

FACTORS AFFECTING LOAN ACQUISITION AMONG SMALL SCALE FARMERS IN OTUKPO LOCAL GOVERNMENT AREA OF BENUE STATE, NIGERIA

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Abstract

This study investigated the factors affecting loan acquisition among farmers in Otukpo LGA of Benue State of Nigeria. Primary data collected from the farmers were utilised in this study and analysed using descriptive statistics and probit analysis. The findings indicate that the loan collected during the 2006/2007 farming season was significantly lower (1000 times lower) than the amount of money spent on family obligations. This brings to the fore the issue of food security and income stability of the small scale farmers. It has been discovered that many small scale farmers tend to sell off their farm produce when prices are low in order to repay social-obligated loans and also meet up some social obligations. Among the explanatory variables, interest rate charged and collateral given positively influenced loan acquisition while response to loan conditions impacted negatively on it. This finding indicates that farmers are favourably disposed towards taking loans with interest and given collateral and this is contrary to what many researchers have tended to postulate.

Keywords: Rational, credit delivery, credit utilisation, social-obligated loans, senior claims

Introduction

Most of the researchers in the area of credit delivery to small scale farmers in Nigeria and other developing economies have concentrated their research effort on the utilization of the credit by the farmers and their attitude towards repayment. Such studies include those by Olaitan, (2006); Ozowa, (2008); Iheduru (2002); Oke et.al, (2007); Akpabio (2007); Mashatola and Daroch, (2003) and Kizilaslan and Adiguzel (2007) among others. The findings from these researches have tended to brand the farmers in a way to suggest that they are not rational in loan utilisation and repayment. Most of the studies have concluded that most farmers delay repayment or are unable to pay back bank, government or non-governmental credit granted to them simply because they utilize the loans in non-commercial concerns like marrying new wives and not strictly on the farms for which the credit was originally sought. In Nigeria for example, this fact has influenced public policy and programmes aimed at improving the provision of credit to small scale farmers to enhance their productive capacity. In this regard, Peoples Bank of Nigeria (PBN), Community Banking System (CBS), Rural Banking programme (RBP), Family Economic and Advancement Programme (FEAP), Nigerian Agricultural, Co-operative and Rural Development Bank (NACRDB) and a host of others were mainly brought on stream in order to resolve to the issue of default in loan repayment among small scale farmers (Nmadu, 1998, 1999; MicroStart, 2008). For Example, both PBN and CBS, and even the concept of microcredit system, were established to promote community participation in loan recovery as beneficiaries were to be guaranteed by the community as worthy of such gesture and a guarantee of recovery (Nmadu, 1999). Researchers have never attempted to find out if the acquisition procedures and other steps in the credit delivery have informed the attitudes of the farmers in repayment plan. A whole look must consider application, procedures adopted by the lenders, timing of release and nature of disbursement to really understand why default has been a big burden in Nigeria agricultural credit delivery system. The other factors that could impede smooth credit administration to small scale farmers include the interest

1987). Production of any agricultural produce is highly influence by its market demand. The demand and supply on the other hand are influence by set of measures taken by Central Government on agricultural production and marketing, hence affects the socio economic, physical and political characters of the citizenry.

Gum arabic (*Acacia* spp) is a desert thriving plant. There are over 1100 species found in sub Saharan Africa and are found grown wild in northern Nigeria where the climatic conditions are favourable for the plant's growth (Umar,2006) yet under exploitation in spite of a strong production and marketing potentials in Nigeria. However only three of the species are known to be of economic importance, namely *Acacia senegal*, *Acacia seyal* and *Acacia seberina* (Bello, 1998). They are otherwise called grade 1, grade 2 and grade 3 gum arabic respectively. Gum arabic have a strong binding and quality storage ability of substances (Seif, 2002), hence it is used in many manufacturing industries such as pharmaceutical, cosmetic, lithography, textile and pottery industries. Due to the economic significance of this product worldwide, it happen to be one of the major export crops in some African countries like Sudan, Chad and Mali; while Nigeria also earns some reasonable foreign exchange from gum arabic export (Bello, 1998). There are eleven gum arabic production state in Nigeria and the six major ones include Jigawa, Yobe, Borno, Kebbi, Sokoto and Katsina States. Jigawa state was purposively selected for the studies due to her elaborate production scheme on gum arabic. Available data shows that Jigawa state have over 800 hectare of land cultivated under *Acacia senegal* (grade 1) gum arabic (Jig. Min. of G.A; 2005). There are five zonal offices, namely Maigatari, Ringim, Dutse, Gumel and Gagarawa zones and one processing company (JIGACO) located at Maigatari, Free boarder zone. Production of gum arabic from nursery to processing stage is carried out in the state. How ever it observed that gum arabic production is concentrated among the elite in the state. The study therefore examined the economic and prospects of gum arabic production in the state.

METHODOLOGY

The Study area: Jigawa State is located in the North West of Nigeria, sharing boarder with Kaduna State in the south, Kano State in the west, Bauchi State in the east and Yobe State in the north. The state is a semi Sahara area. The climatic condition is hash high temperature fluctuating between 18 °C - 44 °C and a mean rainfall of about 150 mm per annum (Jigawa State Daily, 2005). The dominant tribes are Hausa and Fulani. Their major occupations are farming and marketing. Among the popular cash crops grown in the State are gum arabic, groundnut, onion, cotton, and tomatoes. Other crops commonly grown in the State include millet, guinea corn, maize, rice, beans and sesame.

Data collection techniques: Multi- stage sampling techniques was used in the data collection. The first stage was a purposive sampling of four predominantly gum arabic production areas in the state, namely Gumel, Maigatari, Ringim and Mallam Maidori; while the second stage was a random sampling of gum arabic farmers in these areas for administering of questionnaire and oral interview. A total of 200 copies of questionnaire were administered among farmers out of which 150 were correctly filled and used for the analysis of this study.

Data analytical technique used: The data were analyzed using descriptive and inferential statistics. The descriptive statistics as means, percentage and frequency tables were used to analyse the socio economic characteristics of the respondents; while inferential statistics such as budgetary analysis and Gini-coefficient were employed to analyse the profitability of gum arabic production in the state.

Model specifications

Analysis of revenue distribution: Gini coefficient model ($GC = 1 - \sum XY$) was used to determine the revenue distribution among the respondents in the state. The revenue generated among the farmers ranged from N 2500 N 1,320,000.00. These were grouped in to five categories in order to determine the revenue distribution among the respondents. The respondents within the sales range of N 1.00 N 200,000.00 formed the first category and they constituted about 63% of the total respondents which accounted for only 16.40 % of the total revenue generated. The sales category of N 200,001 N 400,000.00 were 17.3 % and they accounted for about 23.50% of the total revenue generated ; while those within the sales range of N 400,001 N 600,000.00 was only 6.7 % which generated a total revenue of 12.20%. it was also indicated that 5.3% of the respondents formed the sales category of N 600,001 N 800,000.00 which generated a revenue of 14.40% of the total revenue. Those with sales range of greater than N 800,000.00 constituted 8.0% of the total respondents, and they generated about 33.5 % of the total revenue. Using the Gini coefficient (GC) formula, GC was calculated as 0.678 which tends to unity; 1 (Table 3). This implies that there was high level of inequality in the revenue distribution among the respondents.

Table 3: Analysis of revenue distribution

Sales(N)	No. of farmers	Prop. of farmers(X)	Cum.prop of farmers	Total revenue(N)	Proportion on total revenue	Cum.prop on total revenue(Y)	XY
1 - 200,000	94	0.627	0.627	6,211,000.00	0.164	0.164	.1028
200,001- 400000	26	0.173	0.800	9,007,500.00	0.235	0.399	.0690
400,001- 600000	10	0.067	0.867	4,664,250.00	0.122	0.521	.0349
600,001- 800,000	8	0.053	0.920	5,523,500.00	0.144	0.665	.0352
Above 800,000	12	0.080	1.00	12,822,750.00	0.335	1.00	.0800
Total	150	1	-	38,229,000.00	1.00	-	.322

Source: Data analysis, 2008

$$GC = 1 - \sum XY$$

$$= 1 - 0.322$$

$$= 0.678$$

CONCLUSION

The study indicated that gum arabic is a money thriving crop. This can serve as a source of poverty alleviation among farmers in the state especially when the identified constraints are properly tackled. More awareness campaign to extend the production of gum arabic to the majority of the public will aid in a better revenue earning and production encouragement of the crop in the state.

RECOMMENDATION:

Gum arabic is a promising plant high resistance to harsh climatic conditions with high economic value. Government need to encourage the gum arabic farmers to maximize their production capacity by providing them soft loans and some inputs like improved seedlings (A. senegal), fertilizer and source of irrigation water for their nursery productions. This will aid in economic empowerment of the farmers in the state.

(i) **Budgeting/profitability analysis:** the formula is expressed as;

(a) $GM = TR - TVC$ Where;

GM = gross margin (N)

TR = total revenue (N)

TVC = total variable (N)

(b) $NP = TR - TC$ Where;

NP = net profit

TR = total revenue

TC = total cost

(ii) **Gini-coefficient:** the formula is expressed as

$GC = 1 - \sum XY$ Where: GC = Gini coefficient, X = percentage of producers in the category, Y = cumulative proportion of total production and \sum = summation sign

RESULTS AND DISCUSSION

Socio-economic distribution of respondents

Age distribution: The age distribution of the respondents indicated that 45.33% of farmers were within the age brackets of 20-35 years. Majority of the farmers are within 36-55 years (48.66%) while the least were those within the ages of 56-70 years which accounted for 5.99% of the total respondents. This implies that most of the gum arabic farmers in the study areas were in their active stage and their productivity is expected to be high (Table 1).

Occupational distribution of the respondents: The occupational distribution of the respondents is presented in Table 1. The result revealed that majority of the respondents (47.33%) were civil servants. This was followed by those who combined farming and trading (24.66%), while 23.33% of the respondents claimed to be full-time farmers. This indicates that gum arabic business was mostly done by civil servants in the state. This implies that civil servants have easier access to gum arabic production packages more than non-civil servants in the state.

Farm size distribution: The farm size distribution as presented in Table 1 indicated that majority of the farmers (70.66%) have only 1-4.99 hectares of gum arabic farms. Only 9.32% of the respondents have 13 hectares and above of gum arabic farms in the state. This implies that gum arabic farming in the state is mostly in the hands of small-scale holders. This may be due to lack of available farm land and funds to establish large-scale farms of gum arabic.

Constraints distribution: There were seven (7) factors identified as constraints hindering the respondents' maximum production capacity of gum arabic in the state. Four of these were significant, namely lack of capital (32%), lack of technical know-how (21.33%), lack of land (12.66%) and poor yield of the crop (12.66%) (Table 1). This implies that for gum arabic production to expand in the state, soft loans should be provided to the farmers and extension agents should establish stronger contact with the farmers through enlightenment campaigns and demonstration plots on gum arabic production techniques.

Table 1: Socio-economic characteristics of respondents

Variable	Frequency	Percentage
Age	68	45.33
20- 35	73	48.66
36- 55	9	5.99
56- 70		
Occupation	35	23.33
Farming only	37	24.66
Trading	71	47.33
Civil servants	7	4.66
Others		
Farm size(ha)	106	70.66
1 - 4.99	19	12.66
5 - 8.99	11	7.33
9 - 12.99	14	9.32
13 and above		
Production constraints	19	12.66
Lack of land	48	32.00
Inadequate capital	32	21.33
Lack of technical know- how	12	8.00
Lack of government support	6	4.00
Lack of improved seedlings	14	9.33
Poor market	19	12.66
Poor yield		

Profitability analysis: Gross margin (GM) of budgetary analysis model was used to determine the profitability of gum arabic production in study areas. The result of the analysis is presented in Table 2. The result indicated that GM obtained was 36,553,619.00. This gives GM/ha./yr as ₦ 51,702.43. Total net profit (NP) was calculated as ₦35, 580, 116.00 which gives an average of ₦ 237,200.77 per respondent. This implies that gum arabic production in the state is profitable.

Table 2: Budgetary/ profitability analysis

Variables	Values
Total hectares	707 hectares
Quantity of gum arabic produced and sold	155,300 kg
Fixed cost	₦973,503.00
Total variable cost	₦1,675,381.00
Total cost	₦2,648,884.00
Total revenue	₦38,229,000.00
Gross margin	₦36,553,619.00
Gross margin/ha/ year	₦51,702.43.00
Net profit	₦35,580,116.00
Net profit/ farmer	₦237,200.77

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