EFFECT OF MICROFINANCE INSTITUTIONS ON THE SUSTAINABLE GROWTH OF SMALLHOLDER FARMERS IN SOUTHWEST NIGERIA

ADEWUMI, Joseph Omotayo
Department of Business Administration, Nasarawa State University, Keffi
Email: adetayojoe@yahoo.com

Abstract
This study examined the effect of microfinance institutions on the sustainable growth of smallholder farmers in Southwest Nigeria. The study adopted the survey research design. Questionnaires were administered to a sample of (400) of smallholders' farmers in south west, Nigeria. The responses were analyzed using the smart PLS-SEM. It was found that micro training has a positive and significant effect on the growth of smallholder farmers while monitoring and supervision revealed a negative and positive effect on the growth of smallholder farmers. It was recommended that recommends that stakeholders should prioritize the design and implementation of focused, practical training programs tailored to the specific needs of smallholder farmers. These programs should aim to build farmers' capacity in key areas such as modern farming techniques, resource management, market access strategies, and the use of technology in agriculture. Finally, stakeholders should shift the focus of monitoring and supervision from punitive measures to developmental support. Supervisors should act as mentors, providing constructive feedback, guidance, and solutions to challenges faced by smallholder farmers.
Key Words: Micro finance Institution, Monitoring and Supervision, Micro Training and Growth of smallholder farmers.

INTRODUCTION

In Nigeria agriculture is dominated by small scale farmers most of whom are rural-based, with a low level of education; poor access to useful information and market and lack access to credit finance. The inaccessibility of credit by these farmers hinders their acquisition of the required inputs to increase their output and this, in turn, limit agricultural development by reducing farmers' output, expected income, savings and overall welfare of the farmers in Nigeria (Oparinde et al., 2020). The enduring lack of credit access faced by these farmers has significant consequences for their household-level outcomes, as well as, technology adoption, agricultural productivity, food security, nutrition, health and overall welfare of the farmers' households (Eyo, 2018).

Micro finance institution loans are used for agricultural production, trading, processing and transport, resulting in an increase in the use of agricultural inputs and increased output of agricultural production. This leads to enhanced employment opportunities in these sectors for the wider community and reduction in the prices of such products due to increased supply. They also state that trading activities financed by MFIs can help to establish new marketing links and increase the income of traders, and this can lead to reduced migration due to increased employment opportunities and increased income (Silong & Gadanakis, 2019).

Statement of The Problem

Smallholder farmers are the backbone of agriculture in Southwest Nigeria, contributing significantly to food production and rural livelihoods. Despite their vital role, these farmers face numerous challenges that constraints or hinder their productivity and threaten their ability to achieve sustainable growth and adapt to the dynamic agricultural environment. Many farmers struggle to meet the stringent requirements for accessing microfinance services, and those who do often find it challenging to repay loans due to unpredictable agricultural yields and market fluctuations.

Recent studies Ogunbiyi, (2023), Adeyemi and Olagunju (2020) and Ibrahim and Wali (2022). Most of these studies focused on the relationship between microfinance services and small business growth in Lagos State, effectiveness of microfinance banks in promoting entrepreneurship among women in Nigeria and the impact of microfinance bank services on rural development in Nigeria. Thereby revealing

a knowledge gap. As such, this study will therefore, fill the gap by examining the effect of microfinance banks services on the growth of smallholders' farmers in south west, Nigeria

Objective of the study

The main objective of the study is to examine effect of microfinance institutions on the sustainable growth of smallholder farmers in Southwest Nigeria. While the specific objective is to:

i. Examine the effect of micro training on the growth of small holders' farmers in south west, Nigeria.
ii. assess the effect of supervision and monitoring on the growth of small holders' farmers in south west, Nigeria.

Research Hypotheses

The following formed the research hypothesis of the study.

Ho1 Micro training has no significant effect on the growth of small holders' farmers in south west, Nigeria.

Ho2 Supervision and monitoring has no significant effect on the growth of small holders' farmers in south west, Nigeria.

LITERATURE REVIEW

Micro Finance Institution

Sinha and Martin (2022) stated that micro finance institution (MFIs) provide financial services to individuals and small businesses who typically lack access to traditional banking services. The primary goal of microfinance banks is to promote financial inclusion by offering a range of financial products and services tailored to the needs of low-income clients. They further stated that use of microfinance does not involve only disbursement and collection of loan repayment and savings, it also refers to a set of flexible organization structures and processes through which provision of essential financial services are offered to low-income earners and small business entrepreneurs on a continuous basis.

Zeller et al. (2022) refer to micro finance institution as the provision of financial services, such as credit, savings, insurance, and other basic banking services, to low-income individuals or communities who typically lack access to traditional banking services. These services are usually provided by microfinance institutions (MFIs) or microfinance banks, which are specialized financial institutions that cater to the financial needs of the underserved or economically marginalized populations. Microfinance banking aims to alleviate poverty and promote financial inclusion by providing small loans and other financial services to individuals who may not have access to formal banking institutions due to factors such as low income, lack of collateral, or limited financial literacy.

Micro Training

Elkanah (2023) refers to micro training as an organized system of learning targeted to providing education and skill development opportunities to individuals, typically in small groups or individualized settings. It is designed to address specific learning needs and enhance competencies in particular areas of interest or expertise. Micro training programs are characterized by their brevity, focusing on delivering concise and targeted content that can be easily absorbed and applied by participants. These programs may cover a wide range of topics, including technical skills, soft skills, and professional development areas. Micro training is often delivered through various channels, including online platforms, mobile apps, workshops, seminars, or one-on-one coaching sessions.

Dermol and Cater (2022) refers to micro training as a battered and focused approach to training that is designed to address specific skill gaps or learning needs of individuals or groups. Unlike traditional training programs that may cover a broad range of topics, micro training delivers concise, bite-sized learning modules that are highly tailored to the learner's immediate requirements. These training sessions are typically brief, often ranging from a few minutes to a few hours, allowing participants to quickly acquire new knowledge or skills without extensive time commitments. Micro training can take various forms, including online courses, workshops, seminars, or mobile learning apps, and it often utilizes

interactive and engaging instructional methods to enhance learning retention. The content of micro training programs is carefully curated to provide practical and actionable information that learners can immediately apply to their work or daily lives.

Monitoring And Supervision

Ololade et al. (2023) stated that monitoring and supervision involves the systematic observation and collection of data or information related to specific activities or processes. It aims to track progress, identify trends, and assess performance against predefined indicators or benchmarks. Monitoring provides real-time insights into the status and effectiveness of ongoing activities, allowing for timely interventions or adjustments to optimize outcomes. Supervision, on the other hand, involves the direct oversight and management of individuals, teams, or processes to ensure adherence to policies, procedures, and performance expectations. Supervisors provide guidance, support, and feedback to personnel, monitor their work, and address any issues or challenges that may arise. Supervision is essential for maintaining quality, consistency, and accountability in operations. Monitoring and supervision are integral processes in various fields, including business management, education, healthcare, and project implementation.

Oparinde et al. (2022) defined monitoring and supervision as a way of tracking and assessing the progress, performance, and outcomes of activities, projects, or systems. It entails collecting data, measuring indicators, and evaluating results against predefined objectives or benchmarks. Monitoring helps stakeholders identify potential issues, trends, or areas for improvement in real-time, enabling timely adjustments and informed decision-making. Supervision, on the other hand, refers to the oversight and guidance provided by individuals or authorities responsible for directing, managing, or supporting the execution of tasks, projects, or processes. Supervisors ensure that activities are carried out effectively, efficiently, and in accordance with established standards, procedures, and regulations.

Growth

Lowder and Skoet (2022) refers to growth as the process of increasing in size, quantity, or significance over time. In various contexts, it can denote physical expansion, such as in the case of living organisms, or it can relate to economic development, where it signifies improvements in production, income, and overall wealth within a society. Growth often implies positive change and progress, indicating that an individual, organization, or economy is moving toward greater efficiency, productivity, and well-being. It can encompass a range of dimensions, including financial, social, and environmental aspects, reflecting a holistic view of advancement and improvement in quality of life.

Ortmann and King (2021) defined growth in context of smallholder farmers as the process of improvement and advancement in various aspects of their agricultural practices and overall livelihoods. It encompasses increases in productivity, which is the ability to produce more output from the same or fewer inputs. Growth also involves enhancements in economic stability and income levels, where farmers experience higher earnings from their agricultural activities. Additionally, growth includes improvements in the efficiency and sustainability of farming practices. It also involves the adoption of innovative techniques, better resource management, and the integration of modern technologies that lead to more effective and sustainable farming operations.

Micro Training and Growth of Small Holders Farmer

Eke et al (2023) investigated how micro training has assisted small holders' farmers growth in Edo state. The study employs the survey method. The population of this study is based on the farmers in Edo State. Primary sources of data were employed and questionnaire was designed using Linkert scale format. The population of the study is 1988 out of which sample size 333 was derived using Taro Yemane formula. 333 questionnaires were distributed out of which 300 returned their questions. Data collected was analyzed using both descriptive and inferential statistics while hypothesis of the study was tested using pears on chi-square distribution. The findings confirmed a positive and insignificant contribution of micro training on the growth of farmers in Edo state. The study recommended among others that, keeping records of cash inflows and out flows of the businesses will help small and medium enterprises

track the record of deficiency and strengthen their performance. While the survey method is mentioned, there is insufficient detail about how the questionnaire was developed, including its validation.

Monitoring and supervision and Growth of Small Holders Farmer

Felix et al (2023) examined the impact of super visoring and monitoring of loan after disbursement to farmers in Benin City. A survey research design was adopted. The primary method of data collection was used, a well-structured questionnaire was designed and distributed to the fifteen (330) sampled farmers in Benin City. The questionnaire was the main research instrument used in the study. A total number of 330 questionnaires were distributed out of which 300 were returned. Both descriptive and inferential statistic was used for the data analysis, frequency and percentages were used to analyze the section A of the questionnaire while multiple regression analysis was used for the test hypothesis. The result shows that poor monitoring have a negative and significant effect on the farmers in Benin City. The study recommended that proper monitoring of agencies in charge of loans for farmers should be put in place and the farmers should have proper planning for the growth and sustainability of their farm activities. The study states that "multiple regression analysis was used for the test hypothesis" but does not specify what hypotheses were tested.

Bank led theory

The Bank Led Theory was propounded by Al-Muharrami and Palaniappan in the early 2000s. Their work focused on the role of banks as key drivers of economic development, particularly in the context of microfinance and rural finance. This theory emphasizes that banks, through their financial intermediation and tailored services, can effectively support underserved segments of the economy, including smallholder farmers and micro-entrepreneurs, thereby fostering overall economic growth. Bank-led model offers a distinct alternative to conventional branch-based banking in that customer conducts financial transactions at a whole range of retail agents instead of at bank branches or through bank employees. The bank is the ultimate provider of financial services and is the institution in which customers maintain accounts. Retail agents have face-to-face interaction with customers and perform cash-in/cash-out functions much as a branch-based teller would take deposits and process withdrawals. Virtually any outlet that handles cash and is located near customers could potentially serve as a retail agent. Whatever the establishment, each retail agent is outfitted to communicate electronically with the bank for which it is working. The equipment may be a mobile phone or an electronic point-of-sale (POS) terminal that reads cards. Once an account is established or loan approved, the customer goes to the retail agent to conduct all or certain financial transactions. The retail agent checks the customer's identification documentation and processes the transaction, debiting the customer's and crediting the payee's bank account if it is purchase or a transfer of funds between accounts. Unless the transaction is merely a transfer of funds, cash is either deposited to or withdrawn from the retail agent's cash drawer. An electronic record of the transaction is either routed directly from the retail agent to the bank or is handled by a payment processing agent that settles the transaction between the customer's account and the payee's account. (Lyman, et al 2006). The bank led theory is related to the study as it focuses on how financial institution like microfinance banks deliver their financial services through a retail agent, where the bank develops financial products and services but distribute them through a retail agent.

METHODOLOGY

The study adopted a survey research design. The study population consisted of (152,534) registered farmers in South West Nigeria. The techniques were in conjunction with Taro Yamane (1968) sample selection formula to determine the sample size of 400. Convenience sampling techniques was used and the procedure involves selecting participants based on their availability and willingness to participate to enable the collection of data. The study used primary data. Data were collected using 5-point Likert scale structured questionnaire. The data collected was analyzed using smart-PLS SEM.

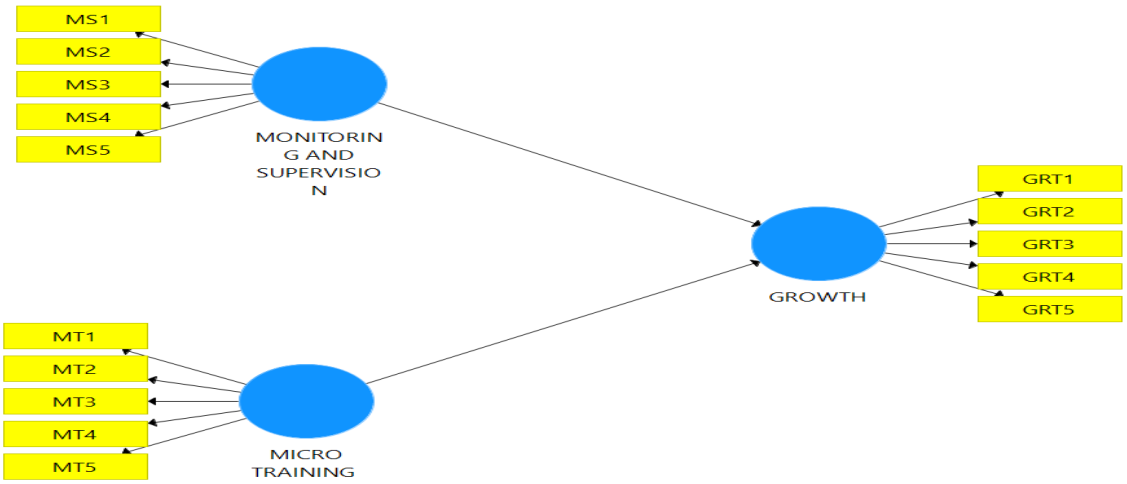

Figure 1: Study Model

RESULTS AND DISCUSSION

Table 1.1: Reliability of study scale

S/N	Variables		Factor Loadings	Cronbach Alpha	Composite Reliability	Rho A	Average Variance Extracted (AVE)	No of Items
1	Micro Training (MT)	MT 1 MT 3 MT 4	0.728 0.689 0.833	0.620	0.795	0.828	0.720	3
2	Monitoring and Supervision (MS)	MS 3 MS 4 MS 5	0.854 0.831 0.862	0.809	0.885	0.643	0.566	3
3	Growth (GRT)	GRT2 GRT3 GRT4	0.762 0.894 0.914	0.864	0.908	0.890	0.713	3

Source: Smart PLS Output, 2025

Composite reliability of Jöreskog's (1971) was applied to test for internal consistency of the items. All the values fall within the Hair, et al., (2019) rating of good consistency. The Cronbach alpha value was above 0.60 which is the minimum threshold as recommended by Sekaran (2010). To test for the convergent validity, the average variance extracted (AVE) was used. All the latent variables showed values greater than 0.50 which indicates that the constructs explain at least 50 percent of the variance of its items. According to Henseler et al., (2015) the Fornell-Larcker criterion does not perform well when explaining discriminant validity, particularly when the indicator loadings on a construct differ only slightly. As a replacement, they proposed the Heterotrait-Monotrait (HTMT) ratio of the correlations which is the mean value of the item correlations across constructs relative to the (geometric) mean of the average correlations for the items measuring the same construct (Voorhees et al., 2016). Discriminant validity problems are present when HTMT values are higher than 0.90 for structural models (Henseler, et al., 2015).

Table 2 Heterotrait-Monotrait Ratio (HTMT)

	MICRO TRAINING	MONITORING AND SUPERVISION	GROWTH
MICRO TRAINING			
MONITORING AND SUPERVISION	0.796		
GROWTH	0.718	0.528	

Source: Smart PLS Output, 2025

Model Goodness of Fit (GoF)

Sequel to the need to validate the PLS model, there is a need to assess the goodness of fit of the model as Hair, et al. (2017) suggested. This study used the standardised root mean square residual's (SRMR). The choice of this index was based on the fact that the SRMR provides the absolute fit measure where a value of zero indicates a perfect fit. The study adopted Hu & Bentler (1998) suggestion that a value of less than 0.08 represents a good fit while applying SRMR for model goodness of fit. The study result indicates an SRMR value of 0.01. This indicates the model is fit.

Assessing the Structural Model

Having satisfied the measurement model assessment, the next step in evaluating PLS-SEM results is to assess the structural model. Standard assessment criteria, which was considered include the path coefficient, t-values, p-values and coefficient of determination (R^2). The bootstrapping procedure was conducted using a resample of 5000.

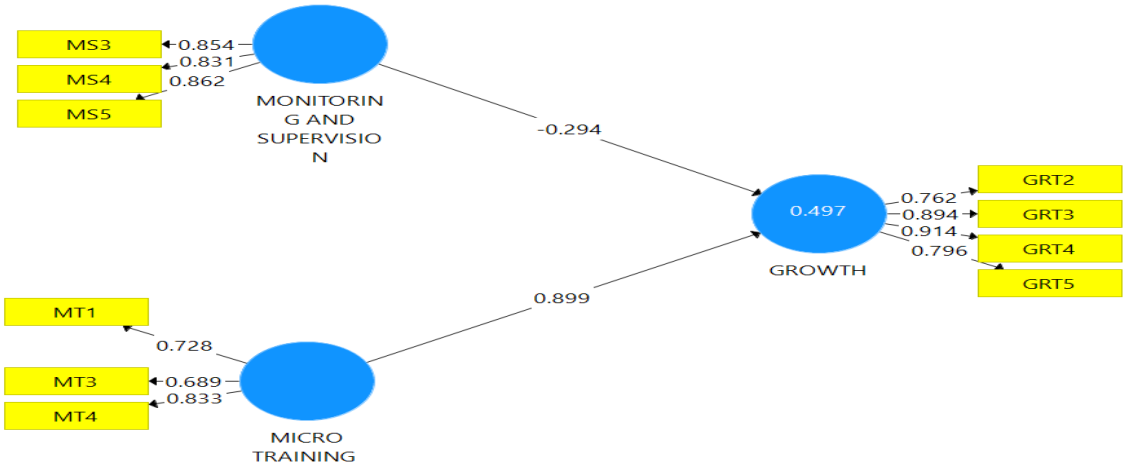

Fig. 3: Path Coefficients of the Regression Model

The R-square value stood at 49% indicating that micro finance institution represented by micro training and monitoring and supervision are responsible for 49% variation in the performance. The remaining 51% variation could be explained by other factors not included in the study. Based on Hair, et al., (2019), the r-square is considered suitable and lends credence to the findings of the study. The result of the path analysis is presented in the table below.

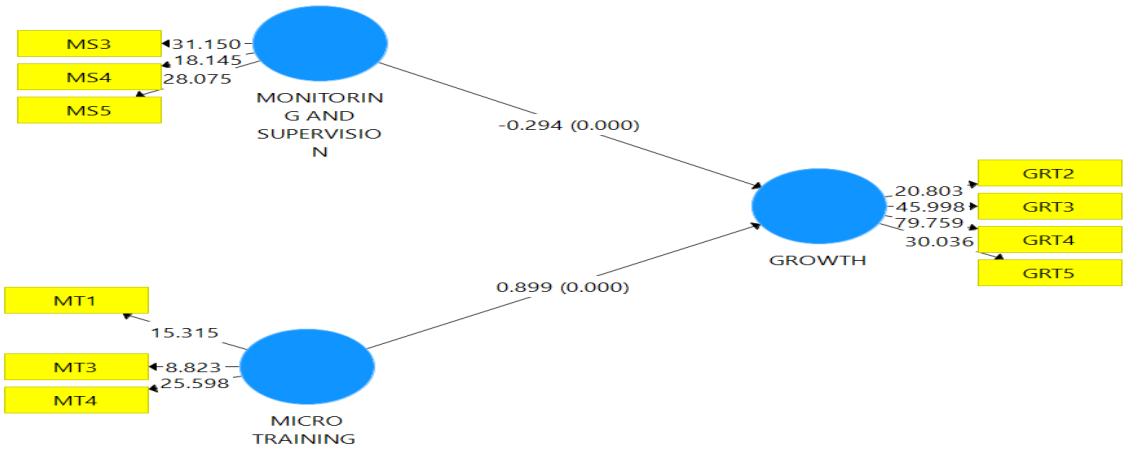

Table 3.1: Path Coefficients

Hypothesis	Variable	Path Coefficient ***(Beta)	t-value	p-value	Findings
Ho_1	Micro Training	0.899	12.390	0.000	Rejected
Ho_2	Monitoring and Supervision	-0.294	4.349	0.000	Rejected

Source: Smart PLS Output, 2025

Results from table 3.1 The findings from the study indicate a statistically significant and positive relationship between micro training and the growth of smallholder farmers. The decision was reached based on the t-value of 12.390, a beta value of 0.899 with a p-value of 0.000. This is an implication that there is a need for sustained investment in capacity-building initiatives that provide smallholder farmers with the tools and skills needed to navigate challenges and seize opportunities. The null hypothesis has sufficient grounds to be rejected and as such the alternate hypothesis which states that micro training has no significant effect on the growth of smallholder farmers is rejected.

Finally, the result reveals a statistically significant but negative relationship between monitoring and supervision and the growth of smallholder farmers, as indicated by a coefficient of -0.294, a t-statistic of 4.349, and a p-value of 0.000. This suggest that, while monitoring and supervision are relevant to growth of smallholder farmers, their current implementation may be hindering rather than facilitating growth. The implication is that the null hypothesis has sufficient grounds to be accepted and as such the alternate hypothesis which states that monitoring and supervision has no significant effect on the growth of smallholder farmers is rejected.

CONCLUSION AND RECOMMENDATIONS

Based on the findings above, the study concludes that monitoring and supervision and micro training are key motivators for the growth of smallholder farmers in South West, Nigeria. Therefore, the study recommends that stakeholders should prioritize the design and implementation of focused, practical training programs tailored to the specific needs of smallholder farmers. These programs should aim to build farmers' capacity in key areas such as modern farming techniques, resource management, market access strategies, and the use of technology in agriculture. Finally, stakeholders should shift the focus of monitoring and supervision from punitive measures to developmental support. Supervisors should act as mentors, providing constructive feedback, guidance, and solutions to challenges faced by smallholder farmers.

REFERENCES

Dermol, V., & Cater, T. (2022), The Influence of Training and Training Transfer Factors on Organizational Learning and Performance. *Mediterranean journal of social science 4(6), 2039-2117.*

Eke, A.S., Edwin O.,1 & James T. (2023) investigated how micro training has assisted small holders' farmers growth in Edo state. *International journal of business and management invention* 5(11), 14-29.

Elkanah H., L. (2023), Effect of microfinance bank services on performance of small and medium scale enterprises in Jalingo Metropolis Taraba state, Nigeria. *International journal of economics and financial modelling.* 2(6), 7-24.

Felix, M., Samuel, J.M., & James, H. (2023) impact of super visoring and monitoring of loan after disbursement to farmers in Benin City. *International Journal of Business & Law Research 8(1):56-62.*

Ololade, R. A., Olagunju, F. O., Adejumo, T. J., & Okegbade, A. I. (2023). Econometric Analysis of Accessibility and Repayment Ability of Agricultural Credit among Rural Root and Tuber Crops Farmers in Oyo State Nigeria. *Global Journal of Management and Business Research*. 25(1), 1–12.

Oparinde, L.O. Amos, T.T. & Adeseluka, M. (2020). Influence of agricultural credit guarantee scheme fund (ACGSF) on fishery development in Nigeria. *Scientific Papers Series Management, Economic Eng. Agriculture Rural Development*. 17 (1) 323–332.

Oparinde, L.O. Amos, T.T. Adeseluka, M. (2022). Influence of agricultural credit guarantee scheme fund (ACGSF) on fishery development in Nigeria. Scientific Papers Series Management. *Journal of Economic Eng. Agriculture Rural Development*. 17 (1) 323–332.

Ortmann G. & King R. (2021) Small-scale farmers in South Africa: Can agricultural cooperatives facilitate access to input and product markets. *International Journal of Economic, Business and Finance,* 2(8):373–396.

Silong, A. K. F. & Gadanakis, Y. (2019), "Credit sources, access and factors influencing credit demand among rural livestock farmers in Nigeria", *Agricultural Finance Review*, 80(1): 68-90.

Sinha, S. & N. Martin, (2022). Informal credit transactions of microcredit borrowers in rural Bangladesh. *Australasian Agribusiness Review*, 18(3)103-135.

APPENDIX 1: QUESTIONNAIRE

Below is statement on the scale of 1-5, where 1= Strongly Agree, 2= Agree, 3= Strongly Disagree, 4= Disagree, 5= Undecided. Please indicate by ticking () the extent of agreement or disagreement with each statement.

S/N	Micro Training	SA	A	SD	D	U
1	There is effectiveness in training program in enhancing your knowledge and skills					
2	I'm satisfied with the quality of content and materials provided during the training program					
3	The training program help me to apply the newly acquired knowledge and skills in my work and daily life					
4	The interaction and engagement fostered during the training program, such as group discussions, exercises, or hands-on activities is wonderful.					
5	Effective training and capacity-building programs are necessary to enhance the skills and knowledge of individuals involved in agribusiness activities.					
	Supervision and Monitoring					
6	The team provide valuable feedback and guidance for improving the project/activity					
7	The level of support provided by the supervisory team in addressing challenges or issues identified during monitoring was high.					
8	Their activities ensure compliance with project, objectives, guidelines, and standards.					
9	The team provide accurate and reliable data and information for decision-making					
10	The effectiveness of the corrective actions or recommendations provided during the supervision and monitoring process in improving project/activity performance.					
	Growth					
15	My organization has the ability to acquire new customers/clients to drive growth					
16	We have successfully expanded our customer base within our target market.					
17	I'm confidence in the group's ability to sustain its current growth trajectory					
18	Employee performance has directly supported the growth and success of the organization.					
19	We actively adopt technological advancements to stay competitive					
20	We have successfully secured funding to support our expansion efforts					