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Determinants of access to finance among female cooperatives in Bauchi and Gombe states of North Eastern, Nigeria

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Abstract
Access to finance has become a major concern for policy makers especially in the agricultural sector of Nigeria. However, limited studies were conducted on the determinants of access agricultural finance. Accordingly, this study investigated the determinants of access to finance from the point of financial inclusion, literacy and social capital of smallholder cooperative farmers in Bauchi and Gombe states, Nigeria. The study adopted quantitative research approach using survey design strategy. A total of 155 valid responses were collected from the respondents drawn by stratified random sampling using questionnaire instrument. The collected data was analyzed using Partial Least Squares – Structural Equation Modelling (PLS-SEM) to test the formulated research hypotheses. The study found that financial inclusion, financial literacy and social capital have significant positive influence on access to finance of female cooperatives smallholder farmers in Bauchi and Gombe states, Nigeria. The study also found that social capital significantly influence financial inclusion and financial literacy in the study area. The research therefore recommended that smallholder female farmer should form more social capital through cooperatives in order to increase the level of financial inclusion and literacy thereby increasing the level of access to finance for agricultural production. The study contributed to the existing body of knowledge by investigating the determinants of access to finance from demand perspective. The finding of this study therefore has implications to policy makers, cooperative societies, financial institutions, female farmers and the general public.

Keywords: finance, female cooperatives, agricultural

Introduction

One of the most important basic need for mankind is food. Agriculture provide the global food need of the populace. Over the years, agriculture has attracted the attention of various stakeholders including government, organisations, individual, and Non-Governmental Organisations (NGOs). The sector has assumed prominence with substantial investment coming from government and private sources. In many developing nations, agriculture is the main stream of the economic activity. It contributed significantly to the economic growth by substantial contribution to the Gross Domestic Product. For instance, in Zimbabwe, agriculture is said to be the engine of economic growth and stability as it contributes about 18 per cent of the total GDP thereby leading to the economic development of the country (Rubhara & Mudhara, 2019). In Nepal, agriculture is also one of the major contributors to the country's GDP. It contributes around 38 per cent of the country's GDP thereby making it one of the most important sectors of the economy of the country (Upreti, Ghale, Shivakoti, & Acharya, 2018). Also, in Nigeria, agriculture is an important industry in Nigeria and has been largely responsible for taking Nigeria out of the 2017 economic recession. Agriculture contributes the highest proportion to the economy of the country. The sector contributes about 41 per cent of the GDP and employs about 70 per cent of the country's active population (Silong & Gadanakis, 2020). The extensive agricultural activities in the world can also be seen the level of gaseous emission from the sector. It was reported that the aftermath of agricultural activities which is reported to have contributed about 14.5 per cent of the global carbon emission (Odhong *et al*., 2019). Thus, the importance of agriculture the live of mankind can never be over emphasized. That was why the United Nations targets the sector for the eradication of hunger and provision of employment opportunities in its Sustainable Development Goals (SDGs) (Adegbite & Machethe, 2020; Bizikova *et al*., 2020) [1, 9].

Agriculture is the primary occupation of the vast majority of rural people in sub-Saharan Africa (Ingutia & Sumelius, 2022) [31]. Smallholder farmers, who make up a substantial portion of the farming population, are more vulnerable to climate change because they lack stable tenure and live in areas with degraded soil and poor soil quality that depend on unpredictable rainfall. The number of wage workers, displaced people, and pastoralists in rural areas is modest. Men relocate to the cities in pursuit of work, hence the majority of households are led by women across all categories.

However, despite the contribution of the agricultural sector to the economy, it is still bedeviled with a lot of challenges. One of the major challenges of the agricultural sector is that of access to adequate finance. Kumar *et al*. (2021) [37], reveals that access to finance is one of the major issues affecting agricultural development in many countries especially developing nations. They cited example of India where majority of farmers lack access to agricultural finance even with the governments' effort towards overcoming the challenge. In Nigeria also, poor agricultural financing is reported. Farmers have difficulties in accessing finance (Kehinde & Tijani, 2021) [35]. Poor agricultural financing refers to low financial capability of farmers and limited access to external fund which results to low financial resource for agricultural production.

Though the problem of access to finance for agriculture production could have supply, the demand side of the

problem is also enormous (Alao, Bamire, & Kehinde, 2020; Cabeza-García, Del Brio, & Oscanoa-Victorio, 2019; Kehinde & Tijani, 2021) [5, 13, 35]. The demand-side issues of access to finance include poor level of financial inclusion and financial literacy as a result of poor social capital. For instance, it is reported that, globally, more 2 billion active population have been excluded and do not have access to basic financial services (Adegbite & Machethe, 2020; Hussaini & Chibuzo, 2018) [1, 30]. This shows significant issues associated with financial inclusion globally. In Nigeria specifically, the 2016 Enhancing Financial Innovation and Access (EFInA) survey shows that only 68.4 percent of the Nigerian adult are financially included indicating that 41.6 per cent of the population are financially excluded (Hussaini & Chibuzo, 2018) [30]. This shows that financial inclusion is an important issue to address in achieving access to finance for agricultural production.

Statement of problem

Alao *et al*. (2020) [5] reported that a number of studies have been conducted on access to finance among farmers in Nigeria. However, majority of the studies are not gender sensitive. Gender inequality is a problem which has characterized the agricultural financing. Both men and women contribute significantly to agricultural production yet, their access to agricultural resources like credit differs. Women are more constrained than their men counterparts in terms of access to credits (Kaur & Kapuria, 2020; Lal, 2019) [34, 38]. These are reportedly related to their level of financial inclusion and financial literacy.

The sustainable development of Nigeria is being challenged by a persistent large financial inclusion gender gap (FIGG). The same gender gap in the country's smallholder agriculture frustrates the significant potentials of agriculture in achieving sustainable development outcomes. The smallholders drive the agricultural sector, comprise majority of the worlds' poor and are found in all regions in Nigeria. These farmers, especially women, face issues of financial inclusion and financial literacy (Adegbite & Machethe, 2020) [1]. A number of study investigates access to finance (Fianto, Gan, & Hu, 2019; Kaur & Kapuria, 2020; Odhong *et al*., 2019; Rubhara & Mudhara, 2019; Silong & Gadanakis, 2020) [21, 34]. However, these studies did not specifically investigate the influence of financial inclusion and financial literacy on access to finance even though they mention their possible role in access to finance. Literature shows that a lack of financial knowledge makes it difficult to identify and understand information about returns, risks, and financial products and to process such information. Financial services are not made readily available to everyone that needs them for some reasons which could be lack of awareness (financial illiteracy) (Hussaini & Chibuzo, 2018) [30].

Similarly, financial inclusion is a challenging issue across different countries because of the fact that around 2.7 billion adults worldwide (or 70% of the adult population) do not have access to formal financial services (Hussaini & Chibuzo, 2018) [30]. The situation is also dire in Nigeria with about 41.6 per cent of the population financial excluded based on EFInA survey (Hussaini & Chibuzo, 2018) [30]. The problem of financial inclusion and literacy leading to the issue of access to finance for agricultural production is more severe with women than men (Agarwal, 2020; Alao *et al*., 2020; Alvi *et al*., 2021; Cabeza-García *et al*., 2019; Dohmwirth & Hanisch, 2017; Fletschner & Kenny, 2014; Ishemo & Bushell, 2017; Rubhara & Mudhara, 2019; Tsige *et al*., 2020) [2, 5, 6, 13, 19, 22, 32]. Thus, women are said to cooperate effectively which may give them an edge in forming social capital (Dohmwirth & Hanisch, 2017; Kaur & Kapuria, 2020; Kehinde & Tijani, 2021; Odhong *et al*., 2019) [19, 34, 35] the impact of such social capital on their financial inclusion and literacy leading to access to finance has not been evaluated previously. Therefore this study investigated how social capital influence financial inclusion and financial literary which cumulatively determined the access of female cooperatives to finance for agricultural production.

Research objectives

The main objective of this study is to assess the determinants of access to finance among smallholder female farmers in Bauchi and Gombe states, Nigeria. The specific objectives are

a. To examine the effect of social capital on financial inclusion in the study area
b. To determine the effect of social capital on financial literacy in the study area
c. To determine the effect of financial inclusion and financial literacy on access to finance in the study area

Literature review

1. Access to finance

Access to finance is necessary to create an economic environment that enables firms to grow and prosper however Smallholder farmers face significant barriers to finance (Kira, 2013). Financial constraints are higher in developing countries in general, but SHFs are particularly constrained by gaps in the financial system such as high administrative costs, high collateral requirements and lack of experience within financial intermediaries (Babagana, 2010) [7]. Increased access to finance for SHFs can improve economic conditions in developing countries by fostering innovation, macro-economic resilience, and GDP growth (Nhung, 2014).

2. Strengthening access to finance for smes growth and development

According Oruonye and Musa (2012), if Nigeria is to attain Vision 2020 and meet the Millennium Development Goals (MDGs), it must make a concerted effort to improve access to finance. With a population of 170 million people, 55% of which are living below the poverty line, Nigeria is not on track to meet the Millennium Development Goal (MDG) of food security if farmers are not financially empowered to buy inputs for production.

Ahiawodze and Adade (2012) [3] stated that access to finance is also identified as a key constraint to the poor in attempting to grow and expand their farm. Around 74% of the Nigerian population has never been banked. Cheluget (2013) [14] contended that providing wider access to finance in Nigeria could become an important vehicle for poverty reduction at present only 7% of adults have a loan and use it mostly to open or expand a business.

Mwangi and Evelyne (2012) study the impact of financial literacy on access to financial services in Kenya using the 2009 National Financial Access (FinAccess) survey data. The study found that financial literacy remains low in Kenya. Access to financial services is not only based on

levels of financial literacy but also other factors such as income levels, distance from banks, age, marital status, gender, household size and level of education. However, the study also established that the probability of a financially illiterate person remaining financial excluded is significantly high calling for increased investment in financial literacy programs to reverse the trend. The studies recommend the development of a curriculum on financial education and administer it in local, middle level and higher learning institutions.

Habib (2015) [23] studies entrepreneurship development and financial literacy in Africa. The study specifically looks at how financial literacy affects the household behavior regarding financial decision-making, as well as the gender gap in financial literacy. The research seeks to establish a formal relationship between financial literacy, financial inclusion and social capital, and access to finance. The interrelationships amongst them are discussed in the following subsections from which hypotheses were deduced.

Financial inclusion and access to finance

Bongomin *et al*. (2018a) [10] explained financial inclusion (FI) to be the process through which participants in an economy can easily and effectively have access to both formal and unofficial financial services in a way that benefits their activities. Financial inclusion (FI) is the ease and efficiency with which actors in an economy are granted access to both formal and informal financial services in a way that their activities are positively impacted. Women often find it challenging to participate in social, economic, and political processes in societies where men predominate, especially in emerging nations. In Sub-Saharan Africa, access to financial services, a crucial link in the cycle of agricultural development, is the main barrier to gender equality (Okezie *et al*., 2021). According to Okezie *et al*. (2021), in contrast to their male counterparts, women agribusiness owners have less access to financial services, and they are more likely to cite this as the first or second obstacle to the growth of their companies, which undercapitalizes the economic activities of women. Bongomin *et al*. (2018a) [10] suggested that increased financial inclusions increase access to finance. Other studies also related financial inclusion to access to finance (Adegbite & Machethe, 2020; Cabeza-García *et al*., 2019; Kaur & Kapuria, 2020) [1, 13, 34]. It is therefore hypothesized that:

H1: Financial inclusion has significant influence of access to finance of female farmers

Financial literacy and access to finance

United Nations states that financial literacy, which is the ability to use knowledge and skills to manage financial resources. Financial literacy enables managers and owners of businesses in developing economies to make appropriate financial decisions and choices about the complex financial products offered by the financial systems without being intimidated. Financial literacy has been identified as important determinant of access to finance of farm holders (Adegbite & Machethe, 2020; Cabeza-García *et al*., 2019; Kaur & Kapuria, 2020) [1, 13, 34]. It is therefore hypothesized that:

H2: Financial literacy has significant influence of access to finance of female farmers

Social capital and access to finance

Woolcock and Narayan (2000) noted that the impact of social capital has been recognized in the microfinance context, but most of the empirical applications have studied the effect of social capital on repayments in group lending (Karlan, 2007) [33]. The lack of financial access is much more serious problem in developing countries than it is in developed economies or even in middle-income countries. Therefore, the study of social capital can potentially shed new light on the problems of financial access in developing countries. This is because the poor farmers employ their social capital, which takes the shape of interpersonal and generalized trust and social punishments, to replace and guarantee the credit and its future repayment because they lack physical collateral to secure credit from banks. It is therefore hypothesized that:

H3: Social Capital has significant influence of access to finance of female farmers

Social capital and financial inclusion

Social capital (SC) refers to those unofficial connections, groups, and networks that foster cooperation and camaraderie among participants through reciprocity and warm feelings. (Bongomin *et al*., 2016) [12]. Banks demand tangible collateral to assure repayment when giving credit. Therefore, trust and social sanction resulting from social capital serve as a security and guarantee for bank loans for the poor who lack physical collateral (Heikkilä, Kalmi, & Ruuskanen, 2009) [28]. In fact, social capital turns into a useful asset for the poor who lack tangible collateral to obtain bank loans (Chloupkova & Bjrnskov, 2002) [15]. The interactions that aid in gaining access to resources and advancing economic processes are directly impacted by social associations. Social capital gives more impetus to gain financial inclusion. Bongomin *et al*. (2018b) [10] suggests that social capital and financial inclusion share significant relationship. It is suggested that increased financial inclusions will depend on the quality of social networks at their disposal. It is therefore hypothesized that:

H4: Social Capital has significant influence of financial inclusion of female farmers

Social capital and financial literacy

Falk and Kilpatrick (2000) [20] observed that social capital available to the participants lies within the knowledge resources and the identity resources that are brought to the interaction by the participants individually and collectively. Interactions by poor households in networks act as conduits for knowledge and information transfer among the poor (Reagans & McEvily, 2003). Thus, Cohen and Nelson (2011) [17] revealed that poor households in associational networks may improve their financial knowledge and skills, which enable them to make wise financial decision and choices. It is therefore hypothesized that:

H5: Social Capital has significant influence of financial literacy of female farmers

Methodology

This research adopted quantitative research approach using survey design strategy. The choice of this methodology is

influence by the fact that the nature of the research problem is deterministic because access to finance is conceptualised to be determined by other factors such as financial inclusion, social capital and financial literacy. According to Creswell (2014) [18], quantitative research approach is best suited when the nature of research is deterministic such that causes determine outcome. Thus, the research is aligned towards positivist philosophical view based on hypothetico-deductive reasoning (Park, Konge, & Artino, 2020; Ryan, 2018). Thus, hypotheses were deduced from extent literature in the subject area.

The population of the research are female farmers who are members of cooperatives in Bauchi and Gombe States, Nigeria. There are a total of 340 cooperative societies involving women in the study area. Using (Krejcie & Morgan, 1970) [36], a sample size of 186 was determined. The sample was drawn using stratified random sampling to ensure adequate representation from Bauchi and Gombe states. The data was collected from the respondents using survey questionnaire instrument. Out of the 186 distributed questionnaires, 155 of the returned questionnaires were considered valid for further analysis. This represents 83 per cent response rate which is considered very adequate for survey research (Pallant, 2011).

Majority of the respondents are adults within the age 31 and above as indicated by over 70 per cent response with most of them having basic educational qualification. The respondents are members of cooperatives mostly for about 1 to 20 years as indicated by about 68 per cent response. The respondents are engaged into various types of farming such as rice farming, maize farming, poultry farming, beans farming, fish farming, etc. Most of the cooperatives have less than 40 members as indicated by over 70 percent and have capital asset investment of less than five hundred thousand Naira as indicated by about 51 per cent.

Result

This research formulated research hypotheses to achieve the research objectives. The hypotheses were tested using Partial Least Squares – Structural Equation Modelling (PLS-SEM). PLS-SEM establishes the relationships between exogenous latent constructs and endogenous latent constructs. In this research, the two stage evaluation criterion was employed. The first stage involved the evaluation of the measurement model of the research.

Measurement model assessment

The measurement model is evaluated by assessing the reliability and validity of the measurement models. The reliability is assessed using Composite Reliability, Cronbach's alpha and rho A. Since PLS-SEM is used, composite reliability is considered more appropriate because it maximises indicator variance without much restriction on the number of indicators (J. F. Hair, Hult, Ringle, & Sarstedt, 2017; Lowry & Gaskin, 2014) [24, 40]. A value of 0.7 and above are regarded as acceptable reliability (H. Usman & Lizam, 2016). The result of reliability and convergent validity assessment is presented in Table 1.

Table 1: Reliability and Convergent Validity of the Measurement Models

Construct	Items	Factor Loading	Cronbach's Alpha	Rho A	C.R.	AVE
Access to Finance (HOC)			0.914	0.917	0.929	0.595
Access to Finance (Conventional)	AF2	0.844	0.886	0.891	0.917	0.688
	AF3	0.880				
	AF4	0.754				
	AF6	0.833				
	AF7	0.831				
Access to Finance (Non-Interest)	AFN2	0.703	0.831	0.834	0.888	0.667
	AFN5	0.838				
	AFN6	0.880				
	AFN7	0.836				
Financial Inclusion	FI1	0.844	0.928	0.930	0.940	0.636
	FI10	0.861				
	FI2	0.849				
	FI3	0.722				
	FI4	0.780				
	FI6	0.797				
	FI7	0.716				
	FI8	0.782				
	FI9	0.810				
Financial Literacy	FL1	0.816	0.900	0.903	0.921	0.625
	FL10	0.775				
	FL11	0.847				
	FL3	0.756				
	FL6	0.785				
	FL7	0.812				
	FL9	0.739				
Social Capital	SC11	0.733	0.905	0.913	0.923	0.601
	SC13	0.821				
	SC14	0.838				
	SC15	0.797				
	SC2	0.703				
	SC3	0.773				
	SC7	0.765				
	SC8	0.765				

The validity of the measurement model is measured based on the convergent validity and the discriminant validity. The convergent validity is measured using the factor loadings of the manifest variables and the Average Variance Extracted (AVE). The factors are required to load high on their underlying constructs, preferably above 0.7. Where lower loading do not affect the AVE, as low as a loading of 0.4 is allowed (J F Hair *et al*., 2014) [25]. The value of the AVE is required to be at least 0.5 (Hamza Usman, Garba, & Abdullahi, 2017).

The result in Table 1 shows the reliability and convergent validity of the measurement models. Access to finance was a higher order construct (HOC) reflected into lower order constructs (LOC) of access to conventional finance and access to non-interest finance. The HOC has composite reliability of 0.929 and AVE of 0.595 all above the recommended threshold. The LOCs have composite reliabilities of 0.917 and 0.888, and AVEs of 0.688 and 0.667 respectively. Financial inclusion has a composite reliability of 0.940 and AVE of 0.636 while that of financial literacy is 0.921 and 0.625 respectively. Social capital also has composite reliability of 0.923 and AVE of 0.601. All the measurement models therefore have composite reliability and AVE greater than the minimum recommended threshold. Similarly, the items load high on their underlying constructs. They are all above the preferable cut-point of 0.7 (J. F. Hair *et al*., 2017) [24].

The assessment of the measurement model also involves the evaluation of the discriminant validity. Discriminant validity is assessed using Fornel and Larcker criterion, Cross-loading Criterion and Heterotrait-Monotrait (HTMT). However, only HTMT is presented because is currently the most robust means of assessing discriminant validity (Henseler, Ringle, & Sarstedt, 2015) [29]. The result of the discriminant validity is presented in Table 2.

Table 2: Discriminant Validity – HTMT

	AF	AFc	AFn	FI	FL
AF (Access to Finance)					
AFc (Conventional)					
AFn (Non-Interest)		0.873			
FI (Financial Inclusion)	0.790	0.738	0.792		
FL (Financial Literacy)	0.826	0.785	0.813	0.884	
SC (Social Capital)	0.823	0.816	0.765	0.825	0.814

The result of discriminant validity using HTMT criterion shows that the highest HTMT ratio is 0.873 between AFn and AFc. To achieve discriminant validity, the HTMT ratio, in liberal perspective, is required to be less than 0.9 (Henseler *et al*., 2015) [29]. Accordingly, the discriminant validity of the measurement models is achieved. Thus, the measurement models of the study pass the quality criteria to warrant the assessment of the structural model.

Structural model assessment

After establishing the quality of the measurement models, the next stage of the PLS-SEM model evaluation is the assessment of the structural model. The structural model is evaluated by assessing the coefficient of determination (R^2), path coefficients, effect sizes (F^2) and predictive relevance (Q^2). The structural model of the study is presented in Figure 1.

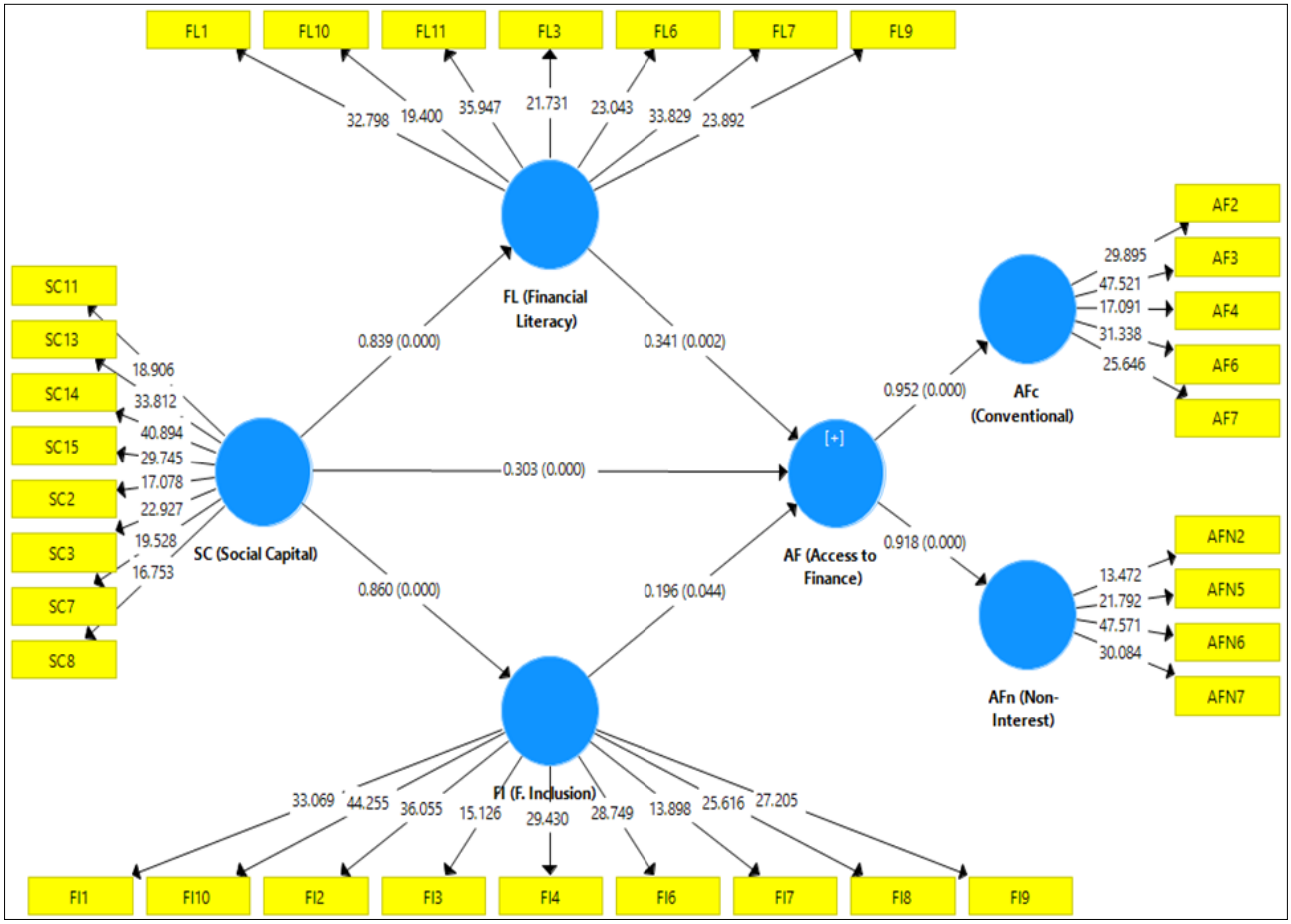

Fig 1: Structural Model

Figure 1 shows the structural model of the study. It shows the various paths earlier hypothesised. The structural model is discussed in the following paragraphs. The assessment of the structural model involves the assessment of coefficient of determination (R^2). It shows the contribution of the independent variables to the variance of the dependent variable. The model produced an overall R^2 of 0.63. It implies that about 63 per cent of the variance of access to finance can be explained by social capital, financial inclusion and financial literacy. The second measure of the quality of structural model is the path coefficient. Path coefficient range from -1 to +1 and it shows the strength of influence of the independent variable on the dependent variable (J. F. Hair *et al*., 2017) [24]. Most of the path coefficient in a structural model are required to be significant. In this model, all the path are significant as indicated by p-values less than 0.05 after 5000 sample bootstrapping supporting the quality of the model (J F Hair *et al*., 2014) [25].

The relative contribution of each exogenous variable to the R^2 is assessed as effect sizes (F^2). The model produced F^2 of 0.050, 0.083, and 0.024 for social capital, financial literacy, and financial inclusion respectively indicating moderate effect sizes (Cohen, 1988) [16]. The predictive relevance of the model is assessed using cross validated redundancy. To achieve predictive relevance, the cross validated redundancy is required to be greater than 0 (J. F. Hair *et al*., 2017) [24]. The Q^2 of the major endogenous variable is 0.363 which is greater than 0. Accordingly, the model achieve the required predictive relevance. The two stage evaluation has established that the research model has achieve the required quality criteria for the measurement models and the structural model. Accordingly, the hypotheses of the research can be tested without fear of distorted coefficient.

Hypotheses testing and discussion

The earlier formulated hypotheses are tested using PLS-SEM algorithm. The result of the hypotheses testing is presented in Table 3.

Table 3: Hypothesis testing

Hypotheses	Path	Standard Error	T Statistics	P Values
H1: FI (Financial Inclusion) -> AF (Access to Finance)	0.196	0.096	2.029	0.044
H2: FL (Financial Literacy) -> AF (Access to Finance)	0.341	0.112	3.039	0.002
H3: SC (Social Capital) -> AF (Access to Finance)	0.303	0.085	3.559	0.000
H4: SC (Social Capital) -> FI (Financial Inclusion)	0.860	0.020	43.299	0.000
H5: SC (Social Capital) -> FL (Financial Literacy)	0.839	0.026	32.898	0.000

The result of the hypotheses testing shows that all the paths are significant. Specifically, the result shows that the path leading financial inclusion to access to finance is significant ($\beta = 0.196$, $t = 2.029$, $p = 0.044$). This shows that financial inclusion has significant positive influence on access to finance. The finding implies that one unit change in financial inclusion could change access to finance by 19.6 per cent while controlling for the effect of other variables. Accordingly, the hypothesis is accepted. The finding is line with previous studies who found that financial inclusion is related to access to finance (Kumar *et al*., 2021; Lal, 2019) [37, 38]. Farmers who are actively engage in financial activities with financial institutions are therefore more likely to access finance than those who are not (Adegbite & Machethe, 2020; Cabeza-García *et al*., 2019; Lowitt *et al*., 2020) [1, 13, 39].

The study also found that the effect of social capital on financial literacy is significant ($\beta = 0.839$, $t = 32.898$, $p = 0.000$). This shows that social capital has significant positive influence on financial literacy. The finding implies that one unit change in social capital could change financial literacy by 0.839 units while controlling for the effect of other variables. The hypothesis is therefore accepted. This finding is line with previous studies who found that social capital as significant determinant of financial literacy (Alao *et al*., 2020; Kehinde & Tijani, 2021) [5, 35]. Social capital implies the ability of the female farmers to come together as a cooperatives. This could enable them to acquire the necessary knowledge and know-how about financial products and services which could not be gained individually (Alao *et al*., 2020; Bizikova *et al*., 2020; Cabeza-García *et al*., 2019; Ishemo & Bushell, 2017; Kaur & Kapuria, 2020; Kehinde & Tijani, 2021) [5, 9, 13, 32, 34, 35]. Thus, from the analysis, all the hypotheses are accepted.

Conclusion and recommendation

The need for food is the first basic requirement of mankind to survive hunger. Agriculture provide the means of satisfying this need as well as providing employment opportunities thereby contributing significantly to the Gross Domestic Products (GDP) leading to the economic growth and development of nations. However, despite the importance of agriculture, it is still facing enormous challenges. One of the major challenges is the lack of adequate access to finance necessary to embark on agriculture. The lack of access to finance is more pronounced among female farmers. Accordingly, this study investigated the determinants of access to finance among female cooperative farmers from demand perspective.

The study hypothesised access to finance as a function of financial inclusion, financial literacy and social capital. The study found that financial inclusion and financial literacy have significant positive influence on access to finance of female cooperative farmers in Bauchi and Gombe states, Nigeria. The study equally found that social capital has significant positive influence on access to finance. Besides the access to finance, financial inclusion and financial literacy are equally significantly influenced by social capital of the farmers.

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