



**ANALYSIS OF SOURCES OF MICRO CREDIT TO WOMEN GROUNDNUT  
(*ARACHIS HYPOGAEAE* L.) PROCESSORS AND COLLATERAL REQUIREMENTS  
IN CENTRAL ZONE OF BAUCHI STATE, NIGERIA**

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**ABSTRACT**

The study examined analysis of sources of micro credit to women groundnut (*Arachis hypogaeae* L.) processors and collateral requirements in central zone of Bauchi State, Nigeria. Two local government areas were randomly selected from the central agricultural zone with sample size of 122 groundnut women processors and data were collected with the aid of well-structured questionnaire. Data was analyzed using descriptive statistics and inferential statistics. The results revealed that all (100%) of the groundnut processors were female, 71.3% were married while 9.8%, 8.2% and 10.7 were single, divorced and widowed, respectively. The results also indicated that 35.2% of the respondents had attended secondary school and 27.0% had primary education, 17.2% had tertiary education, 11.5% had never been to school and 9.0% had adult education. Majority (79.5%) had good market access in terms of sales. 19.7% had a fair market access and 0.8% had difficult market access. The results further disclosed that 97.5% of the respondents used local method for groundnut. Majority (53.3%) of the respondents sourced credit through the informal sectors. The findings further showed that majority (86.9%) of the groundnut women processors in Central Bauchi State mainly used relatives as their source of micro credit. Cooperatives source of micro credit, village shopkeepers, local money lenders and faith organizations as well as non-governmental organizations and agricultural traders accounted for 77.0%, 70.5%, 58.2%, 58.2%, 54.1% and 54.1%, respectively. Majority (92.6%) of the groundnut women processors indicated that household asset was the major collateral they use while obtaining loans from the informal credit sources in the study area. The findings also revealed that salary, land/title deed, cooperative registration and others accounted for 15.6%, 47.5%, 77.9%, and 9.9%, respectively, as other collateral requirements for accessing credit by the respondents in the study area. The study concluded that household asset (92%) was the major collateral the groundnut women processors used in obtaining loans from the informal credit sources in the study area. Also, (86.9%) of the groundnut women processors major sources of credit was relatives in the study area. The study recommended that women groundnut processors should be provided with simple but efficient equipment at affordable cost, and that soft loans should be made available at low interest rate by the government and non-governmental organizations.

**Keywords:** Groundnut, Micro credit, Processors, Collaterals requirements, Multi-stage.

**INTRODUCTION**

Groundnut (*Arachis hypogaea* L.), also known as peanut, is a legume that ranks 6th among the oilseed crops and 13th among the food crops of the world and aside providing high quality edible oil, easily digestible protein, and nearly half of the 13 essential vitamins and 7 of the 20 essential minerals necessary for normal human growth and maintenance, it also produces high quality fodder for livestock (International Crop Research Institute for Semi-Arid



Tropics [ICRISAT], 2010). According to FAOSTAT (2015) world groundnut production stood at 42.8 million tons in 2013 with Asia (67.1%) and Africa (24.6%) contributing the lion share and Nigeria ranks third in the league of groundnut producing nations just after China and India. In Nigeria, the leading producing States include Niger, Kano, Jigawa, Zamfara, Kebbi, Sokoto, Katsina, Kaduna, Adamawa, Yobe, Borno, Taraba, Plateau, Nasarawa, Bauchi, and Gombe States (NAERL, 2011).

Agriculture financing is a necessary and critical part of agriculture and farming, and an essential step in deciding the quantity and quality of inputs, technology, materials, and labor utilized by the farmers (World Bank, 2019). Economically, farmers in Nigeria are among the weakest groups in the country and are often trapped in a poverty cycle. When a farmer approaches an institutional agency (banker) for a credit, the banker should be convinced about the credit proposal and the economic viability of the proposed investment (Sani, 2017). Some guidelines are essential for the banker to take decision on the credit proposal. From this point, the credit officer will have to access the economic feasibility tests of such a farm credit. In this regards, three basic financial strategic decisive questions to be assessed by the banker includes: (i) if the loans are advanced, will it generate returns more than the costs? (ii) will the returns generate marketable surplus, to repay the loans when it falls due? (iii) will the farmer stand up to the risks and uncertainty in farming? (Sani, 2017).

Groundnut processing activity is profitable; however, profit level has been relatively low, due to many factors which could be economic, social, and institutional and/or enterprise related (Muhammad-lawal *et.al.*, 2012). Groundnut is cultivated by small holder farmers particularly in rural areas; it plays an important role in the livelihoods of smallholder farmers. Women constitute a chunk of the agricultural productive force in Africa. In Nigeria, they are actively involved in farming activities and constitute about 60-80% of the labour used for farming activities like planting, weeding, transportation, processing, marketing and storage of products and they also account for two-thirds of food crops produced in the country (Bawa *et al.*, 2014). Groundnut has contributed extremely to the development of the Nigerian economy through the sales of seeds, cakes, oil and haulms (Mustapha *et al.*, 2015).

Agricultural finance comprises of all loans and advances given or granted to farmers and others in agricultural related activities such as fisheries, forestry, processing, marketing, transportation, storage and distribution of products resulting from these activities (Sani, 2017). The two primary sources of agricultural finance for farmers in Nigeria are the institutional/formal financial sector and the non-institutional/ informal financial sector (Sani, 2017). Another reason for the ineffectiveness of government funding is that the number of loans issued is not commensurate with the needs of the smallholder farmers, making it difficult for farmers to gain access (Okoruwa *et al.*, 2020). Commercial, agricultural, development, and microfinance banks are the principal entities rendering financial services to the agricultural sector in Nigeria. Credit provision from banks in Nigeria for small processing equipment is nearly non-existent, and banks rarely lend to small scale farmers directly without them going through one of the existing government schemes. Banks are more likely to lend to large processors and that credit comes with better terms than loans to smaller processors. Formal financing in Nigeria in its current form cannot meet the credit need of all value chain actors concurrently (Okoruwa *et al.*, 2020).

In the non-institutional or informal financial sector, farmers obtains funds through cooperative societies, borrowings from family members, or money lenders. The primary source of lending in the non-institutional/informal financial market is through money lenders who often are exploitative and charge interest rates that further plunge farmers into financial



jeopardy (Sani, 2017). Often these money lenders require collateral from the farmers; in most cases, their most valuable assets, including farm equipment. In the absence of such equipment, personal belongings are offered as collateral. The cooperative society form of non-institutional/informal finance is traditionally administered through formal cooperatives or contribution among groups of social networks. The money is distributed in one of two ways, either lent to the members of the society on a rotational basis, or the money is combined and is awarded to the member that has made the request at an agreed interest rate. Despite the fact there is no collateral requirement, the repayment interest rates of cooperative societies can be high, and in some cases, between 10 to 15% per month (Fadeyi, 2018).

Similarly, Aribaba (2013) said that the main sources of credit available to the farmers in the study area were co-operative societies, friends or relatives, money lenders, commercial banks, agricultural banks and microfinance banks. The implication is that the major sources of credit among the respondents were personal savings, friends or relatives and co-operative societies, which are non-institutional credit sources. Credit from non-institutional sources is more attractive, because there is little or no insistence on collateral security. On the other hand, formal sources of credit had low patronage from the farmers, which may be due to lack or limited presence of banks in the study area coupled with delay in approval and disbursement of loan and insistence on collateral security.

The lack of bank accounts, collateral, and information regarding the procedure for accessing credits from banks limit peasant farmers and rural women's access to credit from formal institutions Okojie *et al.* (2010). Numerous studies show that bank-borrower relationships can lower the collateral requirements for firms. Relationship lending minimizes the information gap and helps banks to predict the quality of projects more accurately, which reduces collateral requirements from borrowers (Duarte, 2015; Rahman *et al.*, 2016).

## **MATERIALS AND METHODS**

### **The Study Area**

Bauchi State has a total of 20 local Government Areas (LGAs) divided into three Agricultural zones, which are; zone 1 Toro and Dass in the western zone, Gamawa, Dambam, Misau, Shira and Katagum in the northern zone, Warji, Ganjuwa, Darazo and Ningi in the Central zone. This study will be conducted in two local government areas (LGAs) of Bauchi State namely; Ganjuwa and Warji LGA. Ganjuwa LGA is located on latitude 10.729° N and longitude 9.9912° E with land mass of 5,059km<sup>2</sup>. The estimated population was about 391,200 (NPC, 2021). The climatic condition is characterized by two distinct seasons, dry and wet seasons, with rainfall ranging from 850mm to 1000mm per annum which falls between April/May and October and dry season starts from November to April, while temperature ranges from 9.11° C to 40.55°C (BSADP, 2015). The vegetation types are conditioned by the climatic factors, which in turn determine the amount of rainfall received in the area. For instance, the Northern part of Bauchi State receives less amount of rainfall compared to the Southern part of the State. It has loosed soil and clay soil. The vegetation is typically Northern Guinea Savanna type made of grasses and herbaceous plants. Trees are scattered and do not form a canopy. The human settlement in the area is essentially of rural setting with few semi – urban environments (BSADP, 2015). The major economic activities of the area are farming with a combination of trade, cattle rearing, hunting, food processing, weaving, fishing, art and craft practiced by the people. The major crops produced by most of the farmers in Ganjuwa LGA include rice, maize, millet, groundnut, cowpea, sesame, sorghum, while livestock include cattle, sheep, goat, and poultry.

The vegetation of the area is open savannah woodland with some trees of height 6m and above. The trees occurs singly or in clusters and the space in between is occupied by herbs layer of non-woody species up to 3m tall (BSADP, 2015). Most important trees and shrubs found in the study area includes *Adansoniyadigitata*, *Cassia steberiana*, *Phoenix doctylifera* e.t.c.,. The soil is characterized by stony sand basement complex, the surface soil is free draining sandy loam and moderately deep. Warji LGA is located on latitude 11.158<sup>0</sup> N and longitude 9.739<sup>0</sup> E with land mass of 625 km<sup>2</sup>. The estimated population was about 161,500 (NPC, 2021). The climatic condition is characterized by two distinct seasons, dry and wet seasons, It has an average daily high temperature 30<sup>0</sup>C and rainfall range of 700 mm which falls between April/May and October and dry season starts from November to April (BSADP, 2015). The vegetation types are conditioned by the climatic factors, which in turn determine the amount of rainfall received in the area. It has loosed soil and clay soil. The vegetation is typically Northern Guinea Savanna type made of grasses and herbaceous plants. Trees are scattered and do not form a canopy. The human settlement in the area is essentially of rural setting with few semi – urban environments (BSADP, 2015). The major economic activities of the area are farming, trades, cattle rearing, hunting, weaving, black smiting, art and craft practiced by the people. The major crops produced by most of the farmers in Warji LGA include rice, maize, millet, groundnut, cowpea, sesame, sorghum, while livestock include cattle, sheep and goat, and poultry. The map of Bauchi State showing locations of sampled areas is presented in Figure 1.



Figure 1: Map of the study area  
 Source: Reconnaissance survey (2022)

### Sampling Procedure

Multi-stage sampling was employed in the selection of respondents for the study. In the first stage, two Local Government Areas (LGAs) Warji and Ganjuwa were selected using





purposive sampling techniques because of the peculiarity of the two Local Government Areas (LGAs) namely; Ganjuwa and Warji in respect to groundnut women processors. While in the second stage, two villages were randomly selected from each LGAs making a total of four villages. A response rate of 20% was considered adequate for analysis and reporting within the study; therefore, in the final stage, 20% respondents were proportionately selected from the sampling frame as sample size as presented in Table 1.

**Table 1:** Sample Frame and Sample Size Procedure

LGAs	Villages	Sample frame	Sample size @20%
Ganjuwa	1. Kafin Madaki	160	32
	2. Miya	100	20
	Sub-total	260	52
Warji	1. Tudun Wada	200	40
	2. Ranga	150	30
	Sub-total	350	70
Grand-Total		610	122

Source: Field survey (2022)

### Methods of Data Collection

The research used primary data that were collected through the administration of structured questionnaire to the respondents with the assistance of trained enumerators. The questionnaires will be administered to the women engaged in groundnut processing and their sources sources of credit and collateral requirements in the study area.

### Analytical Techniques

The research used both descriptive to achieve the research objectives. The descriptive statistics such as; mean, frequency distribution and percentages were used to achieve objectives of this study as detailed in the results and discussion section.

## RESULTS AND DISCUSSION

### Socio-economic Characteristics of Women Groundnut Processors

Sex is the characteristics of men and women that are socially constructed. Table 2 result revealed the distribution of respondents according to sex in the study area. The table revealed that all (100%) of the respondents were female. It can therefore, be concluded that groundnut processing in the study area was dominated by females. This shows that female dominate groundnut processing in the study area. This finding agreed with Zarma and Adewuye (2018) who reported that females are dominance in groundnut processing in Northern part of Nigeria.

Marital status can be defined as a situation with regard to whether one is single, married, separated, divorced, or widowed. The result revealed distribution of respondents according to their marital status. Table 2 also indicated that 71.3% of the respondents were married while 9.8%, 8.2% and 10.7 were single, divorced and widowed, respectively. This implies that since majority were married; it therefore suggests higher engagement and commitment towards their sustainable livelihood. They also tend to have access to more family labour in groundnut processing.



**Table 2:** Qualitative socio-economic of the Respondents (n = 122)

Characteristics	Frequency	Percentage
<b>Sex</b>		
Male	0	0
Female	122	100
<b>Marital status</b>		
Single	12	9.8
Married	87	71.3
Divorced	10	8.2
Widowed	13	10.7
<b>Level of education</b>		
Never been to school	14	11.5
Primary	33	27.0
Secondary	43	35.2
Adult education	11	9.0
Tertiary	21	17.2
<b>Market access</b>		
Difficult	1	0.8
Fair	24	19.7
Good	97	79.5
<b>Processing method</b>		
Modern technique	3	2.5
Local method	119	97.5
<b>Occupation</b>		
Farmer	20	16.4
Business	66	54.1
Civil servant	18	14.8
Retired	2	1.6
Others	16	13.1
<b>Nature of involvement</b>		
Part-time	26	21.3
Full-time	96	78.7

Source: Field Survey, 2022

Level of education (Table 2) represents a broad section of the education ladder, that is, the progression, embracing all fields and programme groups that may occur at that particular stage of the progression. The table indicates that 35.2% of the respondents had attended secondary school and 27.0% had primary education, 17.2% had tertiary education, 11.5% had never been to school and 9.0% had adult education. This might be due to inadequate educational institutions and government awareness to school enrollment in the study area. Which also disclosed that the respondent has various level of education which implies that their level of understanding of processing marketing may differ, this statement is in agreement with Nwanosike (2011) who discovered that variations in educational background are usually responsible for the difference in their ability to evaluate and manage risk.

Market access is the conditions, tariff and non-tariff measures, agreed by members for the entry of specific goods into their markets. Table 2 further indicates that (79.5%) of the respondents had good market access in terms of sales, about 20% had a fair market access and 0.8% had difficult market access. This might be due to the availability of ready market for their products in the study area. Table 2 also reveals that 97.5% of the respondents used local method for groundnut processing while the least (2.5%) of the respondents make use of modern



technique for groundnut processing. This might be due high capital requirement and lack of technical know-how on the operation of the modern technique which necessitate the farmers to go for the local method.

### Sources of Micro Credit Available to Groundnut Women Processors

The Table 3 shows the distribution of respondents according to the type of micro agricultural credit sources in the study area. Table 3 reveals that majority (53.3%) of the respondents sourced credit through the informal sectors. Asogwa *et al.* (2011) observed the source of credit often chosen by farmers is dependent on the ease of accessibility and other factors. The result above shows that most of the farmers chose the informal sources over the formal sources. This may be probably due to the farmers' low groundnut processing experience, small business size and non-cooperative membership; while 11.5% and 35.2% sourced their credit either through the formal or semi-formal credit institutions.

**Table 3:** Distribution of the Respondents according to type of micro credit sources

Sources of credit	Frequency	Percentage
Formal	14	11.5
Semi-formal	43	35.2
Informal	65	53.3
<b>Total</b>	<b>122</b>	<b>100</b>

Source: Field Survey, 2022

### Various Sources of Micro Credit

The Table 4 shows that majority (86.9%) of the respondents indicated that relative were the major sources of credit for groundnut women processors in the study area. This could be as results of lack of formal credit institutions in the study area. The amount of credit rationed among the smallholder farmer is determined by several factors major of which is the availability of the credit and repayment attitude of the smallholder farmer (Ataguba and Olowosegun, 2012). 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). The findings also revealed that cooperatives, village shopkeepers, local money lenders and faith organizations as well as non-governmental organizations and agricultural traders accounted for 77.0%, 70.5%, 58.2%, 58.2%, 54.1% and 54.1%, respectively, are the major sources of micro agricultural credit in the study area.



**Table 4:** Distribution of respondents according to credit sources (n = 122)

Credit sources	*Frequency	Percentage	Ranking
Relatives	106	86.9	1st
Cooperatives	94	77.0	2nd
Village shopkeepers	86	70.5	3rd
Local money lenders	71	58.2	4th
Faith organizations	71	58.2	4th
Non-governmental organizations	66	54.1	5th
Agricultural traders	66	54.1	5th
Micro finance bank	59	48.4	6th
Commercial bank	43	35.2	7th
Merchants	41	33.6	8th
Others	3	2.5	9 <sup>th</sup>
Total	706		

\* Multiple Responses

Source: Field Survey, 2022.

### **Collateral Requirements for Accessing Credit by Groundnut Women Processors**

The Table 5 shows that majority (92.6%) of the respondents indicated that household asset was the major collateral they use while obtaining loans from the informal credit sources in the study area. This is because it is easier to get loans in the informal credit institutions with less collateral requirement than the formal credit institutions in the study area. It is an important instrument for enabling farmers to acquire command over the use of working capital for enhancing their productivity and income. Thus, credit is an essential ingredient in the growth strategy of the agricultural sector (Mohsin *et al.*, 2011). The findings also revealed that salary, land/title deed, cooperative registration and others accounted for 15.6%, 47.5%, 77.9%, and 9.9%, respectively, as other nature of collateral requirement for accessing credit. According to Balana and Oyeyemi (2022), one of the main causes of rural poverty is a lack of access to agricultural loans. This is due to the fact that these low-income households lack the necessary collateral to obtain loans from lenders. Agricultural households frequently offer non-durable and perishable collateral as security.

**Table 5:** Distribution of the Respondents according to Collateral Requirements (n = 122)

Collateral requirement	*Frequency	Percentage	Ranking
Household asset	113	92.6	1st
Cooperative registration	95	77.9	2nd
Land/title deed	58	47.5	3rd
Salary	19	15.6	4th
Others	12	9.9	5 <sup>th</sup>
Total	297		

\*Multiple responses

Source: Field Survey, 2022

### **CONCLUSION AND RECOMMENDATIONS**

The study concuded that household asset (92%) was the major collateral the groundnut omen processors used in obtaining loans from the informal credit sources in the study area. Also, (86.9%) of the groundnut women processors major sources of credit was relatives in the





study area. The study recommended that women groundnut processors should be provided with simple micro credits at low interest rate by the government and non-governmental organizations that is affordable without collaterals and efficient processing equipment at affordable costs.

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