

The Impact of Gombe Micro Finance Bank on Profitability and Income of Agricultural Businesses in Gombe Metropolis, Gombe State, Nigeria

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Abstract

The study examined the impact of Gombe micro finance bank on profitability and income of agricultural businesses in Gombe metropolis, Gombe State, Nigeria. Multi stage sampling technique was used in selecting 105 beneficiaries of the bank comprising of fifty (50) microprocessors, thirty (30) vegetables sellers and twenty five (25) fruits sellers. The data were collected using structured questionnaire. Secondary data were also collected from the bank. The data were analyzed using descriptive statistics, T-test, Gross margin analysis and multiple regression models. The results of the analysis revealed that Women constituted 49% of the beneficiaries of the bank loans since its inception in 2008. There was significant difference in income of the respondents before and after benefiting from the loan. The gross margin analysis revealed that the respondents had an average gross margin of 2096.70 NGN. The major problems encountered by the respondents while accessing the loan were; compulsory saving with the bank, high interest rate, loan maturity period and frequency of visits for the loan recovery.

Keywords: Impact, Gombe Micro finance bank, Profitability, Income, Agricultural businesses

1 Introduction

Micro financing is not a new concept as it has been used for a very long period as means of providing small micro credit to unemployed or low income individuals or groups who would otherwise have no other means of gaining formal financial services. The micro finance scheme has primarily developed as a response to the inability or apathy of commercial banks and the formal financial system to serve the needs of low-income households and micro enterprise (Adelaja, 2005). Micro finance has proven to be effective and efficient mechanism in poverty reduction all over the world (Berger 2002). In December, 2005, the micro finance policy, regulatory and supervisory framework for Nigeria was released by the Central Bank of Nigeria. Its main objective is to support the delivery of very small, uncollateralized or less than normally collateralized loans or other financial services such as savings or insurance for low income clients. In spite of these programs and policies, most of the poor entrepreneurs are yet to have access to micro finance (Adelaja, 2005). A CBN survey of Micro Finance Institutions in 2005 identified 188 registered Micro Finance Institutions in Nigeria.

Agri-business in this research include the following: Fruits and vegetables sellers, Manual groundnut oil millers, Beans snacks (including *Akara* and *moi moi*) etc. Agricultural business is a generic term for various businesses involve in food production, including farming and contract farming seed supply, agrichemicals, farm machineries, wholesales and distribution, processing, marketing and retail sales (Idolor, 2010). Gombe micro finance bank from its establishment in 2008 to 2012 has disbursed large volumes of loans to its clients, with little or no publicity. It is against this backdrop that this study was conducted with a view to examine the Impact of Gombe micro finance bank on Profitability and Income of agricultural businesses in Gombe metropolis, Gombe state, Nigeria, identify and describe the socio economic characteristics of agribusiness clients, determine the difference in the income of the beneficiaries before and after the loan, determine the socio economic factors influencing the amount of loan accessed as credit from the bank, determine the profitability of the agricultural businesses in the study area and identify the main problems encountered by the Agricultural businesses in the study area.

2 Methodology

This section presents the methodology of the study. It explains the research design, population, sample size and the sampling technique employed. It also further describes the sources of data collected and the method used in analyzing the data.

The study Area

Gombe State was created on October 1st 1996, with Gombe as its capital. Gombe State is located between latitude 9° 3'N and 12° N and longitude 8° 45'E and 9° 3'E (GMSG, 2010). The land area is about 20,365 square kilometers. The 2006 Census showed the figures of 2,353,879 out of which 1,230,722 are male while 1,123,157

are female (NPC, 2006). Gombe town is located in the derived savannah region and it has a land area of about 1054km² approximately, the weather has a high limit of 37⁰C and its lowest of 26⁰C, it has a far terrain with streams and hills. The major agricultural business activities in the state includes the following: Input selling, fruits and vegetable selling, oil milling, farming among others. The climate is characterized by two distinct seasons, which wet and dry seasons. The wet season starts from april / may and ends in november. december to february is the coldest months while march, april and may are the hottest months. The average rainfall of the study area is 850mm (GMSG, 2010).

2.1 Sampling Technique

A multistage sampling technique was used in this study. The first stage involved the purposive selection of Gombe micro finance bank because of its large number of clients among the other three (3) micro finance banks in the state. The second stage involved another purposive selection of (3) agricultural businesses (microprocessors, vegetables sellers and fruits sellers) from the list of the bank clients, based on homogeneity of their businesses found out during preliminary survey conducted by the researcher. The third stage involved the use of simple random sampling technique. The method was used to select fifty (50) microprocessors, thirty (30) vegetables sellers and twenty five (25) fruits sellers, that is(10%) from each enterprise selected, making a total sample size of one hundred and five (105) respondents.

2.2 Data collection procedure

The data were collected from primary and secondary sources. The primary data were collected using a structured questionnaire administered to the respondents. The data collected include the socio economic characteristics of the beneficiaries (agricultural business clients) such as: age, occupation, gender, level of education, s saving, household size, volume of business etc. The secondary data collected from the bank includes: number of clients and volume of loans disbursed.

Analytical tools

The data collected were analyzed using descriptive statistics, t- test and farm budgeting.

Model specifications

T- Test

$$t = \frac{\bar{X}_A - \bar{X}_B}{SX} \dots\dots\dots (1)$$

$$\bar{X}_A = \frac{\sum A}{n}$$

$$\bar{X}_B = \frac{\sum B}{n}$$

$$\delta = \sqrt{\frac{\sum X^2 - (\sum X)^2}{n}} \dots\dots\dots (2)$$

Where: t = t statistic

\bar{X}_A = Mean of the income before the loan (naira)

\bar{X}_B = Mean of the income after the loan (naira)

SX = Standard Error

n = Number of observations

δ = Variance

n-1 = Degree of freedom

Decision: If the calculated t-value is greater than the tabulated t-value, Ho is rejected and Ha is accepted.

: If the calculated t-value is less than the tabulated t-value Ho is accepted and Ha is rejected.

Gross Margin Analysis

The gross margin analysis was adopted to determine the profitability or otherwise of the businesses in the study area, through the estimation of total expenses as well as returns. The gross margin analysis is given as follows:-

$$GM = TR - TVC \dots\dots\dots (3)$$

Where: GM =Gross Margin

TR=Total Revenue (₦)

TC=Total Variable Cost (₦)

The estimated gross margin gives an indication of the profitability or otherwise of the agricultural businesses.

Return on capital,

This is the return on capital or every naira invested in the course of producing a particular output. It is the total farm income divided by the total cost (Olukosi *et al*, 2005).

$$R/N = \frac{TR}{TC} \dots\dots\dots (4)$$

Where:

R/N = Returns per naira invested.

TR = Total Revenue

TC = Total Cost.

3 Results and Discussion

This chapter covers the presentation, and interpretation of the results. It also discusses the results so that inferences can be drawn. Most importantly, the section had provided answers to the research questions of the study.

3.1 Gender Distribution of Banks Clients 2008-2012

Table 1: Total Number of the Bank Clients and Percentage of Women

Years	Total Number of Beneficiaries	Number of Women Beneficiaries	Percentage of Total Number of Beneficiaries
2008	894	300	34
2009	1963	900	46
2010	3645	1925	53
2011	5326	2602	49
2012	6395	3180	50
TOTAL	18223	8907	49

Source: Field Survey 2013

For the purpose of this study the percentage of women beneficiaries, total disbursement, sources of funds and mode of operation of the bank is considered as the measure of the performance and level of outreach, since one of the first objectives of Micro Finance Banks (MFBs) as reported by Anyanwu (2004) is to improve the socio-economic conditions of women, especially in rural areas, through the provision of loan assistance, skills acquisition, reproductive health care services, adult literacy, and girls' education. Globally there is uniformity in standard measure of level of outreach across poverty strata but to define and determine outreach, level of women participation in micro finance, (the number of women reached) is often used Ahmad, (2010). The results in Table 1 shows the number of clients and percentage of women covered by Gombe micro finance bank from 2008 to 2012, which indicates that percentage of women is increasing every year in the bank, with exception of the year 2011, which indicate a reduction due to insecurity and fuel subsidy crisis, according to the Bank officials. Even though, the total number of women beneficiaries are 49% of the total number of the bank's clients its indicating a great coverage of women which is a very good indicator of outreach.

3.2 Income distribution of the beneficiaries before and after the loan collection

Table 2: Results of t- test before and after the loan

Item	Value
Average Income Before Collecting the Loan	₦ 34590.5
Average Income After Collecting the Loan	₦188580.95
Mean	₦ 153990.5
T-value	21.4***
Std Dev.	73842.8
Probability	95%

***Significant @ 1%

Source: Field survey, 2013

Table 2 shows the average income of the beneficiaries before and after the loan were ₦34590.5 and ₦188580.95 respectively. The t- value of the income before and after credit was 21.4. The mean value was ₦153990.5 with standard deviation of ₦73842.8, which is indicating a high significant difference at 1% level of significance. The null hypothesis H_0 is rejected and the alternative hypothesis H_a is accepted. (Yunus, 2004) found out that any credit invested in an income-generating enterprise as a working capital or for productive asset can lead to establishment of a new enterprise or the growth of an existing one. This is an indication that the various sources of agricultural credit available to the beneficiaries had significant influence on their level of income.

3.3 Cost and Returns Analysis of the Agricultural businesses

Table 3: Cost and Return Analysis of the Agricultural businesses

Item of Cost	Total Value	Average Value	Percentage of Average Value
Variable Costs			
Acquisition Cost	8,754,000	16,674.28	97.97
Transportation Cost	43,842.00	83.51	0.49
Facilitative Cost	35,525.00	67.67	0.39
Marketing Charges	27,170.00	51.75	0.30
Revenue/Taxes	74,700.00	142.29	0.83
Total Variable Cost	8,936,237.00	17,019.19	100
Gross Income	10,015,000.00	19,076.19	
Gross Margin	1,079,763.00	2,076.70	
Returns per Naira invested	1.12		

Source: Field Survey, 2013.

Analysis of the agricultural businesses cost and returns as indicated in Table 3 shows that the total variable cost in the marketing process consist of acquisition cost of the Fruits, vegetable, bean, and groundnut with the higher percentage of 97.97 percent which was the major items of cost in the business enterprises, this agrees with Adepoju and Omonona (2007) whose major variable cost of items was the one with the highest percentage. The total variable cost was ₦8, 935.237.00 (average value of ₦16, 674.28) and the total revenue was ₦10, 015,000.00 (average value ₦19076.19) while the gross margin was ₦1, 079,763.00 (average value of ₦2056.70). The return per Naira invested was 1. 12 and operating ratio was 0.892 which indicates that the agricultural business marketing is very profitable in the study area.

3.4 Clients Problems

Table 4: Major Problems Encountered by the Clients

Problem Encountered	Number of Clients	Percentage
Compulsory Saving with the Bank	103	98
High interest rate	54	51
Loan Maturity Period	97	92
Frequency of visit for Loan	96	91

Source: Field survey 2013

The Problems encountered by the clients are mostly with the policies that governed MFI credit terms like (a) the compulsory saving account with the MFI before loan approval. (b) Higher interest rate when larger amount is requested by the client. (c) The time limit and the frequency of the repayment, which is weekly as asserted by (Folake, 2005) Who stated that “ In most cases the access problem, particularly among formal micro financial institutions, is one created primarily through their lending policies like higher interest charged by the bank, time limit of repayment, group lending , compulsory saving etc.”. The results in Table 4 shows that 98% of the sampled clients had problems with the compulsory saving of the bank as requirement for loan collection procedure which poses a serious challenge as the clients are not willing to continue with the compulsory savings , if an alternative may be found, also 51% of the clients were not comfortable with the interest rate charged by the bank more especially when a client need more than hundred thousand naira(₦ 100,000) as loan, which is also discouraging the clients to access more funds for their businesses. The results show that 92% of the clients have problems with the loan maturity period one week which is not enough for the loan to mature and 91% have problem with the frequency of visit by the bank lending agents to the clients every week for loan repayment.

3.5 Conclusion and Recommendations

The study concludes that Gombe Micro Finance Bank and agricultural businesses financed by the bank are on the path to sustainable and profitable growth. The amount of loan accessed by the client is greatly influence by the years of experience of the client and the interest charged by the bank. Based on the research findings the following recommendations were made:

1. The interest charged by the bank need to be reviewed so as to increase the amount of loan accessed by the respondents
2. The issue of compulsory saving and time limit for the repayment of loan should be reviewed to allow the clients develop the habit of saving willingly and the period of loan repayment is extended.

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