



## **PROFIT AND PROSPERITY: SAVING STRATEGIES OF FEMALE SOY CAKE MICROENTREPRENEURS IN GUSAU, ZAMFARA STATE, NIGERIA**

**Kabir, A. M. and Kabir, A.**

Department of Agricultural Economics, Usmanu Danfodiyo University, Sokoto.

### **ABSTRACT**

*This study investigates the saving patterns and challenges faced by female microentrepreneurs in Gusau, Zamfara State, Nigeria, who process soy cakes. One hundred soy cake processors were surveyed using a two-stage sampling technique. The data collected were analysed by the use of descriptive statistics and OLS regression model. Data analysis revealed an average age of 22, with most of the respondents being unmarried and possessing only secondary education. About 24% of the soy cake micro entrepreneurs reported not saving any money, the average weekly savings however amounted to 19.5% of gross margin (₦2,154). The most popular saving methods were informal rotating savings groups (Maiadashe) followed by home storage and livestock purchase. Banks were rarely used. Primary saving goals included future investment (30%) and immediate consumption (27%), followed by emergencies (22%). Surprisingly, education and marriage were less frequent saving motivations despite the young age and educational level of the respondents. Regression analysis confirmed gross margin and business experience as significant positive determinants of savings. Limited access to financial resources and a lack of financial literacy hinder their growth and stability. This research highlights the need for financial inclusion initiatives and financial literacy training to empower these women to save more effectively and achieve greater financial security for their businesses and themselves.*

**Keywords:** Soy cake processing, female micro entrepreneurs, Savings behaviour, Gusau, Nigeria

---

Corresponding Author: [am.kabir@udusok.edu.ng](mailto:am.kabir@udusok.edu.ng)/ +234 803 927 0001

### **INTRODUCTION**

According to Bolaji and Ekaete (2016), Soy Wara, a unique Nigerian product, is a delicious example of culinary adaptation. It is a curdled soy milk product inspired by traditional Wara, a local cheese-like food. This innovation is credited to Dr. O. Nakayama, a Japanese researcher, who played a key role in its development. Dr. Nakayama's contribution came through a scientific exchange programme sponsored by the Japan International Cooperation Agency (JICA). He focused on creating methods to produce tofu using readily available and affordable

coagulants in Nigeria. In Asian tofu production, calcium sulfate or bittern (magnesium chloride) are commonly used, but these can be expensive or difficult to find, especially in rural areas. Dr. Nakayama's approach addressed this challenge, paving the way for a more accessible soy-based protein source in Nigeria (Bolaji and Ekaete, 2016).

Micro, Small and Medium Scale (MSMEs) enterprises are business enterprises that are highly personalized, situated within an area of operation which is relatively small in terms of size, employment, turnover and capital, and is actively managed by one or few persons for the purpose of making profit (Uzoejinwa *et al.*, 2016). Micro and Small-scale agro-processing business are pro-poor enterprises that are flexible, require little capital investment and can be carried out in the home without the need for sophisticated or expensive equipment (Igene, 2008). Micro-scale business are vehicles through which women, youths and other disadvantage groups can become economically independent and even save some money.

Savings refers to an amount of money put aside for future use. It is the sacrifice of current consumption to allow for capital accumulation, and is very imperative for supporting and developing rural industries (Obayelu, 2012). Savings provide numerous benefits to small-scale agro-based entrepreneurs directly for investment and indirectly as indication for repayment ability, increase in credit rating and as collateral in a credit market (Brata, 1999).

Meanwhile, several surveys have shown that Nigerians are trapped in the vicious circle of poverty—low income, low savings and low investments (Obayelu, 2012). In other words, capital formation plays a vital role in continuous increased production of goods and services, and as such, capital formation has to be supported by appropriate volume of savings. A growth in economic activities stimulates investment, and increased investment in turn enhances economic growth, income and savings levels (Mishra, Das and Mishra, 2010).

In developing countries like Nigeria, female-owned microbusinesses, particularly those in the food processing sector, often face significant challenges to achieving financial stability and growth. A crucial barrier is the limited access to financial resources and a lack of knowledge on effective saving strategies (Obayelu 2012) who further observed that the performance and productivity of small-scale agri-processors are affected by their level of income, savings and investment. He noted further that the combination of income, savings and investment are so connected together that they affect one another. For example, Akingunola (2011) observed that a business with low level of investment will yield low income for the entrepreneur and this low income will further result to low savings.

Limited access to financial resources creates a perfect storm for these female entrepreneurs. Formal loan options may be out of reach due to stringent requirements or lack of collateral, while the unpredictable income common in microbusinesses, particularly informal ones, makes saving a constant struggle. Further complicating matters, women entrepreneurs often have to prioritize household needs over business investment, leaving them with little room to save for future growth or emergencies (Obayelu, 2012).

Compounding the financial resource limitations, many women entrepreneurs lack the financial literacy to make informed saving decisions. This manifests in a few ways: limited knowledge of saving options like bank accounts, rotating savings groups (ROSCAs), or mobile money

platforms; difficulty setting clear financial goals for their business, making it hard to prioritize saving or track progress; and a tendency towards short-term financial planning that overshadows the importance of saving for long-term business development or emergencies.

The combined effect of these limitations creates a cycle that hinders the sustainability and growth of female-owned microbusinesses. Without access to financial resources and the knowledge to save effectively, these businesses struggle to invest in improvements, build buffers for unexpected expenses, or seize opportunities for expansion.

This research project focuses on soy cake processors in Gusau Local Government Area, Zamfara State, Nigeria. By examining their specific saving patterns and the challenges they face, the aim were to;

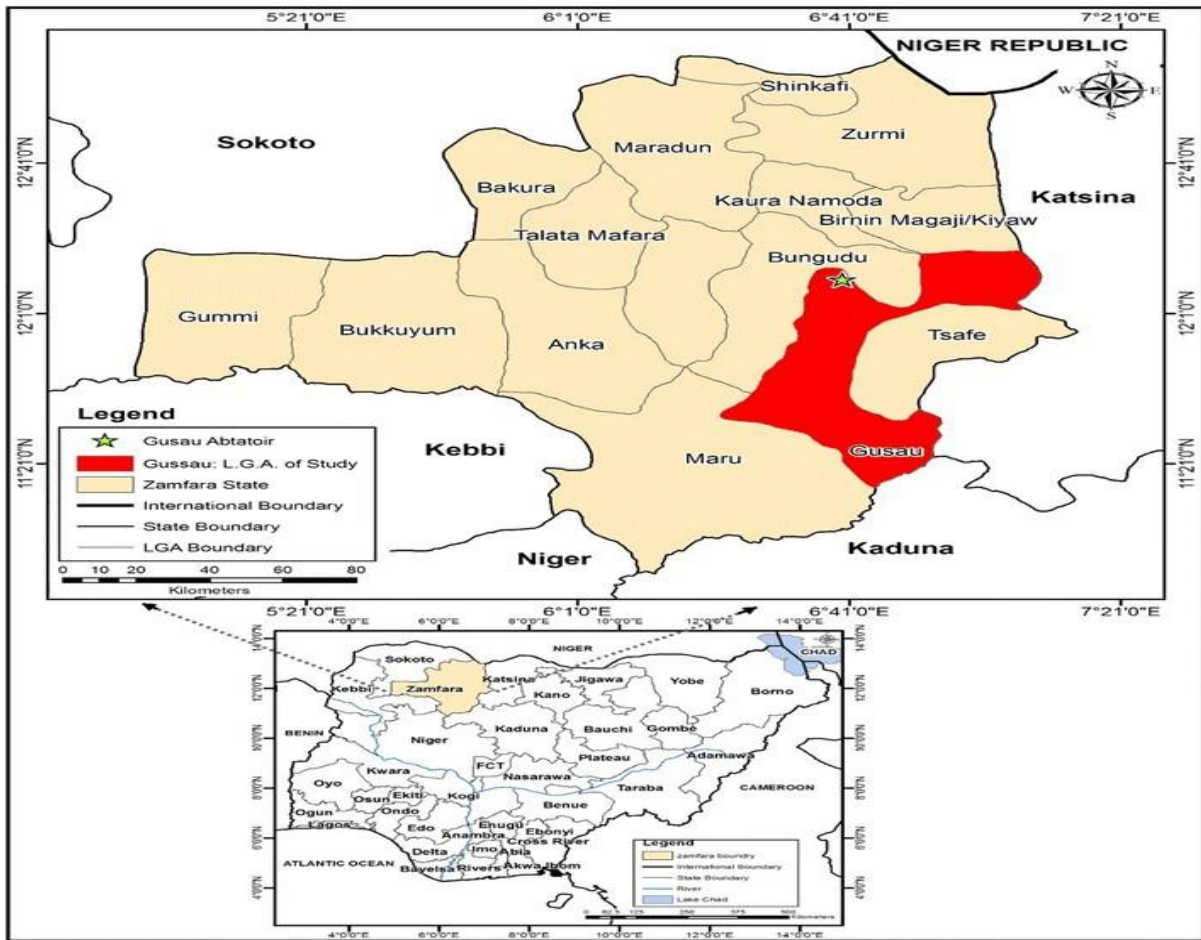
- i. calculate the amount saved by the micro-scale soybean cake processors in the study area;
- ii. describe the saving pattern of the micro-scale soybean cake processors in the study area;
- iii. identify the reasons for saving by the micro-scale soybean cake processors in the study area;
- iv. determine the factors affecting the amount saved by the micro-scale soybean cake processors in the study area.

### **METHODOLOGY Study Area**

The study was carried out in Gusau, the capital city of Zamfara State, Nigeria. Which is located between the coordinates 12.1628° N, and 6.6745° E. It has an area of 3,364km and a projected population of 682,700 as of 2021 (citypopulation.de). Gusau being the state capital of Zamfara state is a thriving metropolis with varied economic activities ranging from civil-services, manufacturing, trading, finance and many educational institutions (Federal University, College of Education). Therefore, in every nook and crannies of the metropolis one can find microbusiness of one form or another. Notable among them are food processing especially by women entrepreneurs.

### **Sampling Technique**

Two-stage sampling technique was used to select the respondents. The first stage involves the purposive selection of five areas namely; *Ungumar gwaza, Damba, Sabon gari, Hilin jirgi* and *Tudun wada*. These areas were purposively selected based on the high concentration of Soy cake processors in the areas. In the second state, twenty respondents were randomly selected from each of the five areas, thereby resulting in a total of one hundred Soy cake processors as the sample size for the study.



**Figure 1: Study Area Map Data Collection and Data Analysis**

Primary data were used for this study. The data were collected using an interview schedule administered to the respondents. The data collected were analysed by the use of descriptive statistics and OLS regression model which is specified thus:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + e \quad (1)$$

Where:

- Y = Amount saved (₦ / Week)
- X<sub>1</sub> = Age (years)
- X<sub>2</sub> = marital status (married = 1; 0= otherwise)
- X<sub>3</sub> = Educational Levels (Qur’anic = 0; Primary = 1; Secondary =2; Tertiary =3)
- X<sub>4</sub> = household size (number of persons)
- X<sub>5</sub> = Soycake Processing Experience (years)
- X<sub>6</sub> = Primary occupation (Soycake processing = 0; Otherwise = 1)
- X<sub>7</sub> = Source of Capitals (Self = 1; otherwise = 0)
- X<sub>8</sub> = Gross Margin (₦) b<sub>0</sub> – b<sub>8</sub> = Parameters to be estimated
- e = error term

## RESULTS AND DISCUSSIONS Socioeconomic Characteristics of the Respondents

**Table 1: Socio-Economic Characteristics of the Respondents**

	Descriptions	Freq.	(%)	Min	Max	Mean (SD)
Age Range	14-20	52	52			
	21-30	39	39			22.37
	31-40	9	9	14	40	(6.42)
		<b>100</b>	<b>100</b>			
Marital Status	Single	57	57			
	Married	30	30			
	Divorced	11	11			
	Widowed	2	2			
		<b>100</b>	<b>100</b>			
Household Sizes	2-5	84	84			
	6-10	16	16	2	10	3.49
		<b>100</b>	<b>100</b>			(1.95)
Highest Educational Levels	Qur'anic Only Primary	1	1			
	Secondary	6	6			
	Tertiary	92	92			
		1	1			
		<b>100</b>	<b>100</b>			
Soycake Processing Experience	1-5	74	74			
	6-10	23	23			4.4
	11- 13	3	3	1	13	(2.77)
		<b>100</b>	<b>100</b>			
Primary Occupation	Soy Cake Processing	69	69			
	Animal Husbandry	15	15			
	Crop farming	11	11			
	Hair do	5	5			
		<b>100</b>	<b>100</b>			
Source of Capital	Parents	54	54			
	Fiancée	14	14			
	Husband	17	17			
	Self	15	15			
		<b>100</b>	<b>100</b>			

Source: field survey, 2021

Table 1 shows the socioeconomic characteristics of the respondents during the study period. It reveals the mean age to be 22 years, an average of 3 members per household with about 4.4 years of processing experience. More than half of them are unmarried, with 92% having secondary education as their highest qualifications.

Soycake processing is an on the spot food processing (frying) business that is carried out by the street sides mostly in the evening. Therefore, it is a business that is most suitable for young and unmarried women. This explains why all the respondents are female, with more than half (52%) being teenagers and unmarried (70%). Similarly, the high percentage of respondents with only secondary education (92%) and limited experience (average under 3 years) might reflect the relatively low entry barrier for this business (Food and Agriculture Organization of the United Nations; 2014). The finding that 70% of respondents receive capital from parents or fiancés suggests a reliance on personal networks for funding which is a common feature for young entrepreneurs (Lenz *et al.*, 2013; FAO, 2014)

### Savings Status

Table 2 and 3 gives the percentages and the actual amounts saved by the respondents on weekly basis. It shows that 24% of the respondents do not save any amount, while the weekly saving averages were 19.5% of Gross margin which translate to ₦2,154. The results showed that 64% of the respondents saved between 20 and 30% of their weekly gross margin

**Table 2: Distribution of the Respondents According to the Percentage of Gross Margin Saved**

% Gross Margin Saved	Frequency	Percentage
0	24	24
5	1	1
15	1	1
20	39	39
30	25	25
40	10	10
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Field Survey, 2021

**Table 3: Distribution of the Respondents According to the amount saved per week**

Amounts (₦)	Frequency	Percentage	Min	Max	Mean
0	24	24			
< 1,000	1	1			
1001 – 2,000	16	16			
2001 – 3,000	24	24	362	6514	2,154
3001 – 4,000	17	17			
4001 – 5,000	11	11			
➤ 5,000	7	7			
<b>Total</b>	<b>100</b>	<b>100</b>			

Source: Field Survey, 2021

These high percentages of both savers and saved amount can be attributed to the fact that the respondents are young secondary schools leavers, thus planning to either further their education or get married each of which requires substantial amount of money. Moreover, Obilor *et al.* (2018) in a study on saving behaviour of petty traders in Enugu State, noted that literacy increases the likelihood to save through both formal and informal savings mechanisms. While Nenubari *et al.* (2022) in a study on saving behaviour of Nigerians also observed also that households with 1 – 4 persons have tendency to put away more money as savings thus the high level of savings by the respondents.

### Savings Pattern

Figure 2 shows the distribution of the respondents according to where they saved their money. Using the *Maiadashe* (Asusu) is favored by 46%, followed by keeping it at home (37%), buying of assets such as livestock (14%) and finally banks (3%)

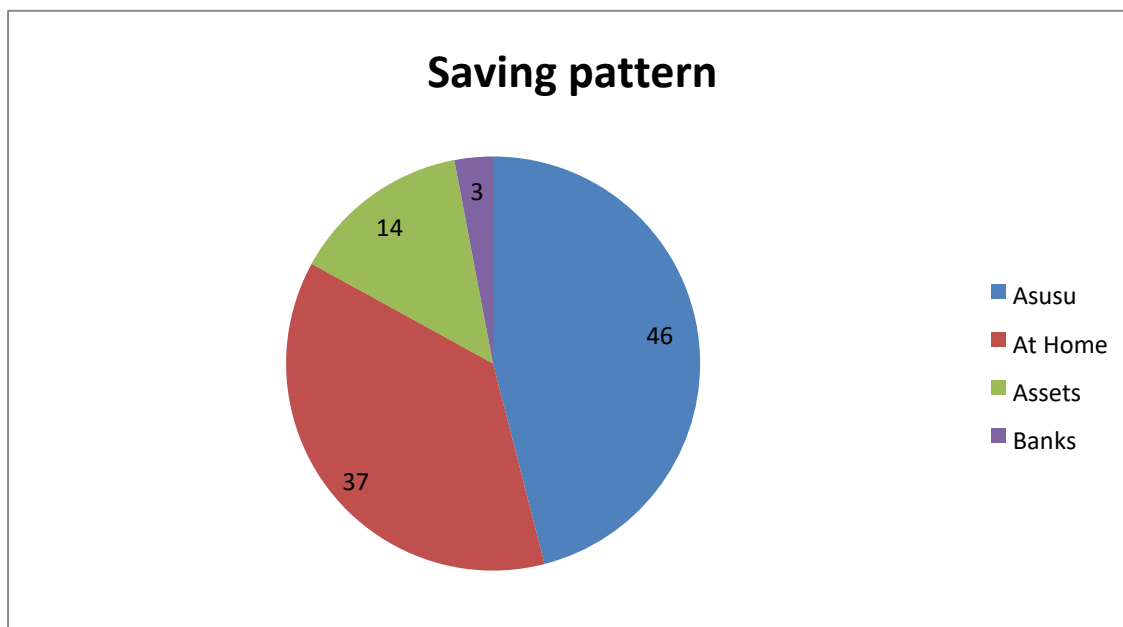


Figure 2: Showing the Places where the Respondents keep their Savings

The result showed that Soybean cake processors saved majorly through *Maiadashe* (asusu). This was evident as it accounted for about 60% of the means of savings of the respondents compared to 23% by cooperatives and 16% by personal/home savings while bank savings received the least patronage of 3%. The popularity of *Maiadashe* as a means of savings by the respondents can be attributed by among other things the itinerant nature of the *Maiadashe* whereby they moved from one customer to another collecting their savings on daily basis. This makes for convenience on the part of respondents. In a similar study by Odoemenem *et al.* (2005) in Benue State, it was noted that, the use of informal financial sectors to mobilize savings is widespread among small-scale agribusinesses as it gives them access to loans that they cannot get from formal financial institutions due to lack of collateral.

### Purpose of savings

Figure 3 shows that about 30% of the respondents save for future investments and about 27% save for the purpose of future consumption. Meanwhile, about 22% save in case of emergencies, about 11% saved for the purpose of education and finally about 7% for marriage purpose.

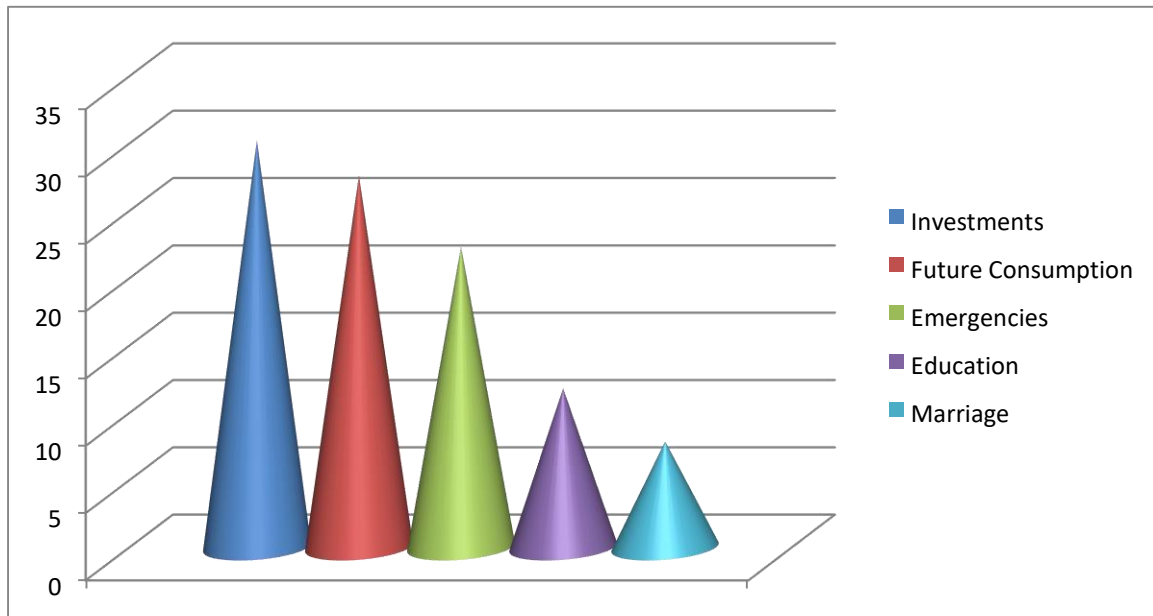


Figure 3: Showing the Purpose of Savings by the Respondents

As is expected with young girls, it is not surprising that one of the main purposes of saving by the respondents is for future consumption. This is because their daily earnings is not enough to buy such items as clothes, jewelries, phone and other fashion accessories, so they have to save for such purposes. It is however surprising that only few of the respondents consider education and marriage as reasons for savings. This is because considering their young age and the fact that they are mainly secondary school leavers, education and/or marriage should be at the top of their priorities based on the sociocultural norms obtainable within the study area. The fact that investment is the number one reasons for savings implies that they are not in any hurry to go back to school or to get married. In a study on saving behaviour of young women in rural Nigeria by Adebayo, and Ojo, (2023) it was shown that young women often prioritize immediate consumption over long-term savings

### Factors Determining the Amounts Saved

Regression analysis was conducted to identify factors influencing the amount saved by respondents. As presented in Table 4, gross margin and business experience emerged as significant positive determinants of savings. Both variables were found to be statistically significant at 1% and 5% levels, respectively. Surprisingly, educational level, although positive, it was not significant. This could be attributed to the fact that there is not much variability in the educational level of the respondents.



These results align with expectations, indicating that higher earnings and greater business tenure are associated with increased savings. The adjusted R-squared of 0.63 suggests that the included variables explain a substantial portion of the variation in savings amounts.

**Table 4: Determinants of Amounts Saved by the Respondents**

Variables	Coefficient	Standard error	t value	P>t
Age	13.48456	44.99089	0.30	0.765
Marital Status	-207.0669	163.002	-1.27	0.208
Educational Level	396.0351	306.0907	1.29	0.200
Household Size	-93.66534	129.3691	-0.72	0.472
Processing Experience	136.1492	67.95508	2.00	0.049**
Primary Occupation	40.49013	99.46299	0.41	0.685
Source of Capital	19.53055	94.66481	0.21	0.837
Gross Margin	.3797047	.0430016	8.83	0.000***
Constant	-2419.303	877.6082	-2.76	0.008***
Adjusted R-Squared	0.6315			

Source: Field survey, 2021.

## CONCLUSION AND RECOMMENDATIONS

This study investigated the savings behaviour of female soy cake micro entrepreneurs in Gusau, Nigeria. Findings indicate low savings amounts despite high saving rates, with a preference for informal saving methods. Income and business experience positively correlate with saving, but limited access to formal finance and financial illiteracy hinder savings growth.

To enhance savings, increasing financial literacy, improving access to formal financial services, and promoting savings groups are crucial. To enhance the financial well-being of female soy cake processors, a multifaceted approach is recommended. This includes implementing comprehensive financial literacy programs, facilitating access to formal financial services through microfinance institutions or cooperatives, promoting the formation of women-led savings groups, providing business development support encompassing financial management, record-keeping, and marketing training, and advocating for policies that support women-owned microenterprises, such as tax incentives, market access, and affordable childcare services..

## REFERENCES

- Adebayo, O., and Ojo, F. (2023). Saving Habits of Young Women in Rural Nigeria. *Journal of African Economies*, 32(4): 567-582.
- Akingunola, R. O. (2011). Small And Medium-Scale Enterprises and Economic Growth in Nigeria: An Assessment of Financing Options. *Pakistan Journal of Business and Economic Review*, 2(7): 23-30.
- Bolaji, O. A and Ekaete, A. U (2016). Safety of Street-Vended Soy Wara in Nigeria. *Journal of Food Protection*, 79(1):169-173.
- Brata, A. G. (1999). Household Saving Behaviour: The Case of Rural Industry in Bantul. *Analysis CSIS* 28(1), 75-86.
- Citypopulation.de (2024, July 15). GUSAU Local Government Area in Nigeria. Retrieved from [https://www.citypopulation.de/en/nigeria/admin/zamfara/NGA037007\\_gusau/](https://www.citypopulation.de/en/nigeria/admin/zamfara/NGA037007_gusau/)
- Food and Agriculture Organization of the United Nations. (2014). Street Foods: A Growing Phenomenon. Retrieved from <https://www.fao.org/fcit/food-processing/en/>
- Igene, J. O. (2008). Repositioning The Agro Processing Sub-Component of The National Programme for Food Security (NPFS) For Improved Performance: *Proceedings of the national workshop on agro processing and farm mechanization*, Kaduna, Nigeria. Pp 432-441.
- Lenz, C., Dooley, C. F., Lynch, E., Swinburn, B. A., & Mithen, S. (2013). Characteristics of the Street Food Vending Trade and Its Contribution to Overall Household Income in a Low-Income Urban Settlement in Vietnam. *Public Health Nutrition*, 16(12): 2232-2240.
- Mishra, P. K., Das, J. R. and Mishra, S. K. (2010). The Dynamics of Savings and Investment Relationship in India. *European journal of Economics, Finance and Administrative Science*. Retrieved from <http://www.eurojournals.com>.
- Nenubari, J. I., Joseph, O. D., Charles, C. A., Ahmadu, U. M. and Ibimna, O. I. (2022). Factors Influencing Saving Behaviour of Nigerians *International Journal of Finance and Accounting*, 7(3):33 – 53.
- Obayelu, O. A. (2012). Saving Behaviour of Rural Households in Kwara State, Nigeria. *African Journal of Basic and Applied Sciences*, 4(4), 115-123.
- Obilor, P. O., & Uzoagba, I. E. (2018). Saving Behaviour of Low-Income Earners in Nigeria: A Case Study of Petty Traders in Enugu State. *International Journal of Social Sciences and Humanities Review*, 8 (1):1-10.
- Odoemenem, I. U., Ezike, K. N. N. and Alimba, J.O. (2005). Assessment of Agricultural Credit Availability to Small-Scale Farmers in Benue State. *Journal of Agricultural Science and Technology*, 15(1 and 2): 79-87.

Uzoejinwa, B. B., Ani, A. O., Abada, U. C., Ugwuishiwu, B. O., Ohagwu, C. J. and Nwakaire, J. N. (2016). Small-Scale Food Processing Enterprises: Measures for National Development and Addressing Food Security Challenges in Nigeria. *International Journal of Scientific and Technical Research in Engineering (IJSTRE)*, 1(5): 72-82.