agricultural loans and include innovative products such as insurance and microfinance are needed. Although insurances tend to be costly an require specific budgetary efforts. financial institutions, both local and international, must adopt new strategies to reach rural markets and stimulate investment in agriculture (Köhn, 2014). Credit on its own has proven insufficient to serve the investment needs of the agricultural and rural sectors; it needs to be embedded in a more extensive set of rural financial services.

Insurance, thus, has a critical role in mitigating risks in agricultural lending. Agricultural insurance mitigates the risks inherent in agricultural production (such as market fluctuations, climatic events, and biological factors). Research shows that it can significantly reduce risk levels for lenders and farmers, facilitating access to credit for agricultural projects. Moreover, integrating crop insurance with agricultural lending enhances farmers' financial stability and improves their loan repayment ability. In this context, Kajwang (2022) underscores the importance of effective collaboration among insurers. financial institutions. and

policymakers to expand insurance coverage, particularly for smallholder farmers.

inclusive with Integrating finance agricultural insurance is an effective strategy for poverty reduction in rural significantly areas. as economic conditions improve. An investigation in rural central and western China found that both inclusive finance and agricultural insurance positively reduce rural poverty, with agricultural insurance showing a double threshold effect based on rural economic development levels. At lower levels of economic development, agricultural insurance is less adequate, but as disposable income rises, its poverty reduction effect becomes more pronounced. The study also highlights the significant roles of urbanization, rural social assistance, and rural medical care in alleviating poverty (Li et al., 2023).

Index-based insurance, which ties payouts to external indices such as rainfall or temperature, offers a promising alternative for smallholder farmers. Traditional crop insurance poses significant challenges due to high administrative costs. information asymmetries, and limited data. In contrast, index-based insurance is a low-cost solution that minimizes moral hazard and adverse selection and can be implemented more efficiently in developing countries where infrastructure and data are often scarce (Robles, 2021).

Digital financial services (DFS) positively influence agricultural development, but tailored services are needed. For example, mobile money platforms like Kenya's M-PESA have significantly benefited rural households by facilitating remittances and improving access to agricultural inputs. However, DFS adoption has proven more advantageous for commercial farmers operating within integrated value chains than subsistence farmers. To enhance the effectiveness of DFS in agricultural development, it is essential to focus on customer segmentation, refine



service design, and develop savings and insurance products tailored to farmers' specific needs (Miller, 2019).

Agricultural insurance, while increasingly accessible, still fails to empower women due to persistent gender gaps. Timu & Kramer (2023)examine the gender dimensions of agricultural insurance, highlighting significant gaps in uptake and benefits for women resulting from low financial literacy, risk aversion, and cultural constraints. products While these are increasingly accessible, they often fail to empower women or transform restrictive gender norms. Consequently, the authors call for betterdesigned insurance programs that address demand- and supply-side barriers, promote gender equality, and incorporate tailored educational outreach. They also emphasize the benefits of bundling insurance with other agricultural support services and leveraging mobile money to enhance accessibility. Case studies from Kenva demonstrate how such targeted approaches can increase women's control over insurance contracts and payouts while reducing domestic workloads.

2. Rural financial inclusion today

Figure 1: Approximately three of every five people worldwide have at least one financial account. South Asia has the highest levels of this indicator, while the Middle East and North Africa register the lowest. Latin America, the Caribbean, and sub-Saharan Africa have the most significant disparities between urban and rural populations regarding financial account ownership.

Figure 2 Globally, fewer than one in five people use their phone or internet to send money. However, this proportion increases to almost two-fifths in rural sub-Saharan Africa. In contrast, the Middle East and North Africa

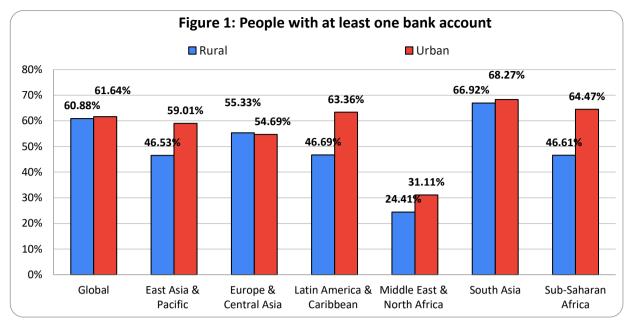
regions register the lowest levels, just over one twentieth.

Figure 3: Nearly two in five people in urban areas worldwide made or received a digital payment. Europe and Central Asia stand out for having comparable levels in urban and rural areas. In contrast, regions such as Latin America and the Caribbean, East Asia and the Pacific, and Sub-Saharan Africa exhibit notable disparities in digital payment usage between urban and rural populations.

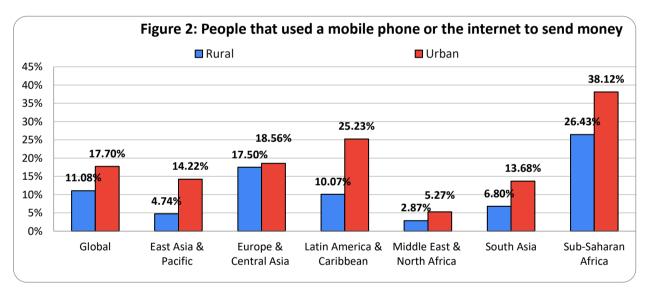
Figure 4: Over one in ten people worldwide obtain a loan from a formal institution or a mobile money account. Latin America & the Caribbean have the highest urban loan access rate, reaching two in ten people.

Figure 5: Nearly one in five rural residents worldwide received a payment for the sale of agricultural products. However, this figure increases to more than three in ten in East Asia & the Pacific and Sub-Saharan Africa.

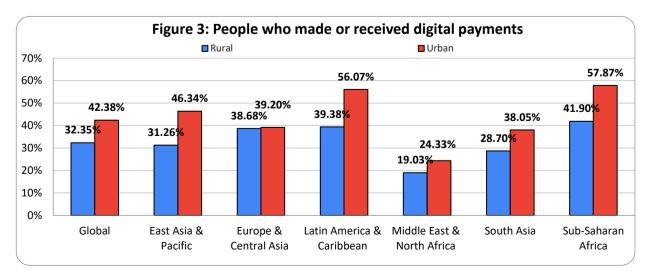




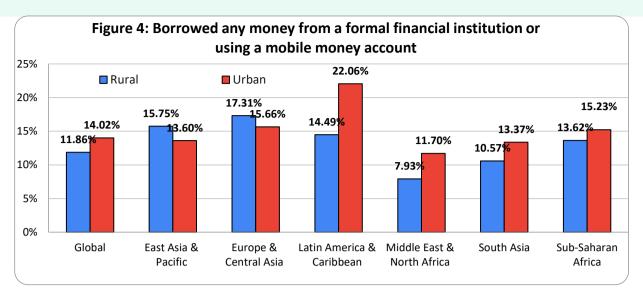
Source: Own elaboration. Global Findex 2021



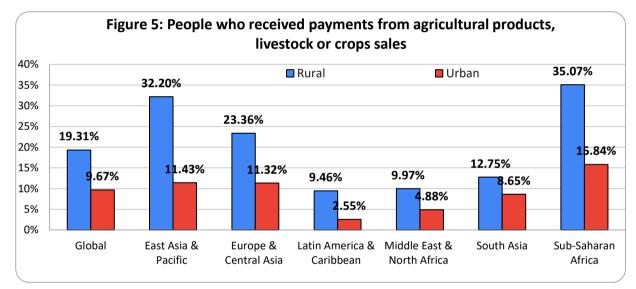








Source: Own elaboration. Global Findex 2021



Source: Own elaboration. Global Findex 2021



3. Why is rural financial inclusion a relevant goal for PDB?

PDBs are uniquely positioned to drive transformative rural financial inclusion by acting as catalytic market-builders, bridging formal financial systems and underserved rural communities. comparative Their advantage lies in their deep territorial presence, sectoral expertise, and public mandate, which aligns naturally with IFAD's inclusive rural finance principles. PADBs can foster innovation by supporting communitybased financial organizations (CBFOs), piloting climate-resilient financial products such as indexed insurance, and leveraging blended finance to crowd in private capital. Moreover, they are well-suited to coordinate with both public regulators and emerging private actors such as fintechs and agri-SMEs to build enabling environments that scale impact sustainably. By adopting a more targeted, impact-driven approach, PADBs can serve as critical engines of inclusive, resilient, and equitable rural transformation (IFAD, 2021).

Rural financial inclusion improves the economic ecosystem and expands livelihoods in the rural areas: Financial products are key to allowing rural dwellers to adapt and manage climate change income-generating effects on their activities and lives. Rural environments and all the productive activities developed in rural areas could greatly benefit from more financial inclusion. While credit and agricultural credit for working capital specifically have been the traditional financial product of interest when talking about rural finance, financial inclusion amplifies the range of relevant rural financial products and services. Different types of savings, insurance, and other risk management instruments, payments, remittance products, and other services

complement the toolbox needed to support rural citizens in their pathway to development.

Nevertheless, financial inclusion in rural areas tends to be lower than in urban requires specific settinas and interventions to overcome the limitations that explain such differences. Financial inclusion in rural areas often lags behind that in urban settings due to geographic isolation, limited infrastructure, and lower levels of digital connectivity. Rural communities may have fewer traditional banking outlets and less access to financial education, hindering their ability to participate in the formal financial bridge this system. То gap. targeted interventions are needed—such as deploying mobile banking solutions, establishing local financial agents, and designing financial products tailored to rural needs. These help measures can overcome existina and promote more inclusive limitations economic growth in rural areas.

PDBs are key credit providers for agriculture. As agriculture is still a key economic activity in rural areas (producing key food and export products, creating significant job opportunities and anchoring several service providers to the agricultural value chain) that is underdeveloped in most of the Global South, it remains underfinanced. Without enough agricultural credit, agricultural development will not be achieved.

Public Agricultural Development Banks (PDBs) are pivotal for unlocking rural economic potential. As key financial institutions in rural and agricultural ecosystems, PDBs can drive transformational change by fostering financial inclusion. Their unique role lies in bridging the gap between underserved rural populations and financial services, thus creating a more equitable and resilient rural economy. PDBs, with physical infrastructure, tend to be present in rural areas to directly serve local actors (individuals, social organizations, and micro, small, and medium-sized firms) and influence regional



and national policies and investments affecting rural conditions.

3.1 What is needed to expand rural financial inclusion?

Expanding rural financial inclusion requires infrastructure, agent networks. credit support, financial literacy, and strategic partnerships. The literature identifies several key drivers for expanding rural financial inclusion. Strengthening physical and digital infrastructure is essential to improve access, while increasing the reach of banking and non-banking agents enhances financial service delivery in remote areas (digital payments, savings, credit, insurance). Credit guarantees, lines, and alternative collateral facilities help mitigate lending risks and make financing more accessible to rural populations. Financial and digital literacy training and capacity building for organizations and financial intermediaries also empower users to engage with financial services effectivelv. Finally. fosterina networks. coordination, and strategic alliances-such as partnerships between financial institutions and fintech companies-can drive innovation and improve service efficiency in rural areas (Alliance for Financial Inclusion, 2022).

Infrastructure is needed to overcome barriers like connectivity issues, lack of financial literacy, and high costs of digital tools. Although Miller (2019) found a positive impact of DFS on agricultural development, he concludes that strategic investments and partnerships are necessary to build the market infrastructure and overcome the abovementioned barriers. On their part, Demirguc-Kunt et al. (2017) state that achieving greater financial inclusion is hindered by factors such as high transaction costs, inadequate financial infrastructure, and the need for tailored products. In that sense, policy options to overcome these barriers include promoting digital IDs, digital payments,

and shared mobile infrastructure to increase access in remote areas (CGAP et al., 2024).

Expanding agent networks improves financial access in rural areas. Expanding rural financial inclusion requires a broader network of banking and non-banking agents to increase financial service reach in remote areas. Agent banking and mobile money providers help bridge the gap where traditional banks are absent, offering essential services like deposits, withdrawals, and credit access. Strengthening these networks enhances capillarity, making financial services more accessible, convenient, and cost-effective for rural populations.

Although banking agents are crucial in expanding financial inclusion, they require better infrastructure, lower costs, and supportive regulations to enhance their reach. Seifert (2024) found that their expansion has significantly improved access to financial services in Tanzania, with 89% of the population now living within 5 km of a financial access point, though rural penetration lower. remains However. challenges such as limited 3G and 4G network coverage, the high cost of POS machines and other financial tools, and capital constraints for agents continue to hinder further growth. The author suggests that regulatory adjustments, including allowing non-bank digital financial service providers to issue e-money and easing capital requirements for rural agents, could help expand their reach.

Credit guarantees and credit lines reduce risk and improve rural access to financing. They are essential for expanding rural financial inclusion by reducing lending risks and increasing access to financing for small farmers and rural entrepreneurs. Guarantees help mitigate default risks, encouraging financial institutions to extend credit to underserved populations, while credit lines provide the necessary liquidity to support agricultural cycles and rural businesses.



These mechanisms enhance financial stability, promote investment, and foster economic growth in rural areas.

Training for individuals and capacity building for financial institutions are essential for effective and sustainable rural financial inclusion. Expanding rural financial inclusion requires targeted training in financial and digital skills to empower individuals to use financial services effectively. Additionally, capacity building for organizations and financial intermediaries enhances their ability to design, deliver, and scale inclusive financial products. Strengthening these capabilities ensures that users and providers can navigate and optimize financial systems, fostering greater access and sustainable growth in rural areas.

Strategic alliances between financial institutions and fintech enhance rural financial inclusion. Expanding rural financial inclusion requires strona networks. coordination, and alliances between financial institutions and fintech companies. These partnerships improve service delivery, leverage technology to reach underserved areas, and create innovative financial products tailored to rural needs. Improved collaboration ensures greater efficiency, accessibility, and scalability of financial services in rural communities.

Cross-sector collaboration is needed to overcome financial inclusion barriers. To overcome the significant barriers that still exist for financially reaching the last mile populations, including limited access to information, communication technologies (ICT), and digital public infrastructure (DPI), there is a need for cross-sector collaboration between financial regulators, ICT authorities, and the private sector to ensure that financial services reach the most vulnerable (CGAP et al., 2024).

Strong policy frameworks, government support, and partnerships with local financial institutions are needed to ensure that rural populations can access essential financial services. A comprehensive approach that includes supply-side and demand-side measures is required to ensure sustainable and inclusive financial systems in rural areas (Alliance for Financial Inclusion, 2022).

3.3 Why is it relevant for Agri-PDBs?

Greater financial inclusion in rural areas can translate into five key features. First, it enhances resilience and reduces risks by equipping individuals and businesses with better financial tools to manage uncertainties. Second, it expands and diversifies economic opportunities, improving rural livelihoods through increased credit, savings, and insurance access. Third, as financial services become more accessible, rural clients develop greater financial literacy and better decisionmaking tools, allowing them to manage resources more effectively. Fourth, financial inclusion lowers transaction costs, making financial services more efficient and accessible. Finally, it strengthens client connectivity, enabling them to generate, share, and utilize increasing information, further reinforcing rural economic ecosystems.

Fostering financial inclusion is a strategy for PADBs to achieve broader economic, social, and environmental goals. Financial inclusion empowers rural communities to enhance income opportunities, manage risks, and improve resilience during crises by enabling access to financial services.

Agricultural Development Banks play a pivotal role in mitigating financial risks within the agricultural sector by offering guarantees and collaborating with the insurance industry. For example, institutions such as FIRA and FINAGRO in Latin



America³, Nigeria's NIRSAL, and Ghana's GIRSAL have provided the necessary support.4 By partnering with insurance providers, these banks help facilitate access to agricultural insurance products for small producers in rural areas. ultimately safeguarding investments and promoting sustainable development in the agricultural sector.

Despite their size and unique characteristics, Public Agricultural Development Banks (PADBs) play a crucial role in the rural sector. Their performance closely reflects the overall state of rural economies and agriculture. Stronger rural economic ecosystems lead to improved outcomes and expanded opportunities for growth. Additionally, clients with greater access to financial services and better information enable PADBs to make informed and more efficient allocation decisions.

Public Development Banks (PDBs) are crucial in addressing financial market failures. promoting structural transformation. and supporting development. sustainable PDBs have experienced a resurgence following the 2008 global financial crisis. Xu et al. (2021) identify over 500 PDBs and Development Finance Institutions (DFIs) across 150 countries, with these institutions collectively holding assets \$18.7 trillion. representing totaling approximately 10% of global investment. PDBs and DFIs vary widely regarding mandates. ownership structures, and geographical reach. The findings highlight the increasing significance of these institutions in tackling market failures, driving structural transformation, and advancing sustainable development.

PDBs are shown to play an essential counter-cvclical role durina crises. providing financing for projects that align sustainable development with qoals (SDGs) and the Paris Agreement. Bilal (2021) explores the historical evolution of PDBs in Europe, highlighting their key roles in financing long-term development and promoting socio-economic transformation. It focuses on three central European national development banks (AFD, KfW, and CDP) and their evolving strategies to align with the EU's development objectives. The paper also highlights the growing need for cooperation among European financial institutions. particularly under the "Team Europe" initiative, which encourages more integrated and effective development finance across borders. The conclusion underscores the strategic importance of PDBs for development finance and as tools for diplomatic and geostrategic influence, promoting European values and interests globally. Global South PDBs should rediscuss their geopolitical and countercyclical role, to incorporate these mandates in the general goals as strategyc objectives to reinforce their role as public policy instruments to help development.

Multilateral Development Banks (MDBs) play a critical role in financing climate adaptation for small farmers. Lipper et al. (2021) argue that while MDBs are key actors in funding adaptation projects, current financial commitments are insufficient to meet the increasing needs of smallholder farmers and rural communities. The authors highlight the need to expand climate finance and improve access through mechanisms such as blended finance, which can attract private sector investments while addressing the

³ FIRA is an institution of the Bank of Mexico that provides financing to farmers and ranchers (<u>https://www.fira.gob.mx</u>), and FINAGRO is a development bank that promotes the Colombian rural sector (<u>https://www.bancoagrario.gov.co/finagro</u>).

⁴⁴ NIRSAL Plc specializes in Agricultural risk management, Finance facilitation and Agribusiness project development in Nigeria (<u>https://nirsal.com/</u>), and GIRSAL provides credit risk guarantees to financial institutions to increase lending to the agricultural sector in Ghana (<u>https://www.girsal.com/</u>)



unique challenges of agricultural adaptation. Although MDBs are well-positioned to coordinate these efforts, further action is needed to streamline funding processes, lower transaction costs, and ensure resources reach the most vulnerable populations. The study also underscores the importance of adaptive financing structures for small-scale agriculture. It stresses that aligning financial mechanisms with the Paris Agreement's objectives will be essential for achieving longterm resilience in food systems. MDBs also provide concessional resources to PDBs and technical assistance to improve their efficiency, outreach, and effectiveness, Also, they play a role in promoting peer exchanges and opening sectoral policy dialogues.

Public Development Banks (PDBs) are uniquely positioned to help finance achieve sustainable development goals. Marodon (2020) states that this is due to their dual role in providing public funding and leveraging private finance. PDBs can lead the transition to low-carbon. resilient. and equitable socioeconomic models, but this requires a systemic, inclusive, and long-term approach. The author underscores the need for strong coordination between international, regional, and national development banks to effectively address global challenges such as climate change, biodiversity loss, and inequality. To enhance their impact on sustainable development, the study proposes five key recommendations: (1) integrating sustainability into financing decisions, (2) mobilizing and coordinating private finance, (3) directing funds toward transition-oriented projects, (4) fostering responsible demand for sustainable investments, and (5) building a global coalition of development banks to strengthen multilateral cooperation.

Collaboration between the government, financial institutions, and other stakeholders is needed to design products tailored to the specific needs of rural households and smallholder farmers. The Bank of Zambia (2012) emphasizes the need for a comprehensive rural finance strategy that uses technology to enhance financial service delivery, reach underserved populations, promote agricultural financing, and foster financial literacy.

3.4 The comparative advantage of PDB in supporting rural FI

PADBs leverage financial expertise, policy influence, mobilize and leverage public sector resources to rural areas and have rural (physical) presence, key to drive financial inclusion. Public Agricultural Development Banks (PDBs) have a unique comparative advantage in supporting rural financial inclusion due to their multifaceted role as financial suppliers, product testers, and regulation influencers, and given their role in mobilizing anda levereging public resources to rural and agricultural activities. Their ability to test financial solutions in the field allows for tailored product development. At the same time, their strong relationships with the public sector enable them to shape policies and drive investments that enhance rural financial ecosystems. Additionally, PDBs are deeply rooted in rural areas, giving them direct access to underserved communities and a strong institutional presence to facilitate financial inclusion.

Public agricultural development banks are more effective than microfinance institutions (MFIs) in supporting long-term agricultural investments. Khandker (2018) explores both public and private sources of agricultural credit, including the role of microfinance institutions (MFIs) and agricultural development banks, providing examples from various developing countries, and noting that although MFIs have been successful in offering short-term loans to farmers, they are less effective in supporting long-term agricultural investments.



Well-governed public institutions with commercial orientation can play a pivotal role in expanding financial services during challenging economic times. Conroy et al. (2009) states that the experiences of India and Mongolia show how underperforming public banks can be reformed or restructured to become commercially viable institutions while increasing access to financial effectively services. while Thailand's experience highlights the challenges and opportunities faced by regulators and policymakers in leveraging specialized financial institutions to enhance financial inclusion. Regarding this issue, Braverman et al. (1986) state that inefficiencies and lack of accountability in financial institutions managing government programs hinder agricultural development and poverty reduction.⁵

4. What PDB is doing to advance rural FI, and what else can be done

Unica groups in Peru empower rural communities through member-driven savings and credit, fostering financial inclusion, entrepreneurship, and economic resilience. For over 15 years, Unica groups in Peru, promoted by Cofide, have proven to be an effective tool for financial inclusion in rural areas with limited access to formal financial institutions. These member-driven savings and credit organizations have successfully strengthened local businesses and created employment opportunities, particularly for women. Each Unica is established through the initial contributions of its members, who pool their resources to form a common fund. This

fund serves as the basis for providing loans, which members repay with interest. The generated profits are reinvested, allowing the capital to grow progressively. In Cajamarca, thanks to a partnership with the Asociación Los Andes (ALAC) and funding from the mining company Newmont, 289 Unica groups are currently operating, with a combined capital exceeding 13 million soles and nearly 5,000 members. Beyond enhancing their members' financial literacy, these organizations have funded agricultural and commercial ventures, strengthening the economic resilience of their communities. However, their expansion faces challenges, including the need for ongoing training and support and integration with the formal financial system to enhance their impact and sustainability (Trivelli, 2023, June 26).

FIRA in México supports rural financial inclusion through credit and training but must expand digital finance and partnerships to overcome challenges. FIRA, a second-tier development bank under the Bank of Mexico, provides credit, guarantees, training, and technical assistance to support agriculture and agribusiness in rural areas. Partnering with commercial banks, credit unions, and cooperatives enhances financial inclusion for underserved populations climate-smart and promotes farming practices. However, challenges like limited economies of scale and regulatory barriers persist. To strengthen rural financial inclusion. among other things, FIRA supports the expansion of digital financial services, build stronger partnerships with local institutions, and implement financial literacy programs, mainly targeting women and indigenous communities (Villarreal, 2017).

⁵ Braverman et al. (1986) focused on the failure of subsidized rural credit programs in developing countries and found that, although there was a large-scale allocation of credit, these programs have not led to improved agricultural output or poverty reduction. This had to do with inefficiencies and lack of accountability in

the financial institutions created to manage these programs. The authors suggest that market-based reforms, including better management of rural financial institutions and improved monitoring systems, are essential for effective rural credit markets.



FINAGRO from Colombia boosts rural financial inclusion in Colombia through financing and climate-sustainable loans but must tackle scale and regulatory challenges. The Fund for the Financing of the Agricultural Sector (FINAGRO) in Colombia promotes rural development by providing financing and investment support through financial intermediaries. As a second-tier bank, it offers favorable credit for agricultural projects, with a growing focus on climatesustainable loans. However, scale limitations and regulatory barriers hinder full financial inclusion. To advance, FINAGRO could expand digital financial services, strengthen local partnerships, and offer tailored financial products. especially for women and indigenous communities, fostering inclusive economic growth (Green Finance LAC, 2024).

NIRSAL boosts rural financial inclusion in Nigeria by de-risking agricultural lending but must overcome scale and regulatory challenges. The Nigeria Incentive-Based Risk Sharing System for Agricultural Lending (NIRSAL Plc), created by the Central Bank of Nigeria (CBN) in 2013, enhances agricultural financing by de-risking lending and promoting rural financial inclusion. Using five strategic pillars-Risk Sharing, Insurance, Technical Assistance, Incentives, and Rating-NIRSAL provides credit guarantees, insurance products, and capacity-building programs to support agricultural investments. However, scale limitations and regulatory barriers still hinder full inclusion. To advance, NIRSAL could expand digital finance, strengthen financial partnerships, and develop tailored products for women and indigenous communities to ensure broader, sustainable economic growth (NIRSAL, n.d.). This promising initiative has undergone several challenges during its implementation, all of which generate valuable insights for other PDBs and are key to improving its effectiveness.

Similarly, Ghana's GIRSAL enhances rural financial inclusion in Ghana by de-risking agricultural lending through credit guarantees and technical support to financial institutions. The Ghana Incentive-Based Risk-Sharing System for Agricultural Lending (GIRSAL) is a non-banking financial institution established to de-risk agricultural financing and stimulate increased lending to the agricultural sector by financial institutions in Ghana. GIRSAL provides credit risk guarantees to financial institutions to increase lending to the agricultural sector in Ghana. It also offers technical support to improve their understanding knowledge and of the agricultural sector and to strengthen their capacity to assess, structure, and manage agribusiness lending (GIRSAL, n.d.).

CGAP, Sahamati, and India Post Payments Bank launched a 2022 initiative using digital tools and rural agents to streamline loan applications, aiming to cut approval times from 15 days to under 10 minutes. In early 2022, CGAP, Sahamati⁶, and India Post Payments Bank⁷ (IPPB) partnered to expand access to formal lending for underserved rural households in India. The project leverages IPPB's vast network of 200,000 rural agents and integrates Account Aggregators (AAs) from the India Stack⁸ to connect customers, agents, lenders, and data providers. A key feature is a self-service lending mobile app that enables a paperless loan application process, supported by IPPB agents, to foster

⁶ Sahamati is a non-profit industry alliance in India that facilitates the implementation of the Account Aggregator (AA) framework.

⁷ It is a payments bank created by the Indian postal company, which takes advantage of the infrastructure of postal services to turn them into agents and open that platform to other financial service providers.

⁸ India Stack is a set of digital public infrastructure (DPI) initiatives developed by the Indian government to enable secure, paperless, and cashless digital transactions across financial, identity, and data-sharing services. It is designed to facilitate financial inclusion, improve government service delivery, and enhance the digital economy by leveraging interoperable and scalable technology.



consumer trust and ensure a smooth user experience. Preliminary findings reveal that rural borrowers find traditional loan applications burdensome, often requiring up to 15 days and extensive paperwork. Despite these hurdles, formal financial institutions remain preferred for their lower interest rates and reliable disbursements. The initiative seeks to reduce the loan application process to under 10 minutes, significantly improving access to formal credit in rural areas (Martinez, 2023).

BRI Indonesia leverages its vast agent network, digital banking services, and partnerships with fintech to drive financial inclusion and rural banking expansion. Bank Rakyat Indonesia (BRI) is a state-owned bank specializing in agriculture, rural finance, and microcredit, playing a key role in financial inclusion across Indonesia. Its agent network extends banking services to remote areas. enabling cash-in/cash-out, payments, and remittances via local merchants. BRI also integrates with digital payment platforms and fintech companies, connecting its agents with for third-partv providers seamless transactions. Its mobile app and virtual account system facilitate digital banking and QR payments, enhancing interoperability. By leveraging alliances with payment companies, BRI bridges the gap between formal banking and the informal economy, expanding access to credit, savings, and financial services for farmers. micro-entrepreneurs, and underserved communities.

Tamwil EI Fellah (TEF) expands agricultural credit in Morocco by financing smallholder farmers without collateral through risk management and government partnerships. Tamwil El Fellah (TEF), a subsidiary of Groupe Crédit Agricole du Maroc (a state-owned bank in Morocco specializing in agricultural and rural finance - GCAM), was established to bridge the financing gap for farmers who lack traditional collateral, leveraging risk management mechanisms such as a Prudential Stabilization Fund (PSF),

alternative guarantee structures, and a credit scoring system adapted to agricultural risks. TEF addresses small farmers' tvpical challenges (scarce formal financing due to fragmented land ownership, high climaterelated risks, and limited financial literacy) through customized credit products. partnerships with government agencies for technical support, and flexible repayment structures aligned with agricultural cycles. Ramirez & Hernandez (2016) state that while TEF has successfully expanded access to agricultural credit, key challenges remain, including capacity building among loan officers, sustainable risk-sharing mechanisms, and long-term financial viability. The model offers valuable insights for scaling inclusive agricultural finance initiatives in other developing economies.

Banco do Nordeste (BNB) has driven rural financial inclusion in northeastern Brazil through its CrediAmigo and AgroAmigo microfinance programs, reaching over 2 million clients, empowering women, and improving incomes and household wellbeing. Banco do Nordeste (BNB) has been instrumental in advancing rural financial inclusion in northeastern Brazil through its microfinance programs, CrediAmigo and AgroAmigo, which support small farmers and entrepreneurs. Launched in 1997, these programs use a solidarity group lending model, graduated loan amounts, and technical assistance to borrowers. CrediAmigo has grown into Latin America's most extensive microcredit program, serving over 2 million clients while maintaining a strong loan portfolio. BNB now manages 60% of Brazil's microcredit, demonstrating its leadership in the sector. Its inclusive approach has significantly benefited vulnerable populations, with 67% of CrediAmigo clients being women and nearly half of the beneficiaries coming from Bolsa Família households. Impact studies confirm that continuous access to microfinance has improved microentrepreneurs' incomes and household well-being, illustrating how development



banks can effectively scale financial services in poverty-affected rural areas (World Bank, 2005). The microfinancial version of Crediamigo called Agroamigo has been a key instrument to reach family farmers (Trivelli and Venero, 2007).

Banrural S.A. successfully transformed from a state-owned agricultural bank into a profitable. self-sustaining rural bank. financial inclusion expanding while maintaining strong financial performance. This study analyzes the transformation of BANDESA, а state-owned agricultural development bank in Guatemala, into Banrural S.A., a profitable and self-sustaining rural bank. The transition began in 1998 and introduced private sector participation and a diversified capital structure, ensuring financial and business-oriented discipline The management. findings highlight Banrural's strong financial performance, becoming Guatemala's third most profitable bank while maintaining a social mission of rural populations. serving The bank significantly expanded its outreach, increasing service points and offering financial products tailored to small farmers, microenterprises, and indigenous communities. It successfully mobilized rural savings, ensurina а sustainable funding model. Key success leadership, factors include geographic expansion, competitive financial products, and an efficient risk management system. The study concludes Banrural is a rare success story in public development banking, demonstrating that rural finance can be both profitable and socially impactful (Alfaro, 2003).9

The National Bank for Agriculture and
Rural Development (NABARD)
significantly impacts rural livelihoods,
economic resilience, and rural prosperity
in India. Riddhi et al. (2024) examine
NABARD's role in empowering rural

economies. highlighting its contributions through financial support to improve rural infrastructure, capacity-building initiatives by fostering microfinance and supporting selfhelp groups (especially for rural women), policy advocacy, and the promotion of sustainable practices. including organic farming, climate-resilient practices, and agroforestry. The authors recommend enhancing NABARD's efforts by increasing access to credit for small farmers and promoting technology adoption to drive rural development further.

Regional Rural Banks (RRBs) have significantly promoted financial inclusion in India, but challenges persist. Kharuri et al. (2018) found that between 2013 and 2017. RRBs significantly improved access to banking services in rural areas, mainly through initiatives such as Basic Savings Bank Deposit Accounts (BSBDA), Kisan Credit Cards (KCC), and General Credit Cards (GCC). The expansion of branchless banking and the introduction of ICT-based solutions have further facilitated this progress. However, challenges remain, including low financial literacy among rural populations and the need to enhance the sustainability and outreach of RRBs.

Surveys show that there has been significant progress in financial inclusion in India. The 2021-22 National Rural Financial Inclusion Survey (NAFIS) conducted by the National Bank for Agriculture and Rural Development (NABARD) reveals a 57.6% increase in the average monthly income of rural households, with agricultural households earning slightly more than non-agricultural ones. Additionally, there was a notable rise in financial savings, with 66% of households saving money, compared to 50.6% in 2016-17. The use of Kisan Credit Cards (KCC) agricultural with 44% of expanded, households holding a valid KCC. Insurance

governance can be found in Trivelli and Venero (2007).

⁹ Another study discussing the positive results of Banrural, and highlighting its innovative



coverage increased dramatically, reaching 80.3% of households, and pension coverage also grew, benefiting 23.5% of households. These findings underscore the positive impact of financial inclusion initiatives, contributing to improved economic resilience and security for rural populations (Press Information Bureau – Government of India, 2024).

Public sector banks (PSBs) are essential to achieving financial inclusion in India, particularly for low-income individuals and rural populations. PSBs played a pivotal role in implementing the Pradhan Mantri Jan-Dhan Yojana (PMJDY), a financial inclusion initiative launched by the Government of India. PSBs have been instrumental in expanding access to banking services, particularly for marginalized populations in rural and underserved areas. Their efforts include opening accounts, integrating with Direct Benefit Transfer (DBT) schemes, promoting digital transactions. and facilitating microinsurance and credit. Several key strategies were employed by PSBs, such as organizing financial literacy campaigns, conducting door-to-door outreach. and mobile utilizing banking to overcome geographical barriers. Continued collaboration is needed between the government and PSBs to expand access to further financial services like micro-loans and micro-insurance (Johnson et al., 2024).

5. Key players and resources to learn more and get assistance to work in rural financial inclusion

Alliance for Financial Inclusion (AFI)

- A global network of financial inclusion policymakers from emerging markets and developing countries. AFI focuses on developing and implementing inclusive financial policies and is a key resource for policy development and sharing best practices.
- Website: <u>www.afi-global.org</u>

Consultative Group to Assist the Poor (CGAP)

- A global partnership that works to expand access to financial services for people experiencing poverty. CGAP provides extensive research, resources, and tools for financial inclusion, especially in rural areas.
- Website: <u>www.cgap.org</u>

Women's World Banking

- An organization that focuses on improving access to financial services for women, particularly in underserved and rural communities. They offer resources for developing financial products tailored to women and rural populations.
- Website: www.womensworldbanking.org

Global Partnership for Financial Inclusion (GPFI)

• A global platform for the development of financial inclusion policy and initiatives. GPFI supports the



implementation of financial inclusion strategies with a focus on rural populations.

Website: <u>https://www.gpfi.org/</u>

Better Than Cash Alliance (BTCA)

- BTCA is an alliance of governments, companies, and international organizations working to shift from cash to digital payments to improve financial inclusion, particularly in rural areas. It provides tools and frameworks to increase digital financial inclusion.
- Website: <u>www.betterthancash.org</u>

The World Bank – Financial Inclusion

- The World Bank offers extensive research, tools, and case studies on financial inclusion, focusing on rural areas and low-income populations. They also provide financial products and support programs to enhance rural financial inclusion.
- Website: <u>https://www.worldbank.org/en/topic/fin</u> <u>ancialinclusion</u>

The Global Findex Database (World Bank)

- A comprehensive database that measures global financial inclusion, providing data on access to financial services, especially in rural and lowincome areas. This resource can help inform policies and strategies for rural financial inclusion.
- Website: <u>www.worldbank.org/en/publication/glo</u> balfindex

The International Finance Corporation (IFC)

• The IFC is part of the World Bank Group and works on projects related to rural financial inclusion. It mainly focuses on building inclusive business models and innovative financial services for rural populations.

Website: <u>www.ifc.org</u>

The International Fund for Agricultural Development (IFAD)

- IFAD focuses on empowering rural communities through financial inclusion, especially in agriculture. They offer resources on agricultural finance and rural financial services.
- IFAD has developed a specific Rural Finance Policy that can be found at: <u>https://www.ifad.org/en/w/corporate-</u> <u>documents/policies/rural-finance-</u> <u>policy</u>
- Website: <u>www.ifad.org</u>

MicroSave

- MicroSave is an organization that provides consulting services and research on inclusive finance, particularly for rural and low-income communities. It works on digital financial services, microfinance, and financial inclusion strategies.
- Website: <u>www.microsave.net</u>

The Bill & Melinda Gates Foundation

- The Gates Foundation has several initiatives to improve financial services for the underserved, with a strong focus on rural financial inclusion through digital financial services and mobile money.
- Website: <u>www.gatesfoundation.org</u>

Bill & Melinda Gates Foundation – Inclusive Financial Systems

 Their Inclusive Financial Systems initiative leverages digital finance, mobile payments, and regulatory frameworks to enhance financial inclusion. This initiative helps develop policies, digital payment systems, and



interoperable financial infrastructures that enable rural populations to access financial services more efficiently.

- Website: <u>https://www.gatesfoundation.org/our-</u> <u>work/programs/global-growth-and-</u> <u>opportunity/inclusive-financial-</u> <u>systems</u>
- Their Mojaloop open-source payment system is a key example. It provides an inclusive digital payment platform that can be adapted for rural financial ecosystems.
- Website: <u>https://www.gatesfoundation.org/ideas</u> <u>/articles/digital-payments-financial-</u> <u>inclusion-mojaloop</u>

UNCDF (United Nations Capital Development Fund)

- The UNCDF supports financial inclusion in rural areas by helping to scale inclusive finance models that integrate mobile and digital financial services into low-income and rural communities.
- Website: <u>www.uncdf.org</u>

Grameen Foundation

- This organization empowers poor people, especially in rural areas, by providing access to financial services and promoting inclusive business models.
- Website: <u>www.grameenfoundation.org</u>

Rabobank and Rabo Partnerships

 Rabobank, a Dutch multinational focused on food and agribusiness, enhances rural financial inclusion through Rabo Partnerships. It collaborates with institutions like the World Bank (2020–2023) to strengthen Cooperative Financial Institutions (CFIs) in Colombia, West Africa, and Ethiopia, addressing scale and regulatory challenges in underserved rural areas.

Website: <u>https://www.rabobank.com/</u>

Accion and the Center for Financial Inclusion

- Accion is alobal nonprofit • а organization dedicated to creating a financially inclusive world. Its Center for Financial Inclusion (CFI) works to advance inclusive financial systems for low-income populations. CFI conducts research, promotes best practices, and collaborates with stakeholders to address challenges in financial inclusion, focusing on innovation and client protection.
- Website: <u>https://www.centerforfinancialinclusion</u> .org/

Agence Française de Développement (AFD)

- The Agence Francaise de Développement (AFD) is France's inclusive public development bank. It commits financing and technical assistance to projects that improve living conditions, promote economic growth, and protect the planet. AFD initiatives supports numerous to enhance financial inclusion in developing countries, often focusina rural underserved on and communities.
- Website: <u>https://www.afd.fr/fr</u>

Global Partnership for Financial Inclusion (GPFI)

 The Global Partnership for Financial Inclusion (GPFI) is an inclusive platform for G20 countries, interested in non-G20 countries, and relevant stakeholders to advance financial inclusion globally. Established to implement the G20 Financial Inclusion Action Plan, the GPFI facilitates peer learning, knowledge sharing, policy advocacy, and coordination. It focuses



on digital financial inclusion, SME finance, and consumer protection issues.

Website: <u>https://www.gpfi.org/</u>

UNDP Insurance and Risk Finance Facility (IRFF)

- United The IRFF. а Nations • Development Program (UNDP), focuses on strengthening insurance risk financing to enhance and resilience in developing countries. It supports public and private sector initiatives to improve financial preparedness for climate risks, natural disasters, and other vulnerabilities, particularly relevant for rural communities. IRFF works on scaling insurance solutions to mitigate financial risks for smallholder farmers. rural enterprises, and vulnerable populations, ensuring that financial inclusion strategies incorporate risk management and long-term sustainability.
- Website: <u>https://irff.undp.org/factsheet/insuranc</u> <u>e-and-risk-finance-facility-general-</u> <u>overview</u>

Asociación Latinoamericana de Instituciones Financieras para el Desarrollo (ALIDE)

The Latin American Association of • **Development Financing Institutions is** the international organization that American represents Latin and Caribbean development banking. Conceived since its foundation as a venue for discussions and proposals of policies and concrete solutions to the problems that pertain to the financing of development in Latin America and the Caribbean. The programs, projects, activities and services the Association promotes and carries out are aimed at fostering the unity and strengthening the joint action and coordinated participation of the development banks and financial

institutions in the region's socioeconomic progress.

Website: <u>https://www.alide.org.pe/</u>

African Rural and Agricultural Credit Association (AFRACA)

- AFRACA is an independent knowledge broker that supports rural and agricultural finance to improve the lives of smallholder farmers across Africa. By leveraging its diverse membership, AFRACA collectively shapes national, regional, and global discourse through evidence-based policv research. dialogues, and conferences. international Its knowledge products-including newsletters, research papers, policy position papers-are briefs. and publicly available on its website. AFRACA also provides training in areas such as value chain finance and risk management, and promotes global learning through exchange programs, including South-South with cooperation networks like APRACA.
- Website: <u>https://afraca.org/en/</u>

Asia-Pacific Rural and Agricultural Credit Association (APRACA)

- APRACA is a regional organization that promotes the development of efficient and inclusive rural and agricultural financial systems across the Asia-Pacific region. It facilitates knowledge sharing, capacity building, and research to improve financial access for rural communities. Through training programs on value chain financing. microfinance. and risk management, as well as policy dialogues and regional forums, APRACA supports its member institutions in strengthening rural finance delivery. The organization plays a key role in advancing sustainable agricultural development and rural livelihoods in its member countries.
- Website: https://www.apraca.org/



6. References

Alfaro Gramajo, L. N. (2003). Reverting the tendency in developing finance: The case of Banrural S.A. in Guatemala. USAID & World Council of Credit Unions (WOCCU).

Alliance for Financial Inclusion. (2022). "Enhancing financial inclusion in rural areas" (Guideline Note No. 50).

Alvi, M. A., Rafique, A., & Shehzad, K. (2020). "Financial inclusion and bank stability controversy: Evidence from South Asian region." International Journal of Financial Engineering, 7(4), 2050038.

Araújo, A. (n.d.). Innovación para la inclusión financiera [Conference presentation]. CEPAL.

Arshad, A. (2022). "Impact of financial inclusion on food security: Evidence from developing countries." International Journal of Social Economics, 49(3), 336-355.

Azimi, M. N. (2022). New insights into the impact of financial inclusion on economic growth: A global perspective. PLOS ONE, 17(11), e0277730

Banco do Nordeste. (n.d.). Sobre o Agroamigo.

Bank of Zambia. (2012). "Rural finance policy and strategy" (2012). Bank of Zambia.

BFA (2018), "The Impact of Banco Azteca in Peru"

Bilal, S. (2021). The rise of public development banks in the European financial architecture for development (Working Paper 12/2021). Elcano Royal Institute.

Braverman, A., & Guasch, J. L. (1986). "Rural credit markets and institutions in developing countries: Lessons for policy analysis from practice and modern theory." World Development, 14(11), 1253–1274.

Carbon Trust. (n.d.). Funding a just transition of Mexico's agricultural sector with Agence Française de Développement and FIRA.

CGAP, BTCA, GPFI, and World Bank. 2024. "G20 Policy Options to Improve Last Mile Access and Quality of Inclusion Through Digital Infrastructure, Including Digital Public Infrastructure (DPI), Consumer Protection, and Other FIAP Objectives" Washington, D.C.: CGAP. Chatterjee, A., & Oza, A. (2017). Agricultural insurance (ADB Briefs No. 77). Asian Development Bank.

Cofer, R. D., & Anderlik, J. M. (2020). Farm banks: Resilience through changing conditions. FDIC Quarterly, 15(1), 31-49.

Colina, C., Clason Höök, M., & Shakhovskoy, M. (2019). "Pathways to Prosperity: 2019 rural and agricultural finance state of the sector report." ISF Advisors & Mastercard Foundation Rural and Agricultural Finance Learning Lab.

Conroy, J. D., Parreñas, J. C., & Manupipatpong, W. (Eds.). (2009). "Promoting financial inclusion through innovative policies: Report of a workshop jointly organized by the Advisory Group on APEC Financial System Capacity-Building, the APEC Business Advisory Council, the Asian Development Bank Institute, and the Alliance for Financial Inclusion.". Asian Development Bank Institute.

Cull, R., Ehrbeck, T., & Holle, N. (2014). "Financial inclusion and development: Recent impact evidence" (Focus Note No. 92). Washington, D.C.: CGAP.

Dabla-Norris, E., Ji, Y., Townsend, R., & Unsal, D. F. (2015). Identifying Constraints to Financial Inclusion and Their Impact on GDP and Inequality: A Structural Framework for Policy (IMF Working Paper No. 15/22). International Monetary Fund.

Danisman, G. O., & Tarazi, A. (2020). Financial inclusion and bank stability: evidence from Europe. The European Journal of Finance, 26(18), 1842–1855.

Dash, A., & Mohanta, G. (2024). "Fostering financial inclusion for attaining sustainable goals: What contributes more to the inclusive financial behaviour of rural households in India?" Journal of Cleaner Production, 449, 141731.

Davis, B., Mane, E., Gurbuzer, L. Y., Caivano, G., Piedrahita, N., Azhar, N., Benali, M., Chaudhary, N., & Rivera, R. (2023). Estimating global and country-level employment in agrifood systems (Issues 23–24). FAO.

Demirguc-Kunt, A., Klapper, L. and Singer, D. (2017), "Financial Inclusion and Inclusive Growth. A Review of Recent Empirical Evidence", World Bank, 2017.

Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2022). The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19. The World Bank.



Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S. & Hess, J. (2017). The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. The World Bank.

Duvendack, M., & Mader, P. (2019). Impact of financial inclusion in low- and middle-income countries: A systematic review of reviews (3ie Systematic Review 42). International Initiative for Impact Evaluation (3ie).

Ercegovac, R., Klinac, I., & Pečarić, M. (2024). The nonsensitivity of public development banks to key stability performance of the banking sector: The lessons for policymakers. Croatian Economic Survey, 26(1), 37–58.

Eslava, M., & Freixas, X. (2018). Public development banks and credit market imperfections.

Finance in Common. (2023). Finance in Common Summit 2023 Report: Unleashing the potential of Public Development Banks for sustainable finance. Finance in Common.

GIRSAL. (n.d.). About. GIRSAL.

Green Finance LAC. (2024, October 18). Colombian Finagro has disbursed climate-sustainable loans for nearly 400 million.

Gu, L., Liu, Y., Liu, F., Dong, X., & Dong, Y. (2024). Impacts of policy-related agricultural insurance on farmers' earnings in China's major grain-producing regions. Finance Research Letters, 69, 106189.

Haggblade, S., Hazell, P. B. R., & Reardon, T. (2007). Transforming the rural nonfarm economy: Opportunities and threats in the developing world (S. Haggblade, P. B. R. Hazell, & T. Reardon, Eds.). Johns Hopkins University Press.

Haggblade, S., Hazell, P., & Reardon, T. (2010). The rural non-farm economy: Prospects for growth and poverty reduction. World Development, 38(10), 1429–1441.

Hernandez, E., & Martinez, C. (2023). A Technical Guide to Unlock Agent Networks at the Last Mile. CGAP.

IFAD (2021) Inclusive Rural Financial Policy (https://www.ifad.org/en/w/corporatedocuments/policies/rural-finance-policy)

ILO (2019) Developing the Rural Economy through Financial Inclusion: The Role of Access to Finance (https://www.ilo.org/sites/default/files/wcmsp5/groups/ public/@ed_dialogue/@sector/documents/publication/w cms_437194.pdf) Johnson, M., & Joy, V. S. (2024). Empowering financial inclusion: The crucial role of public sector banks in implementing Pradhan Mantri Jan-Dhan Yojana (PMJDY). International Journal for Research in Applied Science & Engineering Technology, 12(4), 3681-3683.

Kajwang, B. (2022). Role of insurance in agricultural lending. International Journal of Finance and Accounting, 7(2), 74-83.

Khan, I., Khan, I., Sayal, A. U., & Khan, M. Z. (2021). "Does financial inclusion induce poverty, income inequality, and financial stability? Empirical evidence from 54 African countries." Journal of Economic Studies, 49(2), 303-314.

Khandker, S. R. (2018). "Credit for agricultural development." Oxford Handbook of the Economics of Poverty (pp. 529-561). Oxford University Press.

Kharuri, Z. H., & Manjunatha, T. (2018). "A study on financial inclusion in Indian regional rural banks." Asian Journal of Management, 9(3), 1117-1122.

Köhn, D. (Ed.). (2014). "Finance for food: Towards new agricultural and rural finance." Springer.

Li, Z., Zhang, D., & Zhang, J. (2023). "Research on the systemic poverty reduction effect of inclusive finance and agricultural insurance. Proceedings of the 40th Chinese Control Conference." July 26-28, 2021, Shanghai, China

Lipper, L., Cavatassi, R., Symons, R., Gordes, A., & Page, O. (2021). Financing adaptation for resilient livelihoods under food system transformation: The role of Multilateral Development Banks. Food Security, 13(7), 1525-1540.

Ma, Q., Zhou, Y., & Wang, J. (2024). The impact of climate change on credit risk of rural financial institutions: A threshold effect based on agricultural insurance. North American Journal of Economics and Finance, 71, 102086.

Marodon, R. (2020). Can development banks step up to the challenge of sustainable development? (Research Paper No. 175). Agence Française de Développement.

Martinez, C. (2023, January 13). High tech, high touch: Bringing formal loans to rural India. CGAP.

Miller, H. (2019). "What works for digital financial services in agricultural development?" USAID Feed the Future Initiative.

Mühlenhoff, S. C. (2021). Financial inclusion in the Global South: An analysis of index-based agricultural insurance



and farmer food security in India. Future of Food: Journal on Food, Agriculture and Society, 9(3), 159–178.

NIRSAL. (n.d.). Who we are. NIRSAL.

Omar, M. A., & Inaba, K. (2020). Does financial inclusion reduce poverty and income inequality in developing countries? A panel data analysis. Journal of Economic Structures, 9(37), 1–25.

Pomeroy, R., Arango, C., Lomboy, C. G., & Box, S. (2020). "Financial inclusion to build economic resilience in smallscale fisheries." Marine Policy, 118, 103982.

Press Information Bureau. (2024). "Empowering rural India: NABARD survey on rural financial inclusion." Ministry of Finance, Government of India.

PT Bank Rakyat Indonesia (Persero) Tbk. (2022). Reach Further, Provide Solution, Grow Better and Stronger.

Ramirez, J., & Hernandez, E. (2016). Innovations for inclusive agricultural finance and risk mitigation mechanisms: The case of Tamwil El Fellah in

Morocco. Food and Agriculture Organization of the United Nations (FAO) & ADA – Microfinance.

Riddhi, Kumar, R., Gupta, Y., Yadav, S., & Goenka, N. (2024). Empowering rural economies: Evaluating the role of NABARD in agriculture and rural development. International Journal of Scientific Research in Engineering and Management, 8(6), 1-12.

Robles, M. (2021). Agricultural insurance for development: Past, present, and future. In Agricultural development: New perspectives in a changing world, eds. Keijiro Otsuka and Shenggen Fan. Part Three: Context for Agricultural Development, Chapter 17, Pp. 563-594. Washington, DC: International Food Policy Research Institute (IFPRI).

Seifert, J. (2024, January 31). "Deepening rural financial inclusion through expansion of banking agents." Financial Sector Deepening Tanzania.

Tabash, M. I., Ezekiel, O., Ahmed, A., Oladiran, A., Elsantil, Y., & Lawal, A. I. (2024). "Examining the linkages among financial inclusion, economic growth, poverty, and inequality reduction in Africa." Scientific African, 23, e02096.

Tianyuan, A., Jiashu, Z., & Jingwen, S. (2023). Study on the coordinated poverty reduction effect of agricultural insurance and agricultural credit and its regional differences in China. Economic Analysis and Policy, 78, 835–844.

Timu, A. G., & Kramer, B. (2023). Gender-inclusive, responsive, and -transformative agricultural insurance: A literature review. Global Food Security, 36, 100672.

Trivelli, C. (2023, June 26). Unica: Resiliencia, poder y oportunidades. Gestión.

Trivelli, C. and H. Venero (2007) Banca de Desarrollo para el Agro: experiencias en curso en América Latina. Serie Análisis Económico 25. Lima: IEP

United Nations Secretary-General's Special Advocate for Inclusive Finance for Development. (2021). Financial health: An introduction for financial sector policymakers. United Nations.

Van, L. T.-H., Nguyen, N. T., & Vo, D. H. (2020). "Financial inclusion and stability in the Asian region: Using bank-level data." Borsa Istanbul Review, 20, 1–22.

Villarreal, F. G. (Ed.). (2017). Financial inclusion of small rural producers. Economic Commission for Latin America and the Caribbean (ECLAC).

Wiedmeier-Pfister, M., Huber, C., & Domke, B. (2021). Agricultural development banks and finance facilities: Backgrounds, lessons, trends and case studies from seven countries in Sub-Saharan Africa (Sector Project Agriculture Policy Brief 102). Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Women's World Banking. (2023). "Policy diagnostic: Rural women and financial inclusion."

World Bank Group Web site - Financial Inclusion Overview

World Bank. (2005, December). CrediAmigo: Providing financial services for people experiencing poverty in Northeast Brazil.

World Bank. (2007). World Development Report 2008: Agriculture for Development. Washington, DC: The World Bank.

Xie, S., Zhang, J., Li, X., Xia, X., & Chen, Z. (2024). The effect of agricultural insurance participation on rural households' economic resilience to natural disasters: Evidence from China. Journal of Cleaner Production, 434, 140123.

Xu, J., Marodon, R., Ru, X., Ren, X., & Wu, X. (2021). What are public development banks and development financing institutions? Qualification criteria, stylized facts, and development trends. China Economic Quarterly International, 1, 271–294.



Yap, S., Lee, H. S., & Liew, P. X. (2023). "The role of financial inclusion in achieving finance-related sustainable development goals (SDGs): A cross-country analysis." Economic Research-Ekonomska Istraživanja, 36(3), 2212028.

Yasmin, Y., & Setiastuti, S. U. (2023). "The effect of financial inclusion on food security: Evidence from developing and developed countries." Economics and Finance in Indonesia: Vol. 69: No. 2, Article 4.

Yu, L., Li, W.-J., & Aleksandrova, M. (2022). Impacts and synergies of weather index insurance and microcredit in rural areas: A systematic review. Environmental Research Letters, 17(10), 103002.