



Productivity and Marketing of Poultry Products in Ebonyi State

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Abstract

A study was conducted to determine the Productivity and Marketing of Poultry products in Ebonyi State. Data for this study were collected from both primary and secondary sources. The Primary source was collected through the use of interview schedules while the secondary source was collected from Agricultural Daily Farm Records of the various farms visited. Relevant tools such as Frequency distribution Table, Mean and Percentages were used. A four-point Likert scale and Gross Margin analysis were used in analyzing specific objectives. It was observed from the study that male poultry farmers and marketers were 70% while 30% were females. It was also found that 59% of respondents had little or no education. Moreover, the study reveals that a lack of substantial capital advancement affected management system of poultry production. Poor quality feed, birds and high labour cost were the major factors militating against efficient management of poultry farms in the study areas. Result reveals that the problem of diseases, high labour cost, high cost of feed and medication, poor management system and the inability of the poultry farmers to influence the price of their products contributed to the farmer's low productivity. Results reveal that the poultry farmers operated at subsistence levels. Constraints such as low capital, a lack of improved management system, and high interest rates on loans among others were major factors militating against their management in poultry farming. Based on these results, provision of interest-free loans, improve management and service delivery, storage facilities and establishments of good marketing network would be a *sine qua non* towards achieving effective and efficient production and marketing system in the study areas

Keywords: Productivity, Poultry Products, Marketing, Poverty Alleviation, and Ebonyi State

Introduction

Agriculture employs about two-thirds of Nigeria's total labour force. It contributed 42.2% of gross domestic product (GDP) in 2007 and provided 88% of non-oil earnings (Man Yong *et al.*, 2005). These authors stated that the Agricultural GDP contributions for the year 2005 were as follows: 85% for crops, 19% for livestock, and 4% for fisheries and 1% for forestry. More than 90% of the agricultural output is accounted for by small-scale farmers with less than 2 hectares under cropping. It is estimated that 75% (about 68 million ha) of the total land areas has potential for agricultural activities with about 33 million hectares under cultivation (World Bank, 2005). The poultry sub-sector is the most commercialized of all the sub-sectors of the Nigerian Agriculture. Okonkwo and Akubuo (2001) reported that 70% of the Nigerian population are

involved in Agriculture while 41% are involved in raising Livestock. In the last 10 - years, many large-scale operators in the poultry industry have been forced out of business due to various problems ranging from high cost of feed to scarcity of ingredients. Also the high-cost of drugs, unavailability of veterinary services and lack of a good-road network contributed in the problems. Obioha (1992) reported that feed account for about 70% of the total cost of production in poultry. The high-cost of input had resulted to high cost of the animal products such as meat and eggs. Rose (1997) adjudged the poultry industry as a very important source of animal protein in Nigeria. However, the industry is still being plagued with a series of problems ranging from scarcity of feed and the feed ingredients among others.

The scarcity of feed and the feed ingredients has resulted to a competition between man, livestock and Industries. The low production of feed ingredients and the rise in the Human population has also resulted in high competition and high-cost of the available feed ingredients. To increase the productivity of poultry and sustain the high demand for food, especially in the urban areas, there is a need for an effective distribution pattern of poultry products. Kottler (1995) viewed marketing as the social process by which individuals can obtain what they need through creating and exchanging of products. It is also the process that identifies, anticipates and satisfies customer's requirements. Oluyemi and Robert (1991) reported that marketing encourages comparative advantage in agricultural production as the system ensures that whatever is demanded is made available. Poultry products and their marketing constitute one of the major sources of income in agricultural sector in Ebonyi State. High-level productivity and efficient system of marketing poultry products will ensure the economic sustainability of farmers in Ebonyi State and the Country at large.

Methodology

Area of Study

The area under study is Ebonyi State. Ebonyi State is located in the South Eastern Nigeria. The state is made up of thirteen Local Government Areas. It covers a land area of about 5,935 square kilometres and shares boundaries with Benue, Enugu, Cross River, and Abia states in the North, West, East and South, respectively. It is located between longitudes 7°30" and 8°30" East of the meridian and latitudes, 5°30" and 6°45" North of the equator, (Egbu, 2000). The state falls within the tropical rainforest Savannah belts of South Eastern Nigeria. As a result of this, Shrubs, Oil palm and Dika nut trees are the dominant vegetation particularly in the Southern and Central Zones. Two main seasons prevail in the area, the rainy season which spans from late April to early October and the dry season which last from late October to early April. The harmattan season which is a cold period within the dry season, comes around December and lasts till January in most cases. Ebonyi State has an estimated population of about 3 million people (NPC, 2006). Agriculture is the major occupation of the indigenous people with an estimated 85 per cent of the population earning their living from farming, (Egbu, 2000). The people grow crops like rice, yam, cocoyam, cassava, maize, cowpea, groundnut and vegetables, the major cash crops grown are oil palm (*Eleas guinensis*) and Dika nut trees (*Irvingia gabonensis*). There is also traditional rearing of animals (free-range system) such as goats, sheep, cattle and chickens (Egbu, 2000).

Sampling Procedure

A total of 120 small-scale poultry farmers were randomly selected to supply the data needed for this study. A multi-stage random sampling technique was used to sample from local government Farms down to the individual Farms. The first stage involved random sampling of 9 out of the 13 Local Government Areas. This involved the selection of 3 Local Government

Areas from each of the senatorial zones. The local government areas that were used were Ezza-South, Ezza North and Ikwo local government areas from the Central zone. Ohaozara, Ivo and Onicha Local Government Areas from the South zone. Ohaukwu, Abakaliki and Izzi local government areas from the North Zone. At the second stage of sampling, 2 autonomous communities were randomly selected from each of the 9 local government areas. This gave a total of 18 communities. Then, the third stage involved the random selection of 6 farmers from each of the 18 communities sampled; giving a total of 108 and the remaining 12 were shared among the selected respondents for the study.

Data collection

Data collected for this study were based on both primary and secondary sources. The primary source was collected by the use of structured questionnaires and interview schedules while the secondary source was from the Agriculture daily farm records of the various farms visited. The questionnaires were administered to different local government areas selected in the study areas by hand to reflect the different communities.

Analytical Techniques

The data generated from objectives I, II and III were analyzed using descriptive statistics such as mean, frequency distribution and percentages. In meeting objectives IV and V, A four-point Likert model and gross margin analysis were used.

Model Specifications

Likert-Scale Model

$$\bar{X}_s = \frac{\sum f_n}{N_r}$$

Where X_s = means scores (decision rule)

\sum = Summation of:

f = Frequency of each respondents model.

n = Likert-scale nominal value.

N_r = Number of respondents to constraint factor.

A four-point scale was assigned nominal values as follows:

Very great extent = 4

Great extent = 3

Some extent = 2

Not at all = 1

Therefore: $\bar{X}_s \frac{\sum n}{N} = 4+3+2+1 = \frac{10}{4} = 2.5$ decision rule.

Results and Discussion

Socio -Economic Characteristics of Respondents

The percentage and socioeconomic characteristics of respondents are shown in Tables 1-16. It was found that out of a total number of one hundred and twenty (120) small-scale poultry farmers and marketers, only 70% were males while 30% were females (Table 1). Wives of the poultry farmers formed part of the labour force except in cases of single mothers, divorced women and widows. The marital status of the small-scale poultry farmers and marketers based on whether they were single, married, widows or divorced. Table 2 shows that 5% of the respondents were single, while 65% were

men 18.3% were widows and 11.7% were divorced. This shows that productivity and marketing of poultry products among the respondents in the study areas were carried out by mostly married farmers while little interest was shown by farmers that are Single with 5% interest recorded. It was observed that 6.7% of the respondents were below 30 years of age, 15% were ages between 31- 40, and 31.7% fell into the age groups between 41-50, while 46.6% were ages between 50 and above. It could be observed from the study that most of the small-scale poultry farmers were above 50 years of age.

Young men and women appear not to be interested in poultry farming. They migrate to the urban areas in search of white collar jobs (Table 3). In studying the exact household sizes of respondents, it was found that 6.6% had a household Size of 1-2, 8.3% had 3-4, 21.7% had 5-6, and 46.7% had 7-8 while 16.7% had 9 and above households. It was observed that most poultry farmers and marketers in the study areas had their household sizes clustering between sizes of 5-6 and 7-8 people (Table 4). In Table 5, the data analysis shows that 59% of the farmers had no formal education, 28% had primary education, 10% had secondary education and 30% had tertiary education. It is noted from the study that 59% of the farmers in the study areas were illiterates with little or no formal education to enlighten them on how to make good use of their farms in order to bring about maximum productivity. Most of them can neither read nor write. The implication is that the poultry farmers in the study areas cannot easily adopt an innovation being introduced newly to them. Table 6 shows the distribution according to major occupation, 50% of the respondents engaged in poultry farming as their major occupation, 33.3% are engaged in both poultry farming and crop farming, 10% are engaged in poultry farming and marketing of poultry products while 6.7% are engaged in other occupations such as farming and civil service. A greater proportion of the respondents are in poultry farming and marketing of poultry products. Others are engaged in other forms of occupation. Analysis of income of small-scale poultry farmers and marketers of poultry products (Table 7) reveals that 33.3% of the respondents earned below N60,000 and 40.7% earned between N60,000 to N70,000, 4.2% earned between N90,000 and above annually. It could be observed that poultry farming and marketing of poultry products showed good returns on investment (ROI) to the respondents and encouraged the poultry farmers in the study areas (Table 7). Table 8 shows the distribution of the respondents according to their farm sizes, 23.3% of the respondents had less than one hectare of farmland for cultivation and poultry farming, 45% of them had one hectare, and 16.7% had two hectares of land for farming and poultry farming. Similarly, 11.7% had 3 - 4 hectares and 33% had 5 hectares and above in which they used for crop and poultry farming, respectively. It could be observed from the analysis that poultry farming and marketing of poultry products in the study areas could be said to be at subsistence levels as well as commercial to some extent. It was observed that many respondents made use of more than one type of sources

of labour. Some made use of both family labour and hired labour and others used rotational and communal labour. Table 9 shows that out of 120 respondents used, 72.5% made use of family labour and 16.7% used hired labour to supplement family labour. Similarly, 10.8% of the respondents used communal labour. It could be observed from the survey that most of them used family labour and few used communal and hired labour which led to low productivity of poultry and marketing of poultry products in the study areas. Table 10 shows the distribution of the respondents according to their sources of information, 66.7% of the respondents got their information on radio discussion, 8.3% from newspapers and the internet, 12.5% from family and friends, 12.5% of the respondents got theirs from churches and schools. It was observed that the respondents involved in this study got their information from the wrong sources and this may have led to the adoption of false information on how to keep poultry farms as viable businesses (Tables 1-10).

The distributions according to years of experience show that 23.3% of the respondents had between 1-2 years of experience, 37.5% had between 3-4, 31.7% between 5-6 and 7.5% had between 7 years and above. This could be attributed to the high-level of inexperience of the respondents in poultry farming and marketing of poultry products in the study areas. The distribution of respondents according to systems of poultry management is shown in Table 12. The data collected show that 66.7% of the respondents interviewed adopted an intensive system of management in their poultry farming; 29.2% used a semi-intensive system of management and 4.2% adopted an extensive system of management. It was observed from questionnaires and oral interviews that respondents studied, had different reasons for adopting different systems of management. Some of their reasons were for profitability purposes, sanitation and disease out-breaks. It was observed that some of the respondents were found to be inexperienced in poultry management and this had resulted to the low-level of the management functions and poultry farming in the areas.

Types of Birds Kept in Poultry Farms by the Respondents

From the data collected, it appears that most of the respondents keep both broilers and layers in their Poultry Farms. It is noted from the findings that some of the poultry farmers started their poultry farms with the number of birds ranging from 200 to 300 birds for the beginning of their poultry farm businesses. It was observed that many of the poultry farmers made the selection of birds based on local breeds, crossbreeds, exotic breeds, fertility and weight of the birds etc. It was observed from the survey that some of the poultry farms encountered high-rates of mortality due to poor management, poor quality breeds of birds, poor weather, a lack of finance, starvation and inability to keep farm records; all these resulted to low-level of poultry production and marketing of poultry products in the study areas. The gross margin analysis on quarterly poultry farming and marketing of poultry products are

shown in Tables 13a and 13b.

Market Price Spread

The results on gross margin analysis show that the total revenue for poultry production and marketing of poultry products for four months was N168, 000.00, total variable cost was N62, 500.00, and total fixed cost was N52, 000.00. Then the gross margin was calculated and the result was found to be N105, 500.00. This was observed to be good returns on investment (ROI) to encourage small-scale farmers on poultry farming and marketing of its products in the study areas. It was observed that greater proportion of the poultry farmer's capital came from their personal savings and non from the government, thus it showed that source of the capital in financing poultry production and marketing constitute a great problem to the poultry farmers in the study areas. The major source of marketing their poultry products was through consumers, retailers and middlemen who buy in small quantities. The study also reveals that the respondents were unable to influence the price of their commodities and this has grossly affected the prices of their products. The demand for poultry products was found to be relatively lower than any other animal products and this could be attributed to low consumption of poultry products such as meat and eggs in the study areas. The percentage distribution of Farmland acquisition of respondents is shown in Table 14.

Table 14 show the source of farmland acquisition in the study areas. Farmers acquired land mainly by direct inheritance which constituted 60.8% of the respondents, other sources of farmland acquisition were by family allocation, 25% bought Land to be redeemed later, 7.5% got theirs free from friends, and 6.7% got from community allocation. 0% land tenure system however influenced the type of crops or livestock pattern in the areas in relation to its ecological effect and suitability. The study reveals a number of things about land acquisition in the study areas. Land is traditionally owned individually through inheritance. It is usual for people of the same kindred to own land communally but the power to control is vested on the head or the eldest son of the kindred as the case may be. These consequently lead to land fragmentations which affected agricultural production in the study areas. Constraints to poultry products marketing are shown in Table 15. Table 15 show the degree or extent to which the following factors influenced poultry farming and its products demand. Lack of finance which is always a problem to poultry production (3.4), a lack of transportation of poultry products to market (3.3), low price of products (3.5), low demand of products (3.3), accessible roads (3.3), difficulty in planning (2.3), difficulty in organizing (3.2), availability of food market (3.4), disease (3.5), refrigeration (3.3), equipment and vehicles (furniture and fixture (3.3) and a high-cost of labour (2.3). This implies that all the selected factors affects poultry farming and its product's demands in the studied areas. The mean values of degree of extent to each factor is more than (2.5) used as decision rule and

this is in agreement with Rose (1997) who adjudged Poultry Industry as a very important source of animal protein in Nigeria. However, the industry is still being plagued with a series of problems ranging from scarcity of feed and feed ingredients among others. Constraints faced by farmers in poultry production are shown in Table 16

Table 16 show the extent to which the following constraints militate against production and Marketing of poultry products. These include problems such as land acquisition with (3.4), building (2.8), Veterinary service (3.4), electricity (3.5), quantity and quality of water supply, drugs/ medication (3.3), quality of feed (3.3), quantity of feed (3.3), high-cost of labour (3.5), transportation (3.2) to farm location is also a difficulty in production, gender discrimination affect production (3.4), lack of Market survey before production (2.3), pest and disease (3.4), meat and egg gluts (3.5) are also problems. This result implies that items with scores above (2.5) which is the decision rule were perceived as degree of high extent, while scores below the decision rule (2.5) were perceived as not really affecting production and marketing in the study areas. The Ranges of decision rule results are similar to Okonkwo and Akubuo (2001). They reported that many large-scale operators in the poultry Industry have been forced out of business due to various problems ranging from high-cost of feed to scarcity of ingredients, high-cost of drugs, unavailability of veterinary services and a lack of good road network contributed to the problems. ASC (2010) differs by reporting that the poultry farmers are critically constrained by low productivity of their production system, poor resources including skilled Human resources and inadequate organization capacity, this is based on the areas studied. Conclusively, it is observed that all the factors considered in the items have an average constraint to the farmers in Ebonyi State.

Conclusion

In conclusion, the majority of the respondents are men in the study areas, and information on new system of poultry management is not available. Although farmland is available through direct inheritance, family allocation, tenancy, land tenure system where land exist on almost useless small segment or fragments makes it difficult for farmer to have enough areas of land for large farming. The poultry producers and marketers have no access to bank loans. They therefore, rely on their personal savings, loans from friends and relatives. Ignorance and inability of the farmers to provide acceptable collaterals discourage them from utilizing or applying for loan facilities. Other non-farm expenditures such as marrying more wives, tax rates, school fees and hospital bills reduced the capital available to the farmer for poultry farm business. Weather changes, diseases, natural disaster such as flood and erosion, cost of farm inputs (labour, Feed, medication) and inability of the Poultry products/Marketing Board to influence the prices of their commodities have combined to affect their productivity and income respectively.

References

- Akinwu, W.F. (1995). Economic analysis of poultry production and Marketing an introduction text University Press Ltd Ibadan Nigeria, Pp 65-70.
- Apandaku, A.L, Isiaka, A.E. and Famure, S.T. (1998). The Future of Poultry Industry in Nigeria Department of Agricultural Economics. University Of Ibadan. *World. Poultry Science Journal*. 37 (39) 43.
- ASC (2010). Agriculture Sample Census reviewed third edition magazine Bayelsa 3 (2) 4.
- Burgos, D. (2009). Cage management for layer commercial chicken meat and egg production. 5thed. Academic Publisher. Pg 102.
- Egbu, E. (2000). Ebonyi Creation: Historic Paper Presented at Ebonyi, Hotel Ltd. 2-4-2000.
- FAO (2006). Food and Agriculture Organization of the United Nation. Myanmar: monitoring progress towards hunger reduction goals of the World Food Summit (WFS) and the Millennium Declaration (MD). Last update 03/09/2006. Available at www.fao.org.
- FAO (2007). Contingent evaluation of the Perceived Benefits of Farms Animal Welfare Legislation. Final Report submitted to the International Food Policy Research Institute, Washington D.C 4(8) 45.
- FMALF (2010). Federal Ministry of Agriculture Livestock and Fisheries Department Quarterly bulletin of Animal Statistics. Pp. 8.
- FMAWARD (1998). Federal Ministry of Agriculture Water Resources and Rural Development: Agriculture Policy for Nigeria Publications. Pg. 86.
- FOS (1996). Federal Office of Statistics. Population Figures FOS. Publication.3 (5)12.
- Gleeson, D.S. (2010). Livestock and Fishing Communities Animal Report in Thailand, June 24, 2008.
- Gleeson, S.B. (2010). Marketing of free-range local chickens in Morogoro and Kilosa Urban Markets. *Livestock Research for Rural Development*, 15(3) 2.
- Henning, D.M. (2007). Proceeding of the livestock Research Programme (LSRP) Annual Scientific Workshop in collaboration with DANIDA's Agricultural sector Research programme (ASPS) and National Agricultural Research Organization (NARO).
- Henning, D.M. and Johnson, S.K. (2010). Husbandry and trade of indigenous chickens in Myanmar Result of a participatory appraisal in the Yangon and the Mandalay Divisions trop. *Animal Health Production*. 38(62) 63.
- Kajura, S.Y. (2008). Contingent valuation of the perceived benefit of farm animals welfare legislation. *A Journal of Development Studies*, 2 (4) 29. Yangon.
- Kajura, S.Y. (2008). Livestock and Dairy Industry Development in Tanzania. Ministry of Livestock Development.
- Kirunda, C.M., Byarugba, M.W. and Kyarisilima, A.A. (2008). Agricultural and Livestock Policy United Republic of Tanzania.
- Kohls, C.S. and Muka, H.M. (2009). Organic Food Sales. *Nutrition Business Journal New York*. 5 (8) 20.
- Kottler, C. (2005). Marketing in the tropics. Macmillan Press Limited, London. Pg. 67.
- Kyarisima, S.D. (2009). Chicken and Eggs Annual summary USDA, Washington D.C.
- LFC (2008). Livestock and fishing Community journal Report on livestock Statistics Record (2008) Ibadan. 4(03) 4.
- Manyong, V.M., Ikpi, A., Oluyemi, J.K., Yusuf, S.A., Omonona, B.T., Okoruwa, V. and Idachaba, F.S. (2005). Agriculture in Nigeria: identifying opportunities for increased Commercialization and Investments IITA, Ibadan Nigeria. Pp. 159.
- Morgan, D.S. (2007). Marketing strategies for sustainable Agricultural investment in Nigeria, Nwosu A.C. and Mbanasor J.A. (Ed) Sustainable Agricultural Investment in Nigeria: FAMAN 13th Conference.
- Morgan, D.S. (2007). Myanmar: the Livestock Sector, Poultry and Artificial Intelligence. FAO Internal report Pp 10.
- Msami, T.S. (2009). Economic Analysis of small-scale farm enterprises in Nsukka Area. *Citadel Journal*, 2 (5) 56.
- Muka, H.M. (2009). Poultry Sector Country Review: the structure, marketing and importance of the commercial and village Poultry Industry: An Analysis of Poultry Sector in Myanmar. 3 (7) 29.
- NPC (2006). National Population Commission. Nigeria Census Figures.
- NRO (2009). World Journal of Agricultural Science in 4/4/2009. What does the conduct of Poultry Market in Nigeria a Review.
- Obioha, F.C. (1992). A guide to Poultry Production in the tropic. Acena Publication, Onitsha. Pp. 20-24.
- Okonkwo, W.T and Akubuo, C.O. (2001). Contributions to eradicating poverty and improving the socio-economic life of Nigerians through raising healthier Poultry birds, University of Nigeria.
- Olsen, J.E. (2008). Village Chicken Production in Myanmar purpose magnitude and major constraints, *World Poultry Science*: 63 (54) 104.
- Oluyemi, A.A. and Robert, B.N. (1991). Poultry Production in warm wet climate. Bulletin of FAO 65 (5) 72-76.
- Rose, S.P. (1997). Principal of Poultry Science. CAB International Wallingford U.K. Pp55.
- Sentumbive, P.V. (2007). European Framework Agri-Livestock Constant Ltd and WDC World Development Consultants S.A poultry meat Report December, 2007.
- Sewanyana, D.T. (2006). The Economic of Farming System. Cambridge University Press. Pp. 46-47.
- Sewanyana, D.T. (2006). Livestock Information Analysis and Policy Branch. AGAL.
- USDA (2005). United State Department of Agriculture Food and Nutrition service (F'NS) Poultry Meat Report Texas USA.
- USDHHS (2009). United State Department of Health

Table 1: Gender

Sex	Frequency	Percentage
Male	84	70
Female	36	30
Total	120	100

Table 2: Marital status

Marital Status	Frequency	Percentage
Single	6	5
Married	78	65
Divorced	22	18.3
Widowed	14	11.7
Total	120	100

Table 3: Age

Age	Frequency	Percentage
Below 30	8	6.70
31-40	18	15.00
41-50	38	31.70
50 and above	56	46.6
Total	120	100

Table 4: Household

Household	Frequency	Percentage
1-2	8	6.6
3-4	10	8.3
5-6	26	21.7
7-8	56	46.7
9 and above	20	16.7
Total	120	100

Table 5: Education

Level of education	Frequency	Percentage
No formal education	71	59
Primary education	33	28
Secondary education	12	10
Tertiary education	4	3
Total	120	100

Table 6: Occupation

Major occupation	Frequency	Percentage
Poultry rearing	60	50
Poultry rearing & farming	40	33.3
Poultry/production/marketing	12	10
Farming/civil servant	8	6.7
Total	120	100

Table 7: Income

Annual income (₦)	Frequency	Percentage
Below 60,000	40	33.3
60,000-70,000	50	40.7
70,000-80,000	20	16.7
80,000-90,000	5	4.2
90,000 and above	5	4.2
Total	120	100

Table 8: Farm Size

Farm Size	Frequency	Percentage
Less than 1 hectare	28	23.3
1 hectare	54	45
2 hectares	20	16.7
3-4 hectares	14	11.7
4 and above	4	3.3
Total	120	100

Table 9: Labour

Source of labour	Frequency	Percentage
Family	87	72.5
Hired labour	20	16.7
Communal labour	13	10.8
Total	120	100

Table 10: Information

Source of information	Frequency	Percentage
Radio/discussion	80	66.7
News/paper/interment	10	8.3
Family and friends	15	12.5
Churches/schools	15	12.5
Total	120	100

Table 11: Distribution of Respondent's Years of Experience

Years of experience	Frequency	Percentage
1-2 year	28	23.3
3-4	45	37.5
5-6	38	31.7
7 and above	9	7.5
Total	120	100

Table 12: Distribution of respondents according to systems of Poultry management

Management System	Frequency	Percentage
Intensive system	80	66.7
Semi-Intensive system	35	29.2
Extensive system	5	4.2
Total	120	100

Table 13a: Gross margin analysis on quarterly poultry production and marketing of poultry products

Variable cost	
Items	total amount
Feeds	N5,000.00
Medication	N2,500.00
Drink water	N1,500.00
Sanitation	N4,000.00
Electricity	N2,000.00
Sawdust	N1,500.00
Water trough	N2,000.00
Maintenance	N4,000.00
Labour	N15,000.00
Birds (day old chicks)	N25,000.00
Total variable cost	N62,500.00
Fixed cost of Land	N15,000.00
Pen	N30,000.00
Equipment	N7,000.00
Total	N52,000.00

13b: Total variable cost + total fixed cost N62,500 + N52,000 = N114,500

Items	unit	Qty	price/unit	total/amount
Eggs	kg	300	N30	N9,000
Birds day old	kg	270	N250	N67,500
Meat	kg	100	N900	N90,000
Dropping	50kg bag	3	N500	N1,500
Total revenue				N168,000
Gross margin = total revenue - total variable cost				
Total revenue				=N168,00
Total variable cost				=N62,500.00
Total fixed cost				=N52,000.00
GM = TR - TVC				=N168,000 - 62,500
GM =				N105,500.00

Table 14: Percentage distribution of source of farmland acquisition of Respondents

Source	Frequency	Percentage
Direct inheritance	73	60.8
Family allocation	30	25
Bought to be Redeemed	9	7.5
Free from friend	8	6.7
Community allocation	0	Op
Total	120	100

Table 15: Constraints to poultry products marketing

Items	Very great extent	Great extent	Some extent	Not at all	decision rule
Finance	70x4(2.33) 120	30x3(0.75) 120	15x2(0.25) 120	5x1(0.04) 120	3.4
Transportation	58 (1.93)	40 (1.00)	18 (0.30)	4 (0.03)	3.3
Low price of products	75 (2.5)	25 (0.63)	18 (0.30)	2 (0.02)	3.5
Low demand of products	60 (2.00)	40 (1.00)	15 (0.25)	5 (0.04)	3.3
Accessible roads	65 (2.16)	32 (0.8)	18 (0.30)	5 (0.04)	3.3
Difficult in planning	50 (0.83)	45 (1.13)	20 (0.33)	5 (0.04)	2.3
Difficult in organizing	55 (1.83)	37 (0.93)	20 (0.33)	8 (0.06)	3.2
Availability of food market	70 (2.33)	30 (0.75)	15 (0.25)	5 (0.4)	3.4
Disease	75 (2.5)	25 (0.63)	18 (0.30)	2 (0.02)	3.5
Refrigeration	58 (1.93)	40 (1.00)	18 (0.30)	4 (0.03)	3.3
Equipment and vehicles	68 (2.3)	25 (0.63)	18 (0.30)	9 (0.08)	3.3
Furniture and fixtures	60 (2.00)	40 (1.00)	15 (0.25)	5 (0.04)	3.3
Labourers	50 (0.83)	45 (1.13)	20 (0.33)	5 (0.04)	2.3

Table 16: Constraints faced by farmers in production

Items	very great extent	Great Extent	Some Extent	Not at all	Decision Rule
Land acquisition	75 (2.5)	25 (0.63)	16(0.027)	4 (0.03)	3.4
Building	40 (1.3)	35 (0.9)	25 (0.42)	20 (0.2)	2.8
Veterinary service	60 (2.00)	48 (1.2)	7 (0.12)	5 (0.04)	3.4
Electricity	75 (2.5)	25 (0.63)	18 (0.30)	2 (0.2)	3.5
Water drug/medication	65 (2.16)	32(0.8)	18 (0.30)	5 (0.04)	3.3
Quality of feed	68 (2.3)	25 (0.63)	18 (0.30)	9 (0.081)	3.3
Quantity of feed	60 (2.00)	40 (1.00)	15 (25)	5 (0.04)	3.3
High cost of labour	75 (2.5)	25 (6.63)	18 (0.30)	2 (0.02)	3.5
Transportation	55 (1.83)	37 (0.93)	20 (0.33)	8 (0.06)	3.2
Farm location	68 (2.3)	25 (0.63)	18 (0.30)	9 (0.08)	3.3
Gender discrimination	70 (2.33)	30 (0.75)	15 (0.25)	5 (0.04)	3.4
Market survey	50 (0.08)	45 (1.13)	20 (0.33)	5 (0.04)	2.3
Pest and disease	70 (2.33)	30 (0.75)	15 (0.25)	5 (0.04)	3.4
Meat glut	65(2.16)	32(0.8)	18(0.35)	5(0.04)	3.3
Egg glut	75(2.5)	25(0.63)	18(0.30)	2(0.02)	3.5