Review

Efficiency of poultry marketers in Owerri municipal Imo State

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The marketing of poultry is gradually becoming a big enterprise in Nigeria as it is currently providing employment to a number of households for sustenance of their livelihood and helping in meeting the protein needs of the people. The study was carried out in Owerri Municipal of Imo State. Two major markets in Owerri municipal (Ekeononwa and Relief markets) were selected purposively for the study based on the fact that the business is mainly undertaken in these areas. 32 marketers of live poultry were purposively selected from the two markets making. Data collection was by questionnaires distributed to the marketers. Data collected were analyzed using simple cost- return models, diagrams and multiple Regression analysis. The result of the analysis showed that the business was profitable. The marketing channel showed the routes the product takes from production to consumption. The significant variables that influenced the marketing efficiency were level of formal education, marketing experience, cost of purchases, patronage level and other marketing costs. Based on these findings, it was recommended that business be encouraged through provision of marketing facilities and enhancing the marketers' capacities using cooperatives. The significant variables that influenced the marketing efficiency should be considered in policy issues.

Key words: Efficiency, poultry, marketers, municipal.

INTRODUCTION

Commercial poultry marketing was introduced in Nigeria in the late 1950s when it became apparent that the expansion of cattle population cannot progress at a satisfactory rate to cope with the increasing demand for meat. The commercial sector consists of layers and broiler units, hatcheries and servicing units and this sector depended heavily on foreign sources for parent stock, commercial day old chick, feed ingredients and equipment.

Agriculturist and nutritionist have generally agreed that developing the poultry industry is the fastest means of bridging protein – deficiency gap prevailing in the country using the different kinds of livestock that can be profitably produced in this country (Ikpi et al., 1979). Estimate from consumption of poultry meat is gradually outstripping most other kinds of meat except beef in Nigeria (Ikpi et al., 1979). It is therefore little surprise that funds invested in poultry production are recouped faster than in any other livestock enterprise.

The major constraints in the development of poultry sector include inadequate supply of day-old chicks, feed and equipment. Internal supply of day old chicks is quite inadequate and this makes it difficult for farmers to replace their stock at appropriate times (Olomu, 1995). Poultry marketing is important because of changing demographic patterns. Population generally moves from the village into the town, perhaps leaving fewer people in the main agricultural production regions. Combined with the general growth in population, this situation provides improved opportunities for rural communities to grow and sale more of their products, particularly in the town earning more money and being able to raise standards of living. The urban folks are able to make their contribution to society without the need to consider constant agricultural activity.

Poultry distribution and production are as old as any other farming enterprise in Nigeria and the business
covers all classes of poultry such as broiler, layer, turkeys, duckling and geese. According to Olomu (1995), the development of poultry sector has been slowed down due to constraints which include inadequate supply of day old chicks, lack of credit and managerial skill and disease, feed and equipment. Absence of marketing facilities such as storage, transportation and processing facilities hinder poultry market especially in developing countries. Experience has shown that poultry product problems are caused by a combination of production and marketing deficiencies and until both are adequately and properly treated and integrated, the problem may be persistent (Udensi, 2003).

An inefficient marketing system is one capable of moving commodities from places of production to areas they are needed in a manner that is beneficial to the producers, marketing intermediaries and consumers (Mehta et al., 2002). Price instability arising from inputs costs and availability, Government policies, weather and market forces equally affect market efficiency (Mehta et al., 2002).

The term marketing efficiency is often used in the evaluating the performance of the marketing process. According to Barker et al. (1985), it reflects the consensus that output of the marketing process should be produced efficiently. Efficiency may be defined as increasing the output-input ratio, which generally may be accomplished in any one way of the four ways;

i. Output remains constant while input decreases.
ii. Output increases while input remains constant.
iii. Output increases more than input increases.
iv. Output decrease more than input increases.

Two different dimensions of marketing efficiency are able to increase the output-input ratio. Marketing efficiency according to Olukosi and Isitor (1990), may take two forms, they are technical efficiency and economic efficiency. The technical efficiency concern the effectiveness or the competence with which the physical aspects of marketing are performed, while economic efficiency relates to the term of exchange, the degree of competition responsiveness of the marketing system to the consumer decision.

Agricultural commodities move from the farmers to the consumer over time and space this movement is made possible through various market intermediaries that operates in the marketing system. The chain of intermediaries through which various commodities pass from producers to consumers is called a marketing channel (Reddy et al., 2004). Marketing channel can refer to the sequence through which goods passes from producers to consumers (Kohl and Uhl, 1980). Marketing channel can also be single stage that is, where the flow of good is just between producers and ultimate consumer, the channel is said to be single stage, and multistage. This multi-stage involves every other marketing intermediary known as middle men (Lipsey et al., 1995). The marketing channel also aid the marketing efficiency as commodities are moved from production points to places they are needed in time, forms and in the quantity needed at minimum costs.

The broad objective of this study examine the costs, return and efficiency of the market, examine the marketing channel for poultry products, and analyze the determinants of efficiency of the marketers.

**METHODOLOGY**

The study was carried out in Owerri municipal in Imo State and two major markets in Owerri municipal (Ekeononwa and Relief markets) were selected purposively. 32 of live poultry marketers were purposively selected from the two markets.

The first objective on the costs, return and efficiency of the marketers were analyzed as follows:

Net return (profit) = Total Return – Total cost

Marketing efficiency = \frac{Total returns}{Total cost}

The second objective on marketing channel was analyzed with a diagram while the third objective on determinants of marketing efficiency was analyzed using a multiple regression model implicitly stated as follows:

\[ Y = f(x_1, x_2, x_3, x_4, x_5, x_6, x_7) \]

Where:

- Efficiency of the poultry marketers (Total returns)
- Total cost
- Age in years
- Marketing experience in years
- Household size (Number of people living with the respondents)
- Level of patronage per month
- Purchase cost (₦)
- Other marketing cost (transportation, market charges, capital).
- Level of formal education in years

**RESULTS AND DISCUSSION**

**Costs, returns and marketing efficiency of poultry marketers**

The average monthly costs and returns, net returns and marketing efficiency of the poultry marketers are shown in Table 1.
Table 1. Costs and Returns of poultry marketers.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average variable costs</td>
<td>N231,200</td>
</tr>
<tr>
<td>Average fixed costs</td>
<td>N11,300</td>
</tr>
<tr>
<td>Total costs</td>
<td>N242,500</td>
</tr>
<tr>
<td>Average Returns from sales</td>
<td>N298,520</td>
</tr>
<tr>
<td>Net Returns</td>
<td>N56,020</td>
</tr>
<tr>
<td>Marketing Efficiency</td>
<td>1.23</td>
</tr>
</tbody>
</table>


Table 1 shows that poultry business was profitable in Owerri Municipal of Imo State. The business records an average monthly return of N 56,020. This is a proof of the profitability and viability of the business in the areas and this is higher than the National Minimum wage in Nigeria. Furthermore, the business was economically efficient in terms of input-output ratios. A marketing efficiency of 1.23 was recorded showing that for every N1 invested or incurred as cost in the business, a return of N1.23 was received. Therefore, the marketers maintained return to capital invested in carrying out the marketing activities (Ajayi, 2010 and Enete, 2013).

The marketing channel for poultry

Figure 1 is a schematic representation of the marketing channel for poultry. Normally the trend begins from the egg production to hatchery, the distributors to poultry farmers then to wholesalers to retailers and finally to consumers. Whereas some of these levels are ignored by some of the marketers, such as those that move directly from hatchery to wholesalers and from distributors to wholesalers, or from poultry farmers to consumers and from poultry farmer to retailers and directly from wholesalers to consumers. These alternate routes are shown by the other non arrow lines in the diagram. This agrees with the work of Reddy et al. (2004 which revealed different intermediaries (marketing chain) through which poultry marketing were done. Also, as the product moves from one point in the marketing channel to another, costs are incurred and value is added which influences the price of the product at every level until it gets the final consumers.

Determinants of marketing efficiency of the poultry marketers

The result of regression analysis which reveals the determinants of marketing efficiency of the poultry marketers is shown in Table 2.

Exponential regression was chosen as the lead equation based on the number of significant variables, the value of $R^2$ and F-ratio. The $R^2$ was 0.766 meaning that about 76.6% of the variation in the marketing efficiency was explained by the independent variables while the remaining 24.4% was accounted for by the error term.

Marketing experience had a negative significant effect on the efficiency. This does not agree with apriori expectation but may due to the fact in developing countries; some marketers do not maximize their experience to improve efficiency. Thus, instead of having a positive correlation, the reverse was the case.

Household size was positively significant showing that
Table 3. Determinants of marketing efficiency of poultry marketers.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Linear</th>
<th>Semi-log</th>
<th>Double-log</th>
<th>Exponential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.201</td>
<td>9.330</td>
<td>4.668</td>
<td>0.807</td>
</tr>
<tr>
<td></td>
<td>(4.158)***</td>
<td>(2.080)**</td>
<td>(2.085)**</td>
<td>(3.143)***</td>
</tr>
<tr>
<td>Age</td>
<td>0.006</td>
<td>1.738</td>
<td>0.930</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(0.275)</td>
<td>(1.462)</td>
<td>(1.567)*</td>
<td>(0.335)</td>
</tr>
<tr>
<td>Marketing experience</td>
<td>-0.096</td>
<td>-1.208</td>
<td>-0.584</td>
<td>-0.044</td>
</tr>
<tr>
<td></td>
<td>(-2.691)***</td>
<td>(-4.592)***</td>
<td>(-4.449)***</td>
<td>(-2.531)***</td>
</tr>
<tr>
<td>Household size</td>
<td>0.183</td>
<td>0.445</td>
<td>0.177</td>
<td>0.83</td>
</tr>
<tr>
<td></td>
<td>(2.149)**</td>
<td>(0.647)</td>
<td>(0.516)</td>
<td>(2.015)**</td>
</tr>
<tr>
<td>Level of patronage</td>
<td>0.010</td>
<td>0.607</td>
<td>0.310</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td>(1.977)*</td>
<td>(1.081)*</td>
<td>(1.969)*</td>
<td>(1.718)*</td>
</tr>
<tr>
<td>Purchased cost</td>
<td>4.855</td>
<td>-0.968</td>
<td>-0.505</td>
<td>2.326</td>
</tr>
<tr>
<td></td>
<td>(1.840)*</td>
<td>(-2.496)**</td>
<td>(-2.609)***</td>
<td>(1.817)*</td>
</tr>
<tr>
<td>Other marketing cost</td>
<td>-3.76</td>
<td>-0.645</td>
<td>-0.347</td>
<td>-1.974</td>
</tr>
<tr>
<td></td>
<td>(-5.461)***</td>
<td>(-1.849)*</td>
<td>(-1.990)*</td>
<td>(-5.894)***</td>
</tr>
<tr>
<td>Level of formal education</td>
<td>0.64</td>
<td>0.66</td>
<td>0.279</td>
<td>0.028</td>
</tr>
<tr>
<td></td>
<td>(3.104)***</td>
<td>(1.174)</td>
<td>(0.993)</td>
<td>(2.845)***</td>
</tr>
<tr>
<td>F-ratio</td>
<td>9.526***</td>
<td>5.764**</td>
<td>6.335***</td>
<td>11.252***</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.735</td>
<td>0.658</td>
<td>0.679</td>
<td>0.766</td>
</tr>
</tbody>
</table>

Source: data from field survey 2012.

*=significant at 10%, **= significant at 5%, ***= significant at 1%, += lead equation

increase in household size improves efficiency. This was because large household size provides additional hands that can reduce marketing costs thereby increasing efficiency.

Patronage level and purchase costs showed positive relationship with efficiency. This was because when purchase cost increases, marketers increase their price in a proportion greater than that increase in cost thereby making more profits (Zeberga, 2010). Patronage level can increase the efficiency of marketer because with higher patronage, there will be more returns and expansion of capacity which can help in cost reduction through bulk purchases.

Other marketing costs such as transportation, loading and off loading, market charges and fixed costs were negatively significant. This is because the higher these marketing costs, the higher the total cost of the commodity which on the other hand affect the total profit of the marketers hence, the efficiency (Zeberga, 2010).

Level of formal education was a positively significant variable that influenced the marketing efficiency of the marketers. This implies that education improves efficiency. This conforms the finding of Mkpado and Onuoha (2012) who reported that increasing years of formal education increases level of efficiency.

**Conclusion and Recommendation**

The study has been able to examine the marketing of poultry in Owerri municipal Imo state. The business was profitable and economically efficient. The marketing channel showed how the product is distributed from points of production to consumption points. The significant variables that influenced the marketing efficiency were level of formal education, marketing experience, costs of purchase, patronage level and other marketing costs. The business posts a sizeable profit capable of sustaining the livelihood of households, thus it should be encouraged. Based on the findings, it was recommended that marketing facilities should be improved upon to reduce marketing costs and thus enhance the level of profits and efficiency in the business. The significant variables that influenced the
marketing efficiency should be considered in policy issues concerning the commodity. Formal enlightenment of the marketers is important as well as encouraging the marketers to form cooperatives to them easily access credit facilities to increase their capacities.

**REFERENCE**


