BROODING MANAGEMENT AND PROFITABILTYOF BROILER FROM DAY OLD TO THEIR TABLE SIZE (A CASE STUDY IN ILORIN EAST LOCAL GOVERNMENT)

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CERTIFICATION

This is to certify that this research work has been completed, read through and approved as meeting part of the requirement of the Department of Agricultural technology, Institute Applied Science, Kwara State Polytechnic, Ilorin in partial fulfillment for the award of National Diploma (ND) in Agricultural Technology.

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DEDICATION

I dedicate this project to Almighty Allah who has been there right from the beginning to this point, special dedication also to my ever supportive family, for their relentless support and compassion towards me during my academic section.

Futhermore, I want to dedicate this project report to my supervisor, Mr. Abdulkadir Aliyu for the knowledge impact.

To God be the glory

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I appreciate the support of my lovely parents; MR AND MRS OLANREWAJU for their parental care, prayer, moral and financial and uncountable support towards my success, may almighty God continue to bless them abundantly.

My gratitude to my brothers and sisters; I cannot quit how much all your support,love and cares given to me. May almighty God bless you abundantly. I will also appreciate my friends; Thanks for always being there for me, more successful life ahead in Jesus name. And other colleagues too numerous to mention during misunderstanding and argument in order to enlighten each other.

ABSTRACT

The purpose of this study was to focus mainly on brooding of broilers especially it's management, profitability which serves as a vital tools in discouraging the problem of unemployment in Nigeria.

It also explore the challenges associated with brooding techniques and the measures used to solve them. The instrument used for data collection is Questionnaires and the method of data analysis used in this research work, covers the use of descriptive and inferential statistical tools. Simple percentage were used for data analysis, findings revealed that about 77[38.5%] respondent reported more marketing age of birds, 109[54.5%} reported higher cost of feeding and 49[24.5%] respondent reported lack of storage facilities.

Recommendation were reached based on the findings such as avoiding sudden and massive death of day old chicks due to their sources. It's recommended that we should look for an alternatives supplier of day old chicks and also, further studies should be conducted within sufficient time to make allowance for study's finding and objective result.

TABLE OF CONTENTS

CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The poultry industry has come to be considered as a means to fight poverty in Nigeria. It is important as a source of employment and income to many families, unlike other ventures, it provides faster turn over on capital investment. This has led to the setting up of formal business and training institution specializing in poultry in Nigeria. Brannius (2017), report that the interest of the operations in the industry is gradually being killed due to the prevalence of the disease and other challenges or constrains in the industry. National production of poultry product over the year could increase, if these challenges are investigated and addressed. The benefit which the country gets from the poultry industry are very important to the country's growth.if provide food security and protein intake for poor growth countries(Lathan, 1997) broilers are fast growing chicken mainly raised for their meat, they are domestic bird specifically raised for meat production. Broilers industry is one of the profitable agro-industry which can tackle the problem of unemployment and underemployment in the rural areas particularly of small and marginal farmers.it has been transformed from the traditional backyard farming to the large scale commercial farming in some country including Nigeria. Country like India has an annual growth rate of 11.44% production of 3,725million tons and employment of 4.29 million people (Index Mundi, 2015). India stands the fourth largest producer of poultry in the world valued as $6.6billion dollars.

Poultry meat accounts for about 0.66% of the India's GDP and 7.22% GDP from the livestock sector (Prabakarah, 2014, Rajendren et.al 2014) an increase in per capital consumption by one egg and 50grams of poultry meat can create employment for about 26,000 persons per year (Kazi, 2003) poultry meat production increased from 0.069 million

tons in 1961 to 3.725 million tons in 2014. Despite the achievement, the per capital availability of poultry meat in India is only 2.96kg which is weight below the ICMR (India Council of Medical Research) recommendation of 11kg meat per capital per annum. On the supply side, several factors have contributed to the worldwide growth in poultry production, which involves:

1. Genetic progress in poultry strains for meat and egg production.
2. Better understanding of nitritious fundamentals
3. Disease control (Ravindran, 2015). Give the size of the India's poultry sector,it's price competitiveness and India entrepreneurship.

India is said to take a more active role in the global poultry especially with respect to export the middle east Hellin et.al, 2015). Among all the livestock farming, returns of capital investment is faster in broiler farming so planning should be such that, farmer get maximum benefit out of this broiler farming and young population will get attracted toward this sector.broiler industry can be adopted under a wide range of climatic conditions (Singh et.al.2010).

1.2 Statement of the Problem

Some challenges have been reported by several authors including Faridi and Golian (2014) and Yassin et.al. (2014). The economic evaluation of broiler breed production is very challenging for two main reason.

1. Several factors affect it profitability, which makes statistical analysis difficulty.
2. Production information are added to obtain from the genetic company.

According to a survey by (Sultana et.al.2014) in Bangladesh about 36% respondent reported more marketing age of birds,32% reported Training higher cost of production and 30% reported lack of training facilities.

1.3 Aims and Objectives of the Study

1. To know the scope and nature of brooding management and profitability of broilers from day old to their table size.
2. To know the significance of poultry production.
3. To examine the site selections, housing design and construction of brooding pens.
4. To know different poultry disease symptoms.mode of transmission and their treatment in poultry birds (Broiler)
5. To know the method of applying vaccine and drug administration in poultry birds (Broiler).

1.4 RESEARCH QUESTIONS

The following questions shall be focused on,

1. What are the nature and limitation of brooding management and profitability of raising boiler birds?
2. What are the site selection, housing design and construction of brooding broiler birds?
3. What are the poultry disease symptoms, mode of transmission and treatment in poultry birds (Broilers)?
4. What are the vaccine and drugs given to poultry birds (Broiler)?
5. What are the significance of broilers production?

1.5 SIGNIFICANCE OF THE STUDY

The research provide an overview of poultry industry which has become one of the profitable agro industries which can tackle the problems of unemployment as well as discouraging poverty in the country. It also throws light on the major challenges and the current critical issues impeding the growth and development of poultry farming in nigeria. The project also support farmers in their bid to unite their efforts to raise the socio-economic status of broilers farmers in nigeria.

1.6 SCOPE AND LIMITATION OF THE STUDY

The research does not cover everything about the poultry industry. It focuses mainly on brooding of broilers, especially the challenges associated with brooding technique and measures used to solve them. The study also examines the extent in the using of these brooding techniques from the expected standard.

1.7 OPERATIONAL DEFINITION OF KEY TERMS

1. Brooding: Refers to the period immediately after hatch when special care and attention must be given to chicks to ensure their health and survival.
2. Poultry management: This is define as a multifactorial practice of rearing production techniques that help to maximize the efficiency of production.
3. Broiler :This refer to any chicken that is bred and raised specifically for meat production.
4. Table Size: These are birds that are enough to be killed and consumed.
5. Profitability: This is the act of bringing or making profit in the cause of a business, enterprise or transaction.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 CONCEPTUAL FRAMEWORK

Over the years,broilers production has become a means to fight the problem of unemployment and underemployment in Nigeria; as well serves as a source of income for the citizenry of Nigeria. Parkhurt and Mountriey (1998) considered poultry to collectively design species of birds which are domesticated to produce and grow in captivity so as to render the product of economic value. Chickens, turkey, ducks, geese, some quail and pheasant, guineas and pigeons generally meet the above criteria. They provide meat, egg, fertilizer, animal food and other by-product such as pharmaceutical. They also serve as laboratory purpose for scientific research. Broilers are chickens (Gallus Gallus domesticus) bred that are raised specifically for meat production. In recent time,chicken are one the most common wide spread domestic animal, and with a population of 19 billion in 2011, there are more chickens in the world than any other species of birds. Typical broiler have white feather and yellowish skin and most commercial broiler bred raised for meat reach slaugther weight at between 5 to7 weeks of age (Keany, 2003).

However, there is a growing body of literature on brooding management of broiler. A critical analysis shows change and continuity in agricultural technology. Let us examine below some of the issues. Brooding refers to the management of chicks bectween day old and 8 weeks of age.

According to Hellin et.al (2015) management refers to a multifactorrial practice of rearing, production techniques that helps to maximize the efficiency of production. Thereby, raising domesticated birds such as chickens, duck, turkey, and geese to produce meat and egg for food.

2.1.1 HOUSING MANAGEMENT

Birds are raised under intensive system of management are usually housed instruction and quality of poultry house depend on the farmer capability. Poultry vary from small shed to costly complex. The size of poultry depends on the numbers to be kept in the pen. The table below show the recommended floor space for birds/chicken.

Age in weeks	Space/M Birds	Birds space metre
0-4 brooder house	0.05-0.8	12.20
4-8 weeks	0.10	10
8-20 rearing	0.20	5
20 or more	0.25	4

Source: FAO (2023)

FOUNDATION

This supports the building, should be strong and deep at least 0.3m in soil to prevent rodent from borrowing through and heaving by frost and should be high enough to prevent surface water from running into the house.

FLOOR

The floor of the brooder house can be made of several should be water proof (i.e avoiding water materials and inlet), rat proof free racks and easy to clean and durable as rat can grow the wood, clay floor can also be used for deeplitter but it can chick and allow rodent infestation.

FLOOR SPACE REQUIREMENT

0.19m square per chicks is mostly appropriate for broilers and layers chicks in small flocks. However, this area could also be reduced in case of large floors for commercial purposes.

WALL

The walls are expected to be in solid enough to supports the roofs and withstand winds,between the roof and two coaches of block for foundation is a wire mesh, design to provide for floor through ventilation and also prevent wild animals from entry.

FENCING

Fencing of about 2m high using wire digging 60cm into the ground and angling outward from the pen should be done outside the brooding house prevent predator such rat, mole, foxes, snake e.t.c to prevent hawk, life size replica of plastic make owl should be placed on top of the poultry houses.

2.1.2 MEANING OF BROODING

Brooding refers to the management of chicks between day old and 6 weeks of age. The brooding direction varies in other poultry species. Brooding period is the most critical time in post hatch period of the chicken's life and is highly prone to mortality as such effort is made to enhance livability while reducing mortality. So, brooding is the period immediately after hatching when the chicks need special care and management for their survival.

2.1.3 TYPE OF BROODING

1. NATURAL (HEN) BROODING
2. ARTIFICIAL BROODING
3. COLD ROOM (FLOOR) BROODING
4. WARM ROOM BROODING

NATURAL (HEN) BROODING

This is the simplest way of hatching a small number of eggs where a broody hen (chicken) will incubate her own eggs or those of another hen or a ducks.this is done with the help of broody hens after hatch up to 3 to 4 weeks.

ARTIFICIAL BROODING

This is done by means of a temperature controlled brooder. It's the process of handling a new born chicks without the aid of hen and it's accomplished by means of temperature controlled brooder (frost brooder)

COLD ROOM (FLOOR) BROODING

In this system, specific area of the house are heated to 32 degree celcius-35 degree celcius while the rest of the room is cooled. The area heated is usually enclosed in a chick guard, which prevent the chicks from wandering from the source of heat

WARM ROOM BROODING

This is the type of brooding where the whole room is uniformly heated temperature varying from 28 degree celcius – 32 degree celcius.

2.1.4 BROODING REQUIREMENT

1. TEMPERATURE
2. LIGHTING
3. RELATIVE HUMIDITY
4. VENTILATION

TEMPERATURE

Beginning at one day of age, the chick should be housed at a temperature between 87-92 degree farehient (32-32 degree celcius) at a relative humidity between 40-60%. Care should be taken to prevent the chicks from being exposed to drafts which could result in wind chill when the chicks is one week of age the temperature can be reduce by 4 degree Fahrenheit (2 degree celcius) continue reducing the temperature until housing temperature of 70 degree farehient (21 degree celcius) is reached.

LIGHTING

Lighting for 1 day old bird should begin at 20-22 hours per day for day for the first two day 7 at 10lux (iftx) intensity reduced length weekly to react approximately 12 hours of ligts at 8weeks of ages.

RELATIVE UMIDITY

A relative humidity of 50-70% is recommended for the brooding of chicks.excessively high relative humidity encourages for growth of mould and pathogenic organism especially coccidiosis two low relative humidity leads to dehydration of the chicks.

VENTILATION

Adequate ventilation is required for the well being of the chicks. The role of good ventilation in general of poultry house is to replenish oxygen, remove ammonia and excess water and to keep the optimum temperature as chicks grow older, this curtains should be opened

2.1.5 BROODING EQUIPMENT

1. Feeding equipment

a. Automatic pan feeder

b. Circular feeder

c. Lincer feeder

d. Trough feeder

e. Tray feeder

d. shell grift box

2. BROODER EQUIPMENT

a. Charcoal and coal pot

b. Lantern

c. Electric lamp brooder

d. Brooder guard

e. Infrared bulbs.

3. WATER EQUIPMENT

a. water softness and fiters

b. water neater

c. pain and joy type

d. nipple drinkers etc.

2.1.5 SYSTEM OF BROODING AND MANAGEMENT OF POULTRY

This system refers to the extent to which the the birds irrespective of species of poultry are exposed to sunlight and pasture. It also describes the housing pattern. There are several systems of poultry management namely;

1. EXTENSIVE SYSTEM
2. SEMI INTENSIVE SYSTEM
3. INTENSIVE SYSTEM

EXTENSIVE SYSTEM

This System is also called the free range system that provide complete freedom of movement and exposure of the birds to sunshine and pasture. In this system, birds are given a few grains in the morning, the birds are usually not housed and birds can be seen sleeping on roofs, trees branches or in coops provided by the owners.

SEMI INTENSIVE SYSTEM

In this system, birds reared in this system are characterized by the presence of fixed unit, which act as shelter and a number of fenced runs attached to the fixed unit. The fixed unit could be a real poultry housed. Birds stay in the house and have freedom of moving into the runs to scavenge for insects and pasture during the day and move back into the fixed unit

during increment weather and for roosting in the evening. The use of several runs attached to the fixed unit allows for rotational grazing of the runs.

INTENSIVE SYSTEM

This is the system used in the present day commercial poultry production. Unlike the other system, the movement of the birds are restricted to a fixed house and are not exposed to sunshine and pasture. Instead, they are housed in fixed unit, which permit high stocking density and saves labour. This system also provides protection against theft, predators and adverse weather conditions. The intensive system of management is highly flexible and encourages the adoption of the latest

technology advancements to increase the produce performance of the birds.this system hence is more sufficient than the other two system of management.

2.1.6 BROODING MANAGEMNENT OF DAY OLD CHICKS (BROILERS)

PREPARATION FOR THE ARRIVAL OF CHICKS

Preparation for brooding of chicks usually started, long before their arrival on the farm./in fact preparation is started as soon as the house is depopulated of the older birds.the old litter in the house should be heaped, removed and hauled far away from the premises this should take 3-4 weeks before the arrival of the chicks the debris and cobwebs in the house are removed before subjecting the house to thorough cleaning and scrubbing,preferably with the aid of a pressure pump. The equipment are scrapped and washed before they are disinfected along with the house as the house can be made air tight.it should be fumigated with formaldehyde the bulk feed bin should also be fumigated the surrounding of the building should also be cleaned all these should be done such that the remain unpopulated for 1 to 2weeks before placing chicks in two days before the arrival of the chicks,new litter should be spread to a depth of about 5-7cm if the floor brooding is to be used place the appliances to

their correct positions and test them to make sure they work, make repair where necessary the heating device is turned on and a pilot light should he positioned near the heater.

It is preferable for the chicks to arrive on the farm in the morning give them the whole day to eat and drink and be under close observation by the attendant.on the arrival at the farm.count and record the numbers of chicks before they are unboxed near the hover feed and water are supplied, although it is preferable that water is supplied before feed.this is to reduce the risks of dehydration.day old vaccination should be given if not already the hatchery.

2.1.7 PRECAUTION TO BE TAKEN WHILE BROODING CHICKS

The first precaution towards achieving the goals is to brood chicks in isolation. Brooding house should not be located near houses for the older poultry to avoid disease transmission.nearest poultry should be at least 50cm away where possible,a fence with a single gate should be provided round the brooder house the second precaution is to practice all-in and all-out system of management.birds in one hose should be of similar age with the older not more than a weeks older than the youngest birds in the same house should be started and removed at house,a resting period of several weeks is allowed in the period when there will be no chicks in the house, thus breaking the life cycle of disease causing micro organism

2.1.8 DRUGS AND VACCINATION PROGRAM FOR POULTRY BIRDS (BROILERS)

Many poultry diseases can be prevented by good management practices, including sanitation adequate feeding, well ventilated houses e.t.c. However, some diseases particularly viral and bacterial diseases could easily and rapidly spread and can result in a high death toll. The most reasonable approach to the control of these diseases is by vaccination. The following shows the vaccination and drug scheduled for poultry birds (broilers):

Days	Weeks	Type of vaccination	Mode of vaccination
Day 1-5	1	Glucose and	In drinking water

		multivitamin	
10	2	Gumboro vaccine (1st dose)	Water
14	2	Lasota vaccine (1st dose)	Water
21	3	Gumboro vaccine (2nd dose)	Water
28	4	Lasota vaccine (2nd dose)	Water

Source: FAO, 2023

2.1.9 DISEASE OUTBREAK

Exotic Newcastle Disease (END) is a contagious and fatal viral diseases that affects all birds species. It is one of the most infectious poultry disease in the world. END is deadly that many die without showing any signs of disease. In unvaccinated poultry flocks, a death rate of almost 100% can occur and END can cause death even in vaccinated poultry.

Poultry hobbyist and owners of pet birds should be careful because birds illegally smuggled into the United States are not quarantined and tested by US Department of agricultural and therefore, many carry the virus.

MODE OF TRANSMISSION

Exotic Newcastle Disease (END) spreads;

1. Primarily through direct contact between healthy birds and the bodily discharge of infected birds
2. Rapidly among birds kept in confinement such as commercially raised chickens and turkeys.

3. Through exposure to virus bearing materials picked up on shoes,clothing.equipment and vehicles.

NEWCASTLE DISEASE [END] PERIOD OF SURVIVAL

This virus end can survive in the warm and humid environment for several weeks, this environment could be bird feathers, manure and other materials. However the virus can be mitigated by dehydration, or sunlight.

CLINICAL SIGNS OF END

1. Sneezing, gasping, nasal discharge and coughing.
2. Greenish faeces and watery diarrhea.
3. Depression, muscular tremors, drooping wings, twisting of head and neck, circling and paralysis.
4. Production of thin shell-egg.
5. Swelling of tissues around the eyes and in the neck
6. Sudden death and a high death rate in infected flocks

PREVENTION OF EXOTIC NEWCASTLE DISESASE (END)

END can be prevented through sound vaccination program and practicing bio-security. Also, avoid contact with pet birds that belongs to others, game, food and live birds market.

PULLORUM TYPHIOD (PT) are host adopted with all the type of fowl being vulnerable to infections. Broiler are very prone to the disease. Chickens are susceptible to pullorum-typhiod disease. However broiler hens and rooster can carry the bacteria often times doing without showing any outward sign of infection.

MODE OF TRANSMISSION

Pullorum typhiod spread primarily from hen to young hatching directly the egg,often localized in the reproductive organs of a disease female. It can also be transmitted through the digestive and respiratory secretion of infected birds.

PULLORUM TYPHIOD (PT) PERIOD OF SURVIVAL

Pullorum typhiod bacteria can live in birds or eggs for more than few weeks in the appropriate temperatures the bacteria can also be activated in extreme freezing temperatures and killed in extreme heat.

CLINICAL SIGN OF (PT)

1. Signs of swelling in joints of adult birds.
2. Several lesion on many of the internal organs.
3. White pasty excrement or white diarrhea.

PULLORUM TYPHIOD PREVENTION

Pullorum typhoid can be prevented by monitoring high hygiene condition by disinfecting the poultry house before stocking also wet feed should be discouraged by properly positioning the prevent constant spoilage.

2.2.0 LITTER MANAGEMENT

Litter management such as wood shavings, sawdust, paddyhusk, peanut shell, paddy chaff straw and such other materials that absorb moisture well can be used depending upon the cost and availability spread the litter to a depth of 5cm on the floor before introducing chicks and build it up to a depth of 15cm by adding litter material at the rate of about 2cm per week, this would require approximately 10kg of litter material sq metre litter should be raked thoroughly at frequently interval at least twice a weeks during the cold season and rainy season once a week during the hot season and the day after deworming, litter should be kept dry always.during the cold and rainy season and on the area of floor where watering utensils are placed special attention should be paid daily to check the litter condition

LIGHT

Artificial light should be discontinued from the time the chicks no more require additional warmth dim light of a 4 watt bulb for every 250 chicks can be provided during the night for broiler chicks

POINT TO BE CONSIDERED WHILE ADOPTING DEEPLITTER SYSTEM

The deeplitter system should always be kept dry and also right numbers of birds should be housed the house should be well ventilated. The Inter should be stirred at least once in a week wet litter if any should he replaced immediately with new dry litter and birds must be fed a balanced ratio the time starting deeplitter system should be in the dry period of the year as it allows sufficient time at least two weeks for bacterial action placing of water should be given due attention to keep litter dry.

TYPE OF LITTER IN POULTRY BIRD

1.Pine shaving

2.Hard wood shaving

3.Pine or hardwood chips

4.Rice hulls

5.Peanut hulls and crushed corn cobs.

6.Chopped straw

7.Hay or con straw

8.Processed paper

In general, the best litter suitable for poultry bird is wood shaving from a softwood,such as pine, spruce or hemlock.however, this material has become expensive to use as litter in poultry house due to the dramatic increase in demand in the last few years

ADVANTAGES OF LITTER MANAGEMENT

1. Dry litter help to control ammonia levels thus providing a healthy flocks environment.
2. It reduce condemnations due to hock and foot pad burns and blisters.

3. Dry litter is important for the health and welfare of the birds as

DISADVANTAGES OF LITTER MANAGEMENT

1. It needs ample time and ventilation prior to brooding to assure dryness.
2. It is more difficult to maintain suitable floor temperature during cold weather brooding.

2.2.1 FEEDING MANAGEMENT

Broiler birds are fed ad-libitum ile availability of water and feed the birds should be feed regularly. Broiler are fed broiler starter at 0-4 weeks of age and broiler finisher at 5-8 weeks of age the protein content required by broiler chickens varies between 21-22%. The energy content required for the birds is 3600%.broiler starter contains an energy content of 2800kcal/kg while broiler finisher contain an energy content of 3000kcal/kg. Good ventilation are required for better performance

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter of the study covers the method on brooding of broilers especially, the challenges associated with brooding techniques and the measure used to solve them the chapter is discussed under the headings of Research design, Scope of the study, Population of the study, Sample size and sample technique, Instrument of data collection, Validity of the instrument, Method of collection and Method of data analysis.

3.1 RESEARCH DESIGN

The research will adopt survey research method which will be based on a personally administered questionnaire. The study of broiler production in nigeria, brooding management and profitability of broilers from day old to their table size aimed at discovery to what extent in the use of these brooding techniques from the expected standard.

3.2 SCOPE OF THE STUDY

The research does not cover everything about the poultry industry.it focuses mainly of brooding of broilers, especially the challenges associated with brooding techniques and the measures used to solved them. The study also examines the extent in the use of these brooding techniques from the expected standard..

3.4 POPULATION OF THE STUDY

The population of the study comprises of all the residents in the community in kwara state, who engage in brooding of broilers. These community which are urban areas, were possessively selected because the residence are the targets audience. Kwara state has been estimated population of 2.37million according to the nigeria 2006 census figures

3.5 INSTRUMENTATION

The questionnaire is the instrument for data collection. The questionnaire will be in two parts one will be demography of the respondents like gender,age,sex.marital status etc and part two will contain question relating to the study the question will consist of about 30 close ended questions appropriate for the study to elicit the desired information.

3.6 VALIDITY AND RELIABILTY OF THE INSTRUMENT

The instrument (questionnaire) used is valid because it's the most appropriate instrument for data collection in survey study because it enhances the influence of the research. It's personally nature makes data realized from it reliable and most important, it's give both respondents and researchers the confidentiality of their communication.

More so, the project supervisor monitored it to ensure it's validity both in content and context. This was done by ensuring that the questions contained in the questionnaire are thoroughly and properly constructed and also relevant to the study.

3.7 PROCEDURE FOR DATA COLLECTION

Data collection is defined as the procedure of collecting.measuring and analyzing accurate insights for research, using standard validated techniques. A researcher can evaluate their hypothesis on the basis of collection and ensuring that information rich and to reliable data is collected for statiscal analysis so that data-driven decision can be made for research. The researcher use questionnaire to collect the date. The data will be collected by the researcher and will not employ any assistance to distribute the questionnaire copy.

3.8 METHOD OF DATA ANALYSIS

The method of data analysis is to extract useful information from data and the decision based upon the data analysis the method of data analysis use in this research work covers the use of descriptive and inferential statistical tools.

CHAPTER FOUR

4.0 DATA PRESENTATION AND ANALYSIS

At this chapter, the data are being organized into tables.graphs etc.so that logical and statistical conclusion can be derived from the collected measure merit will be discussed. In presenting data generated from the field, we choose to apply simple percentage tabular presentation made. This is to convenience, clarity and better understanding. We present all the questionnaire items that would provide answers to the researchers' identified problem. All the presentations shall be according to questionaires items and responses.

4.1 DATA PRESENTATION

Data presentation forms an integral part of all academe studies,commercial, industrial and marketing activities as well as professional practices.data presentation is the organization of data into tables,graph,charts etc.all presentation shall be according to questionnaire items an responses.

In the questionnaire items developed from the famed researcher questions, we aimed at using them to elicit answers to the topic problem. A total of 150 copies of the questionaire were produced and distributed to the researchers sample populace.

NOTE: All presentation are done in sample percentage tabular mode, while sample descriptive analysis techniques was to describe what items were contained in the tables.

QUESTION 1: DISTRIBUTION OF THE RESPONDENT AGE

RESPONSES	FREQUENCY	PERCENTAGE (%)
18-25	78	39
26-35	37	18.5
36-45	32	16
46 and above	3	1.5
Total	150	75

Source: Fieldwork, 2025

The table above shows how the respondent answered the question. 78 respondent on 39% fall between the age bracket of (18-25) years and 37 respondents on 18.5% fall between the age bracket of (26-35) years, we have 32 respondents on 1.5% for the age bracket of (36-45) years, we have 32 respondent on 1.5% for 46 years and above.

QUESTION 2: DISTRIBUTION OF RESPONDENT SEX

RESPONSES	FREQUENCY	PERCENTAGE (%)
Male	134	67
Female	16	8
Total	150	75

Source: Fieldwork, 2025

In this response to the question on the distribution of respondents sex, 134 respondents representing 67% of the population are male while 16 representing 8% are female.

QUESTION 3: RELIGION

RESPONSES	FREQUENCY	PERCENTAGE (%)
Islam	96	48
Christian	54	27
Total	150	75

Source: Fieldwork, 2025

The above table shows the number of respondents religion from the table, 96(48%) are islam while 54 (27%) are christian.

QUESTION 4: MARITAL STATUS

RESPONSES	FREQUENCY	PERCENTAGE (%)
Single	80	40
Married	69	34.5

Other	1	0.5
Total	150	75

Source: Fieldwork, 2025

Table 4 above shows the marital status of the respondents. According to the table, 80(40%) are single, 69(34.5%) are married while non falls under divorce (0.5%).

QUESTION 5: TRIBE

RESPONSES	FREQUENCY	PERCENTAGE (%)
Yoruba	106	53
Hausa	20	10
Igbo	9	4.5
Other	15	7.5
Total	150	75

Source: Fieldwork, 2025

Table 5 shows the tribe of the respondents, According to the table, 106(53%) are Yoruba, 20(10%) are Igbo while non falls under others 15(7.5%).

QUESTION 6: EDUCATION

RESPONSES	FREQUENCY	PERCENTAGE (%)
Primary	1	0.5
Secondary	48	24
Post-secondary	46	23
None	55	27.5
Total	150	75

Source: Fieldwork, 2025

Table 6 above shows the education of the respondent according to the t5able, 1(0.5%) are primary holder, 48(24%) are secondary holder, 46(23%) are post-secondary holder while non fall under none that is 55(27.5%)

QUESTION 7: OCCUPATION

RESPONSES	FREQUENCY	PERCENTAGE (%)
Yes	136	68
No	14	7
Total	150	75

Source: Fieldwork, 2025

The table above shows how the respondents answered the question above, 136 (68%) are yes while 14(7%) are no

QUESTION 8: DO YOU BELONG TO AN ASSOCIATION OR COOPERATION?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Yes	83	41.5
No	67	33.5
Total	150	75

Source: Fieldwork, 2025

The table above shows how the respondent answered the question above, 83(41.5%) belong to an association or cooperation while 67(33.5%) are not

QUESTION 9:SOURCE OF INCOME

RESPONSES	FREQUENCY	PERCENTAGE (%)
Loan	22	11
Bank	18	9
Government	24	12

Personal savings	86	43
Total	150	75

Source: Fieldwork, 2025

From the table above, shows how the respondents often get engage with the source of income, 22(11%) get engage with loan, 18(9%) with bank, 24(12%0 with government body and lastly 86(43%) from their personal savings.

QUESTION 10 HAVE YOU BEEN VISITED BY ANY EXTENSION AGENT

RESPONSES	FREQUENCY	PERCENTAGE (%)
Yes	123	61.5
No	27	13.5
Total	150	75

Source: Fieldwork, 2025

The table above, shows how the respondent are visited b an extension agent. 123(61.5%) are visited with an extension agent while 27(13.5%) are not.

QUESTION 11:YEARS OF EXPERIENCE IN BROILERS PRODUCTION

RESPONSES	FREQUENCY	PERCENTAGE (%)
0-5 years	61	30.5
5-10 years	37	18.5
10 and above	52	26
Total	150	75

Source: Fieldwork, 2025

In the table above, 61 respondent on 31.5% fall between (0-5years) and 37 respondent on 18.5% falls between (5-10years) for the respondent years of experience in broiler production, 52(26%) fall between (10-above)

QUESTION 12: HOW DO YOU ACQUIRE KNOWLEDGE AND LEARN NEW THINGS ABOUT RAISING OF BROILER?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Extension agent	50	25
Social group	27	13.5
Interest	68	34
Radio/TV	5	2.5
Total	150	75

Source: Fieldwork, 2025

Table 12 above shows how the respondent get to acquire knowledge and new thing about raising of broilers. According to the table, 50(25%) are through extension agent, 27(13.5%) are through social group, 68(34%) acquired through their own interest while 5(2.5%) are through Radio/TV

QUESTION 13: NUMBER OF BIRDS

RESPONSES	FREQUENCY	PERCENTAGE (%)
0-11	0	0
11-20	1	0.5
21-30	0	0
31-40	2	1
41-50	1	0.5
50 and above	146	73
Total	150	75

Source: Fieldwork, 2025

The table above, shows the numbers of birds own the respondent, 1(0.5%) of birds fall between (11-20), 2(1%) falls between (31-40) and 1(0.5%) of the respondent falls between (41-50), for 146(73%) falls between (50 and above).

QUESTION 14: HOW MANY TIMES DO YOU FEED THEM?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Once daily	1	0.5
Twice daily	50	25
Thrice daily	86	43
Others	13	6.5
Total	150	75

Source: Fieldwork, 2025

Table 14 above shows the number of times the respondent feed their birds.1(0.5%) are fed once, 50(25%) choose to feed them twice a day, 86(43%) are fed thrice while 13(6.5%) falls under others

QUESTION 15: WHAT TYPE OF FEEDING DO YOU GIVE TO THEM

RESPONSES	FREQUENCY	PERCENTAGE (%)
Formulated	107	53.5
Concentrated	37	18.5
Others	6	3
Total	150	75

Source: Fieldwork, 2025

The table above show the type of feeding the respondent gives to his/her birds. 107(53.5%) respondent give their birds formulated feeds, 37(18.5%) respondent give their birds concentrated feeds while 6(3%) falls under others.

QUESTION 16: HOW OFTEN DO YOU WEIGH THEM?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Weekly	52	26
Monthly	94	47
Yearly	4	2
Total	150	75

Source: Fieldwork, 2025

Table 16 shows how the respondent often weigh their birds. 52(26%) of the respondents weigh their birds weekly, 94(47%) respondents often weigh their birds monthly while 4(2%) respondent weigh their birds yearly.

QUESTION 17: WHAT IS THE MAIN SOURCE OF LABOUR?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Family labour	38	19
Hire labour	112	56
Total	150	75

Source: Fieldwork, 2025

Table 17 shows the main source of labour of the respondent,from the table above 38(19%)are through family labour while 112 ([36%) respondent are through hired labour.

QUESTION 18: WHAT IS THE PURPOSE OF BRIOLER PRODUCTION?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Domestic purpose	8	4
Commercial poupose	142	71
Leisure	0	0
Total	150	75

Source: Fieldwork, 2025

Table 18 shows the purpose of broiler production of the respondents, from the table, 8(4%) choose to use it as domestic purposes while 142(71%) used the birds for commercial purposes.

QUESTION 19: SOURCE OF YOUR CREDIT

RESPONSES	FREQUENCY	PERCENTAGE (%)
Commercial bank	26	13
Money lender	20	10
Cooperatives	22	11
Friends/relative	40	20
Agricultural bank	28	14
Others	14	7
Total	150	75

Source: Fieldwork, 2025

Table 19 shows the respondent source of credit. 26(13%) are through the commercial bank, 20(10%) are through money lender. 2(11%) are through cooperatives, 40(20%) are agricultural bank while 14(7%) respondent falls under others.

QUESTION 20:DO YOU HAVE ACCESS OR INPUT FROM GOVERNMENT AGENCIES?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Yes	53	26.5
No	97	48.5
Total	150	75

Source: Fieldwork, 2025

Table 20 shows how the respondent have accessor input from government agencies. 53(26.5%) respondent have access from government agencies while 97(48.5%] respondent do not.

QUESTION 21: TO WHAT EXTENT DO YOU KNOW ABOUT THE COST OF FEEDING?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Once daily	1	0.5
Twice daily	50	25
Thrice daily	86	43
Others	13	6.5
Total	150	75

Source: Fieldwork, 2025

Table 21 shows the extent to which the respondent of feeding.from the table know about the cost above, 109(54.5%) respondents see the cost of feeding as very severe, 40(20%) respondents are moderate severe 1(0.5%) see it has not severe while (0%) falls under not a problem.

QUESTION 22: WHAT ARE THE COST OF MEDICATION

RESPONSES	FREQUENCY	PERCENTAGE (%)
Very severe	14	7
Moderate severe	128	64
Not servere	8	4
Not a problem	0	0
Total	150	75

Source: Fieldwork, 2025

Table 22 shows the responses for the cost of medication from the table, 14(7%) respondents see the cost of medication has very severe, 128(64%) choose moderate severe. 8(4%)respondent see it has not severe while 0(0%) respondent falls under not a problem.

QUESTION 23: BAESD ON YOUR EXPERIENCE,HOW OFTEN DO YOU KNOW ABOUT THEIR STORAGE FACILITIES?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Very severe	49	24.5
Moderate severe	50	25
Not severe	45	22.5
Not a problem	6	3
Total	150	75

Source: Fieldwork, 2025

Table 23 show how often do the respondent knows about their storage facilities. 49(24.5%) respondent see it has very severe, 50(25%) respondent choose moderate severe, 45(22.59%) respondents see it has not severe while 6(3%) respondent falls under not a problem.

QUESTION 24: WHAT ARE THE PROXIMITY OF BIRDS TO THE MARKET?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Very severe	4	2
Moderate severe	127	63.5
Not severe	8	4
Not a problem	11	5
Total	150	75

Source: Fieldwork, 2025

Table 24 shows of the are the proximity [nearness of the birds to the market.from the table,4(2%) respondent see it has very severe, 127(63.5%) choose moderate severe, 8(4%) respondent represent not severe while 11(5.5%) of the respondent falls under not a problem

QUESTION 25: BASED ON YOUR EXPERIENCE, WHAT IS YOUR PERCEPTION ON THE COST OF SHIELD/PEN HOUSE?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Very severe	62	31
Moderate severe	47	23.5
Not severe	20	10
Not a problem	21	10.5
Total	150	75

Source: Fieldwork, 2025

Table 25 shows the responses on the perception of the cost of shield/pen house of the respondent from the table above. 63(31) see the cost of sheild has very severe, 47(23.5%) choose moderate severe, 20(10%) see it has not severe while 21(10.5%] falls under not a problem

QUESTION 26: HOW OFTEN ARE THE RATE OF SICKNESS?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Very severe	7	3.5
Moderate severe	77	38.5
Not severe	40	20
Not a problem	26	13
Total	150	75

Source: Fieldwork, 2025

Table 26 shows how often are the rate of sickness of the birds from the table, 7(3.5%) respondent represent very severe, 77(38.5%) respondent see the rate of sickness as moderate severe, 40(20%) choose not severe, while 26(13%) respondent falls under not a problem.

QUESTION: HOW OFTEN ARE THE REACTION OF PEOPLE IN PURCHASING THE BIRDS (ACCESS TO FINANCE)?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Very severe	5	2.5
Moderate severe	30	15
Not severe	38	19
Not a problem	77	38.5
Total	150	75

Source: Fieldwork, 2025

Table 27 shows the reaction of the respondent in purchasing the birds I.e (access to finance). From the table above 5(2.4%) respondent falls under very severe, 30(15%) falls under moderate severe,38(19%) falls under not severe while 77(38.5%) see it as not a problem.

QUESTION 28: HOW OFTEN DO THE BIRDS RESIST TO CLIMATIC CONDITION?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Very severe	8	4
Moderate severe	13	6.5
Not severe	84	42
Not a problem	45	22.5
Total	150	75

Source: Fieldwork, 2025

Table 28 shows how often the birds resist to the climatic condition. From the table, 8(4%) falls under very severe. 13(6.5%) respondent see it has moderate severe, 84(42%) respondents falls under not severe while 45(22.5%) falls not a problem.

QUESTION 29: HOW ABOUT THE SCARCITY OF WATER?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Very severe	39	19.5
Moderate severe	40	20
Not severe	61	30.5
Not a problem	10	5
Total	150	75

Source: Fieldwork, 2025

Table 29 analyze the tabular presentation of how the respondent responds on the scarcity of water. 39(19.5%) respondent represent very severe, 40(20%) respondent choose moderate severe,61(30.5%) respondent fall under not severe while 10(5%) respondent represent not a problem.

QUESTION 30: BASED ON THE YOUR EXPERIENCE,WHAT ARE THE INADEQUACIES OF THE BIRDS SUPPLY TO THE MARKET?

RESPONSES	FREQUENCY	PERCENTAGE (%)
Very severe	9	4.5
Moderate severe	10	5
Not severe	52	26
Not a problem	79	39.5
Total	150	75

Source: Fieldwork, 2025

Table 30 shows how the respondent respond to the inadequacies of the birds supply to the market from the table. 9(4.5%) respondent represent very severe, 10(5%) respondent see it has moderate severe. 52(26%) respondent fall under not severe while 79(39.5%) respondent fall under not a problem.

4.3 ANALYSIS OF RESEARCH QUESTION

QUESTION 1:

What are the nature and limitation of brooding management and profitability production (BROILERS)?

Table 27 answered this question as it was gathered that 5(2.5%) respondent react in purchasing of the birds as a result of the nature and limitation of brooding management and it profitability.30(15%) moderate severe, 38(19%) not severe while 77(38.5%) falls under not a problem.

QUESTION 2:

What are the site selection, housing design and construction for brooding broiler birds?

Table 25 answered this question as it was gathered that 62(31%) very severe respond that the site selection, housing design and construction are very severe, 47(23.5%) represent very severe, 20(10%) respondent represent not severe, while 21(10.5%) falls under not a problem.

QUESTION 3:

What are the poultry disease symptoms,mode of transmission and treatment in poultry (broilers)?

Table 26 answered this question as it was gathered that 7(3.5%) respondent represent very severe, 77(38.5%) respondent see it as moderate severe, 40(20%) choose not severe, while 26(13%) respondent represent not a problem.

QUESTION 4:

What are the vaccines and drugs given to poultry bird (BROILERS)?

Table 12 answered this question as it was gathered that 14(7%) respondent see the cost of medication as very severe. 128(64%) respondent choose or see it as moderate severe,8(4%) respondent fall under not severe while 0(0%) respondent fall under not a problem.

QUESTION 5:

What are the significance of broilers production?

Table 30 answered this question as it was gathered that 9(4.5%) respondent represent very severe, 10(5%) respondent see it has moderate severe, 52(26%) respondent fall under not 79(39.5%) respondent fall under not a problem severe while

4.4 DISCUSSION OF FINDINGS

The purpose of the study is to know the significance and profitability of raising broiler birds in Nigeria. The result obtained were from the statistical analysis of this study data were presented in this chapter to answer the research question raised in the study percentage and frequency statistical tools was used.

Definite question were asked in the questionnaire to generate answers to each of the questions posed in this study. 150 questionaire wereadminstered to the respondent and all the copies of the questionaire were returned.

In table 24, Our finding confined that, the proximity of birds to the market as indicated 127(63.5%), 4(2%) very severe. Moderate severe, 8(4%) not severe while 11(5.5%) respondent falls under not a problem.

It was also discovered that the rate of sickness are often differs from each other as indicated in table 26, 7(3.5%) respondent represent very severe while 26(13%), respondent falls under not a problem

We also noticed that, respondent believe that the cost of feeding is very high as indicated in table 21. 109 (54.5%), respondent see the cost of feeding as very severe, 40(20%) respondent represent moderate severe, while 1(0.5%), respondent falls under not severe.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

This Research is based on “Brooding Management And Profitability Of Broiler From Day Old To Their Table Size” The research is divided into five chapter from chapter one of this study to chapter five clearly reviewed some step approach for easy presentation of it’s contents.

Chapter One is based on the background of the study, which emphasizes on the the poultry industry which has become a major tools of tackling the problems of unemployment and underemployment in Nigeria Statement of the Research problems. Objectives, Researchquestions, Significant of the study, Scope of the study and it’s limitation with Definition of key terms.

Chapter Two of this research work explain the literature review of the research applied by the researcher and the use of related literature was used literature review was done to explain the nature and the foundation on which the research is been built.

Chapter Three of this research work however.contains research methodology adopted in the study, scope of the study, population of the study which are the dwellers of the Ilorin metropolis sampling size and sampling techniques that is sample random and the instrument used in the research study is questionnaire that was administered amidst the sampling size of the population.it was also clearly stated the method of data analysis of the research.

Chapter four of this research work explained how the data gathered were analyzed for proper understanding it also contained how data were presented.

Chapter five of this research work clearly explained and summarized the whole chapter right from chapter one to chapter four it also contain conclusion and recommendation.

5.1 CONCLUSION

Our findings confined that brooding of broilers play a more fertile role in tackling the problem of unemployment in Nigeria in the light of the study,respondent believe that there should be checks and balance on the cost of feeding medication as well as the housing and proximity of the birds (broilers) to the market. Also in relation to the study about 5(2.5%) respondent representing very severe often react with the purchasing power of the birds, 30(15%) respondent falls under not severe while 77(38.5%) respondent falls under not a problem. This means that,77(38.5%) respondent purchase more of the birds in the market.

5.3 RECOMMENDATIONS

At the end of the study, the following recommendations are made:

i. Regular assessment should be conducted to improve awareness of storage facilities among poultry farmers.
ii. Enhance proximity of broiler farms to markets to reduce transportation stress and cost.
iii. Government should subsidize the cost of building poultry pens and shield houses.
iv. Improve veterinary services to minimize sickness rates in broiler farms.
v. Farmers should be educated on proper brooding practices to boost birds' resistance to climate.

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