Cost and Return Analysis of Local Chicken Marketing in Mubi North Local Government Area of Adamawa State, Nigeria

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Abstract— *The study examined the cost and return of local chicken marketing in Mubi north local government area of Adamawa state. Data were collected from 120 respondents with aid of structured questionnaire using purposive and random sampling technique. Descriptive statistics, net income analysis, marketing efficiency (ME) were the analytical tools employed. The result revealed that local chicken marketing in the study area is mostly undertaken by the male gender (85%) who were in their active age between the age of 30-60 years. Majority of them had one form of formal education or the other and have marketing experience of more than five years. On the profitability of the enterprise a total variable cost ₦7887.00 was estimated using 2014 price of input and output. Cost of transportation accounting for 72.84%. The total revenue from the enterprise was estimated ₦13, 100 given the net income of ₦5213 an indication that the enterprise is profitable. A high marketing efficiency of 160% was computed an indication that the profit maximization motive of local chicken marketing is assured. It is recommended that the marketers should be motivated and encouraged with soft loans so as to expand their production.*

Keywords— Cost and return, marketing efficiency, Mubi, Adamawa state.

I. INTRODUCTION

Local chicken (Gallus Domesticus) 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 (Kperegbey, et al 2009). The local chicken usually comprise 5 – 20 birds kept by one family and most often manage by women who provide them with an independent source of income (Ikani and Annatte 2000). 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)

The total poultry population in Nigeria has been estimated between 133 – 165 million, however chicken composed of 91% of this population while guinea fowl (4%), ducks (3%), turkey and other (2%) (FLDPS/RIM, 1991)

In this study, therefore an attempt has been made to determine the cost and return of local chicken marketing in Mubi North area of Adamawa State. The specific objectives were to:

1. determine the socio – economic characteristics of local chicken marketers
2. analyse cost and return associated with local chicken production and marketing.
3. estimate the measures of marketing efficiency associated with chicken marketing in the study area.

II. METHODOLOGY

STUDY AREA

Mubi North local government of Adamawa state lies on the west bank of the Yedseram River, a stream that flows into Lake Chad and is situated on the western flanks of the Mandara Mountain. It shares common boundaries with Borno State to the North Hong Local Government Area to the West, Maiha Local Government to the South and Cameroun Republic to the East.

Temperature is normally warm to hot with minimum temperature of 120c and maximum temperature of 370c (Adebayo, 2004). The ethnic groups are mainly Fali, Gude, Marghi and Fulani. The inhabitants are predominantly farmers and traders

NATURE AND SCOPE OF DATA

The study used mainly primary data, collected from the administration of structured questionnaires to 120 respondents. Purposive and random samplings were used to select respondent for the study.

ANALYTICAL TOOLS

Descriptive statistics involving the use of frequency distribution, tables and the mean; and Net income analysis were employed as the tools for analysis. The net farm income (NI) is expressed as:

$$NI = TR - TVC - TFC \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

TR = Total revenue (₦) obtained as the product of per unit cost of chicken multiplied by the total number of the chicken.

TVC = Total variable cost (₦)

TFC = Total Fixed Cost (₦)

The marketing efficiency (ME) was further used to determine how effective price of local chicken reflect the cost incurred in the marketing system, i.e the price that consumers pay for the local chickens delivered by the marketing system should adequately reflect all marketing cost. In perfectly competitive economic environment, prices will definitely reflect all such cost (Olukosi et al 2007).

$$ME = \frac{\text{Value added by marketing X 100}\ldots}{\text{Cost of marketing}} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

III. RESULT AND DISCUSSIONS

TABLE 1: SOCIO – ECONOMIC CHARACTERISTIC OF THE RESPONDENT.

Variable	Frequency	Percentage
Sex		
Male	102	85
Female	18	15
Marital Status		
Single	20	16.67
Married	100	83.33
Age		
< 30	38	34.55
41 – 60	55	50
>60	17	15.45
Main occupation		
Local chicken marketers	73	66.36
Farming	23	20.91
Others	4	3.73
Educational level		
Non – Formal	36	32.73
Primary	25	22.73
Secondary School	47	42.73
Tertiary	2	1.83
Household Size		
1 – 5	62	56.36
6 – 15	34	39.9
> 15	14	13.72
Marketing Experience		
1 – 5	46	41.82
6 – 15	38	34.55
> 15	26	33.63

Source: Field survey 2014.

SOCIO – ECONOMIC CHARACTERISTICS OF THE RESPONDENT

The result in Table 1 revealed that 85% of the respondents were male and only 15% were female, an indication that local chicken marketing in the study are undertaken by the male folk. Consequently, majority of them were married (83.33%) The implication of marital status on agricultural production can be explained in terms of the supply of agricultural family labour. The supply of family labour would be more where the household heads are married. This is in consonance with the findings of Zalkuwi et al 2014

The farmers were within the age bracket 30 – 60 years (84.55%) an indication that they are in their most productive age bracket. This has direct bearing on the availability of able-bodied manpower for primary production. Moreover, age influences the ability to seek and obtain off-farm jobs and income, which could increase farmers' income and ultimately their production capacity. Parikh and Shah (1995), Maurice (2005), Amazaet al. (2006) Fasasi (2007) and Zalkuwi(2014) reported a significant relationship between farmers' age and efficiency in agricultural production where younger farmers have the tendency to operate more efficiently than older farmers.

The respondent main occupation shows that 66.36% were into full time local chicken marketing, this result shows that majority of the respondents were into local chicken marketing as primary occupation. On the other hand their educational level, 32.73% had no formal education while 67.27% had acquired different levels of formal education. This study reveals that literacy level is high among the respondents and this could have implication on agricultural production in the area. Education affects productivity through a choice of better inputs and output, and through a better utilization of existing inputs. Adoption of agricultural innovations is also easier and faster among the educated farmers than the uneducated farmers as orchestrated by Njoku (1991) and Amazaet al. (2006) and thus, moves them closer to the frontier output.

Their household size distribution revealed that Most of them had a small house hold size of 1-5 (56.36%)

Items	**Value(₦)**	**Percentage (%)**
Variable Cost		
Transportation	5745.00	72.84
Feeding	1735.00	21.20
Tax	203.00	2.57
Medication/Vaccine	204.00	2.60
Total Variable cost (TVC)	7887.00	100
Return		
Total Revenue (TR)	13,100	
Net Income (TR – TVC)	5213	
Total number of bird sold per marketer	132	
B-C ratio 1.66		
Return on sale ratio		39.50%
Market Efficiency (ME)		160.09

Source: Field survey 2014

COST AND RETURN

The net income from chicken marketing was estimated using 2012 prices of input and output. The information in Table 2 revealed that the total variable cost incurred by the entire respondent is estimated to be ₦7887.00 with the cost transportation accounting for 72.84%. This is attributed to the high cost of transportation in the area. Additionally cost of feeds accounted for 21.20% of the total variable cost and is attributed to the system of animal husbandry practice which require continuous supply of quality feed during the marketing of local chickens.

Further more, on the return from the marketing; the total revenue from the sale of 132 local chickens is estimated ₦13, 100 while the net income is estimated to be ₦5213.00 The B-C ratio is 1.66.

To determine marketing efficiency in order to ascertain the improvement of the operation of buying and selling and also pricing aspect to reflect consumers' wishes, a coefficient of 160.09% is estimated

$$ME = \frac{13,100}{7887} = 160.09$$

This is an indication of higher marketing efficiency. It therefore follows that marketing of local chicken in the study area is efficient; hence the profit maximization motive of the marketers is guaranteed.

IV. CONCLUSION

The study examined the cost and return analysis of local chicken marketing in Mubi North Local Government Area of Adamawa State. Primary data formed the basis for the study. Data were collected from 120 respondents with the aid of structured questionnaire using purposive and random sampling technique. Descriptive statistics, Net income analysis and marketing efficiency were the analytical tools employed. The study revealed that male (85%) dominated the enterprise majority had one form of formal education or the other with a marketing experience of more than five years. Local chicken marketing was found to be profitable and efficient as illustrated by the positive net income of ₦5213.00. A marketing efficiency of 160.09% was computed an indication that the profit maximization motive of marketers is assured. It is recommended that the marketer should be motivated and encouraged with soft loans from the government so as to expand their production.

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