ASSESSMENT OF GENDER ROLES IN POULTRY FARMING IN DELTA STATE, NIGERIA

BY

Otaigbe Felix AMOMON

AGR1810119

DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION SERVICES
FACULTY OF AGRICULTURE
UNIVERSITY OF BENIN
BENIN CITY

MAY, 2024

ASSESSMENT OF GENDER ROLES IN POULTRY FARMING IN DELTA STATE, NIGERIA

BY

Otaigbe Felix AMOMON

AGR1810119

A PROJECT SUBMITTED TO THE DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION SERVICES, FACULTY OF AGRICULTURE, UNIVERSITY OF BENIN, BENIN CITY

IN PARTIAL FULFILLMENT FOR THE REQUIREMENTS FOR THE AWARD OF BACHELOR'S DEGREE IN AGRICULTURE (OPTION: AGRICULTURAL ECONOMICS AND EXTENSION SERVICES)

MAY, 2024

CERTIFICATION

This is to certify that this project work was carried out by **Otaigbe Felix AMOMON** with Matriculation Number **AGR1810119**of the Department of Agricultural Economics and Extension Services, Faculty of Agriculture, University of Benin, Edo State, Nigeria.

_____ **Date:**_____

Mr. Alex Ehigie
Project Supervisor

_____ **Date:**_____

Prof. Mrs. M.J. Koyenikan
Head of Department

DEDICATION

I dedicate this project work to God Almighty, my strengthener and sustainer, who in His tender mercies kept and protected me throughout my undergraduate journey in the prestigious university of Benin, Benin City.

ACKNOWLEDGEMENTS

My profound acknowledgement goes to God Almighty for His grace and mercy over my life throughout my undergraduate journey in the University of Benin.

I also express my profound gratitude to my project supervisor, Dr. Alex Ehigie, who in his tight schedules created time to go through my work and directed me on the right path to go. Also, for his patience, kind gestures, advice and understanding and for giving me the privilege to learn new things from him both in learning and in character that aided the quick completion of this project work. I am immensely grateful sir.

I will not fail to appreciate the Head of Department of Agricultural Economics and Extension Services Prof. M.J. Koyenikan (Mrs.) for her passion towards the academic success of every student in the Department of Agricultural Economics and Extension Services. Also the contribution of my academic mention, Prof. D.U. Okoedo-Okojie and all the lecturers in the Department cannot be left unacknowledged, in the persons of Dr. Konkwo and all lecturers of the department working tirelessly to impact the students.

My sincere appreciation goes to my ever supportive wife, Amomon O. Tina, my kids, Samuel Otaigbe, Toris Otaigbe, Felix (Jrn) Otaigbe and kareen Otaigbe who

showed me maximum love and support during my undergraduate journey in the University of Benin.

I want to specially thank the efforts of those who God empowered to support my academic journey in the persons of Pst Daniel Oluwaseun, Pst Godwin Adomi, Engr. Newton Osarumwense Edogiawieree, and member of Tehcnical Unit, living faith church, Ekenwan, Rt. Hon. Roland Osadebamwen Asoro and Mrs. Jane Omamogho, Wisdom Edujie.

Finally, I want to thank the final year students of the Departments of Agricultural Economics and Extension, University of Benin for their support and contributions to my academic journey and the success of this project work.

TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

Despite the importance of poultry, its production is still in the hands of small holder farmers, fragmented farm holdings and usage of unskilled labour force. Farming activities are carried out by both males and females where there is often a gender division of labour. This study assessed gender roles in poultry farming in delta State, Nigeria. Specifically it examines the socio-economic characteristics of poultry farmers in the study area; ascertain the division of labour by gender in poultry farming; identify factors responsible for the dominance (if any) by any of the gender group in poultry farming; identify information needs and source by gender in poultry farming and; identify problems faced by respondents in poultry farming. Questionnaire was used to solicit data from one hundred and sixty (160), made up of 102 males and 58 females poultry farmers and analysed with frequency counts, percentages, means, standard deviation and hypotheses testing using t-test

Results showed that a higher proportion (43.1%) of male and majority (55.2%) of female poultry farmers were between 41 and 50 years and most (90.2%) and (93.1%) were married; also majority (54)9% and 63.8% as males and females famers had poultry experience of between 6 and 10 years. Most (89.4%) and a higher proportion (48.8%) of males and females respectively were involved in preparation of poultry feeds and sourcing of day old chicks respectively. There was no significant difference in male and female poultry farmers access to information sources. The study conclude that male gender dominance in poultry farming was mainly strength needed for the task.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background Information

Poultry refers to all birds of economic value to man. Examples include: chickens, pigeons, duck, pheasant, quail, guinea fowl, and recently ostrich all which belong to the zoological class aves. Atteh (2004) stated that poultry have been on earth for over 150million years, dating back to original wild jungle fowl. Poultry offers a range of uses to human which include: provision of meat and eggs , research and medicinal purpose, production of manure which helped to improve the soil fertility, feathers from poultry birds provide human with aesthetic value (Atteh,2004).

Poultry provides the human body with a range of nutrients such as protein, vitamin B, including thiamin, riboflavin, niacin, and pyridoxine, vitamin E, zinc, iron and magnesium . Protein is essential for the human body because it helps build healthy bones, muscles, skin, cartilage and blood cells. Poultry eggs are a very good source of inexpensive, high quality protein. More than half the protein of an egg is found in the egg white along with vitamin B2 and lower amounts of fat and cholesterol than the yolk. Eggs are regarded a complete source of protein as they contain all eight essential amino acids.

The interest in poultry and poultry products have grown tremendously in the last 20years as stated by (Atteh,2004). Almost every country in the world is involved in poultry production. A probable reason might be because of the acceptance of poultry meat all over the country by all religious and cultural sects.

According to FAOSTAT (2013), the poultry industry in Nigeria had been rapidly expanding in past years, increasing from 185,300metric tonnes in 2001 to 268,000 metric tonnes in 2011.Also, in 2011, Nigerian hen production was 636,000 metric tonnes and was valued at $527.49 million, ranking 19th in world hen egg production and the top producer in Africa. The demand for poultry is far above 2million tones yearly according to a statement by the President of Poultry Association of Nigeria, Dr Ayoola Oduntan in an article in The Nation's newspaper dated August 31st, 2015. The demand far exceeds the production capacity in the poultry industry in Nigeria. It is clear therefore that more needs to be done in the aspect of commercial poultry farming. The gap in production and demand led to years of importation of poultry meat. Although there has been ban on import of poultry meat since 2002, however, large volumes of undocumented and illegal imports are still being carried out. The import ban has reduced but not eliminated imports (USDA report,2002).

As expected, broiler industries in major exporting countries are characterized by modern technologies and a high level of vertical integration (World Poultry,2004).Only a small number of these vertical integrated facilities operate in Nigeria (Killebrew and Plotnick,2010) This obviously is a constraint to poultry farming in Nigeria. Another constraint is the subsistent and small scale nature of poultry farming. A report by Okonkwo and Akubuo (2001) shows that about 10% of the Nigerian population are engaged in poultry product ion, mostly on subsistence and small or medium sized farms.

Labour as a factor of production can be describe as the engine in production. Labour is all human service except decision making in production process (Okoedo-Okojie and Edeoghon, 2009). Labour according to Dvrorak (1992) is a valuable resource of the farm families in agricultural production. The availability of labour cannot be despised in describing and understanding indigenous farming practices. In the cost of agricultural production, both men and women have been involved in rearing of animals to meet their family needs. However, owing to changes in this trend with more animals being introduced to enhance this production, this participation by both male and female has endured (Okoedo-Okojie and Edeoghon, 2009).

Over the years, different patterns have evolved in the particular roles that men and women play in the different task they perform at various levels in agricultural production process. Men and women carry out production within a wider economic and social context, where there is often a gender division of labour.

Kabeer (2003), stated that women play major role in food production, while in Congo, women provide 80% of the labour. The percentage of women economically active in agriculture ranges from 48% in Burkina Faso to 73% in Congo, shortage of male labour and high cost of labour due to male migration to urban, women do more of the farming activities themselves. Olawoye (1995) stated that this situation, however, makes labour very scarce resulting to the women doing all the duties in the farm and where there is labour at all, they charge the women so high.

In Nigeria, over 80% of the adult female population are involve in agricultural activities as they are active in both on-farm and off-farm operations although some operations are more gender friendly than others (Okoedo-Okojie and Edeoghon, 2009). It is therefore pertinent to analyse the gender roles played by farmers in the production of poultry, of which Nigeria is a producer.

1.2 Problem Statement

It is almost as if these days, poultry is no longer thought of as animal only but more like an industrial raw material with a mind blowing amount of uses and as a result, its demand has increased tremendously. Despite the importance of poultry, its production is still with small holder farmers, fragmented farm holdings and usage of unskilled labour force.

In the face of all these problems, agricultural operations are still being carried out by male and female farmers. Over the years, different patterns have evolved in the particular roles that men and women play and the different task they perform at various levels in agricultural production process. Men and women carryout within a wider economic and social context, where there is often a gender division of labour.

Labour has been a major issue in animal production and poultry farming is not an exception. This is because it accounts for 70% of the total cost of the production. In agricultural production, both men and women have been involved in rearing animal to meet the family needs. However, owing to changes in this trend with more animal being reared for the market and more technologies being introduced to enhance the production, this participation has both male and female. Over the years, different pattern have evolved in the particular role that men and women farmers vary out production within a wider economics and social context, which there is often a gender role in food production in Africa for example in Sudan

women provide 30% of labour for food production while in Congo, women provide 80% of the labour. The percentage of women economically active in agriculture range from 48% in Burkina Faso to 73% in the Congo, but Afolami (1995) is of the opinion that farming activities in agricultural production are usually carried out by both male and female, and their labour roles where gender defined. Consequently, gender issue in agricultural production has become a subject of investigation.

Therefore, this research effort is aimed at providing answer to the following questions:

(1) What are the socio-economic characteristics of poultry farmers in Delta State?

(2) What are the divisions of labour by gender in poultry farming?

(3) What factors are responsible for the dominance (if any) by any of the gender.

(4) What are the information needs and sources by gender in poultry farming?

(5) What are the constraints faced by gender in poultry farming?

1.3 Objectives of the Study

The general objective of the study was to access the labour roles played by different gender groups in poultry farming in Delta State, Nigeria.

The specific objectives of the study were to:

(i) determine the socio-economic characteristics of poultry farmers in the study area;

(ii) ascertain the division of labour by gender in poultry farming;

(iii) identify factors responsible for the dominance (if any) by any of the gender group in poultry farming;

(iv) identify information needs and source by gender in poultry farming and

(v) identify problems faced by respondent in poultry farming

1.4 Hypotheses for the Study

The following hypothesis stated in the null form were tested

1. There is no significant difference in male and female farmers' access to information in poultry farming
2. There is no significant difference in constraints limiting male and female farmers access to information on poultry farming.
3. There is no significant difference in poultry farming constraints facing male and female farmers.

1.5 Justification of the Study

It is necessary to ascertain the specific labour roles played by the different gender in poultry farming. This, will prove beneficial in that, it will enable poultry farmers to improve on resource allocation, so as to achieve the needed optimal

goal. This will be great to industries using poultry product and by-product as a raw material. It will also be a source of reference to students who are interested in carrying out an investigation and research based on the related problems. It will also enable agricultural researchers and extension workers or agents in giving useful advice to poultry farmers on how to solve problems of poultry farmers. The study will equally provide other information and recommendation that will guide investment decisions in the poultry sub –sector.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Concept of Poultry Farming

Poultry farming is the raising of domesticated birds such as chicken, turkey, geese, etc. for the purpose of meat and for egg production. Poultry farming could involve broiler production which is basically for providing meat, layers production for eggs, sales of day old chicks, formulation of feeds, marketing of poultry products, etc. Poultry farming could either be practiced in any of the system:

1. **Intensive System**

This involves total confinement of poultry birds in a poultry house or cage. The system could be medium or large scale commercial enterprises and could also be used at household level (Sonaiya and Swan,2004)

2. **Semi-intensive System**

a. These are a combination of the extensive and intensive system where birds are confined to a certain to a certain area with access to shelter. They are found in urban, peri urban as well as rural areas. Fee and water are available to them in the house to avoid wastage by rain, wind, and wild animals.

3. **Extensive System**

This could be :

a. **Free Range System:** Birds under this system are not confined but allowed to scavenge for food over a wide area. The farmer spends less on providing feed for the poultry birds but risks the birds being stolen or knocked down by moving vehicles.

b. **Backyard System:** In this system, poultry birds are housed at night but allowed to free range during the day. They are usually fed a handful of grain in the mornings and evenings to supplement scavenging.

Poultry farming could be small scale, medium scale and large scale commercial farming. Family poultry is defined as a small scale poultry kept by households using family labour and wherever possible, using locally available feed resources(Sonaiya and Swan, 2004)

Rural poultry is defined by participants at a 1989 workshop as a flock of less than 100birds. Labour is not salaried, but drawn from the family household (Sonaiya,1990b).

2.2 Activities Carried Out in Poultry Farming

Some of the activities carried out in ;poultry farming that could be studied to ascertain the extent of gender participation in poultry farming are but not exhaustible in the list below.

Preparation of brooding activities, sourcing and collection of day old chick, brooding of day old chicks, routine medication and vaccination of day old chicks, feed milling operations, feeding of birds, disposal and replacement of poultry litters, culling of birds, daily record keeping, dressing of birds, packaging and weighing of dressed birds,

storage of dressed birds, collection, cleaning, grading and sorting of eggs, transportation, sales and the distribution of resources and marketing of poultry product, placing of prices on poultry products.

2.3 Constraints in Poultry Farming

In spite of substantial qualitative and quantitative advancements in different sectors of the poultry industry will continue to face numerous challenges on a global basis.

Some of the constraints are :

1. Feed cost and continuous efforts to get a better understanding of available alternative feed ingredients. At present, feed cost is probably one of the most serious challenges for the industry.
2. Disease outbreaks and implementation of biosecurity programs, although the extent and also types of disease outbreaks acan vary in different parts of the world. In addition, diseases of metabolic origin including ascites and skeletal disorders are of importance as well.
3. Issues surrounding inclusion of antibiotics in poultry feed and also the use of alternatives to antibiotic growth promoters
4. Insecurity as a result of incidence of human theft
5. Nutrition- related environmental issues(excretion of nutrients such as nitrogen and phosphorus in the manure.
6. Issues related to water in terms of both quality and quantity.

2.4 Gender

The word gender is often confused with the word sex. While sex differentiate the innate biological makeup of men and women, gender on the other hand arise from some socially constructed relationship between male and female (Oakley, 1972). Gender differences affect the distribution of resources and responsibilities between men and women and are shaped by ideological, religious, ethnic, economic and cultural determinants (Moser, 1989)

As defined by FAO(1997), gender is the relations between men and women, both perceptual and material. One of the earliest advocates of gender equality was British philosopher and economist John Stuart Mill in his essay 'The Subjection of Women (1869). John S. Mill disgraced with the idea that women are naturally worse at something than men argued is that we cannot know what women are capable of because we have not let them try. And he added that whether women , family do them or not can only be found in practice.

Gender issues focus on women and on the relationship between men and women, their roles, access to and control over resources, division of labour, interests and needs. Gender relations affect household security, family wellbeing, planning, production and many other aspects of life. (Bravo-Baumaan, 2000).

2.5 Women and Agriculture

The claim is often herd that women produce 60-80 of food in most developing countries and half of the world food supply. (Momsen, 1991; Mehra and Rojas, 2008). Women make essential contributions to the agriculture and rural economies in all developing countries. Their roles vary considerably between and within regions and are changing rapidly in many parts of the world, where economic and social forces are transformation the agricultural sector (FAO 2011). Rural women often manage complex households and pursue multiple livelihood strategies. Their activities typically include producing agricultural crops , tending animals, processing And preparing food, working, engaging in trade and marketing, caring for the family members and maintaining their homes(FAO, 2011).

2.6 Women in Livestock Keeping

Women are very much engaged in livestock production. An estimate of 2/3 of the poor livestock keepers, totaling approximately 400million people are women (Thorn ton et al, 2002). For instance, women often have a prominent role in poultry management (FAO 1998; Gueye 2000; Tung 2005) and diary animals (Okali and Mims 1998; Tangka, Jabbar and Shapiro, 2000). The influence of women is strong in the use of eggs, milk and poultry meat for home consumption and they often have control over marketing and the income from these products (FAO 2011). For this reason perhaps, poultry has been popular investment for the development project aiming to improve the lot of rural women.

While pastoralist and small scale livestock farmers are able to meet rural demand, the urban sector demand has not been fully met, evidently because of large importation of poultry meat into the country. There is therefore a higher need for large scale commercial production of poultry. This has important implications for the engagement of women in the livestock sector because of the different roles, responsibilities and access to resources that are evident within different scales of production system and at different points on the production and marketing chain(). The available evidence suggests that the role of women in meeting these changing demands may diminish for two reasons. The first is when livestock enterprises scale up, the control of decisions and income and sometimes the entire enterprise shifts to men, although this is not universal . The second challenge is that of the business continuation probably due to lack of funds. Women's contribution in poultry farming can be seen in activities such as slaughtering, processing and retail, etc but not much can be said about control of their resources.

2.7 Elements of Gender Participation

Labour

Labour refers to the human effort employed or engaged or involved in production process. This factor of production is very important. Almost all activities in poultry farming need human effort to be carried out.

Women make up almost 50% of the agricultural labour force in sub Saharan Africa, an increase from 45% in 1980. The averages in Africa range from just over 40% in

Southern African to just over 50% in Eastern Africa. These sub-regional averages have remained fairly stable since 1980, with the exception of Northern Africa were the female share appears to have risen from 30% to almost 45%

In 2007, A study by S.O Okoh et al(2010) shows that women contributed up to 54.7 of the labour input in commercial poultry production in Karu and Lafia areas of Nassarawa State. This may hold true for other regions owing to the fact that women are predominant owners of poultry (Okitoi et al, 2007)

Land

Land is the most valuable form of property in agrarian societies because of the economic, political, symbolic and ritual importance (Bioye et al, 2006). In most developing countries, land is not the only means of generating livelihoods but often the main vehicle for investing, accumulating wealth and transferring it between generations. There is a strong correlation in many societies between the decision making powers that a person enjoys and the quality and the quantity of land rights held by that person. (FAO, 2002).

In most African countries, women have land use priorities from husbands but no independent right which allows them control or produce from land (Adekola, Adereti,Koledoye and Owombo, 2013). In traditional or customary societies, women's

direct access to land through purchase or inheritance is often limited, yet they may have greater management and use rights than men.(FAO, 2002) Gender differences in land tenure should be recognized if land objectives such as increased land productivity, providing affordable housing or promoting sustainable resource management are to be met.

Nigeria typifies a society with male superiority and dominance (Lawanson, 2013) and this can be a drawback to women's accessibility to land. However, Soetan (2002) posited that marital status increases the ability of women to own land.

Access to Credit Facilities and Technology

One may not have all the capital to start a business enterprise but with the advent of commercial banks, cooperatives, microfinance banks, the problem of start-up capital can be tackled. However, there is an inequitable access to resources between men and women(which is biased towards men) in mostly patriarchal entitlement system (Akanyi, 1997) of which Nigeria is one. Women are denied access to productive facilities that could boost their socioeconomic situation(Prakash, 1999). The reason for this may not be far-fetched as women do not have ready access to farm lands or other valuables that can be used for collateral.

With the rate at which the world changes, there is hardly anything that is and can be done without the use of some form of technology or the other. The ease that

technology gives to our daily work cannot be overemphasized. Therefore, for Nigeria to become a major player in poultry production, technology must be involved in poultry production. However, access to and availability of these technologies is not always an easy venture. Mbanelo (1990) and Nweke (1994) reported that most policies aimed at making agro technological inputs accessible to female farmers in Nigeria were actually directed towards men. With this report, little wonder why women still practice agriculture in small scale. Even if these technological inputs are available, the technical know how may not be available to put them in use as Okoh et al (2010) reported that poultry farmers are seldom considered by extension workers to visit and motivate them, provide training that would augment their potential capabilities and information on technological advancement.

Management and Decision Making

Management is a factor of production that controls all others. It is defined as an activity that utilizes the functions of planning, organizing, coordination, and control of both human and natural resources to achieve a set goal.

Women world over according to World Bank data (2013), contribute about 50% to global labour force. FAO (2011) stated that they contribute about 43% of agricultural labour force globally. Women participation in decision making process has a significant impact on their improved status and greater role in society. Their participation is potentially important to bring equality between women and men in

order to achieve sustainable development. However, despite this major role, men have reportedly continued to dominate farm decision making, even in areas where women are largest providers of farm labour. The role of women in farm activities, so important economically, has remained obscure for long because women played any major roles in political activities or decision making processes (Mihiret and Tadesse, 2014). This is a result of traditional gender-based subordination and disparity between men and women in the size of landholding and other agricultural resources in farm production. However, the productivity of women depends on the rate of their involvement in farm decision making (Rahman et al,2005). This could be counter-productive because there is bound to be conflict when women as key players carry out farm tasks without being part of the decision process, especially when the decisions fail to recognize their other peculiar household responsibilities.

2.8 Meaning of Gender Participation

Participation could mean different things to different people. In this context, participation means involvement in any sector without undue discrimination as a result of gender. The terms participation and Gender have become a part of development discourse and practice in the last few decades. Advocates of these concepts have claimed that they allow for representation of the most marginalized groups, such as women and the poor. Combining gender with participatory approaches can strengthen both gender and participation, grounding gender in the realities of people's lives, and

making participation a more effective channel for the expression of marginalized people's demands. The mainstreaming of both approaches can increase the redistribution of positive outcomes of projects, programmes and policies.

The full participation of both men and women in policymaking, in economic and sectoral analysis, and in project design and management, maybe impeded by cultural and legal constraints which limit women's participation and by women's relative lack of time and mobility due to their workload and multiple roles. If participatory development is to benefit from women's contributions, and meet the particular needs of women, a range of strategic and practical measures must be taken to overcome these barriers (World Bank, 1995).

CHAPTER THREE

3.0 METHODOLOGY

3.1 The Study Area

The study area was conducted in Delta State. Delta State was created from the defunct Bendel State on the 27th of August, 1991, with a total population of 4,698,391 with 2,674,306 males and 2,024,085 females. The state cover a total land mass of 17,689 square kilometers with a population density of approximately 266 inhabitants per square kilometer. The annual growth rate of the state has been recorded to be 3.28% (National population Census, 2006). It shares boundary with other states as follows; in the North, it is bounded by Edo State, the East by Anambra State, South East by Bayelsa State and on the Southern flank is Bight of Benin (Delta state statistical year book, 2009). The state is currently made up of 25 local government areas (L.G.A.) spread across three senatorial district (Delta South, Delta Central and Delta North senatorial districts)

The farmers are predominantly into the farming of various annual crops like cassava, maize, yam etc and cash crops like rubber and oil palm. Fishing is also a major occupation of those living in the riverine areas of the state. Delta State have a tropical climate with two marked season, the wet (April to October) and the dry season which occurs between November and March.

3.2 Population for the Study

The population of this study includes all poultry farmers in the Delta State.

3.3 Sampling Size and Sampling Procedure

To select the samples needed for the study, a multi-stage sampling technique was employed. The first stage involves a purposive sampling of four (4) local government areas, which are Isoko South, Sapele, Ugheli North and Warri South L.G.A. these four local government will be selected because people in the local government because of the predominance of poultry farming.

The second stage involves a random selection of poultry farmers from four communities in each local government and ten farmers from a community. The communities include Oleh, Umeh, Irri, Igbide in Isoko South Local Government Area Sapele, Amukpe, Elume, Ogiedi in Sapele Local Government Area , Agbarho, ugheli, Agbarha, Ogor Ugheli North Local Government Area and Warri, Agbassa, Orugbo, and Ode-Itsekiri in Wari South Local Government Area making a sample size of one hundred and sixty (160). One hundred and two (102) males, and fifty eight (58) females

3.4 Data Collection Instrument

The source of data will be from primary source generated during field survey. The primary data collected deals with obtaining direct information from individual

farmers (oral interview) through personal interview with the aid of questionnaire (160) copies of the questionnaire were used for the farmers.

3.5 Measurement of Variables

Variables measured include the following;

Demographic characteristics of the respondents which include;

(1) **Sex of respondents:** This was measured by respondents ticking whether he/she is male or female. A 2 scale will be used (sex male = 1, female =2).

(2) **Age of respondents:** This was measured by respondents to indicate their actual age in years.

(3) **Marital status:** This was measured by respondents ticking he/she is married, single, divorced, separated and widowed. Four (4) point writing scale will be used (single = 1, married =2, divorced =3, widowed = 4).

(4) **Level of educational qualification:** Respondents were askedwhat level of education i.e. no formal education, primary education, secondary education, NCE/OND, HND/BSc.

(5) **Working experience:** Respondents will be asked to indicate their working experience in years.

(6) **Source of land:** This was measured by asking respondents to indicate their source of farmland. inheritance was coded 1, purchase was coded 2, lease was coded 3, government was coded 4.

(7) **Source of labour:** This will be measured by asking respondents to tick the appropriate option. Options will be stated and code as follows; self efforts will be coded 1, hired labour will be coded 2, family labour will be coded 3, family and hired labour will be coded 4.

(8) **Family size:** respondents will be asked to indicate their family size by ticking the appropriate option.

(9) **The division of labour by gender** in poultry farming will be measured by asking the respondents to tick the appropriate option below.

(i) Who does the following operation; in poultry farming; sourcing for day old chicks, preparation of feed, sanitation, routine medical and vaccine programme, feeding of birds, dressing of birds, marketing, place of price on poultry products.

(ii) Which gender do you think is more prominent in poultry farming?

(iii) Which type of farming system do you practice in your farm?

(iv) Do you keep records of your farming activities?

The factor responsible for dominance by gender in poultry farming was measured on a four point rating as follows; agree, coded 1, strongly agree, coded 2, disagree, coded 3, strongly disagree, coded 4.

A mean score of 2.5 (1+2+3+4) = 10/4) and above will be regarded that respondents dominance by gender group in poultry farming is positive.

(10) **Information need in poultry farming:** Respondent's information need was measured on a three point rating scale as follows; have access, access and no access.

The problem faced by the farmers in poultry farming was measured by asking the respondents to indicate the severity of the constraints in a 4-point likert type scale of very serious, coded 4, serious coded 3; less serious, coded 2 and not a problem coded 1. A mean score of 2.5 (4+3+2+1= 10/4) and above will be regarded that particular constraint was serious.

Problem of information sourcing, will be ranked on a 4-point likert type scale where strongly agree coded 4; agree coded 3; disagree, coded 2; strongly disagree, coded 1.

3.6 Analytical Techniques

Simple descriptive statistical technique such as frequency counts, percentage, mean, standard deviation as an inferential statistical technique and t-test will be used to test the 3 hypothesis,.

Test of significance using T test:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{S_{\bar{x}}}$$

$$S_{\bar{x}} = \sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}$$

Where:

t = T-test

$\bar{x}$ = Arithmetic mean

$S_{\bar{x}}$ = Standard error

S^2 = Variance

n = Sample size

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Socio-economic characteristics of Respondent

Sex: Table 1 shows that majority (63.75%) of the poultry producers were male while the female were 36.25 percent. This agrees with Okoedo-Okojie and Edeoghon, (2009) which stated that in Nigeria over 80% of the adult female population are involve in agriculture as they are active in both on-and-off-farm operations although some operations are more gender friendly than others.

Age: Table 1 showed that a higher proportion (43.1%) of male farmers were between 41 and 50 years while majority (55.2%) of female farmers 41 and 50 years.

Marital Status: From the Table 1 most (90.2%) and (93.1%) of the female farmers respectively.

This is an indication of high responsibility of the poultry producers and marriage as a honourable institution.

Educational Level: Data of educational level shows that 47.1% of male and 39.7% of female had secondary school education. This may have affected the

majority of the poultry producers level of knowledge and adoption of technology positively.

Poultry Production Experience: majority of respondents had between 6 and 10 years poultry production experience, having a percentage of 54.9 and 63.8 in both male and female in the study area. The implication is that poultry production is an enterprise that is being adopted of recent and it is a profitable one.

Household size: Household size of 5 and below persons where in its majority having a percentage of 56.9% for male and 53.4% for female.

Poultry marketing experience: The Table shows that majority of poultry marketing were between 6 and 10 years of a percentage of 57.8% in male and 53.4% in female.

Membership of Association: 50% of the male producers are members to association while the majority of female of 51.7% do not belong to any association. The association will serve as a medium of information source for the poultry producers.

Table 1: Socio-Economic Characteristics of Poultry Farmers

		Male (102)		Female (58)	
		Frequency	**Percentage**	**Frequency**	**Percentage**
Age: (years)	31-40	21	20.6	14	24.1
	41-50	44	43.1	32	55.2
	51-60	37	36.3	12	20.7
Marital status	Single	10	9.8	2	3.4
	Married	92	90.2	54	93.1
	Divorced	-	-	1	1.7
	widowed	-	-	1	1.7
Educational level	No formal	5	4.9	4	6.9
	Primary	8	7.8	10	17.2
	Secondary	48	47.1	23	39.7
	NCE/OND	23	22.5	13	22.4
	B.Sc/HND	18	17.6	8	13.8
Production experience (years)	1-5	26	25.5	12	20.7
	6-10	56	54.9	37	63.8
	11-15	19	18.6	5	8.6
	16-20	1	1.0	3	5.2
	21 >	-	-	1	1.7
Household size	Below 5	58	56.9	31	53.4
	6-10	42	41.2	27	46.6
	11-15	2	2.0	-	-
Poultry marketing experience (years)	1-5	33	32.4	21	36.2
	6-10	59	57.8	31	53.4
	11-15	10	9.8	4	6.9
	16-20	-	-	1	1.7
	21>	-	-	1	1.7
Membership of association	Yes	51	50.0	28	48.3
	No	51	50.0	30	51.7
	Total	**102**	**100.0**	**58**	**100.0**

Source: Field Survey, 2024

4.1.2 Sources of Input

Source of land: Majority of the producers of poultry had purchase as a source of their land for production. This is 55.9% and 65.5% of male and female respectively.

Source of Labour: From Table 2, majority of source of labour was said to be family labour having a percentage of 54.9% in male and 65.5% in female. This shows there is insufficient hired labour for poultry production.

Source of Capital: From Table, in terms of source of capital, personal saving was the highest in percentage of 78.4% and 82.8% for male and female respectively. The implication of this is that it may not easy in accessing loan for bank and co-operative.

Table 2: Poultry Farmers Sources of Inputs

		Male (102)		Female (58)	
		Frequency	**Percentage**	**Frequency**	**Percentage**
Source of land	Inheritance	35	34.3	16	27.6
	Purchase	57	55.9	38	65.5
	Lease	1	1.0	1	1.7
	Government	9	8.8	3	5.2
Source of Labour	Self effort	26	25.5	8	13.8
	Hired			3	5.2
	Family	56	54.9	38	65.5
	Family and hired	20	19.6	9	15.5
Source of capital	Personal savings	80	78.4	48	82.8
	Friends and relatives	1	1.0	1	1.7
	Thrift	5	4.9	1	1.7
	Private money	2	2.0		
	Cooperative loan	4	3.9	1	1.7
	Bank loan	10	9.8	7	12.1

Source: Field Survey, 2024.

4.1.3 Extension Contact

From Table 3, it shows that majority of producers of poultry have contact with extension officers monthly, with percentage of 83.3% for male and 84.5% for female producers. The implication of this is that the poultry producers have access to extension agents.

Table 3: Poultry Farmers Extension Contact

	Male (102)		Female (58)	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Monthly	85	83.3	49	84.5
Yearly	17	16.7	9	15.5

Source: Field Survey, 2024

4.1.4 Means of Transportation

Data in Table 4 shows that 67.6% and 82.8% of male and female uses vehicle for transportation. This means that there are available means of conveying items and products from one place to another.

Table 4: Poultry Farmers Means of Transportation

	Male (102)		Female (58)	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Vehicles	69	67.6	48	82.8
Truck	27	26.5	10	17.2
Motorbike	6	5.9		

Source: Field Survey, 2024.

4.2 Gender Roles in Poultry Production

Table 5 shows the responsibilities of male and female in the production of poultry. Twelve (12) productive roles were identified. The male folks agreed that 89.4 % (feed preparation), 84.4% (sanitation), 85.0% (dressing of birds), 88.1% (collection grading of eggs), 82.5% (marketing) are the responsibility of male. The female folks agreed that 48.8% (sourcing of day old chicks), 41.9% (routine medical and vaccine programme), are the responsibility of the female were assign as the responsibility for both gender. This result shows the dominance of the male folks in the production of poultry and its enterprise.

Table 5: Gender Roles in Poultry Production

Poultry production activities	Male		Female	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Sourcing of day old	51	31.9	78	48.8
Routine medical and vaccine programme	62	38.8	67	41.9
Preparation of feed	143	89.4	8	5.0
Feeding of birds	91	56.9	45	28.1
Sanitation	135	84.4	18	11.3
Record keeping	77	48.1	50	31.3
Dressing of birds	136	85.0	16	10.0
Collection and grading of eggs	141	88.1	12	7.5
Marketing	132	82.5	22	13.8
Placing of price on poultry products	96	60.0	36	22.5
Cullining of birds	103	64.4	42	26.3
Transportation	41	25.6	100	62.5

Source: Field Survey, 2024

4.3 Reasons for Gender Dominance

Laborious nature of the job (m = 2.94) in male, (m=2.98) in female was ranked first followed by physical strength (m=2.92) in male, (m=2.84) female and difference in gender utilization (m = 2.63)in male, (m=2.66) in female. However low education status and religion were ranked last in male with mean value of 1.54 and 1.46 respectively while poverty and religion were rank last in female with the mean value of 1.47 and 1.45 respectively. This implies that because of the tedious work in value in the production male folks tends to dominate female.

Table 6: Reasons for Gender Dominance in Poultry Production

	Male		Female	
	Mean	**SD**	**Mean**	**SD**
Laborious nature of the job	2.94*	.48	2.98*	.51
Physical strength	2.92*	.39	2.84*	.52
Differences in gender utilization	2.63*	.76	2.66*	.78
Child bearing/raising roles	2.67*	.74	2.55*	.82
Polygamy	2.62*	.77	2.52*	.82
Lack of solidarity	2.51*	.83	2.55*	.84
Cultural bias/stereotyping	2.46	.86	2.57*	.84
Family responsibility	2.40	.87	2.52*	.88
Land ownership	1.66	.71	1.71	.65
Rural labour	1.71	.70	1.57	.62
Current economic situation	1.64	.70	1.59	.62
Tradition	1.52	.64	1.57	.50
Low education status	1.54	.64	1.50	.57
Poverty	1.55	.62	1.47	.54
Religion	1.46	.52	1.45	.50

Source: Field Survey, 2024. ***Agreed (mean> 2.50)***

4.4 Problems of Poultry Production

In problem of poultry production, data from Table 8 shows that lack of loan (m = 3.70) in male, (m=3.66) in female was ranked first, followed by lack of knowledge in export market (m = 3.50) in male (m=3.48) in female and parasite and disease (m = 3.34) in male, (m=3.40) in female however inadequate labour supply and pilfering were ranked least with mean value of 2.23 in male, 2.09 in female and 1.79 in male, 1.71 in female respectively. This implies that the government and corporate organization are not putting effort on the development of poultry production as a sector and there is presence of parasite and disease in the study area.

Table 7: Problems of poultry Production

	Male		Female	
	Mean	**SD**	**Mean**	**SD**
Lack of loans	3.70*	.50	3.66	.51
Lack of knowledge in export market	3.50*	.63	3.48*	.68
Parasite and diseases	3.34*	.65	3.40*	.53
Poor extension service	3.30*	.73	3.38*	.67
Low adoption rate of research	3.32*	.71	3.31*	.68
Unavailability of feed	3.17*	.86	3.31*	.63
Poor access to market	2.89*	.87	2.79*	.72
Scarcity of good poultry breed	2.73*	1.03	2.69*	.96
Inadequate transportation	2.43	.91	2.28	.89
Inadequate labour supply	2.23	.99	2.09	.84
Pilfering	1.79	.75	1.71	.73

Source: Field Survey, 2024. ***Serious (mean> 2.50)***

4.5 Constraints to Information Sourcing on Poultry Production

Data from Table 8 which talks about constraints to information sourcing on poultry production show that poor government management and policies (m = 3.32) in male, (m=3.34) in female was ranked first, followed by inadequate agricultural information provider (m=3.28) in male, (m=3.31) in female and inadequate fund (m=3.28) in male, (m=3.26) while language barrier and cultural difference were ranked last with mean value of 1.56 in male, 1.52 in female and 1.53 in male, 1.47 in female respectively. This means that there is no much contribution from the government and the extension service towards the development of the poultry sub-sector.

Table 8: Constraints to Information Sourcing on Poultry Production

	Male		Female	
	Mean	**SD**	**Mean**	**SD**
Poor government management and policies	3.32	.47	3.34	.48
Inadequate agricultural information provider	3.28	.45	3.31	.47
Inadequate fund	3.28	.45	3.26	.48
High cost of materials	3.20	.49	3.24	.43
Lack of relevant materials	3.21	.47	3.22	.46
Feedback problem	3.12	.65	3.16	.79
Distance/inaccessibility	2.97	.74	3.14	.63
Language barriers	1.56	.74	1.52	.82
Cultural difference	1.53	.66	1.47	.71

Source: Field Survey, 2024. ***Serious (mean> 2.50)***

4.6 Respondent Access to Information on Poultry Production

In respondents access to information Table 9 shows that routine medical and vaccine programme and preparation of feed with the mean value of 2.28 were ranked first while transportation (m=1.19) was ranked last, in male while routine medical and vaccine programme with the mean value of 2.24 was rank first, followed by feed preparation marketing with the mean value of 2.19 and 2.22 respectively, then transportation with the mean value of 1.14 was rank last. This means that the respondents had high access to routine medical and vaccine programmes and feed preparation and marketing while there was low access to transportation.

Table 9: Respondents Access to Information on Poultry Production

	Male		Female	
	Mean	**SD**	**Mean**	**SD**
Routine medical and vaccine programme	2.28	.57	2.24	.54
Preparation of feeds	2.28	.57	2.19	.58
Marketing	2.26	.60	2.22	.56
Sourcing of day old chicks	2.15	.59	1.97	.62
Feeding of birds	1.90	.75	1.71	.73
Sanitation	1.77	.74	1.66	.71
Placing of price on poultry products	1.68	.75	1.57	.68
Dressing of birds	1.33	.60	1.33	.60
Transportation	1.19	.52	1.14	.40

Source: Field Survey, 2024. ***Have access (mean> 2.00)***

4.7 Respondents Source of Information on Poultry Production

The respondents source of information in poultry production in poultry Table 10 shows that other farmers was ranked first with mean value of 5.38 in male and 5.45 in female, while extension agent was rank last with the mean value of 3.59 in male and 3.48 in female. The implication is that the extension agents were source of information to the respondents.

Table 10: Respondents Sources of Information on Poultry Production

	Male		Female	
	Mean	**SD**	**Mean**	**SD**
Other farmers	5.38	1.36	5.45	1.27
GSM/internet	5.42	1.20	5.29	1.36
Bulletin	4.01	1.49	3.98	1.83
Extension agents	3.59	1.71	3.48	1.83
Television	4.28	1.61	4.09	1.66
Radio	3.82	1.80	3.64	1.89
workshop/seminar	4.66	1.47	4.29	1.63

Source: Field Survey, 2024.

Hypothesis 1

To test the differences in male and female access to information on poultry production.

There was no significant difference in male and female farmers' access to information on poultry. As a result of this we accept the null hypothesis.

Table 11: There is no significant difference in male and female farmers' access to information on poultry production.

Sex	N	Mean Rank	Mann-Whitney U	Z	Prob. Level
Male	102	84.41	2559	1.435	0.151
Female	58	73.62			

NS

Hypothesis 2

To test the differences in constraints limiting male and female famers access to information on poultry production

There was no significant difference in constraints limiting male and female farmers access to information on poultry production. Therefore, we accept the null hypothesis.

Table 12`: There is no significant difference constraints limiting male and female farmers access to information on poultry production

Sex	N	Mean Rank	Mann-Whitney U	Z	Prob. Level
Male	102	78.71	2775.5	0.662	0.508
Female	58	83.65			

Hypothesis 3

To test the differences in production constraints facing male and female farmers.

There was no significant differences in production constraints facing male and female poultry farmers. Therefore we accept the null hypothesis and reject the alternative hypothesis.

Table 13: There is no significant difference production constraints facing male and female farmers

Sex	N	Mean Rank	Mann-Whitney U	Z	Prob. Level
Male	102	80.74	2934	0.085	0.932
Female	58	80.09			

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The study focus on the assessment of gender roles in poultry production in Delta State. A multi-stage sampling technique was employed with a total of 160 structured questionnaires for the respondents. Data collected were subjected to analysis of descriptive statistical technique such as frequency counts, percentage, mean, standard deviation and T test were used to test the hypothesis. The result revealed that majority of the respondent were found to be male (63.75) and within the age bracket of 41 and50 year (43.1%) in male and (55.2%) in female, 90.2% and 93.1% of male and female married, 47.1% and 39.1% of male and female with secondary school education, 54.9% and 63.8% in male and female with between 6 and10 year production experience, 56.9% and 53.4% for male and female of household size of 5 and below, 57.8% and 53.4% for male and female of 6-10 year of poultry marketing experience, 50% and 51.7% for male and female do not belong to any association, 55.9% and 65.5% for male and female have source of land as purchase, 54.9% and 65.5% for male and female as family labour, 78.4% and 82.8% for male and female of personal saving,83.3% and 84.5% for male and female of monthly contact with extension officers, 67.6% and 82.8% for male and female of vehicle transportation, for gender roles

89.4%(preparation of feeds); 85.0% (dressing of birds); 88.1% (collection and grading of eggs); 82.5% (transportation) as male responsibility, 48.8% (sourcing and collection of day old chicks); 41.9% (routine medical and vaccine programme) as female responsibility.

For reasons for gender dominance, laborious nature of the job (m=2.96) was ranked first and religion (m=1.46) ranked last. For problem of poultry production, lack of loan (m=3.68) was ranked first and pilfering (m=1.76) was ranked last

In constraints to information sourcing, poor management and policies (m=3.32) was ranked first and cultural difference (m=1.51) was ranked last for males poultry farmers.

Hypotheses one (t=1.435), difference (10.79) shown no significant difference in male and female farmers access to information on poultry production.

Hypotheses two (t=0.662), difference (-4.94) shows no significant difference in constraints limiting male and female farmers access to information on poultry production.

Hypotheses three (t=0.085), difference (0.65) shows no significant difference in production constraints facing male and female farmers.

5.2 Conclusion

The study has shown that gender roles in poultry production are gender defined. Women trailed behind men in their participation in some activities such as preparation of feeds, dressing, sanitation, collection and grading of eggs are complex nature of the task, while the female are mostly involved in sourcing of day old chicks, feeding and vaccine programme due to the fact that it suits them, the study also shows that most farmers had their land by purchase. Male gender dominance in poultry production was mostly due to laborious nature and physical strength.

The farmers generally are faced with problems of lack sources of loan, lack of knowledge in export market and parasite and disease poor government management and policies with inadequate agricultural information provider were the main constraint to information sourcing on poultry production.

The study also shows that disinfectant was highly accessible to the farmers and that extension agent was the most source of information to the farmers.

5.3 Recommendations

On the basis of the findings in this study, the following recommendations were made:

(1) Government should assist poultry farmers in form of loan, grant and agricultural credit facilities and encourage private organisation to invest on the enterprise to make it profitable.

(2) The extension service should come up with programmes that will encourage more women to go into poultry production.

(3) The ministry of agriculture should put proper management and policy in place for the development of the poultry sub-sector.

(4) Adequate and more practicable agricultural information should be provided by the extension services to the poultry farmers by arranging a place for meeting and making use of a teaching method that suits the poultry farmers

(5) Further research into more appropriate technologies of combating the problem of parasite and diseases in poultry production should be encouraged by government and research agencies.

REFERENCES

Adereti, F.O., Koledoye, G.F. and Owombo, P.T.(2013). *Journal of Development and Agricultural Economics* Vol. 5(2), Pp.49-56

Akanyi, B. (1997). The gender implication of structural adjustment for women farmers and their household in Garba, P.K., Akanyi, B. and Isiugo, I. (Eds.), *Women and economic reforms in Nigeria*. WDRDC, U.I., Ibadan

Bravo-Baumann, H.(2000). Capitalization of experiences in the contribution of livestock project to gender issues. Working document. Bern ,Swiss Agency for development and cooperation.

Brown, L. and Haeded, R. (2001). Women as producers, Gate Keepers and Shock Absorbers.

Chado, S.S., Daudo, S. and Igbashat, A.A. (2011). Agricultural Information sources utilized by farmers in Benue State, Nigeria, |Retrieved from *www.patnsukjournal.net/currentissue*

Collet K. and Gale C. (2009): Training for rural development: Agricultural and enterprise skills for women small holder, P26, retrieved from:*www.skillsdevelopment.org/pdf/*.

Dvorak, K. (1992). Labour Requirement in Assessment of Technologies, International Institute of Tropical Agriculture (IITA), Research guide 27, Training Programme, Ibadan, Nigeria.

FAO (1997).Gender: The key to sustainability and food security S.D Dimension, May 1997 (available at www.fao.org/sd).

FAO (2011). Agricultural Development Economics Division. ESA Working Paper No. 11-02. March 2011 .(available at www.fao.org/economic/esa)

Food and Agricultural Organisation (2010).Production year Book, FAO Rome, 2010.

Gueye, E.F.(2000). The Role of Family Poultry in Poverty Alleviation, Food Security and the Promotion of Gender Equality in Rural Africa. Outlook on Agriculture, Vol. 29(2): 129-136.

Kabeer, N. (2003). Gender Mainstreaming in Poverty Eradication Makers and other Stakeholders Common Wealth Secretariat IDRC-CIDA Ottawa, Canada 2003.

Lawanson, T.O.(2010). Gender differences in Nigeria implications for sustainable development J. Extension System 21(1): 46-57.

Mbanelo, M.(1990). Women: A potent labour force in grass roots development. *A paper presented at the national conference on development at the grass root in the 1990s.* 16-17 May, Hotel Presidential, Enugu, Nigeria.

Mihiret, M. and Tadesse, A. (2016). *Journal of Economics and Sustainable Development* ISSN 2222-1700 (Paper) ISSN 2222-2855 (online) Vol.5. No.1,2014.

Moser, C.(1989).Gender Planning in the Third World: Meeting Pratical and Strategic Gender Needs World Development, Vol:17, No 11 (Nov 1989) Pp. 1799-1825.

National Population Commission, 2006.

Obidike, E. (2011). Rural Farmers' Problems Accessing Agricultural Information: A Case Study of Nsukka Local Government Area, Enugu State, Nigeria. Retrieved from: *www.webpages.uidahoede*.

Okali, C. and Mims, J.(1998). Gender and Smallholder Diary Production in Tanzania: Report to the Livestock Production Programme of the Department for International Development (DFID): Appendix 1and 2 Pp. 37-38.

Okoedo-Okojie, D.U. and Edeoghon, C.O. (2009).Assessment of Labour Role By gender in cassava production in Ikpoba-Okha Local Government Area of Edo State, Nigeria. Global Approached Extension Practical (GAEP), 5: 68 – 69.

Okoh, S.O., Rahman, S.A. and Ibrahim, H.I.,(2010). Livestock research for rural development 22(9).

Okonkwo, W.I. and Akubo, C.O.(2011). Thermal analysis and evolution of heat requirement of a passive solar energy poultry chick brooder in Nigeria. *Journal of renewal energy, 911(2001).*

Olawoye, J.E. (1995). The Role of Women in On-farm Loss Prevention. Lecture Presented on Training Workshop for ADP Staff at Ibadan.

Prakash,D.(1999). Rural women, food security and agricultural cooperatives, papers produced for presentation and to serve as a theme paper at the 4th Asian- African. International Conference on Women in Agricultural Cooperation in Asia and Africa organised jointly by the ICA,AA,RRO,JA- Zenchu and IDA CA at Tokyo, Japan, August 24-29.

Sonaiya, E.B. and Swan, S.EJ.(2004). FAO Animal Production and Health, Manual Small Scale Poultry *Production*. FAO of the UN, Rome.

Sonaiya, E.B.(1990B). ANRPD proceedings International Network for Family Poultry Development (INFDP). Origins, activities, objectives And visions. In Dolberg, F. and Peterson, P.H., eds. Poultry as a tool in poverty eradication and promotion of Gender Equality, Pp 39-50 Proceedings Workshop, March 22-26, 1999, Tune Landboskole,Denmar(also available at http://www.husdyr.kvl.dk/htm/php/tune99/4-Sonaiya.htm)

World Bank. (1995). Gender Issues in Participation. Social Development Notes; No. 12. Washington, DC. © World Bank.https://openknowledge.worldbank.org/handle/10986/11670 License: CC BY 3.0 IGO

World Bank. (2013). *World development Indicator*, Washington DC: WB.

World Poultry, (2004a). Thai Broiler Industry forced to change Structure. *World Poultry*,20 (5)24___2004b 'Slow Growth Lifts Chick Quality' World Poultry, 20(60):19 www.fao.org/economic/esa

World Poultry, (2004a). Thai Broiler Industry forced to change Structure. *World Poultry*,20 (5)24___2004b 'Slow Growth Lifts Chick Quality' World Poultry, 20(60):19 www.fao.org/economic/esa

APPENDIX I

RESEARCH QUESTIONNAIRE

DEPARTMENT OF AGRICULTURAL ECONOMICS AND EXTENSION SERVICES, FACULTY OF AGRICULTURE, UNIVERSITY OF BENIN, BENIN CITY, NIGERIA

Dear Respondent,

I am a final year student of the above-named institution. The above questionnaire is no help in the completion of a project titled: **"Assessment of Gender Roles in poultry farming in Delta State, Nigeria"**

Please kindly answer the questions as correctly as possible so as to ensure reliable data collection for this study. The research is purely for academic purpose, and your responses will be treated confidentially.

Thanks for your anticipated co-operation.

AMOMON OTAIGBE FELIX

INSTRUCTION: Please tick (√) in the boxes provided below and write where applicable.

SECTION A: SOCIO-ECONOMIC CHARACTERISTICS

(1) What is the name of your local Government Area?.....

(2) Name of community?.....

(3) Gender: Male [ ], Female [ ].

(4) Age of respondent in years _____

(5) Marital status: Single [ ], Married [ ], Divorced [ ], Widowed [ ].

(6) Educational level: No formal education [ ], Primary education [ ], Secondary education [ ], NCE/OND [ ] B.Sc/HND [ ], Others (please specify)……..

(7) Poultry farming experience: 1-5 years [ ], 6-10 years [ ], 11-15 years [ ], 16-20 years [ ] 21 years and above [ ].

(8) What is the source of land? Inheritance [ ], purchase [ ], Lease [ ], Government [ ].

(9) Your source of labour: Self effort [ ], Hired labour [ ], Family labour [ ], Family and Hired labour [ ].

(10) Household size: Below 5 [ ], 6-10 [ ], 11-15 [ ], 16-20 [ ], 21 and above [ ]

(11) How long have you been engaged in poultry product marketing? 1-5 years [ ], 6-10 years [ ], 11-15 years [ ], 16-20 years [ ], 21 years and above [ ].

(12) Yours source of capital: personal savings [ ], friends and relative [ ], thrift [ ], private money [ ], co-operative loan [ ], bank loan [ ].

(13) What is your secondary occupation? Hunting [ ], Driver [ ], Carpentry [ ], Others(please specify)……..

(14) Are you a member of any association? Yes [ ], No [ ].

(15) How often do you come in contact with Extension Agents? Weekly [ ], Monthly [ ], Yearly [ ].

SECTION B: LABOUR ROLES BY GENDER

(16) Who does the following operations in poultry farming operations, and what is the labour wage per day for male and female in the following operations?

S/N	Operations	Male	Female	Wage per day	
				Male	Female
1	Sourcing and collection of day old chick				
2.	Routine medication and vaccination programme				
3	Preparation of feed				
4	Feeding of birds				
5	Sanitation				
6	Record keeping				
7	Dressing of birds				
8	Collection and grading of eggs				
9	Marketing and transportation				
10	Placing of prices on poultry products				

11	Culling of birds				
12	Others (please specify)				

(18) What type of farming system do you practice in your farm? Extensive system [ ], Semi-intensive system [ ], Intensive system [ ].

(19) Do you keep records of your farm activities? Yes [ ], No [ ].

SECTION C: REASONS FOR GENDER DOMINANCE IN POULTRY PRODUCTION

(20) What are the reasons for gender dominance in poultry production?

S/N	Reasons	Male	Female	Strongly agree	Agree	Disagree	Strongly disagree
1	Laborious nature of the job						
2	Tradition						
3	Land ownership						
4	Current economic situation						
5	Low education status						
6	Rural labour						
7	Family responsibility						
8	Physical strength						
9	Differences in gender utilization						
10	Lack of solidarity						
11	Child bearing/raising roles						

12	Poverty						
13	Religion						
14	Cultural bias/stereotyping						
15	Polygamy						

SECTION D: PROBLEMS OF POULTRY PRODUCTION

S/N	Problems	Male	Female	Very serious	Serious	Little serious	Not a problem
1	Lack of loans						
2	Inadequate transportation						
3	Scarcity of good poultry breed						
4	Inadequate labour supply						
5	Poor extension service						
6	Unavailability of feed						
7	Parasite and diseases						
8	Low adoption rate of research						
9	Poor access to market						
10	Lack of knowledge in export market						
11	Pilfering						
12	Others (specify)						

(21) What are the problems militating against poultry farming information source in your farm and areas?

S/N	Problems of information sourcing	Male	Female	Strongly agree	Agree	Disagreed	Strongly disagree

1	High cost of materials						
2	Lack of relevant materials						
3	Inadequate fund						
4	Distance/inaccessibility						
5	Cultural difference						
6	Feedback problem						
7	Language barriers						
8	Poor government management and policies						
9	Inadequate agricultural information provider						

(22) What information do you need in poultry farming?

S/N	**Technologies**	**Needs**		**Access**			**Sources**					
		Male	**Female**	**HA**	**A**	**NA**	**1**	**2**	**3**	**4**	**5**	**6**
1	Sourcing and collection of day old chick											
2	Routine medication and vaccination programme											
3	Preparation of feed											
4	Feeding of											

	birds											
5	Sanitation											
6	Record keeping											
7	Dressing of birds											
8	Collection and grading of eggs											
9	Marketing and transportation											
10	Placing of prices on poultry products											
11	Culling of birds											
12	Others please specify											

Key:

H = Have Access, A = Access, NA = No Access

1 = Ratio, 2= Television, 3= Seminar, 4= Meeting, 5 = Periodicals, 6= contacts with Extension Agents.