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ANALYSIS OF MAIZE PRODUCTION AMONG BENEFICIARIES AND NON-BENEFICIARIES OF MICROFINANCE BANK LOAN IN AKURE-SOUTH LOCAL GOVERNMENT AREA, ONDO STATE, NIGERIA

By

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ABSTRACT

The study analyzed maize production among beneficiaries and non-beneficiaries of Microfinance Bank loan in Akure-South, Ondo State, Nigeria. It described the socio-economic characteristics of the respondents, compared the differences in outputs, estimated their costs and returns, identified other forms of loan-scheme, identified constraints faced by loan beneficiaries and identified reasons why non-beneficiaries were not obtaining loan. A multi-stage sampling technique was adopted using a well-structured questionnaire to elicit information from hundred (100) maize farmers. Descriptive statistics, t-test, Gross margin and 3-point Likert scale were used for data analysis. Most (76.0%) of the respondents were married, 49.0% were within 40-59 years and 90.0% were formally educated. There was no significant difference between the outputs of beneficiaries and non-beneficiaries. Beneficiaries earned an average total revenue of ₦645,843.60 per hectare per cropping season and incurred a total cost of ₦379,598.34 per hectare per cropping season while non-beneficiaries earned average total revenue of ₦404,976.00 per hectare per cropping season and incurred a total cost of ₦248,815.45 per per hectare cropping season respectively. Undue delay (Mean score=2.0), low volume of loan (Mean score = 2.18) were the constraints of beneficiaries. High interest rate (90%) and collateral (86%) constituted the reasons why non-beneficiaries were not obtaining micro-finance loan. Therefore, beneficiaries need timely loan disbursement with low interest for higher output and profitability.

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Keywords: Production, Micro-finance bank loan, Maize Farmers, Akure-South, Nigeria

INTRODUCTION

Maize is widely consumed and there is hardly any country in the world where it is not utilized in one form or the other. In Nigeria to be specific, maize is an important staple cultivated and consumed across different ethnic and geographical boundaries (Kamara *et al*, 2020). Maize production is strategically important for Nigeria and other sub-Saharan African nations' food security and socio-economic stability. Maize is the second-largest cereal crop grown after rice in Nigeria, it is the third most important cereal crop after sorghum and millet (Simona, 2021). Its benefits supersede other cereals such as rice, wheat, millet, and sorghum, making it a significant crop (Christopher *et al*., 2019).

Hence, maize production ought to be a lucrative venture that could play a significant role in ensuring food security and poverty reduction in Nigeria; particularly for the fact that the country is endowed with an vast arable land area of 910,768 km^2, water area of 13,000 km^2 and reliable natural rainfall across the various geographical regions, hosting about 200million human population and parades the largest market for agricultural foods and other related products in Africa (National Bureau of Statistics, NBS, 2018). The demand for maize in Nigeria is increasingly rising more quickly due to its various economic purposes and potentials for human consumption, livestock feed and industrial utilization (Wossen *et al.,* 2023). Nigeria has sadly been unable

to take advantage of the enormous prospects in the maize sub-sector as local production has continued to trail behind the gap in demand, generating a considerable imbalance between the two. This has pushed the nation to be one of the world's top importers of food over the years. The nation has continued to experience setbacks despite the government's efforts to make the nation self-sufficient in the production of maize. For instance, in Nigeria, smallholder farmers continued to account for most of the farming population and produce over 70% of the country's agricultural production (Adeosun *et al*, 2019). According to the World Bank (2003), smallholder farmers have limited amount of assets and cultivate less than 2 hectares of cropland. Smallholders, whether through self-provision, non-monetary trades, or market exchanges, depend on their agricultural operations for at least a portion of the food they consume (Nnandi *et al*, 2021). Additionally, they generally use family labour. They encounter challenges in obtaining the technological know-how and credit resources they need to bring about the long-awaited transformation in the nation's food production. The maize producers in the country for instance are predominately smallholder farmers living in rural communities and with little or no access to government opportunities.

Therefore, for millions of people in Nigeria, maize is a staple meal that also provides their food security and source of livelihoods (Oluwatoyin, 2021; Rahma et al, 2021; Isonguyo *et al,* 2021; Kehinde *et al,* 2021; Ibitola *et al*, 2019;). Interestingly, the people of Akure South Local Government Area of Ondo State in Nigeria produce maize and practice agriculture as a way of life (Oladoyin, 2022). The crop is primarily farmed for human use mostly under rain-fed circumstances. Production is nonetheless limited by insufficient capitalization, price volatility, pests and disease outbreaks, and inadequate storage facilities, unavailability of high-quality seed in the desired numbers combined with deteriorating soil fertility has continuously contributed to reduction in maize yields in the area. It is thus impossible to overstate the importance of developing sustainable agricultural programs in Nigeria. Since the beginning of agricultural practices in Nigeria, a few programs and policies have been implemented with significant monetary support, although few successes have been noted. In any case, the Micro Finance Banking strategy was intended to help resource-poor farmers across the country, and it is crucial to investigate how far this has been accomplished to alleviate their issues and increase their output

Many maize farmers, including those in the Akure South LGA, have been forced to seek funding from microfinance institutions across the nation because of their struggle to keep up with the country's economic realities. They do so in the hope that the intervention will help them address their long-standing issues with low productivity, the poverty epidemic, the food insecurity crisis, and other issues. As a result, there has been notable movement in the right direction, and the public has presented some arguments for and against continuing the intervention. Therefore, it is crucial to ascertain how closely the Microfinance Bank is adhering to her responsibilities, especially in agricultural production from the farmers' perspective. Research efforts in this direction are relatively scanty. Therefore, this study filled the important information gap by analyzing maize production among the beneficiaries and non-beneficiaries of Microfinance Bank loan (MFBl) in Akure-South Local Government Area, Ondo State, Nigeria. . The study specifically described the socio-economic characteristics of respondents, compared the outputs of loan beneficiaries and non-beneficiaries, estimated the costs and returns of beneficiaries and non-loan beneficiaries, identified other forms of loan scheme available to respondents apart from microfinance bank loan, identified the constraints faced by loan beneficiaries and reasons why non-loan beneficiaries are not participating in micro finance bank loan acquisition scheme in the study area.

METHODOLOGY

The study was carried out in Akure-South Local Government Area which is one of the eighteen (18) Local Government Areas, Ondo State, Nigeria. Its headquarters are in the town of Akure. It lies between Longitudes 5° 06"E to 5° 38"E and between Latitude 7°07"N to 7°37"N in the Southwestern Nigeria (Ayeni, 2011). It is bounded by Owo Local Government Area in the east, Akure North and Ifedore Local Government Areas in the north, Ile-Oluji/Oke-Igbo Local Government Area in the west and Idanre Local Government Area in the south. The climate of the area consists of two peaks rainy season with short and long dry season. The rainy season

begins from March to mid-July and late August to mid-November. Little/short dry season occurs between mid-July and early August, the long dry season begins from late November to March (Akinseye, 2010).

Sampling procedure and sample size: The population of the study comprises of all maize farmers in Akure-South Local Government Area, Ondo State, Nigeria. Multi-stage sampling technique was adopted using purposive and simple random sampling. In the first stage, three (3) Micro Finance Banks in Akure were purposively selected for the study due to their higher involvement in loan disbursement to farmers in the area. The Micro Finance Banks considered include: Oredegbe Micro Finance Bank, Oke-Aro, Akure; Lapo Micro Finance Bank, Ilesha Road, Akure; and ACCION Micro Finance Bank, Oja Oba, Akure. In stage two, a list of all maize farmers in Akure-South Local Government Area, Ondo State, who were currently on loan with the three majorly identified Micro-Finance Banks in the study area and who acquired loan for maize production was obtained for the study. At third stage, from the sample frame shown in Table 1; 10% representing a total of fifty (50) beneficiaries were randomly selected for the study. Finally, a purposive sampling of correspondent number of maize farmers who were non-beneficiaries of MFBl were randomly selected from those communities where beneficiaries were selected to give a grand sample size of one hundred (100) respondents. A well-structured questionnaire coupled with personal interview was used to elicit information from the respondents. descriptive statistics, gross margin, T-test and mean score were employed for data analysis.

Model Specification: The costs and returns of loan beneficiaries and non-beneficiaries were achieved using Gross Margin analysis. Gross Margin analysis shows the profitability of an enterprise, it is the difference between the total revenue and total variable cost.

GM=TR-TVC

Where:

GM= Gross Margin (₦) ………………………… (i)

TR=Total Revenue (₦)

TVC= Total Variable Cost (₦) ((Labour (manday), Seed (kg), Pesticides (litres), Herbicides (litres), Transport (₦), Bagging (dozen)

T-test was used to evaluate the differences in the output and returns of beneficiaries and non-beneficiaries of MBFl in the study area. The t distribution is a probability distribution like the normal distribution. It is commonly used to test hypothesis involving numerical data.

$$t^* = \frac{\bar{X} - \mu}{s/\sqrt{n}}$$ …………………………………….. (ii)

t-Test was used to compare the differences in output, costs and returns of beneficiaries and non-beneficiaries of MFBl in the study area. The t distribution is a probability distribution similar to the normal distribution. It is commonly used to test hypothesis involving numerical data.

The constraints faced by MFBl beneficiaries was achieved using mean score from 3-point Likert scale. The three-point Likert scale is specified below:

Very Serious (VS)   3 points

Serious (S)   2 points

Not Serious (NS)   1 point

The mean response to each item was calculated using the following formula:

$$X = \frac{\sum FX}{N}$$ ……………. (iii)

Where: X = means response, $\sum$ = summation, F = number of respondents choosing a particular scale point, X = numerical value of the scale point and N = total number of respondents to the item.

The mean response to each item was interpreted using the concept of real limits of numbers. The numerical value of the scale points (Response modes) and their respective real limits are as follows:

Not Serious (NS) =1 point with real limits of 0.5-1.49

Serious (S) = 2 points with real limits of 1.50-2.49

Very Serious (VS) = 3 points with real limits of 2.50-3.49

Decision Rule: Any mean score of 2 and above was considered as serious, while any mean score less than 2 was considered as not serious.

RESULTS AND DISCUSSION

Socio-economic characteristics of the respondents: Table 2 revealed the differences in the socio-economic characteristics of the respondents. The age of respondents may be of importance with respect to provision of loan by the MFB in the study area. it could be deduced from the results that most loan beneficiaries were still active and productive individual who have the capacity of repaying the loan, because the Microfinance Banks (MFBs) are willing to give out loan to active farmers who can make use of the loan for increase productivity. This agrees with the findings of Ibrahim (2021) who affirms that age is an important factor in loan disbursement to borrowers. Also, agricultural production requires able bodied active individuals. Therefore, no rational financial institution will give loan to individuals who are older from 60years and above. The beneficiaries of MFBl in the study area were majorly married women who needed loan to buy farm inputs, wages for labour and money for family upkeep among others, whereas majority of the men were non-beneficiaries of MFBl. The non collection of loan on the part of the men may be because of their natural strength which they could use to carry out some of the tedious farming operations, they may also have other sources of capital apart from personal savings, or probably they might have formed a working cooperative , called "owe" whereby they rotate farm operations as a group. Therefore, majority of the non-beneficiaries who were men may not need to source for additional capital for most of their farm operation. In addition, they may also be making use of their family labour which comprises of their wives and children. This collaborates with the findings of Usman *et al*. (2023) in which 84.2% of microfinance loan beneficiaries were married women who engaged in agricultural enterprises in Bauchi State, Nigeria. Many of the respondents were educated but the loan beneficiaries showed higher number of individuals that went beyond secondary school. This reflected in their attitude towards loan acquisition from MFBs. This implies that educated farmers were likely or have higher chances of

understanding the benefits of credit in modern production and comprehend extension information on sources and utilization of credit. This is in line with the findings of Mahmud (2021), who reported that educational level promotes the ability to access and comprehend on credit acquisition among microfinance loan beneficiaries in Niger State. The mean household size of non-beneficiaries was found to be more than the beneficiaries. This implies that the non-beneficiaries may have advantage over beneficiaries in terms of reduction in the cost of farm operations, on the other hand they may have more people to feed and care for, thus, their loan repayment capacity may be low due to multiple responsibilities. Therefore, they may not be interested in MFBl and only spend money within their reach. The household sizes of the respondents were typical of most rural farming communities in Nigeria where household labour is the most dependable source of farm labor. Mohammad *et al* (2019) also discovered household size of 6-10 among farmers in Federal Capital Territory, Nigeria. Nwoko *et al* (2023) also recorded mean household size of 6 persons among maize farmers in Benue State, Nigeria. The results also showed that non-beneficiaries of MFBl were more experienced in terms of maize production than the loan beneficiaries. The implication is that over the years the former would have acquired more skill in their various production activities and might have been able to discover management practices that can help in minimizing cost of production, thus, they may not need to be sourcing for additional capital for their farm operation, maintenance, adoption of improved production practices unlike their counterpart who still need more time to attain such status. Thus, the beneficiaries need to source additional capital for maize production. The respondents were smallholder farmers who cultivated majorly less than 2 hectares of land per annum. This implies that majority of the maize farmers do not have large farm size, therefore, their production volume might be somehow small. The results conform with the findings of Afolami and Ogunwande(2021), who stated that maize farmers in Ondo State cultivated less than 2 hectares in their study. According to the a priori expectation, an increasing farmland would result in higher production and hence higher loan repayment capacity. The respondents also engaged in other non-agricultural occupation such as trading, civil service, driving and artisan. However, majority of the beneficiaries were also into trading of all sorts, thus, there is possibility

of loan diversion into other non-agricultural ventures. On the other hand, the involvement of both groups in other non-agricultural activities could serve as coping strategies during off season and provide insurance against agricultural production risk (Asnake, 2015). Moreover, beneficiaries and non-beneficiaries inherited their farmland while some cultivated rented farmland with few of them cultivating purchased land. This implies that many of the respondents had control over their farmland with little or no cost. These results agree with the findings of Olukosi and Erhabor (2018), who stated that some subsistence farming communities acquired land through inheritance passed from generation to another. Apart from the benefitting from MFBl, many of the beneficiaries also belong to association such as cooperatives, farmer association alongside with non-beneficiaries. This could be because of the benefits derived from belonging to an association especially in terms of access to credit, sharing of knowledge to increase productivity and combined marketing of produce. These results concur with the findings of Hung et al (2020), who found that membership of association have increase access to credit and other benefits than could be derived individually.

Comparison of outputs of respondents: The results in Table 3 reveals that loan beneficiaries harvested more maize output than the non-beneficiaries of MFBl. Although, there were differences in their output figuratively, but there was no significant difference in the output of beneficiaries and non-beneficiaries of MFBl in the study area. This implies that there is no distinguishable difference between the total outputs produced by those who have benefitted from MFBl and the other group who have not benefitted. This may be attributed to certain reasons such as diversion of borrowed loans to unproductive use by beneficiaries which could result in decrease in their expected outputs and loss of produce to pests and disease infestation, seasonality of agricultural operations which may result in crop failure (Mejeha *et al*, 2018).

Costs and returns of respondents: Table 4a reveals that the beneficiaries recorded higher revenue, gross margin, net farm income than non-beneficiaries of MFBl per cropping season. The implication is that the beneficiaries might have employed improved technologies in their maize production activities with loan acquired from the financial institution while the non-beneficiaries were only engaged in extensive system of maize production to get their returns, net farm income without accessing loan from the MFBl in the study area. The beneficiaries also derived more benefit- cost-ratio (BCR) than the non-beneficiaries as revealed in the study. Although the two categories found maize production profitable since their BCR is higher than 1, but more profit accrued to the beneficiaries of MFBl than others. The results are in tandem with the findings of Ahmed (2019) who claimed that maize farming was generally profitable to beneficiaries and non- beneficiaries of microfinance credits in Northeastern, Nigeria. Therefore, if the farmers make effort to expand their scale of production, it would be a rational decision especially on the part of the beneficiaries. However, there were no significant differences in the respondents variable costs, fixed costs and returns in the study area as revealed in Table 4b.

Other forms of loan scheme available in the study area: The results in Table 5 reveals that the respondents had access to other sources of loan in the study area apart from MFBs. It was deduced that the beneficiaries also accessed loan from money lenders, cooperative societies, commercial banks, while the non-beneficiaries of MFBl sourced loan majorly from money lenders, cooperative societies and commercial banks within the study area. The implication is that the MFBl beneficiaries also opted for additional sources of loan as back-up to augment undue delay in processing approved loan by the Microfinance Banks and to meet up with planting season of maize production which are determined by climatic factors such as rainfall, sunlight, humidity and others. The non-beneficiaries of Microfinance Banks loan would have preferred other sources especially the local money lender due to easy access without bottlenecks associated with Microfinance Bank loan and probably due to lower interest rate charged by the money lender. Banks of Agriculture, relatives and friends could be accessed by both beneficiaries and non-beneficiaries of MFBl, the respondents could decide on the most preferred source(s) where to get additional capital for their maize production. No wonder the output of beneficiaries and non-beneficiaries were at close range per cropping season.

Constraints facing loan beneficiaries' access to credits from microfinance banks: Table 6a showed the extent to which different constraints hinder

respondents' access to loan from microfinance banks, considering the mean score of each constraint.

The results showed that inability to mobilize high loan volume was ranked as the most serious constraint with a mean score of 2.18. This is a scenario where the amount of loan sourced is not equivalent to the disbursed loan or advances in the same community where the deposits were mobilized. The results support the findings of Anigbogu *et al* (2015) who asserted that the amount of loan disbursed to farmers as a group was lower than the amount applied for in their study.

Diversion of funds to unproductive ventures was another constraint faced by beneficiaries with a mean score of 2.08. The loan disbursed to the beneficiaries were not totally invested into maize production, but other non-agricultural activities, personal and family consumption. This may be as a result of loan released after the season. Thus, the farmers may not be able to save the money for subsequent year(s), they may resolve to invest into other unspecified ventures rather than the original purpose of loan acquisition. .

Undue delay in processing approved loans with a mean score of 2.00 was another constraint faced by loan beneficiaries The implication of this is that if approved loan are unduly delayed by the microfinance banks officials, by the time the loan finally gets to the farmer, the planting season might have been over and this may have a negative effect on the farmers output, profitability and the loan would be invested into other personal or family uses such as payment as school fees, ceremonies and other unproductive activities.

Corrupt practices of microfinance staff with the lowest mean score of 1.96 as seen on Table 5 was not considered as a constraint facing beneficiaries access to credit as the staff or management of microfinance institutions are honest in their duties and would not give loans meant for disbursement to farmers to other people based on their personal interest.

Corrupt practices of microfinance staff with the lowest mean score of 1.96 as seen on Table 5 was not considered as a constraint facing beneficiaries access to credit as the staff or management of microfinance institutions are honest in their duties and would not give loans meant for disbursement to farmers to other people based on their personal interest.

Table 6b showed reasons given by the non-beneficiaries for not participating in microfinance loan scheme. Majority of the non-beneficiaries (90.0%) indicated high interest rate charges as their reason for not participating. This could be attributed to the belief that MFBs charges more interest rate compared to other financial institutions (Chigunbah *et al*., 2020). Most (86.0%) of the respondents indicated that demand for high volume of deposit as collateral as their reason for not participating because some MFBs require huge amount of collateral e.g. (land, buildings, and so on) which most peasant farmers cannot provide. The results confirm the findings by Fatima and Jelena, (2017) in their study titled; hindrances to micro financing: a Nigerian case study where it was revealed that the predominant factor that hindered business from obtaining loans from microfinance bank is lack of collateral. 32.0% of the non-beneficiaries would have borrowed from microfinance bank but for the seasonality of agricultural production which implies that there are risks and uncertainties attributed to the agricultural production. 26.0% of the non-beneficiaries blamed their reason for not participating on their lack of awareness of the products and services of microfinance banks, implying that they do not have full knowledge of how microfinance institutions operate in their area. This agrees with the findings of Mbuga (2019) who indicated lack of awareness of loan accessibility as one of the constraints facing farmers in his study. 38.0% of the non-beneficiaries are not participating in microfinance loan scheme due to their experience of crop failure or other natural disasters which might have resulted in huge loss and debts which could have made them financially imbalance.

CONCLUSION AND RECOMMENDATION

In conclusion, this study has analyzed maize production among beneficiaries and non-beneficiaries of microfinance bank loan in Akure-South Local Government Area, Ondo State., Nigeria. The study indicates that beneficiaries of microfinance bank loan recorded higher output and profit figuratively than the non-beneficiaries of Microfinance bank, hence, there were no significant differences in their output and profit. The study concludes that there were other sources of loan

available to the respondents apart from microfinance bank loan for maize farmers in the study area.

Therefore, Microfinance banks in the study area should reduce their interest rate, disburse approved and processed loan on time and probably increase the volume of loan to motivate more maize farmers. The microfinance loan beneficiaries should endeavor to apply for loan long time before the beginning of cropping season and invest the acquired loan to maximize output and profit. Maize farmers in the study area should also seize the advantage of available multiple sources of loan to better their lot in terms of output and profitability.

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Table 1: Estimated sampling frame and sample size for the respondents

S/N	Selected Microfinance Bank	Sample frame for Microfinance Bank Beneficiaries	Sample size (10%)	
			Beneficiaries	Non-beneficiaries
1	Oredegbe MFB	187	19	19
2	Lapo MFB	160	16	16
3	ACCION MFB	153	15	15
	Total	**500**	**50**	**50**

Source: Author's compilation (2020)

Table 2: Distribution according to socio-economic characteristics of respondents

	Beneficiaries		Non-beneficiaries		Pooled	
Variable	**Frequency**	**%**	**Frequency**	**%**	**Frequency**	**%**
Age						
30 – 39	16	32	4	8	20	20
40 – 49	16	32	10	20	26	26
50 – 59	10	20	13	26	23	23
60 – 69	8	16	18	36	26	26
70 – 79	0	0	5	10	5	5
Total	50	100	50	100	100	100
Mean	45.92(10.48)*		55.44(11.87)		50.68(12.13)	
Sex						
Male	24	48	40	80	64	64
Female	26	52	10	20	36	36
Total	50	100	50	100	100	100
Marital tatus						
Single	4	8	1	2	5	5
Married	37	74	39	78	76	76
Widowed	6	12	7	14	13	13
Divorced6	1	2	1	2	2	2
Separated	2	4	2	4	4	4
Total	50	100	50	100	100	100
Education						
None	3	6	7	14	10	10
Primary	4	8	5	10	9	9
Secondary	19	38	17	34	36	36
Tertiary	24	48	21	42	45	45
Total	50	100	50	100	100	100
Household Size						
3 –7	37	74	32	64	69	69
8 – 12	12	24	14	28	26	26
13 – 17	1	2	4	8	5	5
Total	50	100	50	100	100	100
Mean	6.12(2.60)		7.2(3.02)		6.66(2.85)	
Farming Experience						

8 – 17	17	34	10	20	27	27
18 – 27	21	42	13	26	34	34
28 – 37	12	24	11	22	23	23
38 – 47	0	0	10	20	10	10
48 – 57	0	0	4	8	4	4
58 – 67	0	0	2	4	2	2
Total	50	100	50	100	100	100
Mean	21.24(7.30)		30.4(13.85)		25.82(11.94)	
Farm Size						
0.4 -- 1.3	25	50	31	62	56	56
1.4 -- 2.3	16	32	14	28	30	30
2.4 -- 3.3	3	6	2	4	5	5
3.4 -- 4.3	2	4	1	2	3	3
4.4 -- 5.3	4	8	2	4	6	6
Total	50	100	50	100	100	100
Mean	1.77(1.28)		1.5(0.98)		1.64(1.15)	
Other Occupation						
None	0	0	3	6	3	3
Civil Service	11	22	16	32	27	27
Trading	35	70	23	46	58	58
Driving	1	2	1	2	2	2
Artisan	3	6	7	14	10	10
Total	50	100	50	100	100	100
Source of Farmland						
Lease	0	0	1	2	1	1
Rent	15	30	17	34	32	32
Inherited	31	62	26	52	57	57
Gift	3	6	5	10	8	8
Purchase	1	2	1	2	2	2
Total	50	100	50	100	100	100
Mem. of Ass.	27	54	26	52	53	53
Non-mem. of Ass.	23	46	24	48	47	47
Total	50	100	50	100	100	100

Source: Field Survey, 2020

Note: Numbers in parenthesis indicates (Standard Deviation)

Table 3: T-test Two-Sample Assuming Unequal Variances

	Beneficiaries	Non-beneficiaries
Mean	41.48	26.00
Variance	4486.132245	319.5102041
Observations	50	50
Hypothesized Mean Difference	0	
Df	56	
T-stat	1.578993095	
Prob. (T<=t) one-tail	0.059985108	
T-critical one-tail	1.672522303	
Prob. (T<=t) two-tail	0.119970217	
T-critical two-tail	2.003240719	

Source: Author's Computation

Table 4a: Costs and returns of loan beneficiaries and non-beneficiaries

Cost Items	Beneficiaries (50)			Non-beneficiaries (50)		
	Qty	Unit Cost	Value	Qty	Unit Cost	Value
Variable Cost						
Labour (Mandays)	74.29	2000	148,586.00	52.68	2000	105,362.53
Seed (Kg)	24.92	430.60	10,730.55	16.12	452.00	7,286.24
Fertilizer (Bags)	10.82	6,338.24	68,602.08	5.68	6,810.81	38,655.95
Pesticide (Litres)	3.83	1,492.00	5,714.36	2.70	1,584.00	4,276.80
Herbicide (Litres)	8.14	1,512.00	12,307.68	5.55	1,498.00	8,313.90
Transport (Naira)			5,037.50			6,388.89
Bagging (Dozen)	3.40	250	10,168.37	2.13	250	6,400.00
Total Variable Cost			**261,146.54**			**176, 684.31**
Fixed Cost						
Deprec. on Tools			631.80			736.40
Machineries			9,030.00			2,894.74
Interest			108,790.00			68,500.00
Total Fixed Cost			**118,451.80**			**72,131.14**
Total Cost			**379,598.34**			**248,815.45**
Returns(100kg bag)	**41.48**	**15,570.00**	**645,843.60**	**26.00**	**15,576.00**	**404,976.00**
Gross Margin			**384,697.06**			**228,291.69**
Net Farm Income			**266,245.26**			**156,160.55**
BCR			1.70			1.63

Source: Field survey, 2020

Table 4b: T-test results of groups' costs and returns

Variables	Respondents	N	Mean	Std. Deviation	Std. Error Mean
Variable Cost	Beneficiary	7	37306.648571	53959.2320462	20394.6727043
	Non-beneficiary	7	25240.615714	37323.3697728	14106.9077871
Fixed Cost	Beneficiary	3	39483.933333	60167.5211257	34737.7345184
	Non-beneficiary	3	24043.380000	38515.6978864	22237.0485427
Returns	Beneficiary	3	432261.306667	194216.6663963	112131.0446250
	Non-beneficiary	3	263142.746667	128016.5190620	73910.3717412

Variables	F-value	t-value	Df	Sig(2-tailed)	Mean Difference	Std. Error Difference
Variable Cost	0.895	0.487	12	0.635	12066.03286	24798.13545
Fixed Cost	1.410	0.374	4	0.727	15440.55	41245.56
Returns	0.667	1.259	4	0.276	169118.5600	134298.6010

Source: **Author's computation , 2020**

Table 5: Other loan sources available to respondents

Other Sources	Beneficiaries (n=50)		Non-beneficiaries (n=50)	
	Frequency	Percentage	Frequency	Percentage
Commercial Banks	34	68	32	64
Cooperative Society	34	68	33	66
Relatives and Friends	20	40	16	32
Banks of Agriculture	24	48	17	34
Money lenders	37	74	39	78
Others	4	8	3	6

Source: Field Survey, 2020

Table 6a: Constraints facing beneficiaries in accessing micro-finance bank loan

Constraints	Very Serious	Serious	Not Serious	Sum	Mean Score
1. Undue Delay in processing approved loans	12	26	12	100	2.00
2. Inability to mobilize high volume	20	19	11	109	2.18
3. Diversion of funds to unproductive ventures	20	14	16	104	2.08
4. Corrupt Practices of Microfinance staffs	16	16	18	98	1.96

Source: Field Survey, 2020

Table 6b: Reasons why non-beneficiaries are not partaking in microfinance bank loan scheme.

Reasons	Frequency	Percentage (%)
High interest rate charges	45	90.0
Seasonal bottlenecks of agriculture	16	32.0
Demand for high volume of deposit as collateral	43	86.0
Lack of awareness of the products or services of microfinance banks.	13	26.0
Experience of crop failure or other natural disasters	19	38.0

Source: Field Survey, 2020