ANALYSIS OF WEALTH STATUS AND ITS DETERMINANTS AMONG CASSAVA PROCESSING HOUSEHOLDS IN IMO STATE, NIGERIA

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Abstract

The study analyzed the wealth status and its determinants among cassava processing households in Imo State, Nigeria. It specifically sought to classify the households into different wealth categories and estimate factors that influence the wealth status of the cassava processing households. In selecting the sample, multistage sampling technique was used in drawing 90 cassava processing households from the local government areas within the three agricultural zones. Relevant data and information were elicited from the selected households using well structured and pre-tested questionnaire. In analyzing the data, wealth index and multiple regression model were employed. The results showed that the households were classified into poor (65.56%); middle class (3.33%) and the rich (31.11%) while age, household size, monthly expenses and income were found to be major factors influencing wealth status. The study therefore recommended the introduction of income support policy to assist the smallholders to continue in the agricultural business since commercial agriculture which has the capacity to feed the economy has not taken root in the study area.

Key words: value addition, cassava processing, households, wealth

INTRODUCTION

Wealth has been defined by a lot of scholars but majority perceive it as an abundance of items of economic value or state of controlling or possessing such items. It is one of the most important variables in social science research since it plays a significant role in the planning and execution of development programmes [9, 13].

The specification of wealth as having the spirit of capitalism has been promoted in recent times because it is assumed to give status to the owners. However, not all wealth confers equal social status. Wealth can be classified into three principal categories: Personal property including homes or automobiles; monetary savings such as the accumulation of past income; capital wealth of income producing assets including real estate, stocks, bonds and business. All these delineations make wealth an especially important part of social stratification [5,7].

Prior to the advent of oil production, the Nigeria economy was predicated on agriculture with multiplicity of smallholder resource poor farmers bearing the brunt of food production for the entire population. In addition, the sector employs about 70 – 80% of the country's labour forced while contributing about 40% to the gross domestic product (GDP) [14].

Among the numerous crops produced by the smallholder producers, cassava is the most cultivated because almost every household in Nigeria is engaged in it. Cassava ranks highly as a major staple food particularly for the low income earners and resource poor farmers in the developing economies of sub-Saharan Africa. This has raised the status of Nigeria as the leader in cassava production in the world [4].

In the face of this lofty productive capacity, the majority of small farmers experience difficulties in food production with heavy post-harvest losses due to weak connections to national and international markets and failure to add value [3]. This trend impacts negatively on profitability of the enterprise and the wealth of farmers. It has also stimulated interest in value addition which has increasingly drawn attention to the processing of cassava into other food forms such as fufu, garri, chips etc. However, the quantum of this contribution to wealth and factors influencing it will delineate the possibility of sustaining the practice among the processing households. Review of literature has revealed that a number of studies have been undertaken to assess the wealth status and its relations with adoption of innovations and technologies especially on-farm. Examples include [8, 10, 12] who found a significant positive relationship between the wealth index and adoption of agricultural innovations while [1] found a significant negative relationship between the two variables. However, [2, 11, 15] never found any significant relationship between them. A cursory look at the articles has shown that all of them were interested in technologies that related to production without considering post-harvest scenarios. In the light of the foregoing, the present study sought to analyze the wealth status and its determinants among cassava processing households in Imo State, Nigeria with the following objectives: (i) classify the households into different wealth categories; (ii) estimate factors that influence the wealth status of the cassava processing households.

MATERIALS AND METHODS

The study area was Imo State and it lies between latitude 4^o45 and 7^o15 North, and longitude 6^o50 and 7^o25 east of the Greenwich Meridian. The Cassava processing households (90) used for the study were selected by multistage sampling technique drawn from the local government areas across the three agricultural zones (30 households per zone). Well structured and pre-tested questionnaire administered on the selected households to elicit data and information required for the study. Data were analyzed using wealth index and multiple regression model.

Following [6], wealth index is establishing by aggregating the major wealth indicators in the study area. The number if livestock and farm implement owned as well as the average amount of cultivated land are usually major wealth indicators in farming communities. The indicators are aggregated by calculating the wealth index (WID) as follows:

$$WID \sum_{j=1}^{n} \frac{Yi}{Yij} (1 = 1 \dots \dots .5; j = 1,2 \dots \dots N) \dots (i)$$

Where Yi = the average number of livestock units farm implements (hand hoes, axes, cutting equipment) and cultivated land for the past three years.
Yij = the sample mean for each item; and
N = sample size
Multiple regression model for addressing factors influencing wealth status:
$$WID = (X_1, X_2, X_3, \dots X_8, e) \dots \dots \dots (ii)$$
Where:
WID = wealth index
X_1 = age (years)
X_2 = education (years)
X_3 = sex (male=1; female=0)
X_4 = household size (no)
X_5 = marital state (married 1; otherwise=0)
X_6 = consumption expenditure (naira)
X_7 = agricultural income
X_8 = access to credit (naira)
e = error term

RESULTS AND DISCUSSIONS

Categorization of households into Wealth Classes

In classifying the household into different wealth categories, the wealth index was computed and the results were presented in Table 1. The medium class is synonymous with the average wealth index while those households with wealth indices below the mean wealth index belong to the poor class. However, those with wealth indices that are above the mean belong to the rich class. By implication, 65.56% of household were

classified as poor; 3.33% were in the middle class while 31.11% fall in the rich households' category. This indicates that the value addition practice has not enhanced the wealth status of the processing household since majority is in living in poverty.

Table 1. Distribution of Households into wealth categories

Wealth categories	Frequency	Percentage
Poor class	59	65.56
Middle class	3	3.33
Rich class	28	31.11

Source: Field Survey, 2014

Determinants of Wealth Status

The result of the multiple regression analysis in Table 2 on estimation of factors influencing the wealth status revealed that out of the eight variables employed in the analysis, four variables which include age, household size, monthly expenses and income were statistically significant at various probability levels. Age was significant at 5% probability level with a positive coefficient (0.163), implying that wealth increases as age increases. Household size was significant at 1% probability level with a negative coefficient (-0.418), indicating that household size has an inverse relationship with wealth status. Invariably, the more the household size, the less their wealth. The coefficient of monthly expenses posted a significant, negative value (-5.989); with rising monthly expenses, wealth of the household diminishes while income which is sparingly significant, recorded a positive sign in line with a priori expectation.

Table 2. Factors influencing wealth status

Variable	Coefficient	Standard Error	t - value
Constant	-2.921*	1.466	-1.993
Age	0.163**	0.054	3.038
Education	-0.356	0.392	-0.931
Sex	0.400	0.445	0.899
H/hold size	-0.418***	0.115	-3.635
Marital Status	0.044	0.439	0.099
M/expenses	-5.989***	1.174	5.100
Income	3.061*	1.622	0.887
Access to credit	0.138	0.522	0.265
R^2	0.506		
F-Ratio	10.377***		

Source: Computed from Field Survey, 2014

The diagnostic statistics posted appreciably good values. Specifically, the coefficient of multiple determination (R^2) is 0.506, implying a goodness –of- fit measure of about 50%. This indicates that the changes in the wealth status of the households were explained to the tune of 50.6% by the explanatory variables. The remaining 49.4% was attributable to error and omitted variables.

The F-ratio recorded 10.377 and significant at one percent probability level. By this value, it implies that the explanatory power of the model is high.

CONCLUSIONS

The analysis of wealth status of the Cassava processing households in Imo state has shown that majority lives in poverty.

By implication, the value addition practice seems not to have contributed meaningfully to their wealth ranking since poverty is wide spread.

Having realized that the coefficients of age, household size, monthly expenses and income were major factors influencing their wealth status, the need to employ policy options hinged on the factors has become rather imperative.

It is therefore necessary that family planning programmes should be intensified in farming communities to discourage the entrenched practice of having overbloated households among Africans.

More so, the introduction of income support policy will assist the smallholders to continue in the agricultural business since commercial agriculture which has the capacity to feed the economy has not taken root in the study area.

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