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ANALYSIS OF THE DETERMINANTS OF SAVINGS AMONG CASSAVA PROCESSORS IN IMO STATE

[1]Igwe, L. U., [2]Igwe, K. C., [1]Ibeagwa, O. B., [1]Anyiam, K. H., and [1]Enoch, O. C.
[1]Department of Agricultural Economics, Federal University of Technology, Owerri, Imo State, Nigeria
[2]Department of Agricultural Economics, Michael Okpara University of Agriculture, Umudike, Nigeria
Corresponding Author: igweugochi01@gmail.com

ABSTRACT

This study analyzed the factors that determine savings of cassava processors in Imo State. 180 cassava processors were randomly selected from the 6 Local Government Areas of Imo State to constitute the sample size. Data were collected through the administration of structured questionnaire. Descriptive statistics and multiple linear regression analysis were used in the analysis of data. The results showed that 75% of the cassava processors were females, a relatively large proportion (38.9%) of the processors were within the age range of 41-50years with a mean age of 43years and a mean processing experience of 8years. 51.67% of the cassava processors saved using thrift (akawo), 33.89% of these processors saved between N20,000 and N40,000 and this percentage saved on a weekly basis. 53.33% of the processors processed their tubers into garri, 37.5% of the garri processors earned between N100,000-N150,000 monthly. The garri processing enterprise was seen to have an average propensity to save of 33.4%. Multiple linear regression analysis showed that total income from both processing and non-processing activity, marital status, household size, processing experience, interest, and membership of cooperative were significant in determining savings. It is therefore recommended that low interest loan should be given to the processors of cassava products to enable them expand their enterprises and thus enhance their income and savings. Also, local saving platforms should be developed so as to make it more responsive to modern day financial activities.

Keywords; savings, average propensity to save, multiple linear regression, cassava processors

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INTRODUCTION

Cassava, scientifically known as *Manihot Esculenta*, belongs to the spurge family, *Euphorbiaceae*, and is classified as a woody shrub. It is grown as an annual crop in tropical and subtropical regions, primarily valued for its tuberous root rich in edible starch, making it a significant source of dietary carbohydrates. Nigeria currently holds the position of the world's largest cassava producer, contributing over 54 million tonnes of tuberous roots annually to this

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fragmented industry structure (Adenle, et al., 2017). Asante-Pok (2013) suggests that cassava serves as a livelihood for producers, processors, transporters, and marketers, while also serving as a key raw material for various industries including baking, textiles, paper, plywood, and confectioneries. Consequently, cassava significantly contributes to the Country's food security. The distinctive characteristics of cassava, such as its adaptability to marginal lands, minimal input requirements, and resilience to drought, have amplified its role. This has positioned cassava as a crucial commodity warranting attention and intervention from both the government and stakeholders in the agricultural sector.

Cassava has received continued support from the Nigerian Government from as far back as 1975 and this has led to its diversified use over time (Sanzidur & Brodrick, 2016). However, according to Nwaru (2004) as cited in Ndem and Osondu (2018), despite the implemented programmes and policies to boost cassava production in Nigeria, the sub-sector still produces below its potential. In view of the credit situation, a sustainable way for capital formation for investment into the cassava value chain is through savings mobilization from the rural processors to increase the amount of loanable funds for investments (Tohib et al*.,* 2018). Savings is considered in economics as the residual of disposable income after deducting personal consumption expenditure (Kagan, 2022).

Savings can be associated with the portion of income that is set aside for future investments, consumption, or unanticipated expenditures rather than being immediately spent (Karlan et al*.,* 2020). The marginal propensity to save should be strong for a nation to experience greater growth in its economy. To protect against unplanned and uncertain life conditions, a person must save money and make investments. Savings can be made in the form of cattle, real estate, or jewels. It could be in the form of cash deposited in banks, but hoarding is more typical (Osondu et al., 2015). Small holder processors are faced with the challenge of either inability to access credit or its inadequacies which have limited their capacities for increased productivity (Tohib et al*.,* 2018). According to Egwu & Nwibo (2014), some of the constraints on agribusiness' ability to save money, particularly for small-scale processors, include the lack of access to productive resources and the bureaucracy associated with creating bank accounts. Some of these processors opt to save money by investing in livestock, loaning out their monies after sales to earn interest, and storing their produce after harvest to sell at higher prices during times of shortages (Egwu & Nwibo, 2014). Others have engaged in informal savings practices like isusu (rotational contributions) and money lending, despite the fact that these informal sources of funds have their own peculiar issues like insufficient capital bases for effective functioning, poor documentation, crude systems of accounting, and gross mismanagement; Farmers nevertheless prefer these informal savings practices to banks (Nwibo & Mbam, 2013), while many others have turned to consumerism (Egwu & Nwibo, 2014).

It has also been seen that lack of savings has been explained by the rising prices for goods and services across the economy, an obvious rise in the cost of cassava tubers, and rising processing expenses(labor and transportation) (Price Waterhouse Coopers, 2020), and has remained the

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situation in the study area. If not addressed, this is anticipated to have an effect on the investment returns of these cassava processors and deter saving as it is known that the degree of investment is significantly influenced by the amount of savings, which in turn affects the amount of cash to be invested (Foluso & Temidayo, 2018).

Multiple linear regression is used to estimate the relationship between one dependent variable (savings) and two or more independent variables (Bevans, 2020). It illustrates how the dependent variable (effect) is related to each of the independent variables (causes) as regression coefficients **(**Nayebi, 2020). It reveals the strength of the relationship between two or more independent variables and one dependent variable (e.g. how savings is affected by independent variables such as age, household size, access to credit, etc.). It also reveals the value of the dependent variable (savings) at a certain value of the independent variables (e.g. the level of savings of a processor at different household size, age, etc.). According to Bevans, (2020), it is given as;

$$y = \beta_0+\beta_1 x_1 +\beta_2 x_2 +\ldots\ldots\ldots \beta_p x_{pj} +\varepsilon j \quad (1)$$

The predicted value of the dependent variable is denoted by 'y', β_0 represents the y-intercept (value of y when all other parameters are set to 0), $\beta_1 x_1$ represents the regression coefficient (β_1) of the first independent variable (x_1) (that is, the effect that increasing the value of the independent variable has on the predicted y value. The εj stands for the error or residual of the j-th observation. The main objective of this study was to analyze the determinants of savings among cassava processors in Imo State, Nigeria. The specific objectives were to;

- describe the socioeconomic characteristics of cassava processors in the study area, in relation to their savings
- analyze the average propensity to save among cassava processors;
- analyze the factors determining savings among the cassava processors.

METHODOLGY

Study Area

The study was carried out in Imo State which is located in the South Eastern rain forest belt of Nigeria, 5.5720° N and 7.0588° E. Its capital is Owerri, it has an area of 5,530km^2 and an estimated population of 5,408,756 persons. (NBS, 2016). The State shares boundaries with Abia State on the East, Anambra State to the North and Rivers State to the South and West. The State is made up of 27 local government areas which are grouped into 3 agricultural zones namely: Okigwe, Orlu and Owerri zones. Imo State experiences an annual rainfall varying from 1500mm to 2,200m.

Across the zones, commerce and agriculture are the major economic activity predominant amongst the people of the State. Yam, maize, Multi-stage sampling technique was used for the purpose of selecting respondents for the study. In the first stage, Orlu and Okigwe agricultural zones were randomly selected from the 3 agricultural zones in Imo State. The second stage

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involved the purposive selection of 3 Local Government Areas (LGAs) from the two zones making a total of 6 local government areas and this was due to the prevalence of cassava processors in these areas. The selected local governments were; Ohaji Egbema, Owerri West, Orlu, Owerri North, Ngor-Okpala, and Oguta.

In the third stage, 3 communities were randomly selected from each of the sampled 6 L.G.As, making a total of 18 communities. In the fourth stage, a village was selected at random from each of the 18 communities making 18 villages for the study. Finally, a list of cassava processors was collected from the Agricultural Development Programme (ADP) of the State. From the list, 10 processors were randomly selected from each of the 18 villages making a total of 180 cassava processors for the study. Data for this study were collected from primary source through a ~~s~~tructured questionnaire.

Descriptive statistics which involves the use of measures of central tendency such as mean, frequency counts, and percentages w~~as~~ used to achieve objectives (i), which is to describe the socioeconomic characteristics of cassava processors. Objective (ii) was operationalized using the macroeconomic ratio; Average propensity to save (APS) as used by Temidayo et al., (2018) to determine the propensity to save of women cassava processors in Ekiti State.

It is given as, $APS = \frac{\text{Savings}}{\text{Disposable income}}$

Objective (iii) which is to analyze the factors determining savings among cassava processors in the study area was achieved using multiple linear regression analysis.

The model to be used for savings is explicitly stated as follows:

$$S = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \ . \ . \ . \ b_{13}X_{13} + e_i \qquad (1)$$

Where;

S = Amount Saved (Naira);
X_1 = Gender (1- male, 0- female)
X_2 = Marital Status (1-married, 0-otherwise)
X_3 = Age of farmer (years);
X_4 = Household size (Number of persons living together);
X_5 = Educational level (years);
X_6 = processing experience (years)
X_7 = Primary occupation (1- processing, 0- others)
X_8= Distance to the nearest financial institution (km)
X_9 = Processing enterprise (1-*garri*, 0-others)
X_{10} = Total income from off-processing activities (Naira);
X_{11} = Total income from processing activities (Naira);
X_{12} = Interest paid (Naira)

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X_{13}= Membership of cooperative society (1=yes, 0-no)
e_i = Error term.
b_0 = intercept (or constant)
$b_1, b_2 \ldots b_{10}$ = i^{th} coefficient corresponding to $X_1, X_2 \ldots X_{13}$

RESULTS AND DISCUSSION

Socio economic characteristics of cassava processors

It could be observed from the result in Table 1 that 25% of the respondents were males, while the remaining 75% of them were females, indicating that there is a higher proportion of female processors in the study area when compared to the male counterparts, suggesting that cassava processing is a female dominated activity. This can be explained by the desire by the women to become financially independent in light of the rising cost of living. Women are viewed as contributing to home financial management by meeting their own needs and those of their families rather than relying on others. This implication is that since women are in charge of providing for their families' food needs, their participation in the processing of cassava can help end hunger and this is in line with the observations of Ikwuakam (2013) in his study on determinants of socioeconomic status of cassava processing among entrepreneurs in South East Nigeria also stated that majority of cassava processors are females.

A relatively higher percentage (38.9%) of cassava processors were within the age range of 41-50 years, this was followed by 32.7% processors who were within the age range of 31-40years, and 17.2% processors who were within the age range of 21-30years. 10.6% processors were within the age range of 51-60years and the least are those processors who were in the age category of 61-70years (0.6%). The mean age was 43 years indicating that majority of cassava processors were members of the economically active population, supporting the research by Kaine (2018), who observed that 90% of cassava processors were between the ages of 40 and 49. At this stage in their careers, processors are extremely productive, have a wide range of income-generating options, and have also made a number of income-producing investments. They are able to produce more by working harder to process the cassava tubers, which boosts their savings as their income rises.

The results also show that 63.9% of the processors were married, 18.9% were single, and 8.3% and 8.9% of processors were divorced and widowed respectively. It is plausible that the married processors took a greater interest in cassava processing as a result of the need to increase their families' income. They may also enjoy the advantage of lower labor costs by using family labor. This supports the study of Ekwe et al. (2017) on small scale processors' engagement in cassava postharvest and households' food provision in Imo State, Nigeria, which reported that the majority (82.2%) of cassava processors were married.

It was seen that 55% of the total number of processors in the Imo State attained secondary level of education. This was followed by 23.9% of the respondents who pointed out that they were

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able to attain tertiary level of education. 20% of the processors had just primary education and the least were those who had no education who were just two in number (1.1%). Secondary level of education is often regarded as basic education; as such, most of the processors in the study area were seen to have attained the basic level of education and could be considered as averagely literate. The inference is that processors are more inclined to use technology and innovation in order to boost production, income, and ultimately, savings. This result is in agreement with the findings of Awoyemi et al. (2020) who observed that most cassava processors completed primary and secondary school education and have formal knowledge of cassava processing.

The distribution of the respondents based on household size reveals that 32.8% of the processors had a household size of 1-5 persons, while 57.2% of the processors had a household size of 6-10 persons. A low percentage of the processors (10%) had a large household size of 11 – 15 persons and the mean household size of the processors was seen to be 6 persons. The mean household size of 6 persons therefore suggests that processors are likely to enjoy family labour readily, and this supports the findings of Ibekwe et al. (2012) in their study on profitability of *garri* processing in Owerri North Local Government area of Imo State which observed that the mean household size of cassava processors in Owerri North Local Government Area of Imo State was 6 persons. The implication is that most cassava processors look for some low-cost labor within the household if the household members are willing to help; otherwise, it may be challenging to save and provide sufficient funds for investments because the size of the home affects the dependency ratio and consumption rate. It could therefore, be said that the number of hired labor used in the processing firm will depend on the size of the family.

The results also show that 34.4% of the processors out of the total number of processors in the study had a processing experience ranging between 6-10 years. 30.6% of them indicated theirs were within the range of 0-5 years of experience, 17.8% processors had processing experience ranging between 11-15years while 11.1% processors had processing experience of between 16-20years. 3.9% of the processors had processing experience of 21-25years while 2.2% of the processors had 26-30years processing experience. The mean processing experience was 8years showing that the processors are experienced in processing cassava and would probably adopt new technology if opportune. Their revenue also, would directly relate to their experience, acceptance, and adoption of better processing technology. Experience is a key indicator of management skill, which suggests that cassava processors are more likely to make choices that would boost productivity and, as a result, improve savings and investment. A long year of processing experience, according to Ikwuakam (2013), is a sign that the activity is a way of life rather than merely a job. This findings, notwithstanding, falls short of the observations of Anyanwu et al. (2017) in their study on factor analysis of net returns from cassava value addition Imo State, Nigeria, which claimed that cassava processors in Imo State have an average of 16 years of processing expertise.

Furthermore, 35% of the processors indicated having cassava processing as their major economic activity, while 23.3% of the processors combined processing and trading. 17.8% of the

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processors combined processing and farming, followed by 12.2% of them who combined processing and civil service. The least was 11.7% of the cassava processors who are processors and also artisans. The result from the table above showed that some cassava processors engaged in some other meaningful economic activities aimed at improving their standard of living besides cassava processing. This improves their income and enhances their savings capacity. However, majority (35%) of the processors were in full time processing business. This is consistent with the study of Osuji et al. (2015) who stated that majority of cassava processors were full time processors. Furthermore, 69.55% of the processors belong to a cooperative society, while the remaining 30.55% do not belong to any cooperative society. Due to bulk purchasing and subsidies provided by various institutional authorities, cooperative organizations enable members to acquire inputs at a lower cost (Onyemauwa, 2012). Most cassava processors in Imo State make use of cooperatives' advantages, which includes raising capital for investments, acquiring lump sum of money and also increase their propensity to save. Additionally, cooperative societies help in improving the cassava processor's ability to take up new practices for processing. This result is consistent with the findings of Osuafor et al., (2020) who stated that cooperative societies are comprised of cassava processors and the benefits of bulk purchasing and other benefits that come with being a member of an agricultural cooperative will benefit processors.

It was seen that 53.33% of cassava processor processed *garri*, 32.78% processed *fufu*, and 12.78% processed only tapioca. The least were those who processed cassava tubers into flour (1.11%). This findings implied that *garri* is the most predominantly processed cassava product in Imo State and could be attributed to its wider sales market and multiple usage. *Garri* can be eaten without further cooking, it enjoys the advantage that when steeped in cold water, it can be consumed as a snack. It can also be consumed raw or cooked and this agrees with the study of Osuji et al. (2015) who stated that majority of cassava processors in Imo State process cassava tubers into *garri*, followed by *fufu*, and tapioca.

The result further revealed that 91.67% of the cassava processors saved in form of cash, 2.78% saved in the form of loaning out money while 10% of the processors saved by storing cassava produce. The processors who saved in cash claimed that their actions were motivated by the lack of capital for intended immediate and/or future use. They argued that when their incomes exceed their current consumption needs, they save in other ways. Paper money is highly liquid, easy to consume and is always accepted as a method of payment, however, carrying banknotes can be a source of insecurity due to the risk of loss or theft. Paper money also, does not guarantee interest, compared to saving in form of cassava produce. Due to inflation, money loses value because of the constant rise in prices of goods and services. This is contrary to the study of Egwu & Nwibo, (2014) which stated that entrepreneurs prefer to invest in livestock as a form of saving, or store their produce after harvest when prices are low and sell during lean period when prices rise.

Cassava processors in Imo State generated their income mainly from cassava processing, though some of them engaged in other activities such as farming, trading, civil service, and craftsman, as

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indicated by the processors. From the result in Table 2, it is seen that the *garri* processing enterprise earned more regardless of the number of participants. This increases their chances to save more of their income for investment and other purposes. Most of the (37.5%) of the *garri* processors earned between ₦100,001-N150,000 monthly, this was followed by 20.83% of them who earned between ₦50,001 – ₦100,000 and 18.75% who earned between ₦150,001-N200,000. The remaining 11.46% of the *garri* processors earned less than ₦50,000 and also, between ₦200,000 and ₦250,000 monthly. The mean monthly income was seen to be ₦186,730.

For the *fufu* processing enterprise, majority (28.81%) of the processors earned between ₦100,001-₦150,000, this was followed by 23.73% who earned less than ₦50,000 and 20.34% of the *fufu* processors earned between ₦50,001-₦100,000. The least were those who earned ₦150,001-₦200,000 and ₦200,001 –₦250,000 (13.56%) and the mean monthly income for the *fufu* processing enterprise was seen to be ₦152,025.

The tapioca enterprise had majority (60%) of its processors earning between ₦50,001-₦100,000, this was followed by 21.73% who earned less than ₦50,000 and 17.39% who earned between ₦150,001-₦200,000. No participant in this enterprise was seen to earn between ₦100,001-₦150,000 and ₦200,000 and above. The mean monthly income the processors in this enterprise was ₦95,000.

The distribution of the respondents based on their saving avenue in Table 4 showed that majority (51.67%) of the processors made use of thrift (akawo), this was followed by 30% of the processors who saved their monies only through ROSCA (isusu) because it gave them access to loans that they cannot get from formal financial institutions due to lack of collateral. It was also seen that 20.56% of the processors saved in the Banks, and the least was 20% who made use of just saving box in saving their monies. This corroborates with the findings of Nwibo & Mbam (2013) that informal method of saving is the most prevalent way of saving among processing households. The information implied that most cassava processors in Imo State saved informally, and a small percentage saved through authorized banking institutions. The informal groups function on days and at times that are convenient for the processors. Because they are derived from regional cultures and customs and are simple and easy to comprehend by processors, their operations are frequently uncomplicated and simple. Credit access in these informal groups is straightforward, non-bureaucratic, and not heavily dependent on written documentation. Loan requests tend to be processed quickly and with the least amount of delay due to the straightforward and clear method. Moreover, the loan's collateral requirements are based on the capabilities of the processors and the environment in the area. It was also noted that these processors favor informal forms of savings due to their inability to use the services of formal financial intermediaries, the ease with which they may access their money, the cost of travel to the banks, and the associated bank fees.

Savings was computed in monetary term and also, prevailing market value was used for those who saved in form of cassava produce, in order to have a uniform computation. From the result

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in Table 5, majority (45%) of the cassava processors in Imo State save weekly, 35.56% save on a monthly basis, while the remaining 19.44% save on a daily basis. This agrees with the study \of Okeke et. al. (2015) which showed that majority of yam entrepreneurs saved their earnings on a weekly basis. The result also showed that 33.33% of the processors saved an amount less than N20,000, majority(33.89%) of them saved between N20,001-N40,000, 23.89% saved between N40,001-N60,000, and 6.67% who saved between N60,001-N80,000. Only a few participants (2.22%) were seen to save an amount from N80,001 and above. This research demonstrates that cassava processors in Imo State are ardent savers who save either daily or weekly. Those who save on a monthly basis are likely to be those who made their money on a monthly basis as well as certain people who make it a practice to save at set intervals.

Average propensity to save of cassava processors according to processing enterprises

Table 5 below shows that the *garri* processors had an average propensity to save (APS) of 0.334, implying that 33.4% of the income generated from processing is saved while the 68.9% is spent on consumption. It was also seen that the *fufu* processors had an average propensity to save of 0.251, which implies that 25.1% of their income is saved while 74.9% is consumed. The tapioca processing enterprise had an average propensity to save of 0.278 which presupposes that 27.8% of their income is saved while 72.2% of the income of tapioca processors is consumed. This observation is in line with the study of Temidayo et al. (2018) who stated that cassava processors are involved in savings and have an average propensity to save of 0.25.

Factors influencing savings among cassava processors

From the result on Table 6 showing the factors influencing the savings of cassava processors in Imo state, 11 variables were employed for the analysis. The analysis showed that the coefficient of multiple determination (R^2) was 0.897 which signifies that 89.7% of the total variation in the dependent variable was explained by the independent variables analyzed in the model. The F value of 126.901 was significant at 1% level, indicating overall significance of the model.

The result shows that marital status was significant ($P<0.05$) and negatively influenced the savings of cassava processors, implying that cassava processors who are married will save less of their income and this could be as a result of high household dependency on the processor. This result disagrees with the study of Wilcox et al., (2022) who stated that married processors saved better than their unmarried counterparts as they are able to pull resources together as couples and save for the future.

Total income from processing activities was significant ($P<0.01$) and positively related to savings. This is justified as increase in on-farm processing income will bring about increase in the savings. An increasing income will result to surplus that will be saved after consumption expenditure has been made and this agrees with the findings of Ike and Umuedafe (2013) who revealed that farm income significantly determines the volume of savings. This finding justified the Keynesian theory of consumption which posits a positive relationship between income and saving; and that household savings is directly and significantly affected by the income level.

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Total income from non-processing activity was significant (P<0.01) and positively related to savings. Off-processing income is reported to act as a substitute for borrowed capital in situations where credit markets are either missing or dysfunctional (Diiro, 2013), it acts as a strategy for overcoming credit challenges faced by the cassava processors. An increased household income will bring about surplus that will be saved after consumption expenditure has been expended. This finding is in consonance with the findings of Emmanuel (2015) who stated that off-farm income positively affects savings.

Household size was also significant (P<0.01), however, negatively related to savings. This implies that savings decreases with an increase in household size. Large household size may imply high dependency on the cassava processor and increase in household expenditure such as health bills, education bills, social events or household consumables negatively affects disposable income and translates to low savings. However, this findings is in disagreement with the study of Wilcox et al. (2022) who stated that household size is significant but positively related to savings. The study explained the likelihood that the farm households in the study area have adult and economically active household members, adding that a farmer will likely save more since he is not solely providing for the family.

Processing experience was significant (P<0.01) and positively related to savings. This is in consonance with *apriori* expectation and implies that the processors who are more experienced are likely to adopt improved practices to increase productivity. The more experienced a processor is, the more will be his ability to manage his processing enterprise and this will increase his income and level of savings and consequently, accumulate investment that will influence his savings. This is in line with the findings of Wilcox et al. (2022) who opined that processing experience is positively related to savings.

Interest on loan was found to be significant (P<0.01) and positively related to savings. This implies that the higher the interest rate, the higher the level of savings and this is in line with the findings of Odemero (2012) who stated that interest rate is positively and significantly related to savings because, a higher interest rate will entice the cassava processors to save more (in order to avoid the cost of borrowing), rather than consume. When interest rates reduces, these processors are likely to stop saving and instead, spend, even take out loans to consume at low interest rates.

Membership of cooperative was also positively significant (P<0.01). This implies that processors who are members of cooperative societies will have higher level of savings than those who do not belong. Cooperatives offer its members the opportunity to increase their monthly income though credit disbursements which translates to more savings. This finding disagrees with that of Okeke (2017) who stated that membership of cooperative society is significant but negatively related to savings.

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CONCLUSION AND RECOMMENDATION

The study has shown that cassava processors in Imo State have a varying degree of propensity to save, the *garri* processors had more ability to save than the *fufu,* and tapioca. The study also showed conclusively that, income from processing and non-processing activity were significant in determining savings. Also significant are, marital status, household size, processing experience, interest, and membership of cooperative

The study recommends the need to develop the local saving platforms so as to make it more responsive to modern day financial activities. For instance, the procedure involved in I*susu* could be improved by digitizing it to make it more user-friendly and transparent and by putting in place safeguards to protect members' money. Cooperative societies should adopt modern technology for record-keeping and financial management, as well as providing training and capacity-building programs for members to enhance financial literacy and entrepreneurial skills.

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APPENDICES

Table 1. The distribution of the processors based on Gender

Gender	Frequency	Percentage (%)
Male	45	25
Female	135	75
Age (years)		
21-30	31	17.2
31-40	59	32.7
41-50	70	38.9
51-60	19	10.6
61-70	1	0.6
Mean: 43years		
Marital Status		
Single	34	18.9
Married	115	63.9
Divorced	15	8.3
Widow	16	8.9
Level of Education		
Primary education	36	20
Secondary education	99	55
Tertiary education	43	23.9
No education	2	1.1
Household Size (Persons)		
1-5	59	32.8
6-10	103	57.2
11-15	18	10
Mean: 6 persons		
Processing Experience (Years)		
0-5	55	30.6
6-10	62	34.4
11-15	32	17.8
16-20	20	11.1
21-25	7	3.9
26-30	4	2.2
Mean: 8 years		
Primary occupation		
Processing	63	35
Processing/Farming	32	17.8
Processing/Trading	42	23.3
Processing/Civil Service	22	12.2
Processing/Artisan	21	11.7
Cooperative membership		
Yes	125	69.55
No	55	30.55
Cassava By-Product	**Frequency***	**Percentage (%)**
Garri	96	53.33
Fufu	59	32.78

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Tapioca	23	12.78
Flour	2	1.11
Total	**180**	**100**
Form of savings		
Cash	165	91.67
Loan out money	5	2.78
Cassava produce	10	5.56
Total	**180**	**100**

Source: Field survey, 2022.

Table 2: Cross tabulation of the cassava processor's income across the different processing enterprises.

Income(₦)	*Garri* n=96	%	*Fufu* n=59	%	Tapioca n=23	%	Flour n=2	%
0 - 50,000	11	11.46	14	23.73	5	21.73	-	
50,001 – 100,000	20	20.83	12	20.34	14	60.87	1	50
100,001– 150,000	36	37.5	17	28.81	-	-	1	50
150,001-200,000	18	18.75	8	13.56	4	17.39	-	
200,001–250, 000	11	11.46	8	13.56	-	-	-	

Source: Field survey, 2022

Table 3: Distribution of the respondents based on their savings avenue

Saving avenue	Frequency*	Percentage (%)
Thrift(akawo)	93	51.67
Bank	37	20.56
Rosca(isusu)	54	30.00
Saving Box	36	20.00

Source: Field survey, 2022. *multiple response taken

Table 4: Cross tabulation between total amount saved (processing and off-processing) and the frequency of savings of the cassava processors

Amount Saved	Frequency	Percentage(%)	Daily	Weekly	Monthly
≤ 20,000	60	33.33	25	34	1
20,001 – 40,000	61	33.89	10	28	23
40,001- 60,000	43	23.89	0	16	27
60,001- 80,000	12	6.67	0	3	9
≥ 80, 001	4	2.22	0	-	4
Total	180		35(19.44%)	81(45%)	64(35.56%)

Source: Field survey, 2022.

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Table 5: Distribution of average propensity to save of cassava processors in Imo State

Cassava Enterprise	Average income from processing activities(₦)	Average income from non-processing activities(₦)	Total average income(processing and off-processing)(₦)	Total Savings	Average propensity to save
Garri(n=96)	78,208	27,958.33	106,166.67	35,542.71	0.334
Fufu(n=59)	115,593.22	30,779.66	146,372.88	36,720.34	0.251
Tapioca(n=23)	71,462.09	20,869.57	92,295.65	25,730.43	0.278

Source: Field survey, 2022

Table 6. Determinants of savings among cassava processors in Imo State

Variables	Estimate	t-Value
Gender	4696.797	1.162
Marital status	-221.698	2.368**
Age	69.476	1.075
Total processing income	0.128	34.673***
Total off processing income	0.183	6.472***
Household size	-202.579	-2.767***
Educational level	1050.547	0.413
Processing experience	918.731	3.453***
Distance to financial institution	2104.763	0.951
Cassava processing enterprise	550.258	1.456
Primary occupation	894.754	0.815
Interest	0.419	2.644***
Membership of cooperative	2696.388	2.657***
R^2	0.897	
Adjusted R	0.890	
F Value	126.901***	

Source: field survey, 2022.

***, **,*: variables statistically significant at 1.0%, 5.0% and 10.0% risk levels respectively.