



# Consumption Pattern Analyses of Cassava Products among Rural Household in Ebonyi State, Nigeria

Okoye, A.C.<sup>1</sup>, Okoye, F.U<sup>2</sup>, Nze, E.O<sup>3</sup> and Daniel-Ogbonna, C<sup>1</sup>

<sup>1</sup>National Root Crops Research Institute Umudike P.M.B. 7006 Umuahia Abia State, Nigeria

<sup>2</sup>Federal College of Agriculture, Ishiagu, Ebonyi State, Nigeria

<sup>3</sup> Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria

email: [okoyeamalac@yahoo.com](mailto:okoyeamalac@yahoo.com)



## BACKGROUND

Cassava is the Nigerian most important staple food in terms of per capita calories consumed and a major source of calorie for roughly two out of every five Nigerian households (Onyemauma, 2010). The main product from cassava, the fresh cassava roots cannot be stored for long as they are bulky with about 70% moisture content and contain varying amount of cyanide which is toxic to humans and animals. Cassava are then processed to increase the shelf life of the products, facilitate transportation and marketing, reduce cyanide content, improve palatability, and the nutritional status through fortification with other rich crops to reduce food losses (Ogunniyi, 2011). Numerous products have been developed for cassava and these results in the production and consumption of a wide variety of food products. Some products from cassava includes gari, fufu (pounded cassava), tapioca, African salad, flour for bakery; feed and starch etc. and are important chains for cassava development in Nigeria. Although, consumption of the products varies among tribes, location and culture, it depends on income; relatively price and taste preference etc. Studying consumer behavior therefore becomes necessary to examine the factors that influence decision and finally consumption.

**Table 1: Ordered Probit Regression for Factors Influencing the Choice of Consumption of Cassava Products in the Study Area**

| Variables                    | Parameter      | Coefficient | Std. Error | Z test    |
|------------------------------|----------------|-------------|------------|-----------|
| Age (years)                  | X <sub>2</sub> | -0.3769     | 0.1771     | -2.13**   |
| Cost of cassava root (Naira) | X <sub>3</sub> | -0.4518     | 0.1995     | -2.26**   |
| Household size (dummy)       | X <sub>5</sub> | 0.6624      | 0.1576     | 4.20***   |
| Marital status (dummy)       | X <sub>7</sub> | 0.8071      | 0.3847     | 2.09**    |
| <b>Ancillary Parameters</b>  |                |             |            |           |
| Cut 1                        |                | 0.7730      | 0.2420     | 3.1942*** |
| Cut 2                        |                | 1.8031      | 0.8562     | 2.1059**  |
| Log likelihood               |                | -68.204791  |            |           |
| χ <sup>2</sup>               |                | 0.0012      |            |           |
| Pseudo R <sup>2</sup>        |                | 0.4240      |            |           |

Source: Field survey, 2019 \*\*and \*\*\* = Significant at 5% and 1% respectively

## METHODS USED

The study was conducted in Ebonyi State, Nigeria. A multistage design that involved random sampling technique was employed in the selection of 120 respondents for the study. A cross sectional data were collected using structured questionnaire/Focus Group Discussion. The study used descriptive statistics, ordered Probit and Correlation coefficient models. Probability of a household's choice of cassava consumption was estimated using ordered probit model as in equation (1)

$$\text{Casspdt} = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + a_4X_4 + a_5X_5 + a_6X_6 + a_7X_7 + a_7X_8 + u_i \quad (1)$$

Casspdt = Cassava products consumed more (gari = 1, fufu = 2, and tapioca= 3)

X<sub>1</sub>= Income (Naira), X<sub>2</sub>= Age of the household head (years),

X<sub>3</sub>= Cost of cassava product (Naira), X<sub>4</sub>= cost of close substitute

(Naira), X<sub>5</sub>= household size (number), X<sub>6</sub>= sex (dummy),

X<sub>7</sub>= marital status (dummy), X<sub>8</sub> = Education (years), U<sub>i</sub> = error term

## FINDINGS

The results show that many of the respondents were female (54.17%), married (61.67%), within age range of below 30years (35.00), had secondary education (47.50%) with household size of 5-8 persons (50.83%). Majority (58.80%) of the respondents consumed *gari* than pounded cassava fufu (28.70%), Tapioca (7.5%) and cassava chip and flour (2.5% each). The respondents preferred *gari* over other cassava products due to household choice (73.75%), nutritional value (57.50%) and availability (45.00%). The results show that coefficient for age and cost of cassava root (5% each) were negative and households size (1%) and marital status (5%) were positively related to choice of cassava product consumption. The results shows a positive (r = 0.3001) correlation between *gari* and its substitute at 5% level of probability.

## DISCUSSION

The decision of cassava products to be consumed is determined by the married, young and educated women with large households. Most of the households that consumed *gari* may be due to the availability of the product as showed as one of the reasons for *gari* consumption. This finding is consistent with Onyemauma (2010) that *gari* is the most important processed and consumed of cassava products. In line with findings, Mofu (2013) noted that cassava consumption products among adults were mainly based on the health status and nutritional values. However, the households with relatively young members are more likely to consume more of tapioca other than *gari* (or fufu). This is so probably because of ease of preparation and processing of tapioca. Decrease in cost of cassava roots will likely increased *gari* consumption other than tapioca or fufu. This is expected as people tend to go for products that will serve as meal and at a reasonable price. In terms of processing, married households have advantage over the singled as the spouse and children will assist in processing of cassava root to *gari* following Onyemauma (2010). Large households will likely increase consumption of *gari* other than tapioca or fufu. The study found a strong and direct relationship between consumption of *gari* and its substitutes.

## CONCLUSIONS

The study provided empirical evidence on the household consumption behaviour of cassava products in Ebonyi State, Nigeria. The ability of the households to consume or prefer a particular cassava product to another is a function of age, cost of cassava product, household size and marital status. *Gari*, pounded cassava and Tapioca were the three major cassava products consumed. The respondents preferred *gari* over another as a result of availability, nutritional value, choice and health status. The study calls for effective promotion of cassava products consumption with more emphasis on the adult population and household size acceptability.

### Percentage consumption of Cassava Products



## REFERENCE

- Mofu, M. J (2013). Determinant Behavioural Factors for Cassava Consumption among Adults in Southern Zambia. *J Nutr Food Sci.* 3(3), 27-34
- Ogunniyi, L.T (2011). Household Consumption Pattern of Cassava Products in Oyo state. *Journal of Science Frontier Research.* 11(6), 2249-2260.
- Onyemauma C.S (2010) Analysis of Household Consumption of Cassava Products in Ohaozara, Ebonyi State, Southeast Nigeria. *Researcher journal of Agriculture.* 2(6), 1-6

## PARTNER LOGOS

