COST AND RETURNS ANALYSES OF LOCAL CHICKEN MARKETING IN KWAMI LOCAL GOVERNMENT AREA, GOMBE STATE.

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ABSTRACT

The research centered on cost and returns of local chicken marketing in Kwami Local Government area of Gombe state. Well-structured questionnaires were administered to 120 respondents purposively and randomly select from three markets. Data collected were analyzed using descriptive statistics, and inferential statistics. The results revealed that, the mean age of local chicken trader's was within 38 years with 76.7%, most of the respondents (92.5%) are males, and (88.3%) were married. The majority (55.8%) had no formal education, also the result revealed that 84.2% of the respondent were local chicken traders' only with no other occupations to supplement their household earnings. The majority (55.8%) had household size ranging from 6 – 10 persons. The result revealed that 100% purchased their local chicken. Furthermore, the result revealed that purchasing cost for local chicken constituted 97.91% (₦ 7,199707) of the total costs. And to get the total revenue is sum of expected (sold birds) and unexpected revenue (accidental egg) to ₦7,908600 and ₦39,080.18 respectively. Hence, the result revealed total revenue for all the bird (local chicken) to be ₦794,768.18, total revenue per bird to be ₦1,013.74, Gross margin for all bird to be ₦594,085.002 and Gross margin per bird to be ₦75.75 was realized. The coefficient were influenced by the socio-economic characteristics included in the regression analysis. Hence, revealed occupation to be significant at 10% use as constant, no level of significance on age, gender, household size and marketing sustainability respectively while marital status and education were also significant at 5% respectively.

KEYWORDS: Socio economics, cost, return, local chicken, Marketing, kwami

INTRODUCTION

Poultry production is unique in that it offers the highest turnover rate and the quickest returns to investment outlay in the livestock enterprises (Sanni, and Ogundipe, 2005). According to Robert (1992) ,small farming families, land-less laborers and peoples with incomes below the poverty line were able to raise chicken with low inputs and harvested the benefits of eggs and meat via scavenging feed resources. Poultry meat and eggs though the major source of animal protein is still unable to meet up the protein deficiency of the world (Igado and Aina, 2010). Local chicken production which is still important in low food deficit in the state, is an appropriate system supporting the fast growing human population with quality protein Kperegbeyi J.I, *et al.,* (2009). Local chicken are adapted to local climate and harsh ecological condition and can withstand and survive local disease condition and therefore less veterinary attention Paul *et al*. (2003).

Hellin *et al.,* (2005) reported that understanding of village chicken functioning and marketing structure are a pre-requisite for the development of market opportunities for rural households. A research study on local chicken is needed to identify marketing participants and as well as the challenges, so as to provide possible solution to the challenges.

MATERIALS AND METHODS

Kwami is one of the Local Government Areas in Gombe state occupying an area of 1,787Km^2 and a population of 195,298 at the 2006 census. The study has two parts that are market and famers survey. The market survey was carried out in three purposively selected markets which are: Malam sidi market, Kurugu market, and Abuja Bula market. 40 questionnaires were randomly administered in each of the selected market totaling 120 questionnaires across the three markets. Data obtain from local chicken traders, were analysis using descriptive statistics such means, minimum, maximum and

percentage; and regression analysis. The regression model used is as specified in equation (1) according to Girei A.A. *et al.*, (2013). The Regression model was used to estimate the influence of some selected socio-economic variables on the total revenue of local chicken marketers.

$$Y = a + b_1X_1 + b_2X_2 \ldots . b_6X_6 + e \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{(1)}$$

Where; Y = Estimated total revenue (₦),

X_1 = Age (years), X_2 =Gender (sex), X_3=Marital status (1=married; 0=otherwise), X_4 = Education (1=No formal, 4=tertiary), X_5= Household size (member), X_6 = Marketing sustainability (number of members), b_1– b_6 = regression coefficients and a=Constant (occupation), e=error term

To obtain the Total revenue, Gross margin per group and Gross margin per bird in marketing the farm budget model was employed. Thus, costs-return analysis described by Olukosi J.O, Erhabor P.O., (1980).

Table 1: Socio-economic characteristics of local chicken marketers.

VARIABLES	FREQUENCY	PERCENTAGE (%)	MEAN	MINIMUM	MAXIMUM
GENDER					
Female	9	7.5			
Male	111	92.5			
AGE					
<30	12	10.0			
31-60	92	76.7	37.50		
>61	16	13.3			
MARITAL STATUS					
Single	10	8.3			
Married	106	88.3			
Divorced	2	1.7			
Widow/Widower	2	1.7			
EDUCATION					
No Formal Edu.	67	55.8			
Primary Edu.	23	19.2			
Secondary Edu.	14	11.7			
Tertiary Edu.	16	13.3			
OCCUPATION					
Civil Service	11	9.2			
Local chicken trade	101	84.2			
Farmer	7	5.8			
Other	1	0.8			
HOUSE HOLDSIZE					
1-5	23	19.2			
6-10	67	55.8			
11-20	27	22.5	5.5	1.00	23.00
20 and above	3	2.5			
SOURCE OF LOCAL CHICKEN					
Inherited	0	0			
Gift	0	0			
Buy	120	100			

Source: Field survey (2020)

Table 1. Showed that the majority 76.7% of the respondents were the age group 38 years follow by those above 60 years (13.3%), those below 30years of age (10%). This is in line with Mohammed *et al*., (2013) that says age is one of the factors that influence traders' decision making in resource

allocation, managerial ability and responsibilities. Similarly, table 1 showed that the majority (88.3%) of the respondents were married which agrees with the findings of Girei *et al*., (2014) who found that 73.3% of the livestock marketers in central zone of Adamawa State were married as well as Oladoja. *et al.,* (2008) who stated that marriage is an important factor in the livelihood of individuals in the society as it is perceived to confer responsibility on individuals. Furthermore, Table 1 showed that the majority (55.8%) of the respondents had no formal education. Adoption of agricultural innovations is also easier and faster among the educated farmers Njoku, (1991) and Amaza, *et al.* (2006). Similar as Oguoma (2003) reported that, level of education attained increases the ability of the marketers to understand and evaluate information on new techniques. Also, Table 1 showed that the majority of the respondents (84.2%) were primarily local chicken traders using that as a means of livelihood. Majority (55.8%) of the respondents had household sizes ranging between 6 and10 with a mean household size of about 6. This is in line with the findings of Olasunkanmi (2011) who reported, the consumption analysis of proteinous food. All the respondents sourced their local chicken through purchase for trading.

Table 2. Costs and Returns of local chicken marketing in Kwami Local Government area Gombe state

VARIABLE COST ITEMS	QUANTITIES	PRICE/UNIT (#) (Return/Cost)	TOTAL (#) (Return/cost)	PERCENTAGE (%)
Local Chicken	7840.00	918.33	7199707.2	97.91
Feed (per/kg)	340.00	217.16	73834.4	1.00
Medication	102.00	102.92	10497.84	0.14
Transport	1013.64	8.45	8565.258	0.12
Electricity	131.70	131.70	263.4	0.004
Tax	121.00	77.50	9377.50	0.128
Labor	251.00	204.58	51349.58	0.698
Total variable cost per group			**7353595.178**	
Total variable cost per bird			**937.96**	
REVENUE				
Accidental Egg	1283	30.46	39080.18	
Sold Birds	7840	1008.75	7908600	
Total revenue			7947680.18	
Revenue per bird			1013.74	
Gross margin (for all the birds)			594085.002	
Gross margin per bird			75.78	

Source: Field survey (2020)

Table 2. **Costs and Returns of Local Chicken Marketing in Kwami Local Government Area Gombe State**

Costs of local chicken marketing were considered as; variable and fixed costs perhaps fixed has no significant different in local chicken trading. This is line with Haruna *et al*., (2012) while revenue were obtained from the sales of bird and accidental egg. The marketing cost is the difference between the amount paid by the ultimate consumers and the amount received by the trader. The marketing costs involved in local chicken trading in the research area is the sum of the cost of the local chicken , feeding costs, costs of medication, transport cost, costs of casual labour, taxes, depreciation on durable items such as feeders, drinkers, carpentry works and other costs associated which had been added to labour. Hence, Table 2 shows the total variable cost and variable cost per bird. The results revealed the total variable cost of the all birds and variable cost per bird were ₦7353595.178 and ₦937.96 respectively. The results further revealed the local chicken cost and the cost of feeding accounted 97.91% and 1.00% of the total variable costs respectively. The gross margin for all birds (GM) and gross margin per bird are ₦ 594085.002 and ₦ 75.78 respectively were realized from the sales of local chicken respectively.

Table 3. Socio-Economic Factors influencing Local Chicken Revenue

Model	Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
	B	Std. Error	Beta		
(Constant)	2.498	.399		6.265	.000*
Age(x_1)	-.014	.096	-.015	-.141	.888^{***NS}
Gender(x_2)	.022	.162	.014	.137	.892***
Marital status(x_3)	-.214	.103	-.204	-2.076	.040**
Education(x_4)	-.116	.037	-.293	-3.162	.002**
Household size(x_5)	.036	.065	.061	.563	.574^{NS}
Marketing sustainability (x_6)	.014	.056	.027	.257	.798^{***NS}

a. Dependent Variable: occupation

Level of significance; ***=1%; **=5% and *=10%

Table 3: Showed that occupation has the constant variable of the respondents had positive coefficient which implies that it had direct effect on local chicken marketing hence, there was kin interest and higher probability of in local chicken trading and it was significant at 10% which showed to be an important factor that determine the cost and returns of local chicken trading. The age of the respondents had no coefficient which implies that it had no direct effect on local chicken marketing hence showed no important factor on determine the cost and returns of local chicken trading. Similarly gender had no coefficient, no respondents which also implies that it had no direct effect on local chicken marketing ,hence showed important factor in determine the cost and returns of local chicken trading. Marital status of the respondents had positive coefficient which implies that it had direct effect on local chicken marketing hence, that as it increases, the higher probability of involves in local chicken trading and it was significant at 5% which showed to be an important factor that determine the cost and returns of local chicken trading. Education of the respondents had positive coefficient which implies that it had direct effect on local chicken marketing therefore, that as it increases, the greater probability of involves in local chicken trading and it was significant at 5% which also showed to be an important factor that determine the cost and returns of local chicken trading. Household size of the respondents had no coefficient which implies that it had no direct effect on local chicken marketing which showed no important factor on determine the cost and returns of local chicken trading. Marketing sustainability of the respondents had no coefficient which implies that it had no direct effect on local chicken marketing which also showed no important factor on determine the cost and returns of local chicken trading.

CONCLUSION The study showed that the majority 76.7% of the respondents were aged 38 years, males, married, purchase their local for trading and had no formal education with gross margin of ₦ 75.78 in per sale of a local chicken bird which only marital and education status are the socio-economic characteristics showed significant level.

RECOMMENDATION Animal protein still remains the major source of proteins; as shown by positive gross margins but not high to sustained investment by individuals, there is need to educate people in the area to be aware on the benefits of local chicken meat compare to "agric chickens" broiler birds and it's likes which can easily improve market price and furthermore the gross margins of local chicken trade's and to obtain formal education in other to improve their marketing skills, standard of living and compete or meet the developing communities.

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