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CONSUMPTION AND SAVING PATTERN AMONG RURAL FARMING HOUSEHOLDS IN ABEOKUTA NORTH LOCAL GOVERNMENT AREA OF OGUN STATE

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ABSTRACT
This study analyzed the consumption and saving pattern among rural farming households in Abeokuta North Local Government Area of Ogun State. One hundred and twenty (120) rural farming household heads were sampled in a two-stage sampling process. The data collected were analyzed using descriptive statistics and multiple regression analyses. The findings revealed that most household heads are in their active age, had formal education, married, farmers, earn little income but save very little. The household size, marital status, cooperative society, occupation and education are the significant determinants of savings among the rural farming households. The significant determinants of consumption among rural household heads include income, savings and education. The study revealed that the consumption of the household will increase by 38kobo if their income increases by 1₦ while the consumption of household will decrease by 18kobo if their savings increase by 1₦, *ceteris paribus.* The policy option requires the household heads to diversify their economic activities in order to earn more income and increase their savings so as to cover their present and future consumption. Household education should be strengthened as education has positive effect on savings and consumption. Lastly, Rural farming households can use cooperative societies as a means of securing economic investment and income diversification.
Keywords: *Income, savings, consumptions, occupation, farming households*

INTRODUCTION
Economic theories of consumption seek to explain people's preferences in relation to consumption and saving over the course of their life. Saving is defined as consumption foregone. Money saved is for future use. When people have a choice, they often choose to save. Savings are made by the poor out of the income from economic activities. In rural areas, money is saved from sale of agricultural produce, wages and income from enterprise while urban poor save mainly from wages earned and income from enterprise and services. Due to seasonality of cash flow in rural area mainly through sale of agricultural produce, availability of work, source of income, saving is seasonal and irregular [10]. Savings are of great importance in a developing and agrarian economy like Nigeria. This is because of the direct bearing it has on the level of economic activity of the nation. Similarly, within the agricultural sector, the degree of progress attained will largely depend upon what the farmers do with the additional incomes generated from year to year from their farm activities. This stems from the fact that the growth rate in the farming economy largely depends on the stock of capital built in a farm organization and the re-investment of such stocks in form of savings for further improvement of the farm organization. If these increments are spent on household expenditure, without building up the necessary

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infrastructure, the future economic development of the nation will be hampered. Savings are seen as insurance against foreseeable future difficulties (constituting a dowry, bridging a difficult period, etc) or completely unpredictable (food shortages, natural weather phenomenon, foodstuffs sold cheaply because of the death or accident of a member of the family, etc). Access to safe and secure savings is an important part of addressing short-term, medium-term and long-term unforeseen circumstances. These savings allow them to protect their own funds and, as a result, to undertake other income-generating activities. It is recognized that high domestic savings and investment are crucial for sustenance of high stable rates of growth of the economy. The savings are for smoothening consumption across one's lifespan in the face of any expected or unexpected fluctuation in the level of income and acts as a net saver during his/her working years and dis-saver in the post retirement life. Different households had different reasons for keeping away some money as savings - ranging from emergencies to marriages and social events, children's education and gifts. Saving for old age is not the important drive for setting aside some cash. In rural areas of developing countries, because of limited inter-industry linkages, local consumption patterns and local savings patterns have a particularly strong influence on the multiplier effects arising from an exogenous shock to the economy. Thus, rural farming households play a critical role in determining the development of rural regions. Over the last few decades, the household sector in many rural areas has become more diverse in nature. This has potential implications for both the sustainability of rural economies and the design of appropriate rural development policies. Several factors have been identified as contributing to this increased diversity.

[1] found that although the total annual expenditure of retiree households was on average lower than that of other household types, they were more likely to spend more on medical supplies and donations to charities. In contrast, younger households had far higher total expenditure levels and spent a far higher proportion of their total outgoings on vehicles and food consumed in the home. However, lifestyle changes may have altered the extent to which different types of households depend on local suppliers to satisfy their consumption and leisure demands. For example, commuter households are likely to source goods close to their point of work rather than from local suppliers. Alternatively, the (often more wealthy) 'incomers' to a rural area may choose to actively support local businesses whereas the indigenous households may be more sensitive to the greater choice and/or pricing discounts available from non-local sources (e.g. through mail-order or the internet). Unless those households earning income from local economic activity spend this income locally, then the benefits of additional economic activity will be 'leaked' and there will be limited secondary benefits for the area. In addition to differences in the income and expenditure patterns of households, different types of households may rely on different sectors for their income. For example, agriculture is known to have an ageing workforce, whereas the distribution, hotel and restaurant sectors tend to have younger employees[1]. However, there is a growing recognition that the development trajectories of rural regions depend not only on the industrial structure of a region and its inter-industry linkages, but also on the socio-economic characteristics of the local population and the linkages between the production and

consumption spheres of the economy [2; 12; 15]. Economic deregulation in Nigeria has in a very short time brought about a reduction in household income levels and to this effect, the livelihood patterns of most rural farming households have remained more deplorable. On the national level, per-capita growth of production of major foods in Nigeria has not been sufficient to satisfy the demands of an increasing population [8]. The result is a big gap between national supply and national demand for food. Progress in the agricultural sector has also remained unsatisfactory [8]. Consumption and saving decisions are at the heart of both short and long-run macroeconomic analysis (as well as much of microeconomics). In the short run, spending dynamics are of central importance for business cycle analysis and the management of monetary policy. And in the long run, aggregate saving determines the size of the aggregate capital stock, with consequences for wages, interest rates, and the standard of living. Savings are important way of improving well-being, insuring against times of shocks, and providing a buffer to help people cope in times of crisis [18]. Therefore, an understanding of factors that affect the savings performance of households is a necessary step toward theory building in social development research, which in turn leads to the formulation of more effective social development policy. Recent literature has shown that gender [5;9], education[4]; [14], employment and marital status [7]; [16] are factors that influence savings behavior. However, few studies tie these factors together and help us understand the interaction of gender with the other factors. [6] noted that literature on gender differences on savings behavior is sparse and concentrates on developed countries.

Marital status has also been shown to have an effect on asset accumulation [7;17]. Historically, marriage has been viewed as a source of financial security [16] and continues to be a determining factor for economic well-being, particularly for women. Pooling resources for a married couple may provide a cushion for them to accumulate assets without going under in times of crisis. According to [3], education is another factor that has an effect on asset accumulation. Education affects savings performance by influencing the level of income and the options for asset accumulation available to the individual. In developing countries like Nigeria, lack of adequate or low level of domestic savings is a major problem due to high level of unemployment, low wages and low income. At the household level, access to food depends on what household members can produce using resources at their disposal as well as its ability to generate sufficient income with which they could purchase required food [11]. Many factors, other than food production and income levels also affect household food security. Among most rural farming households, for instance, even where food is available, cultural and family food distribution practices can endanger the food security of its members. In addition, unsatisfactory methods of food preparation and unhygienic storage and preservation can reduce the nutritional value of available food. From the foregoing, this study examines the determinants of consumption and saving among rural farming households in Abeokuta North Local Government Area (LGA) of Ogun State, Nigeria.

METHODOLOGY

The Study Area

The study was carried out in the Abeokuta North Local Government Area (LGA) of Ogun State. Ogun State was created in 1976 and with estimated population of 3,728,098 million [13]. Ogun State is located in the south western region of Nigeria, it has a land mass of over 16,762 sq km. It is characteristically a rainforest area with traces of the derived savannah. Abeokuta North occupies an area of 57.355 kilometer with an estimated population of 374,843 according to the 1991 population census. It has its local government mainly inhabited by the Egbas who are the Egba Eku, Egba Arin and the Egba Igbeyin with its headquarters at Akomoje. The main occupations of the inhabitants are farming, quarry business, Artisan work and handicrafts such as tie and die, pottery making amongst others: Their predominant language is Yoruba language and Egba dialect.

Sampling Technique

Two-stage sampling technique was used to select 120 rural farming households studied. The choice of Abeokuta North Local Government Area was on purpose because the primary occupation of the inhabitants is farming and this area is partly urban and partly rural. The first stage involved the selection of 6 wards from the 12 political wards in the Local Government Area and the second stage involved selection of 20 farming household heads from each of the selected wards in stage one.

Methods of Data Analysis

The data collected were subjected to descriptive and econometric analysis. Multiple regression was used to estimate the determinants of consumption and saving among the respondents.

Multiple Regression for Determinants of Savings among Rural Farming Households

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \mu \quad (1)$$

Where:

Y = Savings of the household heads (₦)
X_1 = Age of the household head (years).
X_2 = Household size (number of person).
X_3 = Sex of the household head (male = 1, female = 0)
X_4 = Membership of cooperative society (member =1, non-member =0).
X_5 = Occupation (farming =1, otherwise =0).
X_6 = Education (year).
X_7 = Marital status. (married=1; Otherwise = 0)
μ = Error Term

Multiple Regression for Determinants of Consumption among Rural Farming Households

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \mu \quad (2)$$

Where:
Y = Consumption of the household heads (₦)
X_1 = Income of the household head (₦).
X_2 = Savings of the household head (₦).
X_3 = Age of the household head (year)
X_4 = Sex of the household head (male=1, female =0).
X_5 = Marital status of the household head (married =1, otherwise =0).
X_6 = Educational level of the household head (year).
X_7 = Religion (Christianity =1; Otherwise = 0)
μ = Error Term

RESULTS AND DISCUSSION

Socio-economic Characteristics of Rural Farming Households

The distribution of the dominant analysis of the socio-economic characteristics of rural farming household heads is presented in Table 1. Sex determines the ability to perform some physical work. It is a popular belief that men are more efficient in farming than women. Perhaps, this is because they are more energetic and can handle more tedious work than their female counterparts. Majority (66.7%) of the rural farming household heads sampled are males. Age is an important determinant of productivity. The ability of the respondents to take advantage of emerging opportunities that could change their live for better may have relationship with their age, education and experience. Majority (81.3%) of the household heads are aged below 55years. The mean age of the household heads is 46years. This implies that the respondents are in their prime working age with improved probability of higher productivity. Education is of great importance in decision making. It can indirectly determine the decision of households' heads as regard consumptions and savings. Majority (67%) of the respondents had formal education. The mean year of formal education is 12years. The high literacy level of the respondents increases the probability of rural households' heads having improved standard of living by making informed decisions on consumption and savings. Household size (most especially in rural settings) may determine the family labour at the household disposal. Majority (50.6%) of the sampled household heads had between 3 and 5 persons as household members. The households can be said to have considerably moderate household size which may not be unconnected to their high literacy level. The moderate household sizes of majority of the respondents have the tendency of limiting their consumption level and raising their marginal propensity to save. The study revealed that most (88.9%) of the rural household heads in the study area engaged in farm activities as main occupation. Marital status of the respondents may determine the level of household size of the respondents which may have implications on the family labour, income composition, consumption and savings pattern. Married rural household heads account for 63% of the respondents. This implies additional responsibilities for the household heads. Religion of the respondents is expected to affect their household sizes which have implication on their consumption and savings pattern. Those that practiced Islam as religion have the tendency of having larger household size as Islam permits polygamy unlike their Christians' counterpart. Majority (67.9%) of the respondents were

Christians. This larger number of the respondents being Christians may be responsible for the moderate household size. Majority (59.3%) of the sampled rural households heads were cooperative members. This confirms the exploits of cooperative societies in rural areas. Cooperative societies are likely to encourage savings among the respondents having positive implications on their savings and consumption patterns. In terms of income, majority (65.7%) of the rural household heads in the study area earned between ₦100, 001 and ₦200,000 per annum as income from both farming and non-farming activities. The maximum amount earned per annum was ₦400,000. However, majority (59.3%) of the rural household heads saved less than ₦50, 000 annually out of the total amount realized. The maximum amount saved by the household head was ₦90,000.

Table 1: Dominant Analysis of Socio-economic Characteristics of Rural Farming Households

Variables	Dominant Indicator	Mean
Sex	Majority (66.7%) are male	
Age	Majority (81.3%) were aged below 55years	46 years
Education	Majority (67%) had formal education	10 years
Household size	Majority (50.6%) have between 3 and 5 members	4 persons
Nature of Business	88.9% are farmers	
Marital Status	63% were married	
Religion	67.9% are Christian	
Membership of Cooperative Society	59.3% are members of cooperative society	
Income of Household Head	65.7% earned between ₦ 100,001 and ₦ 200,000	₦130,000
Savings of the Household Head	59.3% saved below ₦ 50,000	₦ 30,000

Source: Computed from Survey Data, 2011.

Determinants of Savings among Rural Farming Households

Multiple regression was used to analyze the determinants of savings among rural households and the result is presented in Table 2. The Adjusted R^2 of 0.68 implies that about 68% of the variation in the level of savings of the household heads is jointly explained by the independent variables. Also, the F-value is significant at 1 percent and indicates that the model is of good fit. Household size, membership of cooperative society, occupation, education and marital status were statistically significant at 1%, 10%,5%, 1% and 10% level respectively. They are therefore important determinants of rural household savings. The positive coefficient of membership of cooperative society and years spent in acquiring formal education implies that there is positive relationship between either of membership of cooperative society and number of years of formal education with level of savings of rural households. In other words, the higher the number of years spent in acquiring formal education, the greater the savings made. Membership of cooperative society also follows the same trend. However, the negative coefficient of household size implies that the larger the household size of rural households, the lower their savings. In analyzing the main occupation of the respondents, farming was made the reference occupation. The negative correlation of the coefficient of farming with savings implies that engagement in farming as main

occupation reduces the marginal propensity to save compared to engagement in other occupation. This may be as a result of subsistence nature of farming practices in the study area. Likewise, in analyzing the relationship between marital status and level of savings of rural households, married household heads were made the reference marital status. The negative correlation of 'married' as marital status with level of savings implies that married rural farming household heads save less than their counterparts that are single/divorce/widow. This is justified on the premise that married people have additional marital responsibilities which demand for monetary attention.

Table 2: Determinants of Savings among Rural Farming Household Heads

Variable	Co-efficient	Standard Error	T-value
Constant	5.276***	0.996	5.29
Age (X_1)	-0.004	0.012	-0.30
Household size (X_2)	-0.260***	0.098	-2.67
Sex (X_3)	-0.620	0.351	-1.55
Membership of cooperative society (X_4)	0.1041*	0.056	1.86
Occupation (X_5)	-0.0307**	0.015	-2.05
Education (X_6)	0.164***	0.043	3.77
Marital status (X_7)	-0.549*	0.361	-1.65
R-square	0.71		
Adjusted R-square	0.68		
F-value	25.38***		

*** implies significant at 1%; ** implies significant at 5%; *implies significant at 10%
Source: Computed from Survey Data, 2011

Determinants of Consumption among Rural Households

The result of the multiple regression on the determinants of consumption of households is presented in Table 3. The F-value estimated at 17.23 is significant at 1%. Also, the regression coefficient of multiple determinations (R^2) was estimated at 0.74 while the adjusted R^2 was 0.67. This implies that about 67% of the variation in the consumption of the rural farming household is explained by the independent variables. The significant determinants of consumption include income, saving and education. These variables are significant at 10%, 1% and 5% respectively. The sign of the coefficient of income variable indicate that the more the household head earns the more they consume. The negative sign on the coefficient of the saving variable implies that the consumption of household decreases as their saving increases. This also shows that the household that consume much may save just little out of their income. Education has positive significant effect on the consumption of household, the more the education of the household head the more the consumption of the household.

Table 3: Determinants of Consumption of Rural Household Heads

Variable	Coefficient	T-value
Constant	21.1740***	5.67
Income	0.3800*	1.74
Savings	-0.1800***	-3.43
Age	0.0130	0.61
Sex	0.0034	1.20
Marital status	-0.4070	-0.08
Education	0.3670**	2.54
Religion	0.0246	0.74
R-square	0.74	
Adjusted R-square	0.67	
F-value	17.23***	

*** implies significant at 1% ; ** implies significant at 5% ; *implies significant at 10%
Source: Computed from Survey Data, 2011

CONCLUSION AND RECOMMENDATIONS

This study revealed that most household heads are in the middle and active age, had formal education, married, farmers, earn little and save very little. The determinants of savings among household include household size, marital status, cooperative society, main occupation and years of formal education. The determinants of consumption among rural household include income, savings and education. The consumption of the household will increase 38kobo if their income increases by 1₦. However, the consumption of household will decrease by 18kobo if their savings increase by 1₦, *ceteris paribus.* The policy option requires the household heads to diversify their economic activities to earn income and to be able to increase their savings so as to cover their present and future consumption. Household education should be strengthened as education has positive effect on savings and consumption. Lastly, Rural farming households can use cooperative societies as a means of securing economic investment and income diversification.

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