GENDER AND FINANCIAL INCLUSION IN NGOMA DISTRICT OF RWANDA

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ABSTRACT

This research examines financial inclusion in Ngoma District, a rural area in Rwanda's Eastern Province, using quantitative data from the FinScope 2024 survey. The analysis draws on a weighted sample of 235,812 individuals aged 16 years and above and focuses on access to and use of financial services, saving behaviour, and credit utilization among men and women. Data was analysed using descriptive and comparative statistical techniques to generate financial inclusion indicators, with all computations conducted using Stata. The results show that, although access to financial services has expanded considerably, notable gender disparities persist across all dimensions of financial engagement. Overall, 95% of men and 88.8% of women are financially included, leaving 5% of men and 11.2% of women excluded from both formal and informal financial systems. This gap highlights enduring structural and socioeconomic barriers that disproportionately affect women. Gender differences are particularly evident in the use of formal financial services: 93.9% of men engage with regulated financial institutions compared with 78.4% of women, representing a 15.5 percentage point gap and indicating women's limited access to secure and diversified financial channels. Barriers to financial inclusion are largely demand-driven and include insufficient income, perceptions that financial services primarily serve wealthier individuals, and limited knowledge of available products. These challenges reflect the interaction of economic vulnerability, behavioural perceptions, and information asymmetries in shaping financial behaviour and exclusion. Addressing these constraints requires targeted interventions, including gender-sensitive financial literacy programs, community outreach, and measures to improve income stability and economic resilience. Gender disparities are especially pronounced in saving behaviour. While 61.9% of men use formal savings mechanisms, only 44.4% of women do so, and one-third of women reported not saving in the previous year compared with 19.1% of men. Insufficient income, unemployment, limited financial knowledge, and short-term consumption priorities remain the main barriers to saving. Promoting inclusive, low-entry, and commitment-based savings products can strengthen long-term financial planning while reducing gender gaps in savings participation. Credit utilization remains low for both sexes but is more constrained for women. Only 13.5% of men and 10% of women access formal loans, while women rely more heavily on informal borrowing (36.5% versus 26.7% of men). Key obstacles include fear of repayment, lack of collateral, and perceived high interest rates. Policy responses should prioritize expanding credit guarantee schemes, promoting group-based lending, and encouraging the development of affordable, transparent, and simplified credit products to enhance confidence and participation in formal credit markets, particularly in rural areas.

Key words: Financial services, formally served, financially excluded, gender disparities.

INTRODUCTION

Financial Inclusion (FI) constitutes a critical catalyst for economic development, as it broadens access to financial resources and opportunities for individuals, households, and enterprises. By facilitating access to long-term savings and investment instruments, affordable credit and insurance products, and secure, reliable digital payment systems, FI enhances the capacity of people and businesses to participate productively in economic activities. Consequently, higher levels of financial inclusion are strongly associated with sustained economic growth [1] and development [2]. Limited access to these services is a major barrier to income opportunities and economic well-being, especially for marginalized groups such as the poor, women, and youth, as well as for businesses, particularly Micro, Small, and Medium-sized Enterprises (MSMEs) [3]. FI is therefore regarded as a key means of maximizing access to financial services, fostering innovation, promoting savings and investment mobilization, and ultimately contributing to socioeconomic development [4].

While there have been attempts to define FI, there is no universally accepted definition. Generally, FI is understood as the process of ensuring that individuals, especially those from disadvantaged groups, have easy, timely, and affordable access to financial services offered by formal institutions such as commercial banks, microfinance institutions and insurance companies [5]. FI includes the ownership of an account at a formal financial institution, which enables individuals to save and borrow money, secure insurance, and use payment services [6]. According to Dogan *et al*. [7], FI refers to the ability to access and utilize a basic range of financial services, such as having a deposit or transaction account at a financial institution for storing, saving, or transferring money. This implies that FI emphasizes the ease of access to and availability of fundamental financial services for all members of society [8].

The Alliance for Financial Inclusion identifies the following three key dimensions of FI: (a) *Access*—the availability of formal, regulated financial services that are both physically accessible and affordable; (b) *Usage*—the actual utilization of financial services and products, measured by regularity, frequency, and duration of use; and (c) *Quality*—the provision of financial products that are well-tailored to meet client needs, with appropriate segmentation and a commitment to developing products for all income categories [9].

As there is no universally accepted definition, similarly, there is also no consensus on a formal approach to measure FI [10]. Some studies proposed to measure FI by simply measuring the proportion of adults or households of an economy that have access to formal financial services, such as bank accounts [11], or by focusing on a set of indicators to measure the level of savings, borrowing, payments, and risk

management of adults in the world [12]. For others, FI is a multidimensional concept that cannot be accurately captured by individual indicators such as bank account ratios, the number of automatic teller machines [13]. In the context of this research, we adopted the measurement approach currently used in Rwanda. Specifically, FI is defined as "*having access to or using financial services from both formal financial institutions (example: commercial banks, microfinance institutions, insurance companies, et cetera) and informal services (example: tontines or village savings and lending groups)*" [14].

The World Bank reported that 1.4 billion adults globally are excluded from financial services, with women being 6% less likely than men to have a bank account. Approximately 1 billion women remain unbanked, underscoring significant barriers to their access to financial services [15]. Conversely, the World Bank contends that in countries like Mexico and Nigeria, where women's FI has expanded, the gender gap in financial participation has notably decreased, resulting in broader societal changes [16]. This reflects the crucial and transformative role of FI in advancing women's economic empowerment and in enabling them to become active agents of socio-economic transformation.

In Rwanda, over the past four years, the financial sector has contributed an annual average of 2.5% to the country's Gross Domestic Product (GDP), with key components including banking, microfinance, insurance, and pensions [17]. As part of its National Strategy for Transformation (NST1), Rwanda aims to boost domestic savings and establish itself as a regional financial services hub by 2024. Key objectives of this strategy include increasing electronic payment transactions to 80% of GDP, achieving 100% FI, and expanding the capital market through new financing mechanisms such as green bonds and venture capital [18]. Furthermore, the financial sector's contribution to GDP is expected to rise from 2% in 2020 to 5.2% by 2035, and to 11.8% by 2050 [19]. In line with this achieving this goal, Rwanda has established the Kigali International Finance, organized Fintech forums, adopted the Fintech strategy (2024-2029), registered notable Fintech growth (75 Fintech firms approved by Central Bank with 3 million users), and a strong financial system with sound liquidity, loan growth, digital payment and eKash platform.

The main objective of this research is to assess the level of FI among men and women in Ngoma district, with a particular focus on their access to and use of financial services.

RESEARCH QUESTIONS

This study seeks to respond to the following three research questions:

Question 1. How does the level of FI differ between men and women in Ngoma district and what factors account for these gender-based differences?
Question 2. In what ways do men and women in Ngoma district differ in their utilisation of formal financial services such as savings and credit?
Question 3. What policy interventions could enhance FI and enhance greater use of financial services among men and women in Ngoma district?

MATERIALS AND METHODS

Selection of the study area

For the purpose of this research, Ngoma district was randomly selected from among ten predominantly rural districts in Rwanda, where access to formal financial services remains relatively limited and continues to pose a major development challenge [14]. Using a random number generator, each of the ten rural districts was assigned a numerical code, and Ngoma district was subsequently selected at random as the case study area.

Furthermore, to the best of our knowledge, there are limited studies that have used Finscope data—particularly data collected from Ngoma district. This highlights the significance of the present research, which not only fills a critical gap but also serves as a model for future studies in other districts by offering a deeper understanding of how rural populations access and use financial services.

As shown in Figure 1, Ngoma district is situated approximately 100 km southeast of Kigali, the capital city of Rwanda (around latitude 2°08' S and longitude 30°33' E) near the border with Burundi and Tanzania. It is one of the seven administrative districts that make up the Eastern Province of Rwanda.

Figure 1: Ngoma district on the map of Rwanda

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Sampling

The research uses quantitative data from Finscope 2024 surveys collected between November 2023 and March 2024 by Access to Finance Rwanda (AFR)[1] in partnership with the Ministry of Finance and Economic Planning (MINECOFIN), the National Bank of Rwanda (BNR), and the National Institute of Statistics of Rwanda (NISR).

The sample size was determined based on key parameters essential for its estimation, including the proportion of adults who accessed financial services through formal financial institutions—estimated at 53.3% according to the most recent *FinScope Rwanda 2020* survey [20] – and the corresponding design effect to account for sampling variability. The computation was performed using the following formula[2]:

$$n = Deft^2 \frac{\frac{1}{\widehat{P}} - 1}{\alpha^2}$$

Where:
n**:** the sample size,
Deft: the design effect, and
$\widehat{P}$: the estimated proportion (example: proportion of households that are banked).
α : the level of precision

Given an estimated banked population of 53.3% in Ngoma, a relative standard error of 7.02%, and a design effect (Deft) of 1.5, the calculated sample size is approximately 400 households in Ngoma district.

$$n = 1.5^2 \frac{\frac{1}{\widehat{0.533}} - 1}{0.0702^2} = 400$$

Where:
n**:** Selected sample size in Ngoma district

In line with national household survey protocols, NISR recommends selecting a minimum of 16 households from each Enumeration Area (EA), which, in this context, corresponds to a village. Guided by this recommendation, a total of 25 EAs were obtained by dividing the total sample (400) by the number of households to be interviewed in each EA (16 households)[3], ensuring representation across both rural

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[1] By the time of data collection, the author was the Head of Research and Information at Access to Finance Rwanda and coordinated all the Finscope 2024 survey related activities. The author was therefore granted full access to and use of Finscope 2024 dataset for the purpose of this research
[2] Formula derived from the 2012 National Institute of Statistics of Rwanda's sampling and households listing manual
[3] Guidance on household selection procedures was obtained from the Sampling and Household Listing Manual issued by the National Institute of Statistics of Rwanda

and urban areas in Ngoma district. Specifically, 9 enumeration areas were selected from urban settings and 16 from rural ones, reflecting the population distribution within the district.

To ensure that the Finscope 2024 survey sample accurately reflected the adult population (aged 16 years and above) in Ngoma district, a four-stage weighting process was applied. Firstly, the NISR developed a Master Sample of 4,000 enumeration areas nationwide using the Probability Proportional to Size (PPS) method. The PPS provides statistical representativeness (ensuring that the sample reflects the actual population distribution), reduces the sampling bias, increases efficiency and accuracy as well as supports valid weighting for national estimates. Secondly, 25 enumeration areas for the Finscope 2024 survey were selected from the Master Sample using systematic random sampling at the district level, again facilitated by NISR. Thirdly, 16 households were randomly selected from a comprehensive household list within each chosen enumeration area. Finally, one adult respondent was randomly selected from each household, based on the total number of eligible males and females residing in that household.

The weighted population was estimated by assigning each adult respondent a sampling weight equal to the inverse of their overall probability of selection, taking into account the selection probabilities at all four sampling stages. Applying these weights produced a final estimate representing 235,812 individuals aged 16 years and above in Ngoma district. Both the sampling methodology and the resulting weighted sample were reviewed and validated by the NISR to ensure statistical reliability and national representativeness. The data analysis employed a combination of descriptive and comparative statistical techniques, namely Chi-square test to estimate financial inclusion-related indices, using Stata software.

RESULTS AND DISCUSSION

Key Socioeconomic Characteristics
Table 1 indicates that Ngoma district is predominantly rural, with 81.4% of its residents living in rural areas. The gender composition reveals a slight female majority, with women accounting for 54.3% of the adult population. Furthermore, youth, defined in Rwanda as individuals between the ages of 16 and 30 years [21], comprise nearly half (48.2%) of the adult population, underscoring the demographic significance of young adults in the district.

Educational attainment in Ngoma district remains low, with 13% of adults having no formal education and 58.7% having completed only primary school. Such limited education levels present a major obstacle to FI, as low literacy and numeracy restrict individuals' ability to comprehend fundamental financial concepts, including interest rates, insurance, and credit terms. Consequently, adults with little or no formal

education tend to be less informed about available financial services—such as mobile money, savings accounts, agricultural loans, and microfinance institutions—and often struggle to use emerging digital financial tools, including mobile banking and mobile wallets. This limited financial literacy increases their vulnerability to exploitation by informal lenders or fraudulent schemes, potentially falling into debt traps or paying excessively high interest rates.

Research shows that lower education levels are linked to reduced financial literacy, limiting understanding of financial products and access to credit [12]. This lack of literacy leads to poor financial decision-making [22]. On the other hand, higher financial literacy is associated with increased savings, better credit scores, and improved financial planning [23]. It also promotes greater adoption of mobile money and digital financial tools in low-income communities [24].

Piecework and farming constitute the primary income-generating activities for 42% and 20.1% of the adult population in Ngoma district, respectively. In contrast, 3.1% of adults are employed in formal non-farm sectors while 5% are engaged in self-employment as business owners. These low proportions are largely attributable to limited educational attainment, which restricts the skills and entrepreneurship capacities necessary for innovation and the development of alternative income-generating activities.

Financial Access Strand
The financial access strand defines FI by segmenting adults based on their access to and use of financial services. Accordingly, this strand eliminates overlaps and categorizes the use of financial products across different access channels.

Figure 2 below presents the financial inclusion measurement framework used in Rwanda. This framework also aligns with the current national definition of FI, which is structured around four key financial access categories.
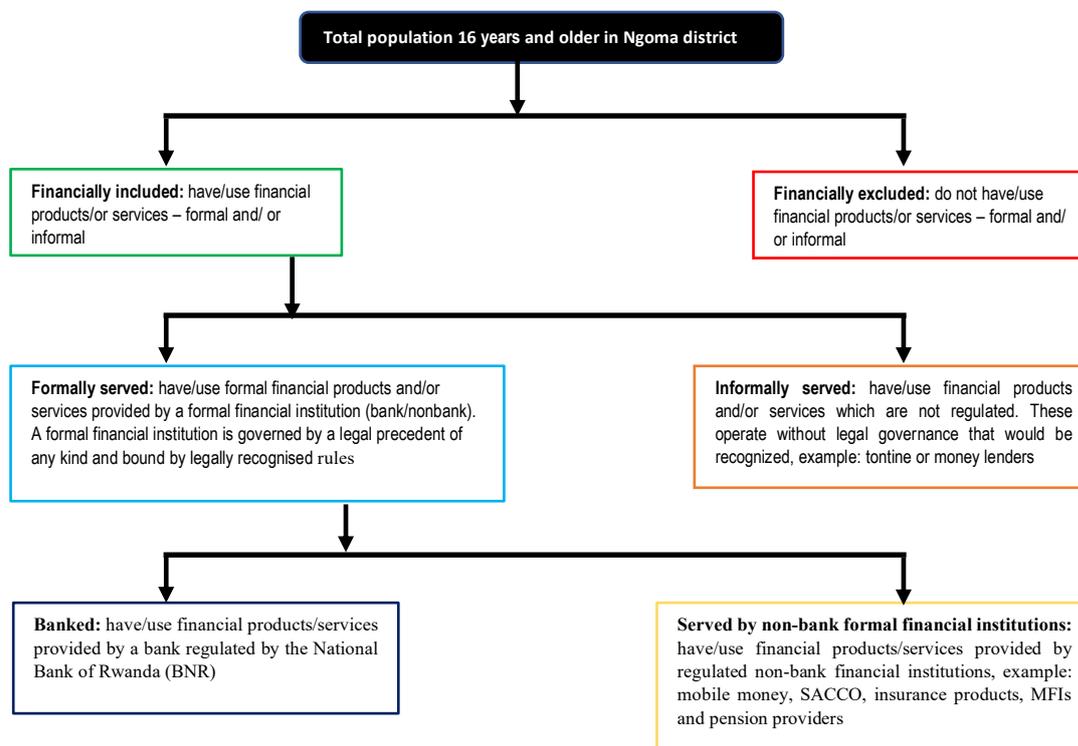
Figure 2: Adapted from the financial inclusion framework used in Finscope 2024 in Rwanda

These access categories include the adult population who, at the time of the survey were being:

- *Banked*: the proportion of adults served by commercial banks.
- *Served by non-bank formal financial institutions:* the proportion of adults using services from non-bank institutions such as Micro-Finance Institution (MFIs), mobile money, Savings and Credit Cooperatives (SACCOs), Insurance services, pension funds, non-deposit-taking financial institutions, and Fintechs.
- *Informally served:* the proportion of adults relying exclusively on informal financial services, such as informal savings groups, tontines, or money lenders, and;
- *Financially excluded:* the proportion of adults not using any financial services, whether formal or informal.

As illustrated in Figure 3, an estimated 95% of males in Ngoma are financially included – meaning that they engage with at least one form of financial service, whether formal or informal – compared to 88.8% of females, indicating a gender gap of 6.2%. Accordingly, 5% of males and 11.2% of females remain financially excluded. The analysis further indicates that 93.9% of males are formally served – through banks and other regulated non-bank financial institutions – whereas only 78.4% of females have access to such services.

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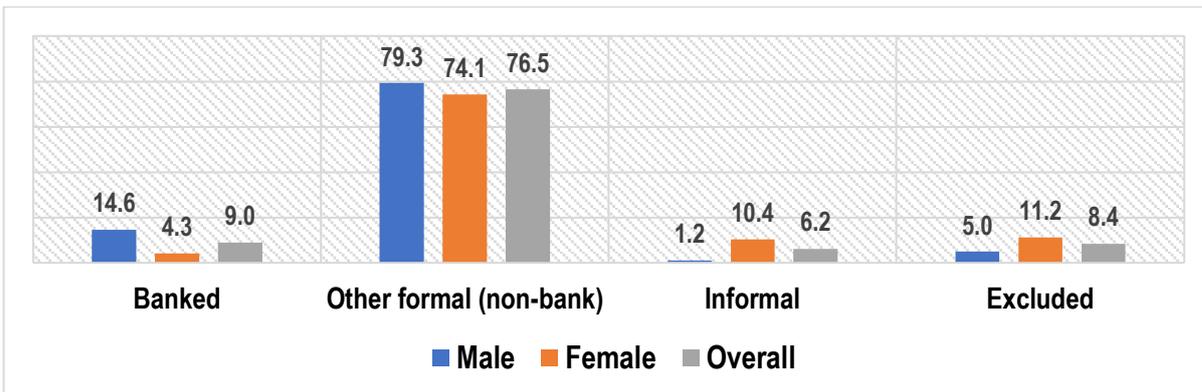
Figure 3: Financial access strand (%)
Source: Author's analysis of the Finscope 2024 survey data

These results underscore a persistent gender gap in access to financial services across the district. In particular, 14.6% of males are banked, compared to a mere 4.3% of females, while 79.3% of males access other types of formal financial services in contrast to 74.1% of females. Conversely, female respondents demonstrate a higher reliance on informal financial mechanisms, with 10.4% engaging in such services compared to only 1.2% of males. These findings indicate that, despite relatively high overall levels of FI, structural gender disparities continue to shape patterns of financial participation in Ngoma district.

Table 2 presents a geographical analysis of access to and use of financial services, highlighting persistent gender-based disparities between males and females residing in urban and rural areas of Ngoma district. Indeed, the findings indicate that levels of FI are generally higher among both males and females in urban areas compared to their rural counterparts. Specifically, FI among urban males is estimated at 97.2%, compared to 89.7% among urban females, whereas inclusion rates among rural males and females stand at 94.4% and 88.6%, respectively. A similar pattern emerges with regard to formal financial inclusion, where 94.9% of urban males (versus 83% of urban females) are formally served, compared to 93.6% of rural males and 77.5% of rural females. Access to banking services remains limited for both males and females in Ngoma district, though the challenge is notably greater among women. In particular, only 4.5% of rural females (compared to 12.6% of rural males) and 2.9% of urban females (compared to 22% of urban males) are banked. These gender-related findings align with evidence from Tanzania [25], Peru [26] and in Africa more broadly [27] which underscore the persistent structural and systemic barriers that contribute to gender disparities in FI.

The predominance of informal financial service use among females underscores persistent gendered disparities in FI. In rural areas, 11.1% of females rely on informal financial mechanisms compared to only 0.8% of males, while in urban settings, 6.7% of females do so against 2.3% of males.

A closer examination of the financially excluded population shows that financial exclusion remains disproportionately high among females – 11.4% in rural areas compared to 5.6% among rural males, and 10.3% among urban females compared to 2.8% of their male counterparts. These figures reveal structural and systemic barriers that continue to limit women's access to formal financial services across both rural and urban contexts.

Importantly, the application of a Chi-Square test confirms that these gender-based and rural-urban differences are statistically significant, with a p-value of less than 0.00001. This result indicates that the observed disparities are unlikely to be due to random chance and are statistically significant at the 95%, 99%, and 99.9% confidence levels.

The pronounced urban–rural divide and gender disparities in FI observed in Ngoma district arise from a multifaceted interplay of economic, social, and infrastructural factors. Urban residents benefit from closer proximity to financial institutions, higher income levels, and greater access to information and communication technologies, thereby enhancing engagement with formal financial systems. Conversely, rural populations face limited banking infrastructure, lower financial literacy, and dependence on informal economic activities, constraining their financial participation. These structural inequalities are further compounded for women, whose limited asset ownership, irregular income patterns, and restrictive socio-cultural norms undermine financial autonomy and access to credit. Additionally, restricted access to digital technologies exacerbates women's exclusion from emerging financial platforms. Consequently, targeted, gender-responsive policy interventions – such as mobile banking expansion, financial literacy initiatives, and inclusive financial products – are imperative to bridge spatial and gender gaps in FI.

As illustrated in Figure 4, the main challenges to FI among males and females in Ngoma district stem from a combination of demand and supply-side constraints. On the demand side, limited and irregular income reduces individuals' capacity to engage with formal financial service providers, while entrenched perceptions that financial services are designed for wealthier individuals further discourage participation.
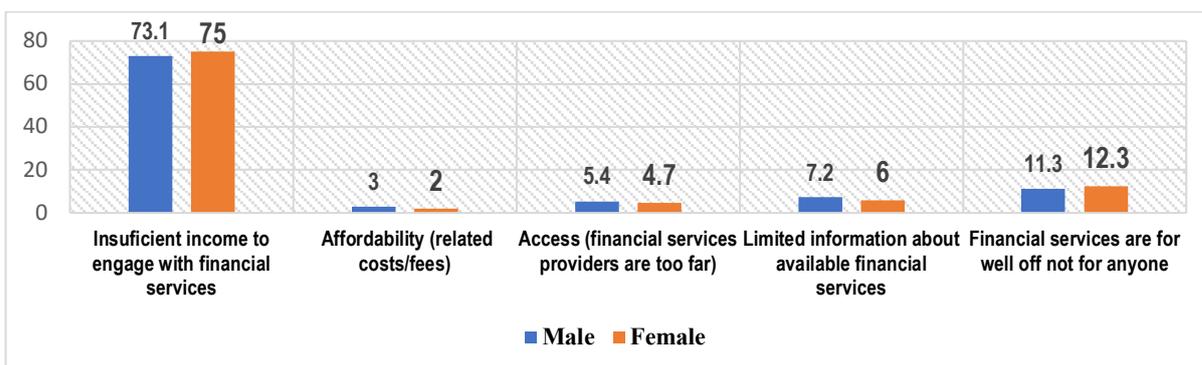
Figure 4: Challenges faced by males and females in achieving financial inclusion (%)

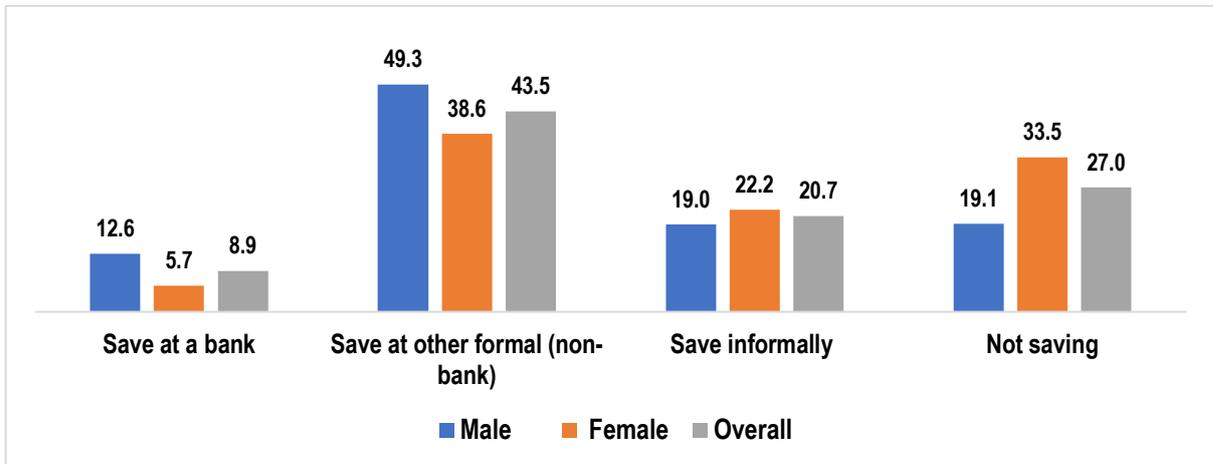Source: Author's analysis of the Finscope 2024 survey data

On the supply side, inadequate dissemination of information about available financial products, the distant location of financial institutions, and the high costs and fees associated with formal services collectively restrict access. These interrelated barriers not only constrain financial participation but also perpetuate structural inequalities, limiting the transformative potential of FI as a tool for economic empowerment and poverty reduction in Ngoma district.

Saving channels commonly used by males and females in Ngoma district

Saving is an important factor of FI as it provides the server with a range of opportunities for accumulating wealth over time for investing and for protecting against shocks. For instance, during crises like the COVID-19 pandemic, people with savings were better able to manage unexpected expenses, such as medical costs or loss of income, thereby reducing their vulnerability to poverty [16]. Rwanda aims to increase savings as a percentage of GDP from 10.7% in 2019 to 28% in 2050 [19]. In the context of this research, "Savings" refers to money or a store of value set aside for purposes other than regular expenditures or transactions.

Figure 5 presents the principal channels of saving employed by adult males and females in Ngoma district, revealing pronounced gender-based disparities in saving behavior. The findings indicate that only 44.3% of females, compared to 61.9% of males, save through formal financial institutions – specifically commercial banks and other regulated non-bank entities such as MFIs, SACCOs, and mobile money platforms. A substantial gender gap is particularly evident in saving through commercial banks, where merely 5.7% of females save compared to 12.6% of males. Similarly, 38.9% of females and 49.3% of males save through other formal non-bank financial institutions. In contrast, informal saving mechanisms, particularly savings groups, are more prevalent among females (22.2%) than males (19%). There are several reasons why males and females in Ngoma save their money, and the dominant of them include: saving to cater for living expenses when times are

hard, buying livestock, medical expenses, buying equipment/appliances, as well as saving for old age.

**Figure 5: Saving channels used by Ngoma district residents (%)**
Source: Author's analysis of the Finscope 2024 survey data

Furthermore, a significantly higher proportion of females (33.5%) than males (19.1%) report not saving at all, underscoring persistent gender inequalities in access to, and utilization of, formal financial services within the district. The main reasons for not saving include not having enough money to save, lacking income-generating activities that generate income, and prioritizing spending on other immediate needs over saving for the future.

The findings presented in Table 3 indicate pronounced gender disparities in the utilization of formal financial services for savings across both rural and urban contexts. Females consistently exhibit lower levels of engagement with formal saving mechanisms, particularly through commercial banks. In rural areas, only 4.8% of females – compared with 9.5% of men – report saving through commercial banks, while in urban areas the figures stand at 10.2% and 23.9%, respectively. A similar pattern is evident in the use of other formal financial institutions among rural residents, where 37.2% of females save through such channels, compared with 52.4% of men. Conversely, among urban dwellers, a higher proportion of females (45.5%) than males (37.8%) report saving through other formal non-bank financial institutions. In relation to informal saving practices, 23.3% of rural females save through informal channels, compared with 19.1% of rural males. Of particular concern is the relatively high proportion of females who do not save at all: 34.6% of rural females – against only 19% of rural males – and 27.9% of urban females – compared with 19.7% of urban males – report not saving. These findings highlight persistent gender gaps in FI and underscore the need for targeted interventions to enhance women's access to and utilization of formal saving avenues.

The application of the Chi-Square test to assess gender and geographical differences in saving behavior revealed a p-value of less than 0.00001, indicating that the observed differences are highly statistically significant. In practical terms, this means that there is less than a 0.001% probability that the differences in saving patterns between males and females in Ngoma district occurred by random chance. Given that the results are statistically significant at the 95%, 99%, and even 99.9% confidence levels, there is a high confident in concluding that gender and geographical differences are meaningful factors influencing how individuals engage with various saving mechanisms. This provides strong empirical support for the claim that FI interventions must be gender-responsive. Critically, both males and females who do not engage in saving face reduced financial security, limited access to investment opportunities, and increased susceptibility to financial shocks. Fostering a culture of saving is therefore essential for enhancing financial inclusion and strengthening household resilience in Ngoma. These findings underscore the need for targeted, rural-focused policy interventions, including the expansion of agent banking networks, investment in digital financial infrastructure, and the design of tailored financial literacy programs that address the structural constraints and specific needs of rural communities.

As shown in Figure 6, this research revealed a range of challenges encountered by both males and females in Ngoma district with respect to saving behavior. The most prominent constraint was the insufficiency of income to allocate toward savings or investments, reported by 42.1% of males and 43.7% of females. This was followed by unemployment, affecting 25% of males and 29.3% of females. Furthermore, a segment of respondents cited inadequate access to information regarding saving practices (11.7% of males and 9.9% of females), while others demonstrated a tendency to prioritize immediate consumption over saving (9% and 7% of males and females respectively). Notably, more than 7% of both male and female respondents indicated that they had never thought about engaging in saving activities at all.
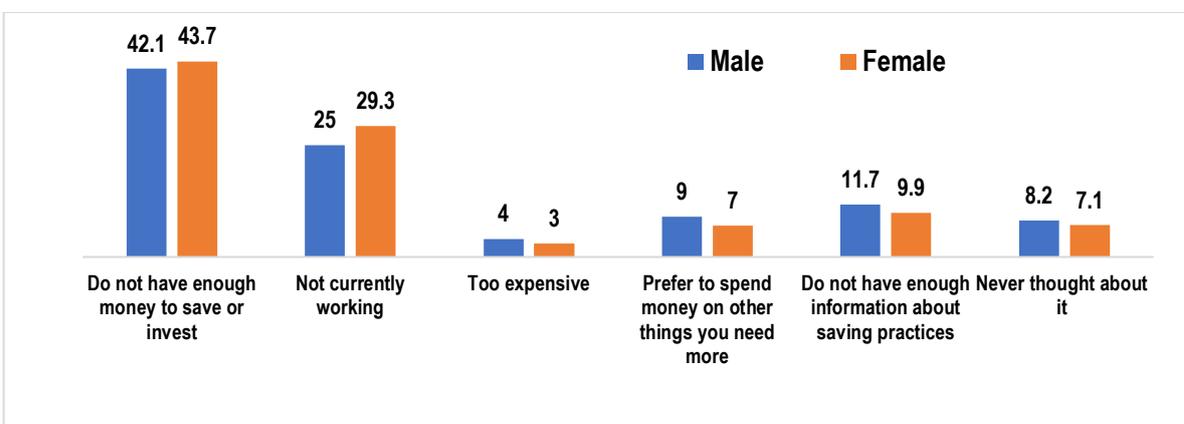
**Figure 6: Challenges faced by males and females in saving (%)**
Source: Author's analysis of the Finscope 2024 survey data

Access to credit in Ngoma district

Access to credit is another important component of FI as it plays a crucial role in improving individuals' and businesses' ability to manage their finances, invest in income-generating opportunities, expand operations, and mitigate potential socioeconomic shocks. Indeed, inclusive credit systems, whether through traditional banks or digital lending platforms, help bridge the financial gap that many individuals face [28].

As depicted in Figure 7 only 10% of females against 13.6% of males borrowed from formal financial institutions, namely commercial banks and other formal financial non-bank financial institutions. Furthermore, females are more likely than males to borrow from informal financial services with 36.5% and 26.7% respectively. The main reasons for requesting credits in Ngoma district include covering expenses for education, farming, buying livestock, buying land (home mortgage), medical emergencies, and other expenses (such as transport, food and groceries, clothing, et cetera).
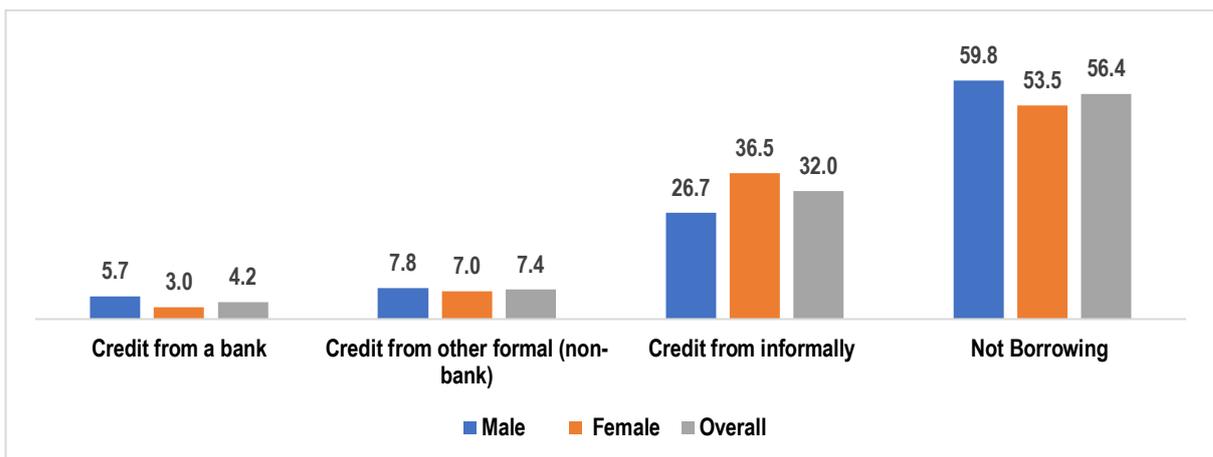
Figure 7: Credit channels used by males and females in Ngoma district (%)
Source: Author's analysis of the Finscope 2024 survey data

It is particularly noteworthy that a substantial proportion of the population in Ngoma district – 59.8% of males and 53.5% of females – did not borrow in the twelve months preceding the FinScope survey. The main barriers to credit access include concerns about repayment capacity, lack of adequate collateral, and the inability to meet institutional lending requirements.

As demonstrated in Table 4, pronounced gender disparities in credit access persist across both rural and urban contexts. Only 2% of adults in rural areas (1.5% of females and 2.7% of males) borrowed from commercial banks, compared to 14.1% in urban areas (11% of females and 16.8% of males), underscoring the combined effects of spatial and gender-based inequalities in access to formal financial

services. Similarly, borrowing from other formal non-bank financial institutions remains limited, with 8.4% of rural males and 6.6% of rural females reporting access, versus 5.9% of urban males and 9.3% of urban females. Informal borrowing dominates among rural females (39.9%) compared to urban females (18.9%), while 25.7% of rural males and 30.5% of urban males also rely on informal sources. A majority of adults remain financially inactive in the credit market, with 52.1% of females and 63.4% of males in rural areas – and 60.8% of females and 46.8% of males in urban areas – reporting no borrowing activity. These findings illustrate that structural, and institutional barrier, combined with gendered socio-economic constraints, continue to impede equitable access to credit in Ngoma district, particularly among rural women who remain heavily reliant on informal finance as a coping mechanism for limited access to formal credit systems.

The application of a Chi-Square test further supports the significance of these findings. With a p-value of less than 0.00001, the differences in credit access—particularly across gender and rural–urban divides—are statistically significant at the 95%, 99%, and 99.9% confidence levels. This means there is virtually no chance that these disparities occurred randomly. Instead, the results provide robust evidence that systemic barriers and socio-economic factors strongly influence credit access in Ngoma.

These findings highlight the urgent need for inclusive credit systems that address structural barriers. Interventions could include expanding microcredit programs, developing credit products that do not require traditional collateral, and promoting financial education targeted at women and underserved rural populations. Such efforts would not only promote greater FI but also foster local economic development and poverty reduction.

The findings outlined in Figure 8 indicate that male and female respondents in Ngoma district exhibit differing behaviors and perceptions concerning borrowing. Specifically, 28.3% of males and 32.1% of females reported that they did not perceive a need to borrow, while 22.6% of males and 24.6% of females expressed concerns about their ability to repay potential loans. Additionally, 25.4% of males and 22.5% of females cited the absence of collateral security as a barrier to borrowing, whereas 11% of males and 8.5% of females indicated that they did not meet banks' lending requirements. Furthermore, high interest rates imposed by financial institutions were identified as a major constraint to credit access by 10.7% of males and 11.3% of females. These findings highlight persistent structural and informational barriers that continue to limit borrowing opportunities among both male and female populations in the district.
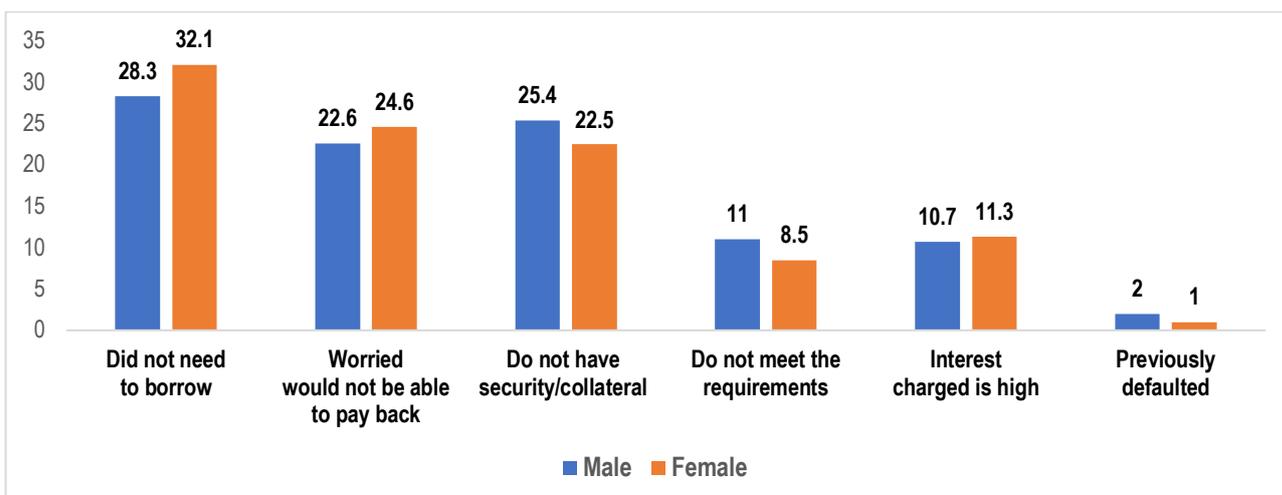
Figure 8: Challenges to borrowing among males and females in Ngoma district (%)
Source: Author's analysis of the Finscope 2024 survey data

CONCLUSION AND RECOMMENDATIONS FOR DEVELOPMENT

This research examined the state of FI among men and women in Ngoma district, with a focus on access to financial services, saving behaviour, and credit utilization. The findings reveal substantial progress in expanding financial inclusion overall, but they also highlight persistent gender disparities across all dimensions of financial engagement. While 95% of men and 88.8% of women are financially included, the remaining 5% of men and 11.2% of women remain fully excluded from both formal and informal financial systems—indicating structural and persistent barriers. Among those who are financially included, a more pronounced divide emerges in formal financial service use: 93.9% of men compared to 78.4% of women rely on formal regulated financial institutions. This 15.5-percentage-point gender gap points to ongoing constraints limiting women's engagement with formal, secure, and diversified financial channels.

Overall, the challenges limiting financial access in Ngoma district are predominantly demand-driven. Both men and women identify insufficient income, the perception that financial institutions serve only the wealthy, and limited information about available services as major barriers. These findings underscore how economic vulnerability, behavioural perceptions, and information asymmetries jointly shape financial choices and help explain why some individuals remain outside both formal and informal financial systems.

To address these challenges, strengthening financial capability through tailored, gender-sensitive financial literacy programs is essential for improving men's and women's understanding of financial services in Ngoma district. Simultaneously, enhancing income stability and economic resilience remains critical to advancing both saving and borrowing, necessitating the expansion of livelihood and

employment-support initiatives – particularly those targeting women – to alleviate the persistent income constraints that limit financial engagement. Complementary interventions, such as women's enterprise development programs, skills training, and improved access to productive assets, would further reinforce the economic foundation required for sustained and equitable participation in the financial system.

Saving behaviour exhibits similarly pronounced gender gaps. Formal saving mechanisms are used by 61.9% of men and only 44.4% of women, revealing a wide gender disparity in access to structured savings opportunities. One-third of women (33.5%) had not saved in the previous year, compared with 19.1% of men. The dominant constraint for both genders is insufficient income – reported by 42.1% of men and 43.7% of women – followed by unemployment and limited knowledge about saving practices. Behavioural factors, including short-term consumption priorities and limited long-term financial planning, further inhibit the formation of a savings culture. In this regard, there is a need for promoting inclusive and user-friendly saving products to help close gender gaps in saving. Additionally, there is a need for financial institutions to develop flexible, low-entry, and commitment-based saving schemes designed for men and women with irregular earnings. Such products can incentivize small but consistent deposits, strengthen long-term planning habits, and reduce behavioural barriers associated with short-term consumption pressures.

Credit utilization is even more constrained. Only 13.5% of men and 10% of women had accessed loans from formal financial institutions, while women relied more heavily on informal borrowing mechanisms (36.5%) compared to men (26.7%). A majority—59.8% of men and 53.5% of women—did not borrow at all. The principal challenges include fear of repayment difficulties, lack of collateral security, and the perception of high interest rates. These barriers not only suppress demand for formal credit but also heighten reliance on informal lending systems that may be less secure or more costly, particularly for women. Improving access to credit requires targeted reforms that directly address the key borrowing constraints identified in this study. Expanding credit-guarantee schemes and promoting group-based or character-based lending models would reduce reliance on physical collateral, benefiting both men and women but particularly women who are less likely to own assets. Strengthening financial counselling and repayment-planning services is equally important, as these measures can ease fears of default and build borrowers' confidence in managing loan obligations. Additionally, incentivizing financial institutions to provide lower-cost, transparent, and simplified credit products would help counter perceptions of high interest rates and complex procedures, thereby fostering greater engagement with formal credit markets.

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Conflict of interest

I hereby declare that I have no conflicts of interest—financial, personal, or otherwise—that could have influenced the findings, analyses, or conclusions presented in this study. This research was conducted independently, without external sponsorship, commercial involvement, or affiliations that could give rise to potential conflicts of interest. Furthermore, there are no competing interests related to data ownership, intellectual property rights, or inventions associated with this work.

Table 1: Socioeconomic characteristics of respondents in Ngoma district

Key Socio-demographics Characteristics		%
Geographical distribution	Urban	18.6
	Rural	81.4
	Total	**100**
Distribution by Gender	Male	45.7
	Female	54.3
	Total	**100**
Distribution by Age	Youth (16 -30 years)	48.2
	31 - 55 years	37.7
	Above 55 years	14.1
	Total	**100**
Distribution by education levels	No education	13.0
	Primary level	58.7
	Secondary level	26.1
	University level	1.7
	Vocational level	0.4
	Total	**100**
Distribution by livelihoods	Salaried-formal sector	3.1
	Salaried - informal sector	13.2
	Business owners	**5.0**
	Farmers/fishers	20.1
	Piecework/vendors	42.0
	Dependents	4.0
	Others	12.7
	Total	**100**

Source: Author's analysis of the Finscope 2024 survey data

Table 2: Financial Inclusion by gender and geographical location (%)

		Banked	Other formal (non-bank)	Informal	Excluded
Rural	Male	12.6	81.0	0.8	5.6
	Female	4.5	73.0	11.1	11.4
	Overall	**8.1**	**76.5**	**6.6**	**8.8**
Urban	Male	22	73.1	2.3	2.8
	Female	2.9	80.2	6.7	10.3
	Overall	**12.9**	**76.4**	**4.4**	**6.3**

Source: Author's analysis of the Finscope 2024 survey data

Table 2: Saving by gender and geographical location (%)

		Save at a bank	Save at other formal (non-bank)	Save informally	Not saving
Rural	Male	9.5	52.4	19.1	19.0
	Female	4.8	37.2	23.3	34.6
	Overall	**6.9**	**43.9**	**21.5**	**27.7**
Urban	Male	23.9	37.8	18.7	19.7
	Female	10.4	45.5	16.2	27.9
	Overall	**17.6**	**41.4**	**17.5**	**23.5**

Source: Author's analysis of the Finscope 2024 survey data

Table 4: Access to credits by gender and geographical areas (%)

		Credit from a bank	Credit from other formal (non-bank)	Credit from informally	Not borrowing
Rural	Male	2.7	8.4	25.7	63.4
	Female	1.5	6.6	39.9	52.1
	Overall	**2.0**	**7.4**	**33.6**	**57.1**
Urban	Male	16.8	5.9	30.5	46.8
	Female	11.0	9.3	18.9	60.8
	Overall	**14.1**	**7.5**	**25.0**	**53.4**

Source: Author's analysis of the Finscope 2024 survey data

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