

## FOOD EXPENDITURE PATTERNS AMONG URBAN HOUSEHOLDS IN IBADAN SOUTHWEST LOCAL GOVERNMENT AREA, OYO STATE

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### ABSTRACT

This study examines food expenditure patterns among urban households in Ibadan South West Local Government Area of Oyo State. The primary data used for the study were obtained through structured questionnaire using random sampling technique. Descriptive statistics and least square regression model were used to analyse the data collected from respondents. Descriptive analysis showed that 82.5% of the household heads were males, 65% of them were married, and 55% fell within the age bracket of 30 and 39 years, while 65% were salary-earners. Most of the respondents (79.2%) had tertiary education and the average household size was found to be 5. Furthermore, 49.2% bought foodstuffs from the market for home consumption on a monthly basis and 52.5% spent less than N10, 000 monthly on food. The result of the least square regression model showed that the age of respondents, level of education and occupation (salary-earner or self-employed) of the household head, as well as the household income were significantly influenced by household's monthly food expenditure in the study area. The study recommends among other things enlightenment programmes that will educate the urban dwellers on the need to eat good quality and hygienic food.

**Keywords:** Food Expenditure, Consumption Pattern, Income, Urban, Households.

### INTRODUCTION

One of the major problems confronting Nigeria is her inability to adequately feed her teeming population. It is in realization of this fact that programmes such as Operation Feed the Nation (1976), Green Revolution (1979), Directorate of Food Road and Rural Infrastructure (1987), National Fadama II (2004) were put in place to increase and sustain food production in the nation. The household food security problem is manifested by the fact that calories and protein consumed by the household members in the country (45.4g)

falls short of the requirement (53.8g) according to FAO (1993).

In view of the cultural practice of most Nigerians, the decision on what to eat in the house is jointly taken. Where the household head takes decision on what to eat in the house, such decision is taken with regards to diverse nutrient requirements and preferences of other members of the households. Similarly, people's behavior regarding food consumption and expenditure is governed by customs and traditions and may be difficult to change (Kalu, 2001).

In urban areas, people are more likely to be conscious of their food consumption preferences relative to the rural areas. That is, people in the urban areas often earn higher wages (or incomes) and are usually more educated than those in the rural areas. However, urban food prices are usually higher than in the rural areas of production. Rural dwellers usually produce their consumption food items and are more likely to eat from their farms, while selling any surplus output. Moreso, most urban dwellers now patronize away-from-home food market because of the convenience involved and the nature of their work (Jae *et al.*, 2000)

Available data reveal that Nigeria's urban population has been growing at an alarming rate. Nigerian towns and cities are exploding – growing in leaps and bounds. The problems and challenges posed by this rapid urban growth are immense. Very frightening and perhaps more easily observable are the human and environmental poverty reflected in poor nutritional status of urban dwellers, the declining quality of life, and the untapped wealth of human resources that they represent. Housing and associated facilities (water, electricity, etc.) are similarly inadequate; likewise, markets and restaurants (where food items are presented) are typically not conducive. The situation has gone so bad that many Nigerians now live in substandard and subhuman environments plagued by slums and squalor, and similarly inadequate social amenities, such as schools, health and recreational facilities, thereby, making it difficult for them to afford good quality meals.

Presumably, consumers choose their diets to satisfy their needs and wants according to their income level. This determines the proportion of income spent on food items.

If history of the last few decades yields any indication at all, a continual increase in the number of hungry or under-nourished people can be expected. This situation cannot support a rapid growth of the Nigerian economy since it is very difficult for a hungry person to differentiate between right and wrong, not to talk of contributing positively to the economy through the production of goods and services. This research work, therefore, derives its justification from the need to analyse food expenditure patterns of residents in the study area, for as long as the number of under-nourished is increasing, the under-development situation in Nigeria will continue to be more discouraging. This situation raises fundamental questions: what is the average amount spent on food monthly? What are the determinants of food expenditure of the urban dweller? The study will therefore, analyze the food expenditure patterns among households in the study area. In pursuance of this, it will examine the amounts spent on food (monthly average) by respondents; examine the factors affecting the food expenditure of respondents and make policy recommendations based on the research findings.

### **RESEARCH METHODOLOGY**

This study was conducted in Ibadan South-west Local Government Area of Oyo State. The study area has a total land area of 244.55 square kilometres, and a total population of 227,047 people (1991 Census Figures). The area is 150 km from Lagos, the commercial nerve center of Nigeria and 659 km from Abuja, the Federal Capital Territory.

The primary data used for the study were collected through administration of structured questionnaire tailored towards realizing the objectives of the study. Stratified random sampling technique was employed to select

the respondents from the study area. The households were stratified into 3 categories (strata) namely low income earners (less than ₦20,000 monthly income); middle income earners (between ₦20,000 and ₦50,000 monthly income.) and high income earners (more than ₦50,000) and 40 households were randomly selected from each stratum. Thus, a total of 120 respondents were used for the study. The descriptive statistics and ordinary least square regression were used to analyse the data collected.

Specifically, the ordinary least square regression was employed for the determination of the factor influencing household's food expenditure. Following Wonnacott and Wonnacott (1970) and Olayemi (1997), the functional relationship is given as:

$$Y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, U)$$

where,

- Y = Household estimated monthly food expenditure (₦),
- X<sub>1</sub> = Age of household head (years),
- X<sub>2</sub> = Education of household head (years spent in school),
- X<sub>3</sub> = Household size,
- X<sub>4</sub> = Household income (₦),
- X<sub>5</sub> = Occupation of household head (salary earner = 1, otherwise = 0),
- X<sub>6</sub> = Household dependency ratio(%),
- X<sub>7</sub> = Education of housewife (years spent in school), and
- U = Error term

The following forms of the regression model were tried on the data; linear, semi log and double logarithm functional forms and were fitted for the purpose of selecting

the lead equation based on the number of significant variables, coefficient of multiple determination (R<sup>2</sup>) and the signs of coefficient, F value and economic reasoning.

## RESULTS AND DISCUSSION

### *Socio-economic Characteristics of the Respondents*

The socio-economic characteristics of the household heads are as presented in the table below;

Table 1 shows that majority of the household heads were males (82.5%); married (65 %) and all of them had one form of formal education or the other. These imply that most of the households were male – headed and they could be easily reached by promotional programmes (on food) using the media, including leaflets and sales persons (where necessary) due to their level of education.

It was also revealed that majority of the respondents fell within the age bracket of 30 and 39 years (55 %); mostly salary – earners (65 %); had an average of 5 people in their household while most of them (49.2 %) purchased their food stuffs from the market on a monthly basis. This is not far – fetched from the fact that majority of them were salary – earners earning their income on a monthly basis. The age distribution also showed that most of the respondents were still within the active age group.

### *Analysis of the Amounts Spent on Food (Monthly Average)*

The analysis of the amounts spent on food (i.e. monthly average), considering food eaten at home and food eaten away from home are as presented in Table 2.

It is obvious from the table that about 70 %

of the respondents spent between ₦5,000 and ₦20,000 on Food Eaten at Home; about 54 % spend ₦3,000 or less on Food Eaten Away From Home, while majority (about 52 %) spend ₦10,000 or less on Food eaten at Home and Food Eaten away From Home.

### ***Problems encountered in purchasing foodstuffs***

The analysis of the problems and constraints encountered by the respondents in purchasing food stuffs from the market for home consumption are as presented in Table 3.

**Table 1: Socio-economic Characteristics of Household Head**

Socio-Economic Characteristics		Frequency	% of Total
Sex	Male	99	82.5
	Female	21	17.5
Marital Status	Single	27	22.5
	Married	78	65
	Single Parent	9	7.5
	Divorced	2	1.7
	Widowed	4	3.3
Level of Education	Primary	1	0.8
	Secondary	15	12.5
	Tertiary	95	79.2
	Adult Education	9	7.5
Age (years)	Below 30	11	9.2
	30 – 39	66	55
	40 – 49	17	14.2
	50 – 59	11	9.1
	60 & Above	15	12.5
Occupation	Salary Earner	78	65
	Self Employed	42	35
Household Size	1 – 4	64	53.33
	5 – 9	52	43.33
	10 & Above	4	3.4
			Average = 5
Frequency of Food Stuff Purchase	Weekly	24	20.0
	Once in 2 Weeks	25	20.8
	Monthly	59	49.2
	Once in 2 Months	12	10

Source: Field Survey Data (2005)

**Table 2: Analysis of the Amounts Spent on Food (Monthly Average)**

	Amount (N)	Frequency	% of Total
Food At Home	< 5000	28	23.3
	5001 – 10000	48	40
	10001 – 15000	19	15.8
	15001 – 20000	17	14.2
	> 20000	8	6.7
Food Away From Home	< 1000	22	18.3
	1000 – 2999	43	35.8
	3000 – 4999	16	13.3
	5000 & Above	39	32.5
Total amount spent on food	0 – 5000	32	26.7
	5001 – 9999	31	25.8
	10000 – 14999	21	17.5
	15000 – 19999	21	17.5
	20000 & Above	15	12.5

Source: Field Survey Data (2005)

**Table 3: Analysis of the problems and constraints encountered by the respondents**

Problem Encountered	Frequency	% of total
Long distance.	54	45.0
Absence of credit facility	12	10.0
Absence of vehicular asset	18	15.0
Markets are not conducive	36	30

Source: Field Survey Data (2005)

From the table above, it can be seen that 45 % of the respondents had problems of covering a long distance between their houses and the market centers to purchase food stuffs. Also, 30 % had problem about markets not being conducive for purchase of food stuffs in terms of the high price of food items. Absence of vehicular asset and credit facility accounted for 15 and 10% of the problems, respectively. The problem of credit facility made it difficult for respon-

dents to embark on economic activities that would have increased their income and make it possible for them to purchase and consume quality food. Similarly, most of the respondents could not patronize markets where food stuffs are relatively cheap due to lack of vehicular asset. This, if available, would have afforded them the opportunity of buying large quantity of food for consumption where available at a reduced price.

### ***Determinants of Monthly Food Expenditure***

This section presents the results of the regression analysis which discusses factors that determine the food expenditure among the respondents in the study area. The lead equation was selected based on certain econometric and statistical criteria (stated earlier). Using these criteria, the linear model was found to be the best and was, therefore, chosen as the lead equation for further analysis. The equation was significant at 1% with an F- value of 11.39; the coefficient of multiple determination ( $R^2$ ) 0.438 implies that 43.8% of the total variation in the household monthly food expenditure was explained by the identified factors. The  $R^2$  value is however low as about 57% of the variation in food consumption expenditure is unexplained by the estimated model. The significance of the F – Value implies that all the significant variables had impact on the household monthly food expenditure of respondents in the study area.

The linear equation is given as;

$$Y = 4490.326 + 112.414X_1^{***} + 364.215X_2^* + 06.111X_3 + 0.199X_4^* + 0.199X_5^* + 43.481X_6 - 7.368X_7$$

(-1.356) (1.684) (2.826) (0.337) (5.524) (-1.808)  
(1.596) (-0.85)

Values in parenthesis are t-values

\*Variables are significant at 1% level;

\*\*\*Variables are significant at 10% level

The result reveals that all the variables will lead to an increase in monthly food expenditure except household ( $X_5$ ) and education of housewife ( $X_7$ ). However, only age( $X_1$ ), education( $X_2$ ) and household income( $X_4$ ) would lead to significant increase in monthly food expenditure. The positive relationship between the level of education

of the household head and the household monthly food expenditure is similar to the findings of Oji (2001) from the study conducted on food consumption patterns in Nsukka Urban. He submitted that, the level of education of the household head was a significant and positive determinant of household food expenditure. This is not surprising because education brings awareness on the importance of quality food to the body and the readiness to pay for it to increase the nutritional standard of the household. Similarly, the positive relationship between the household monthly income and household monthly food expenditure is consistent with that of Aromolaran (2004) who found out that income is a major determinant of household food expenditure. By implication, as the income level of the household head increases, more money is available for purchase of necessary food items for the entire household. From the result, the amount spent on food will rise by N106 if the income rises by ₦1. Basically, income growth has been a major source of increase in food expenditure simply because it determines the ability to pay for it. Policy that will ensure increase in income should therefore be put in place.

### **CONCLUSION AND RECOMMENDATIONS**

This paper has attempted to examine the food expenditure patterns of urban households in Ibadan Southwest Local Government Area of Oyo State. Particular attention was focused on the determinants of monthly food expenditure in the study area. The study found income and level of education of the household head to be the determinants of household monthly food expenditure. Thus, the urban dwellers stand to benefit from income increase and nutrition education. This suggests the need to raise the

income level of the populace through salary increase or better business environment to make good quality food affordable for them in order to meet the basic nutritional requirement. Also, the local government authority should embark on enlightenment programmes that will educate the urban dwellers on the need to eat good quality and hygienic food. The study also reiterated the problems faced by the urban dwellers in the purchase of food. It is therefore expected that the government will look into the constraints and provide enabling environment for the stability of prices of food items in the market and thereby make them available and affordable.

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