

IDENTIFYING THE RESEARCH NEEDS OF FINANCIAL INCLUSION ACTORS

Survey Results

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collaboration with the European Microfinance Platform (e-MFP)
'From Research to Practice and Back Again' Action Group

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AG on Research

From research to practice and back again



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EXECUTIVE SUMMARY

With the expansion of digital financial services, new opportunities to serve populations that were traditionally excluded from the financial system have arisen. However, despite improvements in financial inclusion indicators in recent years, a large group of the global population remains unbanked or underbanked. Furthermore, the constant evolution of digital financial services also presents challenges to which the industry must respond quickly.

In this context, in order to support the work of financial inclusion stakeholders, the e-MFP's Action Group "From Research to Practice and Back Again" launched the survey "Identifying the research needs of financial inclusion actors". This survey aims to identify what areas and topics are the main priorities in terms of knowledge and research for financial inclusion actors, in order to create projects and activities tailored to their specific needs.

Survey participants represent six geographical regions and different types of organizations within the industry, including MFIs, NGOs, Banks, Credit Cooperatives, Investors, International Organizations, Researchers, and Consultancy Firms.

The analysis of survey results indicates that the three areas most selected by participants as the most relevant and/or interesting for their work are the following: 1) Trends and challenges for financial inclusion providers 2) Non-financial services, and 3) Technology and innovation to boost financial inclusion. Within these three areas, respondents had to select specific research topics. The most chosen ones were the following: 1) Barriers to reaching excluded populations 2) Financial education through online platforms, and 3) Digital ID.

Furthermore, in terms of groups of financially excluded populations, survey results revealed a strong shared interest in working in the financial inclusion of rural populations.

All in all, the survey provided insights into the main research interests of different actors in the financial inclusion field. The objective is to create research and activities of interest based on these insights, in order to add value to the work of financial inclusion stakeholders and contribute to improving the lives of the populations in developing countries.

INTRODUCTION

The e-MFP 'From Research to Practice and Back Again' Action Group (AG) works towards bringing the latest research findings, best practices, and new technologies to practitioners in a language easily understood by all. It aims at considerably increase the usefulness of research and contribute to improve the lives of the populations in developing countries served by the financial sector.

In July 2021 the AG launched the Survey "Identifying the needs of financial inclusion actors." The objective of the survey was to identify what areas and topics are the main priorities in terms of knowledge and research in the financial inclusion space. In this report, we present survey results as well as the main takeaways. These findings will be used to guide the work and research agenda of the AG, in order to create activities and knowledge that are relevant for the work of financial inclusion actors.

SECTION 1: SURVEY DESIGN PROCESS

As follows, we describe the process applied for survey design and implementation:

1. Development of a mapping of trends and latest issues in the inclusive finance sector
2. Selection of 12 potential areas of interest for financial inclusion actors, and specific research topics within each area (See Appendix A for the full list of areas and topics)
4. Sharing the selection of areas and topics with e-MFP colleagues to obtain feedback
5. Elaboration of a user-friendly design for the survey
6. Testing the survey among e-MFP colleagues
7. Launch of the survey
8. Analysis of results (See Section 3 for the takeaways of this analysis)
9. Organization of an open event to present survey results as well as to discuss the main findings

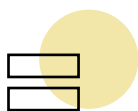
The survey was launched in July 2021 and remained opened for a month. It was available in three languages (English, French, and Spanish), this allowed the participation of actors from all around the world. The survey was sent to e-MFP members and shared on social media.

Survey results allowed the AG to obtain insights into the main interests of financial inclusion actors. The results will serve as a guide to develop activities and research projects based on the specific needs of financial inclusion stakeholders.

SECTION 2: SUGGESTED AREAS

In the survey, the AG proposed 12 areas related to the financial inclusion field. For each of these areas, participants had to indicate whether they were interested and/or considered it relevant for their work (yes or no answer). If the answer was positive, the survey displayed a menu of options with specific research topics related to that area. Then, participants had to select the three topics that seemed most relevant and/or interesting to their work.

In this section, we introduce the 12 areas included in the survey, as well as a brief description of why the AG selected these specific areas.



GENDER EQUALITY IN THE FINANCIAL SECTOR

Despite recent years' advancements in global financial inclusion, women account for 55% of the world's unbanked population and are still lagging in terms of access to the financial system. According to the World Bank's Findex Database (2017), the gender gap in account ownership remained at 9% from 2011 to 2017 in developing countries. This gap can be explained by constraints both on the demand and offer side that include low financial literacy levels, lack of ID, lack of collateral, low mobile phone ownership, lack of sex-disaggregated data, and inadequate product design.

The rise and expansion of fintech promised the possibility of reaching women and other populations traditionally underserved by the financial system. However, there is a digital divide that prevents women from having equal access to digital financial services. According to The Mobile Gender Gap Report 2020, there is an 8% gap between women and men in terms of smartphone ownership in low- and middle-income countries and a 20% gap in terms of internet access. Moreover, a study carried out by the Bank for International Settlements (1) concluded that there is a Fintech Gender gap of 9% (29% of men vs. 21% of women reported having used fintech solutions in the last six months).

Therefore, despite technological advancements and benefits brought by the digital age, women remain less likely to access the financial system. Closing the gender gap is an outstanding debt within the industry. Because of its persistence and complexity, the gender gap in the financial sector is one of the areas suggested in the survey as there is a need for more research and efforts to address it.

Within the area “gender equality in the financial sector”, the AG proposed the following research topics:

1. Financial needs and behavior of low-income women in the digital era
2. Gender gap in access to digital financial services
3. Non-conventional collateral for women
4. Non-financial services to decrease the gender gap
5. Use of Artificial Intelligence and data to close the gender gap



NEW FUNDING SOURCES FOR FINANCIAL INCLUSION

International funding for financial inclusion increased from US\$26 billion in 2011 to US\$52 billion in 2019, according to CGAP’s Trends in International Funding for Financial Inclusion. While private funds increased from US\$8 billion in 2011 to US\$14 billion in 2019, public funds remain the main funding source: 69% out of the total funding in 2011 and 72% in 2019. (2) However, microfinance private asset impact funds (PAIFs) recorded the second-highest growth rate among sectors in 2019. This casts evidence on private investors’ increasing interest in financial inclusion developments. (3)

On another note, green bonds are gaining attention in the financial inclusion industry. This term refers to debt instruments by which investors finance eligible projects that seek to mitigate climate change or help affected people adapt to it. (4) Therefore, these instruments can play a role in financial inclusion by funding organizations that provide financial services to smallholders to adapt to climate change or to access alternative energy sources. Green bonds market is growing and reached USD 1.1tn in 2020, being the clear leader among Green, Social & Sustainability (GSS) Issuance in 2020. (5)

Another example of sustainability bonds that can contribute to funding financial inclusion is Gender Bonds. These debt instruments aim to finance projects aimed at promoting gender equality and the empowerment of women. While still a recent trend, the interest in these types of bonds is increasing. By way of example, the Inter-American Development Bank issued in 2021 the first gender bond in LATAM in order to help expand access to financial services for more than 1,200 women-led MSMEs in Mexico. (6)

Finally, it is worth mentioning that in recent years new technologies allowed innovative financing models and channels to emerge, which is also known as Alternative Finance. Debt Crowdfunding, for instance, is an alternative finance activity that involves bypassing traditional financial intermediaries and using online web-based platforms to connect users of funds with retail funders. These alternative finance developments are also helping improve access to finance for underserved populations.

All in all, the interest of private investors in financial inclusion shows an increasing trend, and new financial inclusion funding sources and instruments have emerged. For this reason, the AG identified “new funding sources in the financial sector” as an area in which there is a need to focus more research.

Within the area “new funding sources for financial inclusion”, the AG proposed the following research topics:

1. Social Impact Investing
2. Gender Bonds
3. Green Bonds
4. Debt-Crowdfunding



PUBLIC POLICY AND REGULATION FOR FINANCIAL INCLUSION

Regulation defines the environment in which financial services providers work. This environment may act as a financial inclusion enabler or, if very restrictive, may cause the financial exclusion of certain groups. In this sense, the G20 has identified the need to “provide an enabling and proportionate legal and regulatory framework for digital financial inclusion” as one of its High-Level Principles for Digital Financial Inclusion. (7)

Providing an enabling framework requires that regulators follow the rapid transformation of financial services without discouraging innovation while keeping consumers protected and ensuring stability in the financial market. Examples of regulation in this regard include personal data management regulations like the General Data Protection Regulation (GDPR) in the EU and California Consumer Privacy Act (CCPA) in California. Moreover, there have been recent changes in regulation regarding the Know-Your-Customer (KYC) and Customer Due Diligence (CDD) principles. (8) The Financial Action Task Force (FATF) has disclosed the principle of Simplified Due Diligence (SDD) and published a guide on how to combine digital identity technologies with the CDD principles. (9) According to CGAP, allowing simplified customer due diligence for lower-risk accounts and transactions is one of the key enablers of financial inclusion in terms of regulation. (8)

The digital transformation of the financial sector has also allowed the development of solutions that facilitate handling with increasing regulatory requirements. On the one hand, SupTech solutions aim to increase the efficiency and effectiveness of market supervision through automated data collection and analysis. On the other hand, RegTech, defined by the Institute of International Finance as: “the use of new technologies to solve regulatory and compliance

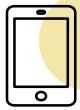
requirements more effectively and efficiently." Through RegTech solutions, FSPs can comply with regulatory requirements more efficiently and less costly, which can improve their capacity to better serve consumers.

Public policy also plays a key role in enabling financial inclusion. In this sense, more developing countries are implementing financial, educational, and digital inclusion strategies, that serve as roadmaps to increase financial and digital inclusion and capabilities. In 2018, 47 countries had a National Financial Inclusion Strategy approved, while 22 were in the process of formulating one. (9) Moreover, in its analysis of policy frameworks in 55 emerging market economies, the Economist Intelligence Unit's Global Microscope reported that about two-thirds of these countries had explicit national financial inclusion strategies in 2014. By 2019, all but one of the countries analyzed have developed one.

All in all, the expansion of digital financial services has created new opportunities to reach vulnerable populations, however, it also presents new challenges and risks that need to be addressed by regulators and policymakers. It is necessary to find a balance between protecting the user, protecting the financial market, promoting innovation, and leaving no one behind. It gets more complex when we consider that, thanks to technology, the operations of financial services providers are becoming more and more global, which calls for greater harmonization of regulation between countries. For these reasons, the AG identified "public policy and regulation to boost financial inclusion" as an area in which there is a need to focus more research.

Within the area Public Policy and Regulation for Financial Inclusion, the AG proposed the following topics:

1. Consumer protection and safeguarding
2. Cybersecurity regulation
3. Gender lens in financial inclusion policy
4. Interest rates regulation
5. Know Your Customer (KYC) regulation
6. Public policy for digital & financial literacy
7. Regional/global harmonization of financial services regulation
8. RegTech
9. Regulatory Sandboxes
10. SupTech
11. Taxation & financial inclusion



TECHNOLOGY AND INNOVATION TO BOOST FINANCIAL INCLUSION

In recent years, as a result of innovation and technology developments, the financial industry has witnessed the entry of new actors, products and services, distribution channels, and data sources, among others. The digital transformation of financial services presents challenges but also new opportunities. In this sense, digital financial services have the potential to address barriers to access the financial system.

By way of example, technology can bring an alternative for one of the main causes of financial exclusion: the lack of ID. According to the The Global Findex database, in 2017 26% of unbanked people in low-income countries weren't able to access the financial system due to the lack of national ID. (12) Digital ID can help expand digital financial services. Moreover, Blockchain technology has the potential to expand financial inclusion. For instance, by offering self-sovereign identity solutions or by diminishing costs of cross-border payments. Through blockchain technology is possible to reduce information asymmetries and gaps, among other access barriers. For instance, the non-profit Kiva is building an identity protocol based on self-sovereign identity for building credit history in Sierra Leone. (10)

Big data and Machine Learning have also helped transform the financial sector. Big data analytics has the potential to diminish knowledge barriers, and thus expand access to financial services to populations that, under traditional criteria, would be excluded from the system. The large amount of data that currently exists has also enabled new actors to provide financial services. For instance, this is the case of Super Apps and E-commerce platforms offering financial services with the potential to reach populations traditionally excluded from the system.

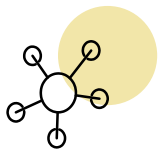
In this context of innovation and a wider variety of actors arises the concept of open banking. This is a banking practice that provides third-party financial service providers open access to consumer banking, transaction, and other financial data from banks and non-bank financial institutions through the use of APIs. (11) This promotes competition within the industry, which can result in lower costs and better service to consumers. (12)

Another technology development that is trending in the financial sector is digital currencies. Digital currencies are relevant for financial inclusion as they can potentially help to attract more people to the digital economy. Regarding CBDC (Central Bank Digital Currencies), 81 countries that represent more than 90% of the global GDP) are considering implementing a CBDC. In 2019 only 35 countries were considering this kind of development. (13)

However, while technology presents opportunities and tools to expand financial access, it brings challenges related to data privacy, cybersecurity, over-indebtedness, and may also reinforce exclusion patterns, for instance, due to biased algorithm design and the existing digital divide. For these reasons and because it is an area that is constantly evolving, the AG identified “technology and innovation to boost financial inclusion” as an area in which there is a need to focus more research.

Within the area “technology and innovation to boost financial inclusion, the AG proposed the following topics:

1. Artificial Intelligence and Machine Learning
2. Blockchain technology applications to boost financial inclusion
3. Digital Identity
4. Government-issued digital currencies
5. Open Banking/Open Finance
6. Super Apps



TRENDS AND CHALLENGES FACED BY FINANCIAL SERVICES PROVIDERS

The expansion of fintech has changed the financial sector dynamics. With the increased competition, more traditional players like banks and MFIs have digitized their products and services. In some cases, traditional players have chosen to partner and collaborate with fintech companies instead of competing in order to deliver financial services more efficiently.

However, fintech expansion is not without risk. While fintech companies do not necessarily aim to help vulnerable populations access the financial system, the pressure derived from digital solutions can directly affect and put at risk the activities of financial service providers working with underserved populations.

Furthermore, the boom of digital financial services can negatively affect clients of both traditional and innovative financial providers. “Easy” digital credit creates risks for people with limited financial literacy. (17) The results of this boom include high default rates, excessive late fees, and over-indebtedness. For instance, one in five Kenyan borrowers reported reducing food purchases to repay a digital loan. (14)

In addition, despite the boom of digital financial services, 1.7 billion adults remained unbanked in 2017, according to the Global Findex database. New challenges to access have arisen, lack of connectivity being one of the most significant. In this sense, in 2020, just over 4 billion people

(51% of the global population) were connected to the mobile internet. Thus, almost half of the world remains unconnected. (15)

All in all, the financial system has become more complex, and there are knowledge gaps on how fintech and traditional players can coexist while protecting consumers and reaching financially underserved populations. The financial industry is in constant motion, affecting the work of financial services providers working with the most vulnerable populations. For this reason, "trends and challenges faced by financial services providers" is one of the areas identified as a one in which there is a need to focus more research.

Within the area “trends and challenges faced by FSPs”, the AG proposed the following topics:

1. Barriers to reach excluded populations
2. Building the trust of customers in digital financial services
3. Dealing with overheating markets
4. Digital Financial Services & over-indebtedness
5. Duty of care to borrowers
6. Innovative approaches for product and services delivery
7. MFIs and Fintech: synergies and challenges
8. MFIs competitiveness in the digital age
9. Responsible use of users' data
10. Scalability of MFIs operations
11. User-Centered product design



CREDIT PRODUCTS

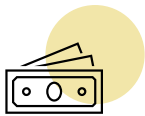
Loans are the most traditional product within the financial inclusion sector. The path that started with microloans to invest in small businesses, today includes loans to cover other specific needs like credits for agriculture, housing, disaster recovery, and climate change resilience.

Credit products have also evolved as a result of digitization and the development of mobile credit. Typically, mobile credit refers to quickly approved short-term loans that are acceded via mobile devices. However, as we have mentioned in previous areas, the expansion of digital financial services does not come without risks like over-indebtedness, algorithm bias, poor disclosure and transparency, and aggressive marketing practices, among others. (17)

All in all, credit products are the most traditional and widespread financial product in the sector. Moreover, it is a product that continues to evolve and to present challenges. For this reason, the AG identified “credit products” as an area in which there is a need to focus more research.

Within the area “credit products”, the AG proposed the following topics:

1. Agri-tech and rural financing
2. Crowdfactoring
3. Disaster-recovery loans
4. Green Loans
5. Housing loans
6. Loans with flexible repayment conditions
7. MSME lending
8. Mobile Credit
9. Water, sanitation and hygiene (WASH) loans



SAVING PRODUCTS

Savings allow people to pay for education, health expenses, as well as to respond to multiple life shocks. Along with microloans, savings (through savings groups) was the main product offered by microfinance institutions.

Informal savings is the most common way in which vulnerable populations save. According to the Global Findex Database, in 2017 on average 44% of adults saved money in the last year in lower and middle economies. 11% saved at a financial institution vs. 17% in a savings club or a person outside the family. As a point of fact, Rotating Savings and Credit Associations (ROSCAs) and Accumulating Savings and Credit Associations (ASCAs), which refers to informal savings groups managed by their members, are saving alternatives widely used in developing countries. Nevertheless, new models such as digital savings are advancing in the sector.

It is worth noting that savings for retirement are not a common in the field. According to Global Findex 2017, only 10% of adults saved for old age on average in low-income countries en Sub-Saharan Africa. In South Asia the average was 12%, and in Latam 14%. Digital channels have opened a possibility to expand this type of savings, but there is still a long way to go.

Savings are of vital importance for vulnerable populations as they enable them to respond to the various shocks that may occur. Although it is a financial product that has been offered for many years, it still faces several limitations to its expansion. Because it is a pillar in the financial inclusion sector, the AG identified it as an area in which there is a need to focus more research.

Within the area Saving Products, the AG proposed the following topics:

1. Digital Savings
2. Informal Savings (ROSCAS/ASCAS)
3. Pensions



INSURANCE PRODUCTS

Insurance products offer protection against health, death, climate change, disaster, and agricultural risks. The lack of insurance can keep vulnerable populations in a vicious cycle of poverty. However, insurance is unavailable or expensive in many developing countries, and at least 5.2 billion people don't have insurance products. (18)

The rise of Insurtech has impacted the sector in recent years. These technology-led applications apply big-data analytics, artificial intelligence, and blockchain technology to develop new risk-assessments models and create products tailored to consumers' needs. They can play an important role in the expansion of insurance to low-income populations as they are improving the efficiency of operations, reducing costs, and implementing innovative models in the sector. However, as is the case with other digital solutions, it may result in the exclusion of some vulnerable groups.

Insurance can play a key role in the lives of low-income populations. It helps mitigate, manage and transfer risks that directly impact their livelihoods. For this reason, the AG identified "insurance products" as an area in which there is a need to focus more research.

Within the area "insurance products", the AG proposed the following topics:

- Agricultural Insurance
- Climate change insurance
- Index-Based Insurance



OTHER FINANCIAL PRODUCTS

As mentioned in previous areas, the origin of microfinance is linked with microloans and saving products for financially unserved populations. Nowadays, the financial inclusion landscape has expanded and includes a more diverse scope of financial products and services.

In this regard, one of the main players is digital payments. According to GSMA, in 2020 the number of registered mobile money accounts grew by 12.7% globally and over 136 million accounts were open in just one year as consequence of COVID-19 pandemic. In this context, digital payments were governments' key allies to efficiently and securely distribute cash transfers to alleviate the economic consequences of COVID-19. This was also the case of humanitarian organizations that included contact-free distribution channels to disburse humanitarian cash transfers in a more efficient, accountable, and transparent way. (18)

Another product with the potential to contribute to the financial inclusion of vulnerable populations is remittances. However, this potential was commonly missed as the most traditional model of remittances is expensive and based on cash-based methods. Nevertheless, Covid-19 accelerated the digitalization of remittances. Mobile remittances reduce costs and challenge the traditional model, freeing the way to increase financial access and inclusion of vulnerable populations.

The path to financial inclusion has expanded beyond loans and savings. In recent years, we have witnessed the expansion of new products and services that have the potential to reduce costs, increase transparency and efficiency, and reach financially underserved populations. Because of their relevance for the financial inclusion of vulnerable populations, the AG suggested “other financial services” as an area in which there is a need to focus more research.

Within the area “other financial products”, the AG proposed the following topics:

1. Digital Payments
2. Mobile Remittances
3. Non-conventional collateral
4. Humanitarian cash-transfers
5. Islamic Banking Model



NON-FINANCIAL PRODUCTS

Financial inclusion is a multidimensional concept. It refers not only to access to financial products and services, but also to the regularity in the use of these products and services, and their quality. (23) For this reason, it is considered a vehicle for achieving financial health and well-being. Therefore, while it is important to expand access, it is also essential to provide non-financial products and services that can increase usage and help people change their behavior to achieve financial health. Non-financial products and services include financial and digital education programs offered to help populations make better use of FS and make informed decisions. According to The Standard and Poor’s’ Global Financial Literacy survey of 2014, only one in three adults globally is financially literate. Furthermore, there is a significant disparity between access to financial services and financial literacy levels. For instance, in Kenya, 82% have access to financial services but only 38% are financially literate. (24) The lack of financial and digital literacy hinders the use of financial services but also makes consumers more vulnerable to fraud, over-indebtedness, and other financial risks.

Non-financial services are essential to ensure that populations can make proper use of financial services and make financial decisions that positively affect their quality of life. Nowadays, in addition to promote financial education, there is also the need to accompany populations in the

development of their digital skills. Because access alone is not enough and because non-financial products are key to reduce the barriers to financial inclusion, the AG included this area as an area in which there is a need to focus more research.

Within the area “non-financial products”, the AG proposed the following topics:

1. Challenges in non-financial services delivery
2. Financial education through online platforms
3. Integration of financial and non-financial products and services
4. Non-financial services needs of underserved populations
5. Supporting customers digitalization
6. Use of data to design non-financial services.



RISK MANAGEMENT

Financial services providers face diverse risks that threaten the sustainability of their operations. These include credit, liquidity, compliance, and operational risks. In addition, in recent years, environmental risks have also become a relevant topic in the field. In this context, financial services providers need to develop strategies to address them, as poorly managed risks can threaten the long-term viability of their operations. Risk management is a challenging task in the financial inclusion sector as many FSPs work with populations that in many cases cannot offer guarantees or collateral.

Because risk management has a direct impact on the ability of FSPs to provide products and services to vulnerable sectors, the AG identified it as an area in which there is a need to focus more research.

Within the area “risk management”, the AG proposed the following topics:

1. Strategies to address credit risks
2. Strategies to address compliance risks
3. Strategies to address operational risks
4. Strategies to address liquidity risks
5. Strategies to address environmental risks
6. Use of technology and data for risk management



PERFORMANCE MEASUREMENT AND IMPACT

Financial inclusion has been identified as an enabler for 7 of the 17 Sustainable Development Goals. Typical metrics of financial inclusion consist of indicators of access, usage, and quality of products. However, the overall impact of financial services on the lives of vulnerable populations is still not clear. There are knowledge gaps in the financial inclusion sector that need to be addressed in order to understand if and how financial services are affecting the well-being of these populations.

Measuring impact is key to improving and making effective interventions. It is essential to address the existing knowledge gaps regarding how financial services impact livelihoods and/or the environment. For these reasons, the survey includes “performance measurement and impact” as an area in which there is a need to focus more research.

Within the area “performance measurement and impact”, the AG proposed the following topics:

1. Environmental performance of Financial Services Providers
2. Financial health of vulnerable populations in the digital age
3. Financial Inclusion and SDGs: Progress and gaps
4. Financial Resilience of vulnerable populations
5. Good practices on data collection to advance financial inclusion
6. Impact of Digital Financial Services on prices and affordability of financial services
7. Social performance of Fintech

SECTION 3: SURVEY RESULTS

A) Profile of Respondents

Survey participants represent 68 different organizations working in the financial inclusion sector. As Table 1 shows, the type of organizations represented in survey responses is diverse. NGOs, Foundations, Consulting Firms, and MFIs account for 52% of respondents.

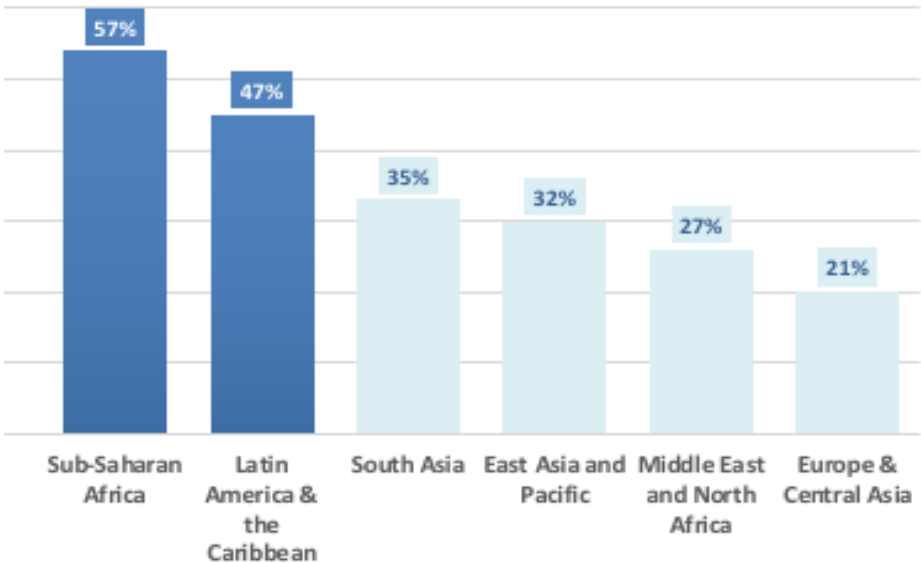
In terms of participants' job title, at least 57% of respondents stated being a decision-maker within its organization: Director, Manager, CEO, Head of Unit, VP. It is worth noting that the pool of respondents is mostly composed of practitioners. There is lower participation of academics and researchers.

Figure 1 shows the main regions in which survey participants work. As per these results, we can state that all regions of interest were represented in survey responses, being Sub-Saharan Africa and Latin America the regions where a higher percentage of participants work.

Table 1: Organization type

Organization type	100%
NGO / Foundation	25%
Consulting firm	14%
Microfinance Institution (MFI)	13%
Independent Consultant	8%
Bank	7%
Research Center/University/Researcher	7%
Investor	6%
International Organization	5%
Other	5%
Credit Cooperative / Credit Union	4%
Network	3%
Fintech	1%

Figure 1: Region of work (*)



(*) The % adds more than 100% as each respondent was able to select more than one region.

B) Chosen Areas

As described in Section 2, the survey presented 12 areas related to the financial inclusion sector. For each of them, participants had to respond if they were interested and/or considered it relevant for their work (yes or no answer). In Table 2, we present these 12 areas ranked by the percentage of respondents that considered it interesting and/or relevant for their work:

Table 2: Chosen areas

Area	% of respondents that considered it relevant for their work
Trends and challenges faced by financial services providers	94%
Non-financial services	94%
Technology and innovation to boost financial inclusion	93%
Credit products	92%
Performance measurement and impact	89%
Gender equality in the financial sector	89%
New funding sources for financial inclusion	87%
Public policy and regulation for financial inclusion	87%
Saving Products	84%
Insurance Products	82%
Other financial products and services	79%
Risk management	79%

Thus, the three areas that were pointed out by the highest quantity of respondents as most interesting and/or relevant were the following:

1. Trends and challenges faced by financial services providers
2. Non-financial services
3. Technology and innovation to boost financial inclusion

Nevertheless, the difference in percentages between the areas is not significant. We observe that even the areas with the lowest percentages (Other financial products and services and Risk Management) have reached at least 79%. This implies that all areas presented were of high interest for financial inclusion actors.

It is worth noting that these results highlight the importance of non-financial services in the industry. It reinforces the idea that providing access to financial services is not enough to improve the wellbeing of vulnerable populations.

The top three areas are the same in almost all regions. Exceptions include East Asia and Pacific, in which the area “performance measurement and impact” replaces “trends and challenges of financial services providers” in the top three. In Central Asia, North Africa & Middle East, “gender equality in the financial sector” is also among the most selected areas.

On another note, we observe that credit, which is the most traditional product in the financial inclusion sector, was the most selected one among financial products (savings, insurance, other financial services). Therefore, while technology has transformed and expanded other financial products, credit remain the most relevant and/or interesting in the sector.

Regarding the selection of areas by type of organization, we observe that for academics, the top three include ‘credit products’ instead of “technology and innovation to boost financial inclusion”. On the practitioners' side, we noted that “gender equality in the financial sector” was also among the most selected areas. On another hand, 100% of respondents working at MFIs and NGOs selected “technology and Innovation to boost financial inclusion”. This can cast evidence on the interest that more traditional players in the sector have in technological developments to improve their work.

C) Chosen topics

As described in Section 2, within each area of interest the AG proposed a list of topics. Among these topics, participants had to choose the three most relevant and/or interesting for their work. In Table 3 we present the most chosen topics within each area.

Table 3: Most chosen topic per area

Area	Most chosen topic
Credit products	Agri-tech and rural financing
Gender equality in the financial sector	Financial needs and behavior of low-income women in the digital era
Insurance Products	Agricultural insurance
New funding sources for financial inclusion	Social impact investing
Non-financial services	Financial education through online platforms

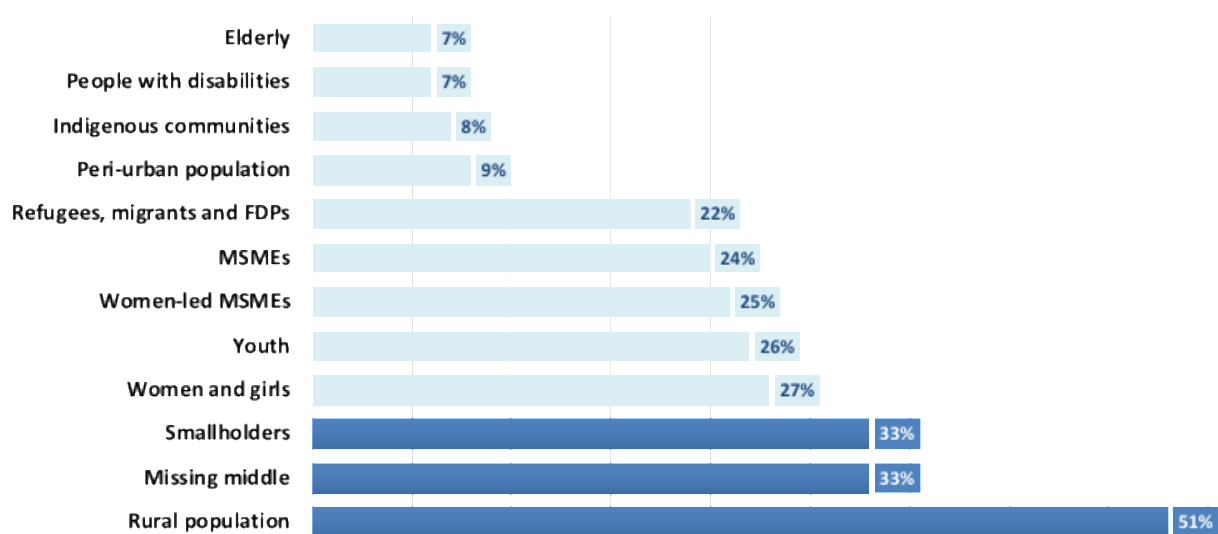
Other financial products and services	Digital payments
Performance measurement and impact	Financial Inclusion and SDGs: Progress and gaps
Public policy and regulation for financial inclusion	Consumer protection and safeguarding, and Public policy for digital & financial literacy
Risk management	Use of technology and data for risk management
Saving Products	Digital Savings
Technology and innovation to boost FI	Digital Identity
Trends and challenges faced by FSPs	Barriers to reach excluded populations

D) Underserved populations

In addition, participants were also asked to select at most three financially underserved groups that they consider relevant and/or interesting for their work.

As shown in Graphic 2, the rural population was the group with the highest number of votes: 51% of respondents consider it a population group of interest for their work. Missing Middle and Smallholders were the other two underserved groups most selected by participants.

Figure 2: % of respondents that selected each population group as one of the three more interesting and/or relevant for their work



These results highlight participants' interest in rural population and smallholders. In point of fact, only 10% of rural communities have access to financial services according to IFAD. The causes of

financial exclusion of this population include low educational level, poor infrastructure and limited capacity of financial services providers. While digital financial services have the potential to reach this population, rural areas are also the less connected territories.

In the analysis of responses per region, we observe that the rural population was the most voted group in all regions except in a) Middle East and North Africa b) Europe & Central Asia. In these two regions, the most selected group was Missing Middle. In addition, in these two regions, the top three also include refugees, migrants and FDPs, and women-led MSMEs.

The analysis of responses by type of organization reinforces the importance of the rural population as a group of interest. This is due to the fact that it is the only group that was selected by all types of organizations as a population of interest and/or relevance.

It is worth noticing that while the rural population was chosen by all types of organizations as one of the three most interesting and/or relevant groups for their work, in some cases it wasn't the most voted segment. For instance, in the case of credit cooperatives/credit unions, the most voted population was youth. In the case of banks, the most voted group was the missing middle. Finally, for researchers the most chosen group was MSMEs.

CONCLUSION

As a result of technological innovations, the financial industry is constantly evolving. While these changes bring opportunities to boost the financial inclusion of vulnerable populations, they also bring numerous challenges and risks. As the industry becomes more complex, stakeholders' knowledge needs also rise. In this scenario, in order to support the work of financial inclusion actors, the Action Group “From Research to Action and Back Again” launched a survey to understand what are the main research needs and interests in the field. Survey results provided insights that will guide the research agenda and the future projects of the AG. On the other hand, it will allow the creation of collaborations and joint work with interested organizations, in order to add value to the work of financial inclusion stakeholders and contribute to improving the lives of the populations in developing countries.

Appendix A

Survey's complete list of areas and topics:

Public Policy and Regulation for Financial Inclusion

- Consumer protection and safeguarding
- Interest rates regulation
- Know Your Customer (KYC) regulation
- RegTech
- Regional/global harmonization of financial services regulation
- Taxation & financial inclusion
- Regulatory Sandboxes
- SupTech
- Cybersecurity regulation
- Gender lens in financial inclusion policy
- Public policy for digital & financial literacy

Technology and Innovation to boost Financial Inclusion

- Digital Identity
- Artificial Intelligence and machine learning
- Open Banking / Open Finance
- Blockchain technology applications
- Super Apps
- Government-issued digital currencies

Gender Equality in the Financial Sector

- Gender gap in access to digital financial services
- Use of Artificial Intelligence and data to close the gender gap:
- Financial needs and behavior of low-income women in the digital era
- Non-financial services to decrease the gender gap
- Non-conventional collateral for women

Trends and Challenges Faced by Financial Services Providers

- Barriers to reach excluded populations
- Innovative approaches for product and services delivery
- MFIs and Fintech: synergies and challenges
- Digital Financial Services & over-indebtedness
- User-Centered product design
- MFIs competitiveness in the digital age
- Scalability of MFIs operations
- Building the trust of customers in digital financial services
- Dealing with overheating markets
- Responsible use of users' data
- Duty of care to borrowers

Funding Sources for Financial Inclusion

- Social impact investing
- Gender Bonds
- Green Bonds
- Debt Crowdfunding

Non-Financial Services

- Financial education through online platforms
- Integration of financial and non-financial products and services
- Non-financial services need of underserved populations
- Use of data to design non-financial services
- Supporting customers digitalization
- Challenges in non-financial services delivery

Credit Products

- Mobile Credit (B2P - B2B)
- Housing loans
- Water, sanitation, and hygiene (WASH) loans
- Green loans
- Agri-tech and rural financing
- Disaster recovery loans
- Loans with flexible repayment conditions
- MSME lending
- Crowdfunding

Risk-Management

- Strategies to address credit risks
- Strategies to address compliance risks
- Strategies to address operational risks
- Strategies to address liquidity risks
- Strategies to address environmental risks
- Use of technology and data for risk management

Performance Measurement and Impact:

- Financial health of vulnerable populations in the digital age
- Social performance of Fintech
- Impact of financial services in the livelihoods of both FDPs and their host communities
- Good practices on data collection to advance financial inclusion
- Environmental performance of Financial Services Providers
- Financial Inclusion and SDGs: Progress and gaps
- Impact of Digital Financial Services on prices and affordability of financial services
- Financial Resilience of vulnerable populations

Insurance Products

- Agricultural Insurance:
- Climate change insurance:
- Index-Based Insurance:

Saving Products

- Digital Savings
- Pensions
- Informal Savings (e.g., ROSCAS, ASCAs)

Other Financial Services

- Non-conventional collateral
- Humanitarian cash-transfers
- Islamic banking model
- Mobile remittances
- Digital payments

Underserved Populations:

- MSMEs
- Missing Middle
- Smallholders
- Elderly
- People with Disabilities
- Women and Girls
- Women-led MSMEs
- Refugees, Migrants and FDPs
- Rural Population
- Youth
- Indigenous Communities
- Peri-urban populations

Works Cited

1. **Bank for International Settlements.** *The fintech gender gap.* 2021.
2. **Tolzmann, Molly.** 2021. *CGAP Funder Survey 2019: Trends in International Funding for Financial Inclusion.* Washington D.C. : CGAP, 2021.
3. **Group, Symbiotics.** 2020 Survey Report Private Asset Impact Funds. *Symbiotics Group.* [Online] October 2020. <https://symbioticsgroup.com/wp-content/uploads/2020/10/PAIF-Report-2020-Summary-Highlights.pdf>.
4. **The World Bank.** IBRD Funding Program. [Online] The World Bank, May 2021. <https://treasury.worldbank.org/en/about/unit/treasury/ibrd/ibrd-green-bonds>.
5. **Climate Bonds Initiative.** Interactive Data Platform. *Climate Bonds Initiative.* [Online] Climate Bonds Initiative, 2021. <https://www.climatebonds.net/market/data/>.
6. **IDB Invest.** IDB Invest Issues First Gender Bond to Finance Projects Supporting Women in Latin America & the Caribbean . *IDB Invest.* [Online] IDB Invest, March 22, 2021. <https://idbinvest.org/en/news-media/idb-invest-issues-first-gender-bond-finance-projects-supporting-women-latin-america>.
7. **GPFI, G20.** *G20 High-Level Principles for Digital Financial Inclusion.* 2016.
8. **FATF.** *FATF Guidance on AML/CFT measures and financial inclusion, with a supplement on customer due diligence.* 2012-2017.
9. —. *Guidance on Digital identity.* Paris : FATF, 2020.
10. **CGAP.** Regulation for inclusive digital finance. [Online] <https://www.cgap.org/topics/collections/regulation-inclusive-digital-finance>.
11. **Alliance for Financial Inclusion.** *NATIONAL FINANCIAL INCLUSION STRATEGY MONITORING AND EVALUATION TOOLKIT.* s.l. : Alliance for Financial Inclusion, 2021.
12. **Demirgüç-Kunt, Asli, Leora Klapper, Dorothe Singer, Saniya Ansar, and Jake Hess.** *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution.* Washington D.C. : World Bank, 2018.
13. **KIVA.** Kiva Protocol. *Kiva.* [Online] <https://www.kiva.org/protocol>.
14. **Scott, Gordon.** Application Programming Interface (API). *Investopedia.* [Online] June 2021. <https://www.investopedia.com/terms/a/application-programming-interface.asp>.
15. **Hallsworth, John.** Engaging with Open Finance. *KPMG.* [Online] <https://home.kpmg/xx/en/home/insights/2020/03/engaging-with-open-finance.html>.
16. **Atlantic Council.** Central Bank Digital Currency Tracker. [Online] <https://www.atlanticcouncil.org/cbdctracker/>.
17. **Michelle Kaffenberger and Edoardo Totolo, with Matthew Soursourian.** *A Digital Credit Revolution: Insights from Borrowers in Kenya and Tanzania. Working Paper.* Washington D.C. : CGAP, 2018.
18. **Waldron, Daniel.** The Social Impact Credit Trap in Asset Finance. *CGAP.* [Online] May 2021. <https://www.cgap.org/blog/social-impact-credit-trap-asset-finance>.
19. **GSMA Intelligence.** *2021 Mobile Industry Impact Report: Sustainable Development Goals.* 2021.
20. **Gian Boeddu, Jennifer Chien and Ivor Istuk.** Consumer Risks of Fintech. [Online] June 2021. <https://figi.itu.int/wp-content/uploads/2021/06/Consumer-Risks-of-Fintech.pdf>.
21. **Microinsurance Network.** Emerging consumers. [Online] <https://microinsurancenetwerk.org/emerging-consumers>.
22. **GSMA.** *The Mobile Economy.* s.l. : GSM Association, 2021.

23. **Nidia García, Andrea Grifoni, Juan Carlos López Diana Margarita Mejía.** *La educación financiera en América Latina y el Caribe. Situación actual y perspectivas. Serie Políticas Públicas y Transformación Productiva.* s.l. : CAF, 2013.
24. **Leora Klapper, Annamaria Lusardi, and Peter van Oudheusden, Jake Hess and Saniya Ansar.** *Financial Literacy Around the World: INSIGHTS FROM THE STANDARD & POOR'S RATINGS SERVICES GLOBAL FINANCIAL LITERACY SURVEY.* 2016.
25. **DF4CR Task Force.** Pioneering solutions in Digital Finance for Climate Resilience. [Online] <https://bfa.global.com/infographic-solutions-in-digital-finance-for-climate-resilience/>.