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Women Participation in Poultry Farming in Selected Local Government Areas of Rivers State, Nigeria

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Abstract: The study analyzed women participation in poultry farming in selected local government areas of Rivers State. The study specifically seek to: describe the social-economic characteristics of women participating in poultry farming; determine the level at which women participate in poultry farming; and examine the constraints to women participation in poultry farming in the study area. Three hypotheses were formulated to guide the study. Descriptive survey design was employed to examine a cross section of women in poultry farming in the study area. Both simple random and snowball sampling techniques were adopted to select three LGAs, eighteen communities and 108 women for the study. Questionnaire instrument mostly designed in Likert type rating scales was used to elicit information from the respondents. Descriptive statistics such as percentage, arithmetic mean and weighted mean scores were used to analyze the data. Linear Regression and Analysis of Variance (ANOVA) were applied to test the hypotheses at 0.05% significant level. The result indicates that women in poultry farming in the study area were in their prime age of 37 years old and that majority of them were married (71%), with a mean household size of six (6) persons per family. It showed a mean annual income of (N228,000.00) only from poultry farming. It also showed that the participation of women in poultry farming in these three LGAs of the State was generally low (CM = 2.16), that they only participated in raising layers for eggs with Grand Mean (GM = 2.89), raising broilers for meat (GM = 2.85) and in the supplies of feeds and drugs (GM = 2.58). Test of significance showed that household size (2.172*), annual income (1.430*) and nature of farming (1.254*) affected the participation of women in poultry farming positively at 5% significant level. Finally, the result showed that: insecurity challenges (GM = 3.30), price fluctuations of poultry products (GM = 3.24), inadequate credit (GM = 3.17), land ownership issues (GM = 3.16), inadequate storage facilities (GM = 3.09), pest and disease problems (GM = 3.06) among other challenges, posed very serious constraints to women participation in poultry enterprise in the study area. The ANOVA result showed that constraints to women participation in poultry farming did not differ significantly at 0.05% probability level among the three LGAs in Rivers State. Based on the findings, the study recommended that: Women in the study area should not limit themselves to only raising of layers for eggs and broilers for meat alone, but diversify to hatchery, production and supplies of poultry feeds and equipment; Extension agencies operating in the study area should register more women as contact poultry farmers especially in Abuah/Odual LGA of Rivers State; and Agricultural credits should be made available and accessible to women in poultry farming in the study area.

Keywords: Women, Participation, Poultry, Farming, Selected.

Introduction

Poultry farming is a form of animal husbandry which raises domesticated birds such as layers, broilers duck fowls, turkeys, quails, etc. for food and other purposes. The birds are reared mainly for meat, egg and manure. Poultry is a non-ruminant animal and can be managed in three systems; Intensive, Semi-intensive and Extensive Systems. These systems indicate the extent to which birds are exposed to sunshine, pasture, housing pattern and also level of technical and routine management attention given to them.

Poultry farming is important because the meat and eggs are excellent protein for humans. Raising of birds serves as hobby for some people, the feathers are used for making pillows and mattresses, eggs are used for producing various vaccines, poultry manure is a source of plant food in the soil, employment is provided by poultry industries through rearing, processing, transportation, marketing etc of birds, and their products.

Domestic birds and even jungle birds are explored primarily for their meat due to their nutritional benefits but domestic birds are reared for meat and eggs. Demand for meat and eggs are influenced by culture, income, population, religious belief, production levels and locations. The consumption pattern is not uniform between urban and rural areas with higher consumption in income, but dwells better on knowledge of health and nutritional benefits of poultry meat. Among the dressed chickens, 70% are sold as dressed or chilled or frozen whole carcass, while remaining 30% as cut up parts and further processed products (Singh, 2012).

Participation of women and their position in meeting the challenges of agriculture are quite dominant and prominent. Their relevance and significance, therefore, cannot be overemphasized. They are the locomotive engine that drives the agricultural industry in Africa, such that any sector of farming that is devoid of women base on gender biases, suffers (Odinwa, Emah and Albert, 2016). These gender differentials in participation in agricultural activities may exist in the form of customs, beliefs and attitudes that confine women mostly to domestic spheres and in policies that impede women access to land, credit, production inputs, employment, education or medical care.

Participation in any enterprise like poultry farming is dependent on the cost involved and the expected benefits in addition to adequate awareness created around the enterprise, provided the innovation conforms to the custom and culture of the people, especially the women (Odinwa, Emah and Albert, 2016). Studies have shown that rural women play significant roles in crop production in Nigeria as a whole and Rivers State in particular. The State is predominantly occupied by a large population of farmers dominated by women and with vast area of land suitable for both crop and livestock including poultry and fish production. Yet, over 75% of local consumption of poultry products in Rivers State is from neighboring States and from importation.

There is evidence of high demand for proteins from poultry and its' products within and outside the area at all seasons without corresponding supplies to meet the demand; investment capitals into some poultry enterprises like broiler, layers, turkey, quail, duck fowl production, etc, are not so high as to scare women away from venturing into their production, the cultural practices in poultry farming and distributions of their products, apart from raising pens for some of the animals, are manageable and have short gestation periods ranging from three to twelve months, depending on the type of poultry, the breeds and the purpose of production.

The primary objective of establishing most of the rural development programmes is to increase the level of awareness of the rural people and encourage participation of citizens in all aspects of their endeavor for increased productivity and for better standard of living. However, despite the premium placed on rural development programmes in Rivers State in particular, through the Agricultural Extension Agencies, such as: Agricultural Development Programme (ADP), Green River Project (GRP), FADAMA I, II and III Projects, etc., there is no sufficient proof that Rivers women have participated or are participating fully in poultry farming of commercial repute, going by the attendant scarcity, high cost of poultry products and poverty among women in the State. Could it mean that the women in Rivers State are not involved in livestock programmes of the extension agencies in the State or that the women farmers in Rivers State shift their concentration from poultry farming, processing and marketing of the products to only crop farming? It is in this premise that the study is slated to analyze the participation of women in poultry farming in selected LGAs of Rivers State.

The broad objective of this study is to analyze women participation in poultry farming in selected LGAs of Rivers State. The specific objectives of this study include to:

i. describe the social-economic characteristics of women participating in poultry farming, in the study area;
ii. determine the extent to which women participate in poultry farming in the study area; and
iii. examine the constraints to women participation in poultry farming in selected LGAs of Rivers State.

The following hypotheses were formulated to direct the study, such as:

Ho_1: Socio – economic characteristics of the women do not significantly affect their participation in poultry farming in the study area.

Ho_2: Women participation in poultry farming do not differ significantly among the various LGAs in Rivers State.

Ho_3: The constraints to women participation in poultry farming do not differ significantly among the various LGAs in Rivers State.

Methodology

The study was carried out in three Local Government Areas of Rivers State, one each from the three Senatorial Districts, which include: Abua/Odual (Rivers West), Ikwerre (Rivers South East) and Oyigbo (Rivers East). Agriculture is the main occupation of the people in these LGAs and the agricultural policy of the State Government is anchored on food crop production such as yams, cassava, cocoyam, plantains, bananas, cocoa ,oil palm, maize, vegetables, fruits etc. and all the three LGAs produce these crops but in varying quantities. The people are also into hunting, rearing goats, poultry and fishing, though a reasonable number of them are into business such as trading, artisans, civil service, company workers etc. (ngex.com/Nigeria/places/states/rivers,htm2013 retrieved 31/01/2019).

This study used descriptive survey approach which includes studying the cross-section of women into poultry farming, for gathering data and for reasonable conclusion of the study. Simple random technique was used to select one (1) local government area from each Senatorial District to make a total of three (3) Local Government Areas. Also, a simple random sampling technique was

employed to select six (6) communities from each of the selected three LGAs to have a total of eighteen (18) communities in all. Snowball sampling technique was finally used in selecting 6 women (poultry farmers of commercial repute) from each of the communities making a total of one hundred and eight (108) respondents, which forms the sample size for this study.

Data for this study were collected from primary source through structured questionnaire and interviewed schedule relevant to the stated objectives. The questionnaire was designed in a four point Likert type rating scales which gave a criterion mean of 2.50 for final judgment.

The study adopted both the descriptive and inferential statistics to analyze the data that were obtained from the field. The descriptive tools used include: percentage, arithmetic means and weighted mean values, while the inferential tools used include simple regression analysis and the analysis of variance (ANOVA) for testing the hypotheses of the study.

Specifically, the descriptive statistics such as percentage and arithmetic mean was used to analyze the socio-economic characteristics of the women participating in poultry farming. While objectives 2 and 3 were analyzed using weighted mean scores derived from a four point Likert - type rating scales. The four points were added together and divided by four (4+3+2+1 = 10/4) to give 2.50 as the critical mean. Therefore, any variable with mean < 2.5 was below acceptance, while any variable with mean ≥ 2.5 was accepted.

Ho_1 was done using simple linear regression model which was explicitly represented as:

$Y = f(x_1\ x_2\ x_3\ x_4\ x_5\ x_6\ x_7\ x_8\ x_9 + e)$ …….. (1)

Where Y = Participation in Poultry farming; x_1 = age (years); x_2 = marital status; x_3 = level of education; x_4 = additional occupation; x_5 = household size (no.); x_6 = years of experience (years); x_7 = nature of farming); x_8 = system of farming practice; x_9 = annual income (₦), b_0 = constant; e = error term.

Linear function:

$Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5$ …….$+ b_9x_9 + e.$ ……. (2)

Test of Ho_2 and Ho_3 were done using ANOVA. The inferential statistic used was to ascertain if the socio – economic characteristics of the women significantly affect their participation in poultry farming, and if the participation of the women in poultry farming differ significantly among the three LGAs studied in Rivers State. All hypotheses were tested at 0.05 alpha level of significance, where f-calculated is greater than the alpha level (0.05), the null hypotheses was rejected; otherwise, the null hypothesis was accepted for critical decision.

Results and Discussion

Socio-Economic Characteristics of Women in Poultry Farming in Rivers State

The findings on the socio economic characteristics of women in poultry farming in selected LGAs of Rivers State (Tables 1) showed that women involved in poultry farming in River State were in their prime age of 37 years old and that majority of them were married (56%), with a mean household size of six (6) persons per family. The finding about the mean age of women in poultry and

piggery enterprises is a good indication that women have ventured into poultry enterprises, even though their present operation may be little now unnoticed, but there is a great hope for poultry farming in the study areas in future. This finding agrees with Ezumah (2000) who presented the view that women in rural areas are involved in several productive activities, yet their roles are never reflected in the mainstream of public development agenda. In terms of the women's experience in poultry farming, the result showed 7 years, as mean years of experience with majority as Part-time farmers (68%) yet, practiced more of intensive system of farming (71%), but with a mean annual income of two hundred and forty-two thousand, four hundred and fifty-eight naira (₦242,458.00) only from poultry farming. This implies that women participating in poultry farming in Rivers State are poor since their returns are not reflecting their assiduous efforts in the businesses. The report of Saito and Spuring (2012) supported this finding when they said that the Nigeria woman is saddled with most of the tasks in agricultural production supposedly meant for the men but the benefits gained by them are not commensurate to the hours they spent on the task.

Table 1: Socio-Economic Characteristics of Women in Poultry farming in Selected LGAs of Rivers State

Variables	**Abua/Odual n = 36**		**Oyigbo n = 36**		**Ikwerre n = 36**		**Mean/% N = 108**	
Age	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**	**Mean**	
Less than 24	06	(16.67)	05	(13.89)	06	(16.67)		
25 – 34	10	(27.78)	11	(30.56)	16	(44.44)		
35 – 44	08	(22.22)	10	(27.78)	04	(11.11)	**37 years**	
45 – 54	09	(25.00)	07	(19.44)	05	(13.89)		
55 and above	03	(08.33)	03	(08.63)	05	(13,89)		
Marital Status	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**
Single	08	(22.22)	10	(27.78)	07	(19.44)	25	(23)
Married	20	(55.56)	20	(55.56)	20	(55.56)	60	(56)
Widowed	08	(22.22)	06	(16.67)	09	(25.00)	23	(21)
Level of Education	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**
No Formal education	12	(33.33)	08	(22.22)	04	(11.11)	24	(22)
Primary education.	04	(11.11)	10	(27.78)	06	(16.67)	20	(19)
Secondary	15	(41.67)	11	(30.56)	16	(44.44)	42	(39)
Tertiary Education	05	(13.89)	07	(19.44)	10	(27.78)	22	(20)
Additional occupation	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**
Petty trading	20	(55.56)	18	(50.00)	18	(50.00)	56	(52)

Civil servant/Industrial Wk	07	(19.44)	06	(16.67)	03	(08.33)	16	(15)
Scholar	04	(11.11)	05	(13.89)	07	(19.44)	16	(15)
Craft work	05	(20.00)	07	(19.44)	08	(22.22)	20	(19)
Household Size	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**	**Mean**	
1- 4 Persons	12	(33.33)	20	(55.56)	11	(30.56)		
5-8 Persons	20	(55.56)	11	(30.56)	19	(52.78)		
9-12 Persons	03	(08.33)	05	(13.89)	04	(11.11)	**6 persons**	
13 and above	01	(02.77)	-	-	02	(05.56)		
Years of Experience	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**	**Mean**	
1 – 4	10	(27.78)	20	(55.56)	19	(52.78)		
5 – 9	14	(38.89)	08	(22.22)	06	(16.67)	**7 years**	
10 – 14	08	(22.22)	04	(11.11)	05	(13.89)		
15 – 19	02	(05.56)	02	(05.56)	04	(11.11)		
20 and above	02	(05.56)	02	(05.56)	02	(05.56)		
Nature of Farming	**(f)**	**(%)**	**f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**
Full time	12	(33.33)	13	(36.11)	10	(27.78)	35	(32)
Part time	24	(66.67)	23	(63.89)	26	(72.22)	73	(68)
Syst of Farming Practiced	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**
Intensive	28	(77.78)	26	(72.22)	23	(63.89)	77	(71)
Semi-intensive	08	(22.22)	10	(27.78)	13	(36.11)	31	(29)
Extensive system	-	-	-	-	-	-	-	-
Annual Income	**(f)**	**(%)**	**(f)**	**(%)**	**(f)**	**(%)**	**Mean**	
Below 150,000	11	(30.56)	10	(27.78)	08	(22.22)		
150,000 – 249,000	08	(22.22)	14	(38.89)	11	(30.56)		
250,000 – 349,000	08	(22.22)	07	(19.44)	09	(25.00)	**₦242,458.00**	
350,000 – 449,000	09	(25.00)	05	(13.89)	08	(22.22)		
500,000 and above	-	-	-	-	-	-		

Source: Field Survey, 2021

The result of the relationship between the socio-economic characteristics of women farmers and their participation in poultry farming (Table 2) in selected LGAs of Rivers State showed that household size, additional occupation, annual income and nature of farming with t-values of (2.172*), (1.289*), (1.151*) and (0.574*), respectively affected the participation of women in poultry farming positively at 5% significant level. Most of the explanatory variables used in the model: nature of farming, additional occupation, household size and annual income correlated positively with the participation of women in poultry farming in the study area. This finding tallied with Odinwa, Isife and Nlerum (2019) who observed that family size determines the volume of household production and consumption, especially in developing countries, positively. The t-values of household size, nature of farming and annual income were significant at 5% alpha level, meaning that these socio-economic variables in women affect their participation in poultry farming positively in the

study areas. This finding also agreed with Adams (2017) who recorded that, age, family size, education level and income were positively related to women's participation in agricultural production.

Table 2: Relationship between the Socio-economic Characteristics of Women and their Participation in Poultry Farming in Selected LGAs of Rivers State

Variables	Coefficient	Std error	t-Values	Probability
(Constant)	5.709	1.110	5.145	0.000
Age	-2.765	0.886	-3.122*	0.004
Marital Status	-0.235	0.886	-0.266	0.793
Level of Education	-0.108	1.034	-0.105	0.917
Additional occupation	1.017	0.789	1.289*	0.208
Household size	-1.196	1.206	2.172*	0.330
Years of Experience	-0.125	0.812	-0.154	0.879
Nature of Farming	0.625	1.090	0.574*	0.571
Annual Income	0.774	0.617	1.151*	0.655

Source: Field Survey, 2021 ***P < 0.05**

Women Participation in Poultry Farming in Selected LGAs of Rivers State

The findings presented on the extent to which women participate in poultry farming in selected LGAs of Rivers State (Table 3), showed that the participation of women in poultry farming in these three LGAs of the State was generally low (CM = 2.16); low in raising duck fowl (GM = 2.18), hatchery (GM = 1.68), guinea fowl (GM = 1.58), quails (GM = 1.57) among others. This may be the reason for gross scarcity of duck fowl, guinea fowl, quails and turkey products in Rivers State. This finding was not in conformity with Ogun and Muklitar (2009) who noted that rural women take the lead in agricultural activities, making up 60 - 80% of labour force, yet their contributions to agricultural development are seldom noticed. But the finding conformed with (FAO, 2010) report that women's low participation, their invisibility in national statistics and their low participation in extension services, means that issues of most concern to women have been neglected in the design and implementation of many developed policies and programmes.

It was only in raising layers for eggs (GM = 2.89), raising broilers for meat (GM = 2.85) and in the supplies of feeds and drugs (GM = 2.58) that the women were involved from the findings, though the women in Ikwerre and Oyigbo LGAs participate more in raising both layers (M = 3.15 and M = 3,03, respectively) and broilers (M = 3.27 and M = 3.15, respectively) than the women in Abua/Odual LGA (M = 2.50 and M = 2.17, respectively). This finding displayed the real situation in poultry industry since the major attention of poultry farming in Nigeria is for raw meat (chicken) and eggs with little or no concern to hatchery and the management of poultry droppings and their byproducts. This finding is in agreement with USDA (2013); Adene and Oguntade (2006) which recorded that poultry farming is an aspect of animal husbandry which

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raises domesticated birds such as chicken, ducks, turkeys etc for food (meat, egg and manure) and for other purposes. The result also unveiled that women in Oyigbo LGA participate more in supplying feeds and drugs (M = 3.58) than the women in Ikwerre (M = 2.65) and Abua/Odual (M = 1.52) LGAs. This finding may be attributed to the location of the LGA in the State and the proximity of the feed mill and vaccine/drug industries to the LGA and to the farmers, considering the relative and economic advantages of supplying feeds and drugs to their consumption or usage centres

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Table 3: Mean Distribution on the Level at which Women Participate in Poultry Farming in Selected LGAs of Rivers State

Poultry activities	Abua/Od Weighted Scores		Oyigbo Weighted Scores		Ikwerre Weighted Scores		Grand Total scores	Grand	
Poultry Activities	**n = 36**	**Mean**	**n = 36**	**Mean**	**n = 36**	**Mean**	**N= 108**	**Mean**	**Remark**
Raising broilers	78	2.17	112	3.12	118	3.27	308	2.85	High
Raising of layers	90	2.50	109	3.03	113	3.15	311	2.89	High
Raising of guinea fowl	41	1.13	48	1.32	82	2.28	171	1.58	Low
Raising of quails	41	1.13	54	1.50	74	2.08	169	1.57	Low
Raising of duck fowl	46	1.28	107	2.97	82	2.28	235	2.18	Low
Hatchery for chicks of any kind.	41	1.13	50	1.40	91	2.52	182	1.68	Low
Conversion of poultry droppings to energy.	43	1.20	53	1.48	85	2.35	181	1.68	Low
Supplying feeds and drugs	55	1.53	129	3.58	96	2.66	280	2.58	High
Supplies of poultry equipment	49	1.36	128	3.55	86	2.38	263	2.43	Low
Cumulative Mean (CM)		**1.50**		**2.44**		**2.56**		**2.16**	

Source: Field Survey, 2021 **Critical Mean = 2.50**

ANOVA result on the Level at which Women Participate in Poultry farming in selected LGAs of Rivers State (Table 4) showed an (f – calculated = 11.15) and an (f – critical = 3.32) at P < 0.05 significant level, leading to the rejection of the null hypothesis which states that 'Women participation in poultry farming do not differ significantly among the various LGAs in Rivers State'. This means that the difference in the mean scores of the three LGAs studied

were significant, which also lend support that women participation

in poultry farming were more in Ikwerre LGA and followed by Oyigbo LGA and less in Abua/Odual LGA.

Table 4: ANOVA Result on the Level at which Women Participate in Poultry Farming in Selected LGAs of Rivers State

Source of Variance	SS	Df	MS	f-cal	f-Critical	p-value	Remarks
B/W Group variance	07.45	2	3.72				
W/Group variance	10.02	105	0.33				
Total	17.47	107		**11.15**	**3.32**	**0.00**	**S**

Source: Field Survey, 2021 **S – Significant at P < 0.05**

Constraints to Women Participation in Poultry Farming in Selected LGAs of Rivers State

The result on the constraints to women participation in poultry farming in the study area (Table 5) recorded in the degree of seriousness that: insecurity challenges (GM = 3.30), price fluctuation of poultry products (GM = 3.25), high cost of veterinary services and poor government policies with equal grand mean (GM = 3.22), inadequate credit (GM = 3.17), land ownership issues (GM = 3.10), inadequate storage facilities (GM = 3.09) and lack of infrastructure (GM = 3.08), lack of marketing channels for poultry products (GM = 3.07), pest and disease problem (GM = 3.06) and financial dependence (GM = 3.04) among other challenges were very serious constraints to women participation in the three LGAs. These factors uncovered by this study were severe and may have negative impact in the participation of women in poultry farming, hence the consequential low participation of women in poultry farming in the study area. For instance inadequate access to credit facilities, lack of processing and storage facilities, high cost of veterinary services and limited access to land will limit a poor woman farmer from undertaking a high-risk agro-venture like poultry farming, no matter how profitable it may be. This finding was supported by Odinwa, Nlerum and Odinwa (2020) who posited that asset-poor women cannot enter into high-risk activities like poultry farming because they do not own enough (and do not have access to credit) to deal with snag risks.

Table 5: Mean Distribution on the Constraints Facing Women Participation in Poultry Farming in Selected LGAs of Rivers State

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Variables Poultry	Abua/Od Weighted Scores n = 36	Mean	Oyigbo Weighted Scores n = 36	Mean	Ikwerre Weighted Scores n = 36	Mean	Grand Total scores N= 108	Grand Mean	Remark
Gender gap	89	2.47	85	2.37	120	3.32	294	2.72	Serious
Land ownership issues	118	3.27	94	2.60	119	3.30	331	3.10	Serious
Financial dependence	113	3.15	105	2.93	110	3.05	328	3.04	Serious
Social constraints	85	2.36	91	2.53	102	2.82	278	2.57	Serious
Lack of training	111	3.08	94	2.62	101	2.80	306	2.83	Serious
Inadequate extension services	103	2.87	96	2.68	101	2.80	300	2.78	Serious
Inadequate Credit	126	3.5	107	2.98	109	3.02	342	3.17	Serious
Poor marketing channels for poultry products	75	2.08	126	3.50	131	3.63	332	3.07	Serious
Price fluctuation of poultry products	93	2.58	130	3.60	128	3.55	351	3.25	Serious
High cost of veterinary services	131	3.63	103	2.87	114	3.17	348	3.22	Serious
Domestic work	91	2.52	89	2.48	102	2.82	282	2.61	Serious
Pest and disease problem	110	3.05	103	2.85	118	3.28	331	3.06	Serious
Lack of processing facilities	113	3.15	94	2.62	114	3.18	321	2.97	Serious
Inadequate storage facilities	118	3.28	107	2.97	109	3.02	334	3.09	Serious
Poor pen structures	125	3.48	104	2.90	104	2.90	333	3.08	Serious
High cost of feed and drugs	128	3.55	111	3.07	111	3.08	350	3.24	Serious
Inadequate power supply	116	3.22	102	2.83	105	2.92	323	2.99	Serious
Lack of functional cooperatives.	101	2.80	121	3.35	102	2.83	324	3.00	Serious
Insecurity challenges	134	3.73	119	3.30	103	2.87	356	3.30	Serious
Poor government policies	131	3.63	115	3.20	102	2.82	348	3.22	Serious
Cumulative Mean (CM)		**3.07**		**2.91**		**3.06**		**3.02**	

Source: Field Survey, 2021 **Critical Mean = 2.50**

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ANOVA results on the constraints facing women participation in poultry farming in the study areas (Table 6) showed an (f – calculated = 0.98) and an (f – critical = 3.17) at P > 0.05 significant level. The null hypothesis which states that 'The constraints to women participation in poultry farming do not differ significantly among the various LGAs in Rivers State' was accepted. This means that the difference in the mean scores of the women in the three LGAs studied was not significant, implying that the constraints to women participation in poultry farming are the same in the three LGAs and will demand unified measures to tackle the challenges in order to encourage the women folk to participate actively in poultry enterprise without seeing it as men centred enterprise in Rivers State.

Table 6: Summary of ANOVA Result on the Constraints Facing Women Participation in Poultry Production, Processing and Marketing in Selected LGAs of Rivers State

Source of Variance	SS	Df	MS	f-cal	f-Critical	p-value	Remarks
B/W Group variance	0.25	2	0.13				
W/Group variance	6.95	105	0.13				
Total	7.30	107		**0.98**	**3.17**	**0.38**	**NS**

Source: Field Survey, 2021 **N S – Not Significant at P > 0.05**

Conclusion

Participation of women in poultry farming in the studied three Local Government Areas of Rivers State is not encouraging yet, though the women in Ikwerre and Oyigbo LGAs are participating more than the women in Abua/Odual considering the few aspects of poultry farming that they participated. Also, it was obvious from the study that no aspect of poultry farming is gender specific. The constraints to women participation in poultry farming, such as insecurity challenges, price fluctuations of poultry products, high cost of veterinary services, poor government policies, inadequate credits, land ownership issues, inadequate storage facilities, pest and disease problems identified in the study are enormous and are common to the three LGAs studied in Rivers State.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Considering the mean age of women in poultry farming, they should be supported and encouraged by government to actively participate in poultry farming as the major operators of farm industry in Rivers State.
2. Women in Rivers State should not limit themselves to only raising of layers for eggs and broilers for meat alone, but diversify to hatchery, feed milling and supply of feeds and poultry equipment.
3. Extension agencies operating in the study area should register more women as contact poultry farmers especially in Abuah/Odual LGA of Rivers State.

4. Agricultural credits should be made available and accessible to women poultry farmers in Rivers State.
5. Women farmers in Rivers State should be guided to form and operate functional cooperatives that will attract interventions from government and non-governmental organizations to address pests/diseases issues and insecurity.

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