Journal of Islamic Philanthropy & Social Finance (JIPSF)
7(1), 2025
eISSN: 2590-3942
Published by UiTM Press
Managed by Center for Islamic Philanthropy & Social Finance

Journal homepage: https://journal.uitm.edu.my/ojs/index.php/JIPSF

ACCESSIBILITY OF MICROFINANCE PRODUCTS FOR INCOME GENERATION AND POVERTY REDUCTION IN JIGAWA STATE

Gambo Babandi Gumel[a], Itari Abdul-Razaq Rilwan[b*], Mohammed Seri[c], Faiza Adhama Mukhtar

[a]*Department of Economics and Development Studies, Federal University Dutse, Jigawa State of Nigeria.*
Email: gbabandi@yahoo.com
[b*]*Department of Economics and Development Studies, Federal University Dutse, Jigawa State of Nigeria.*
Email: abdulrazaq.itari@fud.edu.ng
[c]*Department of Economics and Development Studies, Federal University Dutse, Jigawa State of Nigeria*
Email: serigaringabas@yahoo.com
[d]*Department of Economics and Development Studies, Federal University Dutse, Jigawa State of Nigeria.*
Email: faiadhama@yahoo.com
[*]*Corresponding Author*

Article info

Received:
15/02/2025
Received In Revised Form:
16/03/2025
Accepted:
18/03/2025
Available Online:
20/03/2025

Keywords:
Accessibility;
Income Generation;
Jigawa State;
Microfinance Products;
Poverty Reduction.

DOI:
10.24191/JIPSF/v7n12025_135-144

Abstract

Small loans are critical for alleviating mass poverty, particularly for individuals unable to finance small-scale businesses. This study explores the role of accessing microfinance as a tool for poverty alleviation in Jigawa State, Nigeria, highlighting its effectiveness in providing financial and non-financial services to marginalized individuals. The research underscores the complexities of poverty reduction, which is influenced by various socio-economic factors and cultural dynamics. Utilizing a survey of 450 microfinance beneficiaries across three senatorial districts, the study employs multiple regression analysis to examine the impact of demographic variables—such as gender, marital status, age, number of dependents, educational level, and religion—on access to microfinance products. Findings reveal that education, marital status, and religious affiliation significantly affect perceptions of microfinance's benefits, while gender, age, and number of dependents show limited influence. The results suggest a need for tailored microfinance products to better support married individuals and enhance financial literacy among clients. Additionally, the high prevalence of Muslim respondents indicates that aligning microfinance offerings with Islamic principles may improve acceptance and utilization. The study concludes that while microfinance has potential for income generation and poverty reduction, its success depends on adapting services to meet the diverse needs of the community, complemented by educational initiatives and collaborative partnerships with government and development organizations.

INTRODUCTION

Small loans are effective weapons for addressing mass poverty since most poor cannot afford any amount to expand or even initiate a small-scale business. The provision of both financial and non-financial services to marginalized people allows them to start new businesses or grow current ones, securing their livelihoods. This is what microfinance is all about. The story of reducing poverty is complex and multifaceted, entwined with changes in the economy, global dynamics, and unanticipated disasters. Reducing poverty is still an ongoing problem that calls for perseverance, fortitude, and well-timed actions to improve lives and make the world more egalitarian.

Microfinance is a means of gaining access to financial services for the economically engaged poor, wage earners, or small-business owners operating in the informal economy. The size of the operations is the primary distinction between traditional banks and microfinance organizations. For those without many assets to use as collateral, microfinance organizations provide savings accounts and small, short-term loans to help people improve their living conditions and raise their income levels. Micro-insurances are another service provided by microfinance organizations to shield their clients from illness and natural disasters. Certain microfinance organizations also provide their services to businesses that hire the underprivileged to help them expand and indirectly assist the underprivileged (Idolor & Eriki, 2012). Therefore, microfinance products play a crucial role in income generation and poverty reduction, particularly in developing regions like Jigawa State.

The state is one of the 36 states in Nigeria, located in the North-Western part of the country. Kano state and Katsina state border Jigawa to the west and Yobe state to the north-east. To the north, Jigawa state shares an international border with Zinder region in the Republic of Niger. It has a land mass of 24.742 million Square Kilometers, making it one of the largest states in the country (Usman, et al., 2018).

The official sector, which includes the Central Bank of Nigeria, conventional banks, and other financial institutions, and the informal sector, which is made up of individuals lending and borrowing money typically directly to one another, make up the Nigerian financial sector. In Nigeria, where the majority of people live in rural areas without access to financial institutions, there is a sizable informal economy. In addition to the microfinance policy, the Nigerian government has implemented a number of other programs to combat poverty. These programs include the National Directorate of Employments (NDE) and Agricultural Development Programs (ADPs), which aim to integrate the unemployed and impoverished into the formal economy by utilizing their skills, ideas, and willingness to work (Akanji, 2006). However, a large number of these initiatives have failed (Akanji, 2006).

The majority of people are impoverished and reside in rural areas across all of the world's developing nations. They comprise the informal sector and small and medium-sized businesses, and they work in agriculture and microenterprises. Nigeria is no different. Poverty is rampant in Nigeria, with a startling depth and scope. It has an impact on every geopolitical zone in the nation. Like those in other countries, the impoverished in Nigeria lack the necessities of life, have no voice, and are generally oppressed. According to Idowu and Oyeleye (2012), the impoverished are those who make a living through menial labor, lack access to basic amenities, credit, and housing, and can hardly afford to send their kids to school. Jigawa State is not an exception on this as it is one of the poorest states in Nigeria facing high rates of poverty and low-income generation activities especially for rural women entrepreneurs (Itari & Muhammad, 2022). To this end, this current study intends to examine the availability and accessibility of microfinance products for income generation and poverty reduction in Jigawa State.

LITERATURE REVIEW

The debate on how microfinance reduces poverty has produced a patchwork of conflicting results. In this terrain of divergent viewpoints, some studies claim that microfinance makes poverty worse, while others maintain that it might make poverty less severe.

In their study, Shikur and Akkas (2024) examined the influence of Islamic microfinance services (IMFS) on poverty reduction in the eastern part of Ethiopia. Using a binary logistic regression to model poverty reduction, the result revealed that the income, education, household size and age of the IMFS' clients are the major influencing factors that affect poverty reduction in Ethiopia.

Similarly, Akintola, et al., (2023) investigated the ease of access to the microfinance facilities by the prospective beneficiaries. Primary and secondary data were used for the study. The population (2,150) consisted of loan beneficiaries of Bank of Agriculture, Bank of Industry and Microfinance Bank in the selected States in Southwestern Nigeria. Their study revealed that loan requests, loan grants and disbursements period were the key thrusts of the Microfinance policy. It also found out that collateral security is a leading criterion for ease of access to Microfinance loan facilities by the prospective beneficiaries that has significant impact on poverty alleviation in South-western Nigeria.

According to Bai and Yan (2023) as well as Khoa and Huynh (2023), a company's ability to use social media resources effectively affects both performance and customer engagement. Consequently, microfinance loans utilized for investments carry the potential for huge rewards.

The study by Itari and Muhammad, (2022) examined the financial and non-financial performance of rural women business owners in Jigawa State before and after the Jigawa State government intervention program of 2008 - 2015. Their study employed primary data generated from a survey of 405 rural women entrepreneurs in three different locations of the state. This study adopted the Bivariate Correlation technique, frequency, charts, mean difference, and the difference in difference methods of analysis to analyze the data generated. The difference in difference results, showed that, the economic empowerment intervention in Jigawa State had impacted positively on the rural women entrepreneurs' ability to generate greater enterprise performance with 58.2% increase in output level, 84.8% on profit, 31.4% on income, 41.3% on savings and 96% of them had additional employment at different degrees. Their study further revealed that rural women do not have access to the conventional microfinance owned by either government or private but they do have access to informal non-traditional banking services such as ROSCAs, thrift associations, savings mobilization groups, etc which are accessible to all adults in the state.

While, Chikwira et al., (2022) investigated the microfinance landscape in Zimbabwe and uncover a perplexing long-term result where microfinance, paradoxically, increases levels of poverty. This finding contrasts with expectations, where microfinance leads to increased levels of poverty.

The study by Abu (2020) looks into the macroeconomic impact of microfinance institutions and the larger banking sector on poverty in Bangladesh and finds that microfinance positively influences GDP growth but has little effect on poverty reduction.

Furthermore, Sulemana, et al., (2019) also explore the part microfinance plays in reducing poverty in Ghana's Ashaiman Municipality. Their all-encompassing methodology, which combines surveys, interviews, and observations, demonstrates how microfinance is associated with notable improvements in beneficiaries' income, savings, and food intake, all of which contribute to their overall well-being.

In a similar vein, Prathap, et al., (2018) investigation in the Indian regions of Pavagada and Kunigal finds a discernible and positive influence of microfinance on empowerment, poverty alleviation, and living standards, especially in rural areas.

In a quasi-experimental survey conducted in Bangladesh, Bhuiya et al., (2016) contend that although participation in microfinance is linked to a 7% reduction in the possibility of poverty, it does not completely eliminate poverty.

Research on microfinance's effectiveness in poverty reduction presents mixed results. Some studies argue that microfinance worsens poverty, while others affirm its benefits. Positive impacts are noted in rural India and Ghana, where microfinance enhances empowerment and living standards. In contrast, some findings suggest microfinance can paradoxically increase poverty levels, as seen in Zimbabwe. Additionally, factors such as education, age, and household size significantly influence the accessibility and effectiveness of microfinance in reducing poverty. However, none of such study was conducted in Jigawa State, hence the need for this study to cover the gap identified.

METHODOLOGY

Scope and Sample

The survey was conducted among users of microfinance products in Jigawa state of Nigeria. The state has 27 Local Government Areas, with three senatorial districts, namely; Jigawa South-West, Jigawa North-West, and Jigawa North-East. The simple random sampling technique was adopted in this study; samples were drawn from each Senatorial Districts of the state. Six local government areas were sampled with two from each senatorial district, namely: Dutse and Birnin Kudu LGAs in Jigawa Central, Maigatari and Babura LGAs in North – West as well as Kafin Hausa and Hadejia LGAs in North – East. In each sampled locations seventy-five (75) microfinance users were randomly selected for the survey. The survey was conducted with the use of structured questionnaires. In all, a total of four hundred and fifty (450) number of respondents were obtained from the survey with the help of research assistants.

Model Specification

The study employs descriptive statistics, and the multiple regression analyses using access to microfinance product of the respondents (AMF) as the dependent variable, while the independent variables; are gender (GEN), marital status of the respondent (MST), age of the respondent in discrete form (AGE_d), number of dependents of the respondent (NDP), educational level of the respondent (EDU), and religion of the respondent (REL).

To address the issue of poverty and income generating activity through accessibility of the microfinance products, which is the focus of this research, the functional form of the model and econometric form are given as (1) and (2) respectively below;

$$AMF = f\,(GEN,\ MST,\ AGE_D,\ NDP,\ EDU,\ REL) + \mu \qquad (1)$$

$$AMF = \alpha_0 + \alpha_1 GEN + \alpha_2 MST + \alpha_3 AGE_D + \alpha_4 NDP + \alpha_5 EDU + \alpha_6 REL + \mu \qquad (2)$$

Where; AMF = access to microfinance product of the respondents, GEN = gender of the respondents, AGE_D = age of the respondent in discrete form, NDP = number of dependents of the respondent, EDU = educational level of the respondent, REL = religion of the respondent, μ = white noise which is included in the model to take into account the influence of other omitted variables as well as any error of measurements. The μ is assumed to be normally and identically distributed around zero mean and constant variance ($\mu \sim NIDD\ \{0, 1\}$). The a priori expectation of the model is that: α_1, α_2, α_3, α_4, α_5, and $\alpha_6 > 0$. Note, the subscript D in the model stands for discrete data. Thus, this model is in conformity with the study conducted by Shikur and Akkas (2024).

RESULTS

In this section, the results of findings are discussed under two broad heading, viz the descriptive statistics results and the regression results.

Descriptive Statistics

The descriptive statistics of the variables used in the models are presented in sub-sections 4.1.1 to 4.1.6 which discuses each of the variables used in the regression model as asked in the structured questionnaire.

Gender

The gender distribution of respondents in Jigawa State is a critical factor when conducting a survey of this kind. Table 4.1 constitute the gender division of the respondents in the study.

Table 4.1: Gender of the Respondents

Gender	Frequency	Percent
Male	293	65.1
Female	157	34.9
Total	450	100.0

Source: Field Survey, 2024.

Table 4.1 revealed that slightly above 65% of the respondents are male, while the remaining are female. This distribution highlights a substantial gender imbalance among the respondents, with males representing the vast majority. The male dominance in the result may reflect broader socio-economic and cultural patterns in Jigawa State, where access to microfinance services might be more readily available to or utilized by men compared to women. The overwhelming majority of male respondents suggests that microfinance products might be more accessible or more frequently utilized by men in Jigawa State.

Marital Status

The marital status of respondents highlights cultural factors that could influence the uptake of microfinance services. In many cases, married individuals may have more access to financial resources due to shared household incomes. MFIs should ensure that their products are culturally sensitive and promote inclusivity for all marital statuses.

Table 4.2: Marital Status of the Respondents

Marital Status	Frequency	Percent
Single	43	9.6
Married	364	80.9
Divorced	19	4.2
Widow(ee)	24	5.3
Total	450	100.0

Source: Field Survey, 2024.

Table 4.2 revealed that 80.9% of respondents are married, this demographic is crucial for microfinance institutions (MFIs) to target. Married individuals often have established family units, which can lead to stable financial needs and the potential for cooperative business ventures. MFIs can design products that cater specifically to these family-oriented clients, encouraging joint loans or group savings.

Age

Age is an important socio-demographic factor to be considered when engaging in any business agreement, ranging from business initiation to getting microcredit for establishing the business and its operations. The age distribution of the respondents is depicted in Table 4.3.

Table 4.3: Age of the Respondents

Age	Frequency	Percent
Below 25Years	20	4.4
25 - 34 Years	270	60.0
35 - 44 Years	95	21.1
45 - 54 Years	51	11.3
55 Years and Above	14	3.1
Total	450	100.0

Source: Field Survey, 2024.

Table 4.3 displays the respondents' ages in discrete form. The data shows a significant concentration of respondents aged 25 – 34 years (60%). This age group represents a critical segment of the workforce and potential entrepreneurs. Their energy and adaptability make them ideal candidates for microfinance products aimed at fostering business innovation and economic participation. Given that majority of the respondents are youth, MFIs can design products specifically targeted at young adults, such as startup loans, mentorship programs, and skill development workshops. These initiatives can encourage entrepreneurship and stimulate economic growth.

Number of Dependents

To effectively adapt financial services to meet the needs of microfinance clients, it is imperative to comprehend their demographic situation. To shed light on the financial requirements of the people in Jigawa State and possible barriers to their access to microfinance services, this paper examines the total number of dependents in their households as revealed in Fig. 4.1.

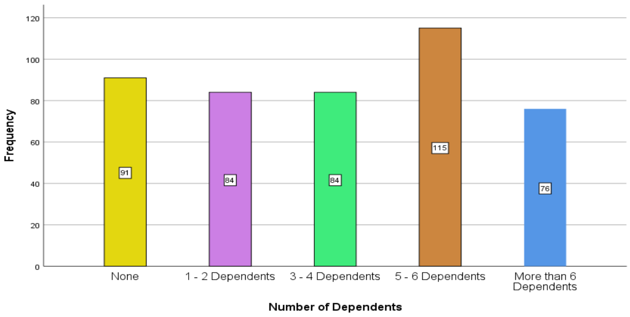

Fig. 4.1: Number of Dependents of the Respondents
Source: Field Survey, 2024.

The distribution of dependents among microfinance beneficiaries' individuals in Jigawa State is depicted in the Fig. 4.1 and the result indicates that 115 individuals, or 25.6% of the respondents, are caring for between five or six dependents. This group represents a sizeable portion of the population that could greatly benefit from microfinance products to manage and improve their economic conditions.

Highest Educational Level

Individuals with lower educational attainment may face challenges in accessing microfinance due to a lack of understanding of financial products or perceived risks. MFIs can address these barriers through community outreach and education. Fig. 4.2 reveals the educational level attained by microfinance beneficiaries in Jigawa state.

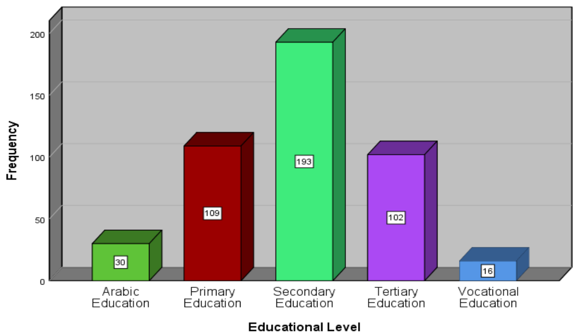

Figure 4.2: Educational Level of the Respondents
Source: Field Survey, 2024.

Fig. 4.2 revealed that 42.9% of respondents having attained secondary education, this group represents the largest segment. This level of education typically equips individuals with basic skills and knowledge necessary for entry-level jobs and can serve as a foundation for further education or vocational training.

Religion of the Respondents

The Fig. 4.3 presents demographic data on the religious affiliation of the respondents in relation to the availability and accessibility of microfinance products in Jigawa State.

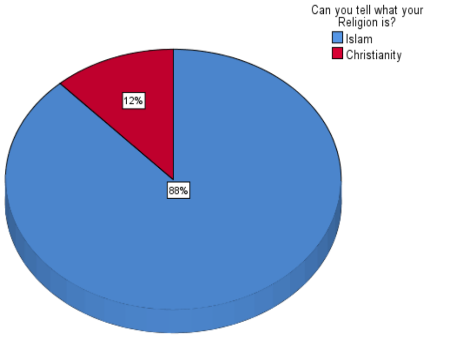

Figure 4.3: Religion of the Respondents
Source: Field Survey, 2024.

The overwhelming majority (88%) of respondents were Muslims, which indicated that the population of people living in Jigawa State are practicing the Islamic religion faith. Due to the high numbered of Muslims, availability of tailored microfinance products and in-line with the Islamic finance principles can play a crucial role in income generation and poverty reduction if they align with the cultural and religious practices of their target demographic. By addressing the specific needs and preferences of the majority (Muslims in this case), microfinance initiatives may be more successful in improving financial inclusion and supporting entrepreneurship within the state.

Regression Results

Table 4.4 shows the estimated results of the accessibility model. From the table, it can be observed that, access to microfinance product of the respondents (AMF) has positive relationships with gender (GEN), age of the respondent (AGED), number of dependents of the respondent (NDP), educational level of the respondent (EDU), and religion of the respondent (REL). This means that the model is theoretically meaningful, because all the parameters are based on the theoretical expectation with the exception of only MST which is expected to have a positive relationship with AMF all things being equal.

Table 4.4: Accessibility Regression Model

Dependent Variable: AMP

Variables	B	Std. Error	t	Sig.
C	.953	.231	4.130	.000*
GEN	.124	.147	.842	.400
MST	-.190	.057	-3.337	.001*
AGE	.056	.042	1.335	.183
NDP	.012	.025	.465	.642
EDU	.105	.035	2.977	.003**
REL	.207	.112	1.838	.067***

R^2 = 0.148, F = 12.827

Source: Authors' Computation, 2024. *Significant level at 1% (*); 5% (**); 10% (***).*

From Table 4.4, results revealed that the negative coefficient of MST (α_1= -0.190, p < 0.001) indicates that marital status is significantly related to perceptions of how microfinance loans contribute to income generation which could reduce poverty rate. This means that married individuals might face more financial responsibilities, possibly limiting the perceived impact of loans on their income. This could suggest that microfinance products may need to be tailored to better support the unique needs of married individuals.

The positive coefficient of EDU (α_1= 0.105, p < 0.003) indicates that higher education levels correlate with a more favourable view of the benefits of microfinance. Education likely enhances financial literacy and the ability to effectively utilize loans for income-generating activities that reduce poverty rate within

Jigawa State. This emphasizes the need for educational programs alongside microfinance offerings to maximize their impact on the beneficiaries.

A strong positive coefficient of REL (α_1= 0.207, $p < 0.067$) suggests that individuals who identify strongly with their religion may perceive greater benefits from microfinance loans. This might reflect community support structures or ethical considerations surrounding lending practices in religious contexts. Microfinance institutions could leverage religious community networks to improve outreach and acceptance.

The marginally significant result of AGE (α_1= 0.056, $p = 0.183$) implies that age may have an influence on the access to microfinance products, but further investigation is warranted. Older individuals may have different financial behaviors or risk aversion, which could affect how they view the impact of loans. Tailoring products for different age groups could enhance accessibility.

The non-significant result of GEN (α_1= 0.124, $p = 0.400$) indicates that gender does not play a significant role in perceptions of loan impact in this context. This may suggest that microfinance products are relatively accessible to both genders in Jigawa State, but further qualitative research might uncover underlying barriers.

The coefficient of NDP (α_1= 0.012, $p = 0.642$) shows no significant effect on perceptions of loan benefits. While the number of dependents may affect financial responsibilities, it doesn't seem to influence how individuals perceive the utility of microfinance products in generating income.

The R^2 value of 0.148 suggests that while some variance in access to microfinance products and income generation is explained by factors included in the model, many other variables are likely to play a role. This highlights the complexity of addressing poverty reduction in Jigawa State and the need for comprehensive strategies. Furthermore, the F statistic (12.827) indicates that the model as a whole is significant, suggesting that at least some predictors contribute to understanding access to microfinance within the study area. This contradicts Akintola, et al., (2023).

The findings suggest that while certain demographic factors like education, marital status and religion significantly impact perceptions of microfinance effectiveness, others like age, gender and number of dependents do not. Findings here conform with (Shikur, & Akkas, 2024; Chikwira et al., 2022). This indicates a need for tailored microfinance strategies that consider these demographic insights, potentially enhancing both the accessibility of microfinance products for poverty reduction in Jigawa State.

CONCLUSION

The exploration of microfinance in Jigawa State underscores its potential as a vital tool for poverty alleviation, particularly among marginalized communities. Microfinance services provide essential access to financial resources for individuals who lack traditional collateral, enabling them to initiate or expand small businesses. The diverse findings from various studies reveal that while microfinance can lead to income generation and improved living standards, its effectiveness can vary significantly based on demographic factors such as education, marital status, and religious beliefs. In Jigawa State, the predominance of married respondents and the significant role of education highlight the need for microfinance institutions to develop tailored products that address the specific challenges faced by these groups. The positive correlation between educational attainment and perceptions of microfinance benefits suggests that enhancing financial literacy and education can amplify the impact of microfinance initiatives. Furthermore, the apparent disconnect regarding the influence of gender and the number of dependents on microfinance perceptions calls for a deeper understanding of local socio-cultural dynamics. While gender did not emerge as a significant barrier, further qualitative research could reveal underlying nuances that might not be captured in quantitative analyses.

In summary, while microfinance holds promise as a mechanism for income generation and poverty reduction in Jigawa State, its success hinges on the adaptability of financial products to meet the diverse needs of the community. A comprehensive approach that combines microfinance with educational initiatives and cultural considerations is essential to unlock its full potential, thereby fostering economic resilience and enhancing livelihoods in the region.

Microfinance institutions (MFIs) should develop products specifically designed for different demographic segments. For instance, offering joint loans or group savings plans for married individuals can address their unique financial responsibilities and encourage collaborative business ventures. Also, MFIs should explore partnerships with governmental and non-governmental organizations that focused on economic development. Collaborative efforts can enhance resource allocation, share best practices, and expand the reach of microfinance services.

CONFLICT OF INTEREST

The authors affirmed that there is no conflict of interest in this article.

CO-AUTHOR CONTRIBUTION

Gambo Babandi Gumel overlook the writeup of the whole article and prepared the abstract. **Itari Abdul-Razaq Rilwan** wrote the introduction, research methodology, statistical analysis and interpretation of the results. **Seri Mohammed** carried out the literature review and draws the conclusion. **Faiza Adhama Muktar** carried out the field work and data entry.

ACKNOWLEDGEMENT

We would like to express our gratitude to TET Fund for financial support and the research assistants who assisted in obtaining the data as well as all others who contributed to the successful execution of the project.

REFERENCES

Abu, A. (2020). The impact of microfinance on poverty reduction at the macro level in Bangladesh comparing with that of the traditional banking sector. *Int. J. Stat. Appl.,* 10(3), 68 – 76.

Akanji, O. O. (2006). Microfinance as a strategy for poverty reduction. *Central Bank of Nigeria Economic and Financial Review*, 39(4), 78 – 102.

Akintola, M.A., Akintola, N.A., Lasisi, O.I., Akintola, J.A., & Akintola, M.A. (2023). National microfinance policy and poverty alleviation in Southwestern Nigeria. *Ilorin Journal of Administration and Development*, 7(2), 88 – 1104.

Bai, L., & Yan, X. (2023). Impact of social media capability on firm performance: new evidence from China. *Asian Business Management,* 22(1), 118–136.

Bhuiya, M.M.M., Khanam, R., Rahman, M.M., & Nghiem, H.S. (2016). Impact of microfinance on household income and consumption in Bangladesh: empirical evidence from a quasi-experimental survey. *J. Develop. Area.,* 50(3), 305–318.

Chikwira, C., Vengesai, E., & Mandude, P. (2022). The impact of microfinance institutions on poverty alleviation. *J. Risk Financ. Manag.,* 15(9), 393.

Idolor, E. J., & Eriki, P. O. (2012). Financial analysis of assessment of impact of micro financing institutions towards poverty reduction in Nigeria. *Journal of Financial Management and Analysis*, 25(1), 51-74.

Idowu, A. O., & Oyeleye, O. A. (2012). Impact of microfinance banks on poverty alleviation in selected local government areas of Oyo state, Nigeria, *European Journal of Business Management*, 4(21).

Itari A. R., & Muhammad, A. M. (2022). Financial and non-financial performance of the rural women entrepreneurs in Jigawa state before and after the state economic empowerment programme of 2008 – 2015, *Kebbi Journal of Economics and Social Science*, 3(2), 94 – 106.

Khoa, B., & Huynh, T. (2023). The influence of social media marketing activities on customer loyalty: a study of e-commerce industry. *International Journal of Data and Network Science,* 7(1), 175–184.

Prathap, B.N., Mahesh, K., & Karthik, K.R. (2018). Impact of micro finance on poverty alleviation. *Journal of Management,* 5(4), 278 – 286.

Shikur, A.A., & Akkas, E. (2024). Islamic microfinance services: a catalyst for poverty reduction in eastern Ethiopia, *International Journal of Islamic and Middle Eastern Finance and Management*,17(4), 770 – 788. https://doi.org/10.1108/IMEFM-09-2023-0327

Sulemana, M., Naiim, F.M., & Adjanyo, C. (2019). Role of microfinance in poverty reduction in the Ashaiman Municipality, Ghana. *African Research Review,* 13(3), 1 – 14.

Usman, S., Nabayi, A., & Bassey, M.B. (2018). Assessment and classification of soils and parent rocks in Dutse, Jigawa Nigeria. *FUDMA Journal of Agriculture & Agricultural Technology*, 4(1), 11 – 23.