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### ABSTRACT

This research evaluated the economic analysis of broiler production in Ika South Local Government Area of Delta State. Broiler production is an enterprise which can be used to fill the gap of malnutrition problem and encourage healthy growth, development and provision of income. Also, agriculturally the dropping serves as organic manures for fertilizing the soil for agricultural production. Also, broiler production has suffered problems of low technical know how, prevalence of disease and lack of finance, etc. Those and many more prevented its expansion and development thereby undermining the realization of its importance. Simple random sampling technique was used for this study out of 20 communities that made up Ika South Local Government Area of Delta State, 10 communities were randomly selected, each of the 10 communities, 10 poultry farmers were selected making the sample size to be 100. The benefit cost ratio BCR was 1, which means profit was made and there was no loss, because if the benefit cost ratio was below 1, that means loss. It is believed that awareness on the importance of broiler production, in addition to government assistance on provision of infrastructural amenities, self loans and grants, technical education to farmer's would boost broiler production in Ika South Local Government Area of Delta State.

**Keywords:** Broiler production, Ika South, BCR and malnutrition

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### INTRODUCTION

In the early centuries, the domestic chicken has been the only species reared as a side line business in many house hold. They serve as a source of pin money and provided meat during festivals like new yam festivals, Christmas and new year [1,2,3,4,5,6]. In 1990's, poultry keeping developed into a commercial enterprise using pure breeds of chicken imported from abroad [7,8,9,10]. The main objective at the time was to use the exotic breeds of upgrade the local stock and provide eggs and meat for colonial masters [11,12,13,14]. It is recommended

that every normal human being should take 45 kg protein per annum, but 2 kg of poultry meal, eggs per person per annum are being consumed in Nigeria [15,16,17]. It was on this regard that the government and some entrepreneurs invested into poultry farming to ensure steady supply of poultry product like meat, egg to improve on the nutritional requirement of the people [18,19]. Poultry production has become popular among the livestock enterprises, because of its increased monetary turnover [19].

### OBJECTIVES OF THE STUDY

The overall aim of this study was to analyze the economic analysis of broiler production in Ika South Local Government Area.

The specific objectives were to:

- Identify the socioeconomic characteristics of broiler production in Ika South Local Government Area.

- Describe the broiler production system in the study area.
- Determine the cost and returns of broiler production.
- Determine the problem affecting the broiler production in the Ika South Local Government Area.
- Make recommendations based on findings of this reproach.

## MATERIALS AND METHODS

### The Study Area

This research was carried out in twenty communities located in Agbor in Ika South Local Government Area of Delta State, Nigeria. Ika South Local Government is bounded at the North by Oriowon local Government Area of Edo State, in the West by Ika North -East Local government Area of Delta state, in the East by Aniocha North local Government Area of Delta State, U lies between latitude 2° arid longitude 3° has an estimated population of about 89,870 {According to the national population commission, 2006) and 90% of the population are engaged in agricultural activities, Ika South Local Government Area of Delta State has relatively

temperature of about 28°C~30°C during the dry season. The study area is popularly known for her agricultural productivities and the major produce are Okra, cassava, palm oil, yam, maize?, palm wine, rubber (latex) furl wood, Snail, cano rat, Antelope and rabbits. It is blessed with rivers and streams which account for sufficient rainfall prevalent in the study area. Ika South local Government Area is endowed with fertile lands and streams. The growing of grain and leguminous plants such as maize, groundnut, cowpea and fishes which are available in the study area helps in the compounding of feed. This tends to boost broiler production in the study area.

### Sampling Technique

Simple random sampling technique was used for this study, out of 20 communities that make up Ika South local Government Area of Delta State, 10

communities were randomly selected. In each of the 10 communities, ten poultry farmers were selected thereby making the sample size to be 100.

### Method of Data Collection

The data for this study were collected from the primary and secondary sources from personal observation and experience of those who has lived long in the study area through oral interview and structured questionnaires administered to correspondents. Primary data came

through the use of oral interview, structured questionnaires arid personal observation by the researcher. Secondary data for this research was gathered from existing findings inform of Books, Journals, newspapers, internet and project work.

### DATA ANALYSIS

Data collected were analyzed using frequency distribution table and percentages.

**Table 1: Distribution of respondents according to age**

Age	No of respondents	Percentage (%)
25-35	25	25
36-45	18	18
46-65	38	38
Above 65	19	19
<b>Total</b>	<b>100</b>	<b>100</b>

**Table 2: Distribution of Respondents According to Sex**

Gender	No of respondents	Percentage (%)
Male	45	45
Female	55	55
Above 65	100	100

**Table 3: Distribution of Respondents According to their Marital Status**

Marital Status	No of respondents	Percentage (%)
Married	50	50
Unmarried	30	30
Widow	20	20
<b>Total</b>	<b>100</b>	<b>100</b>

## RESULTS

### Socioeconomic Characteristics of Respondents

The socioeconomic characteristics of respondents in the study area include age, distribution, gender, marital status, educational qualification and family size of farm holdings that is devoted to broiler production as well as sources of farm labor available to the respondents. The results are presented in tables below.

**Table 4: Distribution of respondents according to their level of education**

Age of respondents	No of respondents	Percentage (%)
No of formal education	25	25
No of primary education	50	50
Secondary education	15	15
Tertiary education	10	10
<b>Total</b>	<b>100</b>	<b>100</b>

**Table 5: Distribution of respondents according to their type of farming occupation**

Type of occupation	No of respondents	Percentage (%)
Full time farmer	55	55
Part time farmer	45	45
<b>Total</b>	<b>100</b>	<b>100</b>

From the table above 46-65% responded more which showed more of the aged people in broiler production. From the above table, there are greater numbers of females as broiler producer. The percentage of female is 55% while that of men is 45%. This shows that Women are

competing favorably with men even better in broiler production since women are greater in number. From the table above, the data shows that 50% are married, 30% unmarried and 20% widowed, from this it shows that majority are married.

**Table 6: Distribution of respondents according to their number of Children**

No of Children	No of respondents	Percentage (%)
1-3	20	20
4-6	30	30
Above 8	50	50
<b>Total</b>	<b>100</b>	<b>100</b>

**Table 7: Distribution of respondents according to farm size**

<b>Farm size</b>	<b>No of respondent</b>	<b>Percentage (%)</b>
Less 1 ha	60	60
1 -2ha	30	30
Above 2 ha	10	10
<b>Total</b>	<b>100</b>	<b>100</b>

**Table 8: Distribution of Respondents According to Labour Available to them**

<b>Type of farm labour</b>	<b>No of respondent</b>	<b>Percentage (%)</b>
Family labour	20	20
Hired labour	10	10
Exchange labour	25	25
Combination of both	45	45
<b>Total</b>	<b>100</b>	<b>100</b>

**Table 9: Distribution of Respondents According to Techniques for Broiler Production**

<b>Method of production</b>	<b>No of respondent</b>	<b>Percentage (%)</b>
Only broiler production	40	40
Broiler production with other live stock	60	60
<b>Total</b>	<b>100</b>	<b>100</b>

**Table 10: Distribution According to Methods of Production**

<b>Type of production</b>	<b>No of respondent</b>	<b>Percentage (%)</b>
Free range	5	5
Intensive	45	45
Semi-intensive	30	30
Combination	20	20
<b>Total</b>	<b>100</b>	<b>100</b>

**Table 11: Distribution of Respondents Based on Cost of Method of Production**

<b>Type of production</b>	<b>No of respondent</b>	<b>Percentage (%)</b>
Free range	40	40
Intensive	-	-
Semi-intensive	60	60
Combination	-	-
<b>Total</b>	<b>100</b>	<b>100</b>

**Table 12: Distribution of respondents showing management practices of Broiler Production**

Type of Management Practices	No of respondent	Percentage (%)
Debeaking	10	10
Vaccination	15	15
Culling	15	15
Treatment of disease	10	10
Feeding	15	15
Compounding of feeds	2	2
Regular sanitation	15	15
Any other specify	18	18
<b>Total</b>	<b>100</b>	<b>100</b>

From the above data it shows that greater number of farmers received formal education. 75% shows are for primary, secondary or tertiary level of education and 25% are uneducated. From table 6 above, it could be analyzed that over 50% of the population has large family size which show that greater number of their children are useful in the farm. This will

no doubt reduce the money spent by the farmers on hired labors. From the above table it shows that greater number of respondents make use of combination of both labors 45% of the farm populace, followed by hired labor 25%, family labor 20% and exchange labor 10%. In other words labor uses through family exchange create more avenue.

**Table 13: Distribution of Respondents based on problem Associated with Broiler Production**

Type of Problem	No of respondent	Percentage (%)
Lack of finance	17	17
Lack of Technical know how	11	11
Disease and pest	6	6
Conservative attitude of people	8	8
High cost of labour	10	10
Weather and climate	10	10
Insecurity of the farm	.	_-
Total	100	100

**Table 14: Fixed Cost for 1st year**

No.	Unit Cost	Total Cost	Life span	Annual Depreciation
500 Birds	100	50,000	9 weeks	10,000
Housing	1	400,000		
Labour	2	20,000		

**Table 15: Operating Input Cost**

Items	Average Quality	Average Cost
Housing	1	400,000
Transport	100 bags of feed	5000
Labour	2 workers	20,000
Drugs	10 numbers of Drug	5000
Feeds	100 bags at 1400	140000
<b>Total</b>		<b>570000</b>

for maximizing profit easily than hired labor. From the table above, it could be seen that the farmers in broiler production only has 40% of the

population while farmers which operate on broiler and other livestock's has 60% of the population. The 40% of the population that

**Table 16: Cost input Cost**

Item	Cost
Birds	50000
Labour	20000
Feeding	1400000
Housing	400000
Transportation	5000
Drugs	5000
<b>Total</b>	<b>62000</b>

**Table 17: Tal Cost**

Item	Amount
Variable cost	620000
Operation input cost	57000
Fixed cost	470000
Depreciation	10000
<b>Total</b>	<b>1670000</b>

Note: Benefit Cost Ratio: Sale birds at 3500; The Benefit Cost ratio BCR =

Benefit/Total Cost - 175.0000 ÷ 1670000 = 1.0479042 practise only broiler

production have their reason adding that management will be problem when diversify the poultry production, it could be high mortality rate of the birds as a result of poor managements, however this idea now leads to specialization of broiler production alone rather than mixing other livestock's. From the table above, it shows that those practicing intensive system ranked the highest by 45%, followed by semi-intensive system 30% and combination method of 20% respectively. This implies that farmers are mindful of the effect of free range system 5%, which the disadvantages are greater than the advantage. In other words it is economical to practice free range system in poultry production as an enterprise on further inquiry cost are high in other method of production. From the table above, it shows that intensive system is the most costly method of production. They also agreed that the intensive system is more rewarding than any other methods, since the birds can attain market size on time

Based on the research findings on broiler production in Ika South Local Government Area of Delta State, Nigeria. It was discovered that few farms are broiler producers in the area and mainly aged men and women. Apart from revenues accrued from broiler production, high protein contents of the meat, the dropping and as raw materials to some agro-allied are the benefit of broiler production. Also apart from lack of finance, other problems such as pest and disease, high cost of feeds and lack of technical know how could be solved by government granting of loans, educating the farmers on innovation of broiler production and ensure its effective implementation, broiler production would be reviewed and the benefits earlier

#### RECOMMENDATIONS

Based on the findings, government should pursue all policies towards reviving production by:

- Providing soft loans and grants over having the agricultural body in charge of agricultural programs

when there is appropriate management and technical know how. The respondents were allowed to respond to as many practice that are being practiced by greater number with 18% of the population, followed by regular sanitation 15%, vaccination 15% treatment with debeaking as a practice since few farmers practice it. From the above table, the respondents were allowed to respond as many times as possible to problems affecting them. Lack of finance which is 17%, lack of technical know how 11%, lack of storage facility 10% insecurity 10%, Disease and pest 6% and the least is understood that if money is available, which controls other factors of production, even those problems, which tend to be most difficult task to them experts can be paid for such services. This implies that if farmers are financed, then all the production will definitely reduced. This means profit was made, if the BCR was below 1 that means loss, but if it is 1 it means profit.

#### CONCLUSION

stated would be enough and would lay to rest problem of malnutrition in this area. Broiler production is an enterprise which will not only provide employment opportunity to many people but will take care of health by ensuring adequate provision of proteins. In addition the income will be generated from this enterprise. Furthermore, the other uses of broiler produce are for social uses and to industries. We hoped that if government imposes policies effectively towards reviving broiler production in no distant time the economy will revive, the inhabitants would be revived based on income and high nutritional intake from broiler enterprises. This will contribute to high productivity based on good health of citizenry.

to live up to the challenges of improve broiler production.

- Effective monitoring to ensure their policies are implemented and enacting laws to check erring farmers.

- Government and non-governmental bodies should make efforts to educate the masses on the need of poultry products to health need.
- Farmers should be encouraged to join cooperative societies.
- The most realist strategy to combat hunger is to encourage

people to indulge in poultry farming.

- Finally ensuring that those bottle necks militating against broiler production are removed. Government should see a way of boosting or encouraging farmers by fixing good prices for broiler production at least to measure the number of broiler producer.

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