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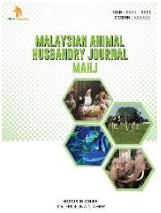

RESEARCH ARTICLE

GENDER DIFFERENTIALS OF SMALLHOLDER FARMERS' PARTICIPATION IN POULTRY FARMING IN OYO STATE, NIGERIA

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ABSTRACT

The study assessed gender differences in smallholder farmers' participation in poultry farming in Osun State, Nigeria. A total of 110 poultry farmers were selected across the study area through a multistage sampling procedure. Interview schedule was employed to collect data from respondents which was subjected to descriptive and inferential analysis. The results showed that 76.4% of males and 72.1% of females had formal education with a mean age of 45±8 years and 41±9 years and a mean income of ₦445,455 ± ₦209,679 and ₦481,818 ± ₦217,670, respectively. Both genders significantly from poultry production. Males dominated off farm activities like repairs of pens and transportation of chicks, while females mostly participated in collection of eggs and marketing of poultry products. Both genders participated at moderate level. Inadequate capital and disease outbreak were major threats to their participation. No significant difference (F=0.775) existed between participation of male and female farmers in poultry production activities. Therefore, the research concluded that is no gender gap in smallholder farmers' participation of poultry farming.

KEYWORDS

Constraints, Involvement, Smallholders, Socio-Economic Characteristics

1. INTRODUCTION

Agriculture is the backbone of economic development and the alleviation of poverty in Nigeria. It is the catalyst for achieving economic growth, since, over 70% of Nigerians engage in agriculture where more than 80% of them are operating at subsistence level (Awoyemi et al., 2017). It accounts for about 26.09% of the gross domestic product (GDP) for the country (CBN, 2019; Oyeniran 2020). Livestock contributed about 8.1% of the total output after crop production which accounts for lion share of 86.7%. The available data show that Nigeria has livestock population which amount to 20.7 million cattle, pigs 7.9 million, 47.7 million sheep and 83,7 million goats in 2020 and 180 million poultry in 2018 (FAOSTAT, 2022; FAO, 2018). Based on this figure, it can be deduced that poultry was one of the dominant livestock sub-sector in Nigeria. According to FAO, cattle and poultry are the major contributors of the household livelihood in Nigeria, with cattle contributing between 30 to 100 % of the total household income, while poultry contribution was between 20 to over 50% (FAO, 2018). According to some researcher's Nigerian poultry industry has the second largest population in Africa closely behind South Africa (Wong et al., 2017; FAO, 2018).

According to the poultry industry has remained the most dynamic and fastest growing segment in the animal husbandry subsector (Nmeregini et al., 2020). And it is a means of livelihood and a way of achieving a certain level of economic independence in Nigeria (Anosike et al., 2018). As a result of short gestation period and high feed conversion ratio, stated that poultry is one of the most affordable, widely available, and best sources of animal protein in Nigeria, it provides the quickest returns on investment in the livestock industry (Akintunde and Adeoti, 2014). This shows the critical position it occupies in the livestock sector. Akintunde and Adeoti further stressed that since egg is the most perfectly balanced food and contain all the necessary amino acids, minerals and vitamins, poultry production is the most effective and economical way of increasing availability of high-protein foods (Akintunde and Adeoti, 2014). Poultry populations in less developing countries are made up primarily of chickens (Wong et al., 2017). According to majority of the poultry are found in rural and resource-constrained areas where food insecurity is a common problem (Wong et al., 2017; Akintunde and Adeoti, 2014). They are accessible to vulnerable groups of society and provides income and sources of food that are high in nutrients to households. However, they also contribute to indirect improvements in food security, including promoting nutrient recycling and utilization in the environment, enhancing mixed farming practices, empowering women, and facilitating access to healthcare and education. Furthermore, they may contribute to several of the Sustainable Development Goals, and to future food security through maintaining biodiverse genomes. In extensive small-scale poultry production systems. A group researcher further emphasized that disease and predation pose serious obstacles for making these contributions achievable, which can be mitigated by enhancing agricultural and livestock extension programs and community animal health networks (Wong et al., 2017).

The term "gender" according to some study, refers to as the characteristics, opportunities, and relationships that come with being a woman or a man (Aila et al., 2012; Alemayehu et al., 2018). These characteristics, possibilities, and connections are socially constructed and acquired through the socialization process; as a result, they are dynamic, changing, and thus may be altered. In most societies, there are disparities and inequalities between how men and women access and manage resources, make decisions, and participate in decision-making processes. In some study, asserted that men's and women's tasks and responsibilities were often given in rural societies based on traditional gender roles which they considers as specific and appropriate roles for male and females (FAO, 2013; Agboola et al., 2020). Since gender roles are seen as the social definition of women and men in a society, they can differ depending on the

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religion, culture, class, values, and beliefs of that society. Despite all regional variations, smallholder households in Africa, Asia, or Latin America that raise poultry, the daily routine management practices of poultry are usually carried out by women, with the help of their children as reported (Alemayehu et al., 2018). Nduthu and Mutombo claimed that indigenous chickens are frequently owned and managed by women, children, and households headed by women in sub-Saharan Africa (Nduthu, 2015; Mutombo, 2014). Scholars like Mutombo also reported that Women and children are in charge of providing the birds with food and water, cleaning the poultry house, and treatment of birds while men may help in building housing and in some communities conveying birds and eggs to market (Mutombo, 2014).

A group researchers indicated that indigenous chickens were predominantly owned and managed by women and their children in sub-Saharan Africa (Alemayehu et al., 2018). He also reported that men were particularly interested in raising poultry birds that are more difficult to manage than chickens such as guinea fowl, turkeys and pigeons in Benin and Togo, and keeping these types of poultry and large flock sizes was a great prestige some men as reported (Kryger et al., 2010). According to report of that in some parts of Nigeria, all genders in the household are involved in the management of indigenous chicken, where children had highest responsibility (Moges et al., 2010). A study conducted in Kenya by reported that women dominated six out of seven extensive poultry production activities such as feeding and watering, selling of chickens and cleaning of chicken houses among others while repairs of poultry houses was the sole role of men (Ngeno et al., 2011). On other hand under intensive poultry production enterprise, some researchers further found out women were still fully in charge of feeding, egg collection and brooding day-old-chicks, while the men were mostly participated in off-farm activities such as the purchase and transportation of feeds and chicks (Ngeno et al., 2011).

There is no doubt that some scholars such as have worked on smallholder farmers' involvement on poultry production in Nigeria (Jacques et al., 2021; Adeniran et al., 2018). Their findings revealed many of the farmers engaged in reared broilers and layers and carried out activities like packing, sorting and grading of eggs among others. In addition, they reported that their socio-economic characteristics did not affect their level of involvement. However, very few studies like conducted on gender participation in commercial poultry production in Nigeria (Okoh et al., 2010). Their study discovered that greater percentage of men were involved in management activities such as treatment and vaccination, de-breaking and purchase of chicks, while more women were more involved in day-to-day poultry activities. The study also revealed more women were involved in farm decision making such as size of flock, selling of poultry products and keeping of earnings. However, there is dearth of empirical evidence on gender participation of smallholder farmers in poultry farming in the study area.

Hence, this study sought to assess the participation of male and female smallholder farmers in poultry production in Oyo State, Nigeria. The specific objectives were to describe the socio-economic characteristics of smallholder poultry farmers on a gender basis; determine their level of participation on gender basis; and identify constraints to their participation in poultry farming. The hypothesis tested was there no significant difference between males and females' participation in poultry farming practices in the study area.

2. Material and Methods

2.1 Study Area

The study was carried out in Oyo State, Nigeria with a land area of 27,249 km2. It has a projected population of 7,840,900 as at 2016 (https://www.citypopulation.de). Oyo State has thirty-three Local Government Areas (LGAs) which has five agricultural zones namely: Ibadan, Oke - Ogun, Ogbomoso, Oyo and Ibarapa, which has 11, 10, 5, 4 and 3 respectively LGAs (Adeyonu et al., 2016). Yoruba is the predominant ethnic group in Oyo State with Oyo as the only one sub-ethnic group. Other ethnic group residing in the state include Hausa, Fulani, Igbo and Idoma. Agriculture was the main occupation of the inhabitants of state where they engage in crop production, livestock farming and fish farming. They cultivate both cash crop and food crops like cocoa, Kolanut, citus, maize, cassava, yam, vegetables and peppers among others. Livestock farming such as poultry farming, piggery, goat and sheep rearing are common livelihood activities among the people in the grassland region of the state. Other economic activities they engaged in include trading, food processing, local soap making, mat weaving, cloth weaving, cassava processing, oil palm processing, tailoring, carpentry, basket weaving, pottery and other small scale businesses.

2.2 Sample and Sampling Techniques

The research was conducted in Oyo State, Nigeria. The state has 4 agricultural zones, namely; Oyo, Saki, Ibadan/Ibarapa and Ogbomoso zones. The target population of the area was the smallholder poultry farmers. A multistage sampling procedure was employed in the study. Oyo Agricultural Zone was purposively selected out of the four agricultural zones in the first stage because of the prevalence of poultry farming in this zone. At the second stage, two LGAs out of the four LGAs from Oyo zone were randomly selected. The selected LGAs were Afijio and Atiba. The third stage involves random selection of four percent of the communities in selected LGAs, making a total of five communities. This translated into three and two communities respectively from Afijio and Atiba LGAs. Finally, random sampling technique was adopted to choose equal number (11) of males and (11) female smallholder poultry farmers in the respective communities to give a total of 110 respondents. That is, 55 male poultry farmers and 55 female poultry farmers. Structured interview schedule was used to collect quantitative information on socio-economics characteristics, economic benefits, level of participation in poultry farming activities and problems associated with their participation in small-scale poultry production. The data were processed with software Package for social science (SPSS) and analyzed with appropriate descriptive such as frequency count, percentage, mean and standard deviation while one-way analysis of variance was the inferential statistics used to test their difference in participation.

2.3 Measurement of Variables

Participation in poultry farming practices was the dependent variable for this research. This was conceptualized as the extent of respondents' involvement in different poultry farming activities which was rated on a-four-point scale from never participate (0 point) to often participate (3 points). Responses from each respondent from the various activities were sum up together to form involvement score, the maximum score was 45 while the minimum score is 0. This involvement were later categories on gender basis into high, moderate and low level using a mean plus or minus standard deviation. Constraints was measured by asking the respondents to indicate the extent to the listed constraints limit their participation in poultry farming on a three-point rating from severe (2 points), less severe (1point) and not severe (0 point).

3. Results and Discusion

3.1 Socio-Economic Characteristics of Male and Female Poultry Farmers

Evidence in Table 1 shows that 56.4% and 41.8% of the male and female poultry farmers were in the age group of 41 and 60 years with a mean age of 45± 8 years for males and 41 ± 9years for females. This implies that even though both genders were still in their productive age with the ability to carry out poultry production activities male respondents were a little bit older than their female counterparts. This finding agrees with who established that majority of small holder poultry farmers were in their active and productive age. Majority (89.1% and 85.5%) of the male and female respondents were married, indicating that majority of them have responsibilities and married households were more involved in poultry farming than unmarried households (Ogunwale et al., 2021). This study supports the findings of that majority of farmers involved in small-scale poultry farming were married (Aromolaran et al., 2013). About one-third of male and female respondents (65.5% and 63.6%) had a family size between 1-5 persons with a mean family size of 5 ±2 and 5±1 persons, respectively. This implies that the majority of the poultry farmers have a moderate household size. Therefore, both genders may derive sizeable family labour to support their poultry production.

Further results shows that almost half (45.5%) of male and very few (12.7%) of the female respondents had access to extension contact. The results implies that although both genders had weak access to extension contact, male farmers was better. This is similar to the findings of who reported that women had less access to extension services and information than men due to social and cultural norms in Burkina Faso (Ayantunde, 2020). It is evident that weak extension contact observed will likely deny both genders benefit of extension services of disseminating appropriate information and technologies which has positive correlation with knowledge, adoption and productivity. Information in Table 1 shows that about (63.6% and 49.1%) of the male and female respondents had spent between 6-10 years and (3.6% and 3.6%). The mean years of experience for male was 7.5± 2.6 years and the mean years of experience for female was 6.9 ± 3 years. This shows that the respondents had experience in their respective enterprises, this is in line with Obiana report that sustained participation in various enterprises increase their knowledge and technical know- how of the business (Obiana, 2014).

Majority (70.9% and 67.3%) of the male and female respondents earned between ₦100,000 to ₦500,000 from poultry farming with a mean annual income of ₦445,455 ± ₦209,679 and ₦481,818 ± ₦217,670 which translated into ₦37,121.25 ± ₦17,473 and ₦40,151.51± ₦18,139 monthly. This implies that female respondents earned more income from poultry production than male counterparts. This contradict the findings of who reported that male dairy farmers earned higher income than their female counterparts due to better access to productive resources (Agboola et al., 2020). The fact that both genders earned above national minimum wage of ₦30,000 for a least pay Nigeria worker, shows that poultry farming is a sustainable and profitable agricultural venture if all the needed technical supports can be given to poultry farmers to build their capacity in the enterprise. Majority of the male and female respondents (81.8% and 96.4%) belong to one organization or the other. This implies more female belonged to social organization than male. Respondents' membership of various organizations would give them access to numerous benefits accrue to belonging to associations, which could improve their performance in poultry production. Majority (76.4% and 72.1%) of the male and female respondents had tertiary education.

This implies that both genders were literate and they stand better chances of accessing information that could enhance better performance of their poultry production. However, female poultry farmers possess higher level of educational status than male since the least of them had secondary school education. Literacy level of an individuals would enhance their awareness of opportunity employment and improve their income generation and enhance their livelihood status. The results shows above half of (58.2%) of male respondents and less than half of half (47.3%) of female counterpart had access to credit facilities. This implies that more male respondents had access to credit facilities than female counterparts. Majority of the female respondents (78.2%) took poultry production as their primary occupation while 30.9% of the male poultry farmers had poultry production as their secondary. This implies that larger percentage of the female respondents depend on poultry farming as the main source of livelihood while majority of male farmers considered it as secondary sources of income to augment their financial needs. This clearly concurs with the findings of which stated that rural dwellers usually engage in other livelihood activities aside farming to complement their household income (Adepoju and Obayelu, 2013; Bila et al., 2015). The result shows that (43.6% and 38.2%) of the male and female respondents engaged in production of layers only while larger proportion of both genders (56.4% and 60.0%) of the male and female engaged in broilers production only. This means that a larger proportion of the poultry farmers engaged in broilers production. This is in line with the report of Oladunni and Fatuase that many smallholder farmers engaged in broilers production because it requires low capital with high rate of turnover (Oladunni and Fatuase, 2014).

Table 1: Socio-economics characteristics (n= 110)

	Male (n= 55)		Female (n=55)	
Variables	**Frequency**	**Percentage %**	**Frequency**	**Percentage %**
Age(years)				
20-40	23	41.8	31	56.4
41-60	31	56.4	23	41.8
Above 60	1	1.8	1	1.8
Mean ± standard deviation	*45±8*		*41±9*	
Marital status				
Single	6	10.9	4	7.3
Married	49	89.1	47	85.5
Widow			4	7.3
Family size				
1-5	36	65.5	35	63.6
6-10	19	34.5	19	34.5
11-15			1	1.8
Mean ± standard deviation	*5±2*		*5±1*	
Access to extension				
Yes	25	45.5	7	12.7
No	30	54.5	48	87.3
Years in poultry Production				
1-5	18	32.7	26	47.3
6-10	35	63.6	27	49.1
11-20	12	3.6	2	3.6
Mean ± standard dev.	*7.45±2.60*		*6.96±3.01*	
Annual income from poultry (₦)				
100,000- 500,000	39	70.9	37	67.3
500,001- 900,000	13	23.6	12	21.7
900,001- 1300,000	2	3.6	5	9.1
1300,001- 1700,000	1	1.8	1	1.8
Mean ± standard dev.	*₦445,455 ±*	*₦209,679*	*₦481,818*	*±217,670*
Association membership				
Yes	45	81.8	53	96.4
No	10	18.2	2	3.6
Level of education				
Primary education	5	9.1		
Secondary education	8	14.5	15	27.3
Tertiary education	42	76.4	45	72.7
Access to credit				
Yes	32	58.2	26	47.3
No	23	41.8	29	52.7
Types of poultry production				
Layers	24	43..6	21	38.2
Broilers	31	56.4	33	60.0
Brooders	-	-	1	1.8
Poultry as major occupation				
Yes	17	30.9	43	78.2
No	38	69.1	12	21.8

Sources: Field survey, 2020

3.2 Participation in Poultry Production Activities on Gender Basis

The results in Table 2 show the mean score of both genders' participation in poultry farming activities and their grand mean scores. Based on grand mean scores of 2.05 and 1.94 for male and female respondents in poultry production, it implies that there was no gender gap in their participation in poultry production unlike the findings of who reported a gender gap existed in poultry production activities among poultry farmers in their studies (Okoh et al., 2010; Lestari et al., 2017). Table 2 shows that daily record keeping (mean= 2.51, 2.64) ranked highest among the activities performed by male and female in small-scale poultry production, suggesting that both respondents regularly keep different poultry records such production record, inventory record, sales and purchase records in order to evaluate the performance of birds, reduce frauds and assist their productivity and efficiency. This contradicts the report of that only women mostly keep records on their poultry farms (Okoh et al., 2010; Adisa and Akinkunmi, 2012). Likewise, repairs of damaged pen (mean= 2.33, 1.58) that ranked 2nd and 10th was mostly regarded as men responsibility due to physical strength and risky involved. This is conform to the findings of that men dominated this activities (Ngeno et al., 2011).

However, routine medication and vaccination programme (mean=2.31, 2.31) was reported as dominated by male in the reports of ranked 4th among the activities performed by both genders s (Okoh et al., 2010). This implies that gender role in poultry production are changing probably due to level of education and civilisation, as both the female and male respondents performed this task together. This finding is similar to Adisa and Akinkumi where the women claimed they learned this procedure from friends and veterinarians at some point or the other (Adisa and Akinkumi, 2012). Despite the fact that this procedure necessitates accurate drug calculations, skillful tool handling, and knowledge of the disease symptoms. Furthermore, feeding and watering of birds (mean =2.31, 2.53) that were considered as roles dominated female gender were performed by males and female's smallholder poultry farmers. Both genders were involved in this task since they had better understand that quality of feeds and water are consumed daily by birds enhance high performance and productivity in terms of eggs and meats. This agrees with the findings of but disagree with the findings of that women mostly involved in feeding and watering the birds (Lestari et al., 2017; Ngeno et al., 2011).

In addition, packing and replacement of poultry litters (mean = 2.28, 2.07) took 5th and 12th position among the roles performed by male and female in poultry farming. It is obvious from this results that disposal of poultry and replacements of litters was male dominated as more male were involved in the disposal of wastes and replacements of poultry litters. In facts, many of the female respondents indicated that most of the time they usually employed hired labors to carry out this task because it is laborious and involved physical strength. Likewise, purchase and transportation of chicks (mean =2.13, 1.14) ranked 6th and 12th among the activities performed by male and female in small-scale poultry production. This implies that male respondents mostly participated in transportation as purchase and transportation of day-old chicks were gender specific roles assigned to men. This corroborate the finding of who reported that men dominated purchase and transportation of chicks (Ngeno et al., 2011; Okoh et al., 2010). Also, washing of drinkers and feeders (mean =2.04, 2.15) took 7th and 6th position among the activities performed by males and female poultry farmers. This implies both male and female respondents mostly participated in maintaining good hygiene of the poultry pen which was previously dominated by female as reported (Okoh et al., 2010).

Finally, collection and grading of eggs (mean= 1.10 and 1.78) ranked 12th and 5th among activities performed by male and female in poultry farmers. This implies collection and grading of eggs was dominated by female folks since it is the gender specific role assigned by the society (Lestari et al., 2017; Ngeno et al., 2011; Okoh et al., 2010). It could be inferred from this findings that that some of the poultry farming activities that were primarily dominated by women before such as cleaning, feeding, egg collection and sales of eggs are no longer gender-specific roles, hence some age-long of gender behavior in agriculture are changing in poultry farming since both genders are now involved in such activities.

Table 2: Respondents' Participation in Poultry Production

Poultry farming activities	Male Mean	(n= 55) Rank	Female Mean	(n=55) Rank
Daily record keeping	2.51	1st	2.64	1st
Repairs of pens	2.33	2nd	1.58	10th
Feeding and watering of birds	2.30	3rd	2.61	2nd
Routine medication and vaccination programme	2.28	4th	2.31	4th
Packing and replacement of poultry litters	2.25	5th	1.07	12th
Purchase/transportation of chicks	2.13	6th	1.14	11th
Washing of drinkers and feeders	2.10	7th	2.25	6th
Feed milling operation	2.04	8th	1.97	8th
Marketing of poultry products	2.00	9th	2.48	3rd
Isolation of sick birds	1.45	10th	1.68	9th
Brooding	1.27	11th	1.89	7th
Collection and grading of eggs	1.10	12th	2.28	5th

Grand mean for male and female = 2.05 and 1.98

Sources: Field survey, 2020

3.3 Level of participation in small-scale poultry farming

Table 3: Respondents' Level of Participation in Poultry Farming Practices

Level	Participation score	Male		Female	
		Freq	%	Freq	%
Low	≤ 23.8	6	10.9	14	25.5
Moderate	23.81- 60.80	49	89.1	34	74.5
High	>60.80	0	0	0	0
Total		55	100	55	100

Sources: Field survey, 2020

The result in Table 3 shows that (10.9 % and 25.5%) of the male and female respondents fell into low level of participation and (89.1 % and 74.5 %) of the male and female respondents fell into moderate level while none of the respondents were operating at high level. This implies that both genders were participating in poultry production at moderate level with a slight difference in their participation. The fact that neither male nor female respondents were involved in high level might be connected to the fact that poultry production in the study area is bedeviled with a lot of problems that limit involvement and production capacity. It is therefore recommended that smallholder poultry farmers should be empowered through capacity building and training so as to enhance their level of participation which eventually lead to higher productivity.

3.4 Constraints to Participation in Poultry Farming

The results in Table 4 shows that the constraints encountered by both the males and females in small scale poultry production are similar. Both genders indicated inadequate capital (mean=1.89, 1.97) as the foremost severe problem limiting their involvement in poultry production. This is because both genders earned little income from poultry farming that could guarantee them of better reinvestment in the enterprise and do not have access to credit facilities for acquiring feeds and other inputs to enhance their production activities. This confirms the finding (Ogunwale et al., 2021). High cost of feeds (mean=1.77, 1.60) was also identified as a severe

constraint to their participation, this is because FAO, asserted that high cost of feeds was a major factor limiting economic sustainability and productivity of small scale poultry enterprise (FAO, 2014). Besides, inadequate access to quality drugs and vaccines (mean=1.71, 1.67) was also acknowledged by both genders as a major problem, this as a result of unreliable supply of vaccines in the cold chain and some drugs because of erratic power supply in most parts of Nigeria, as most vaccines must be kept cold from manufacturer until use for them to be effective (Tabler et al., 2019).

Disease outbreak (mean=1.69, 1.75) was also identified by both males and females, this gives credence to the findings of that poultry disease outbreak is one of the major challenges to poultry farming (Wong *et al.*, 2017; Akintunde and Adeoti, 2014). This usually occur in most smallholder poultry farm due to poor management practices such as poor handling procedure, poor quality drugs and vaccines, poor housing, lack of competent and skilled staff to support smallholder farmers as reported (Tabler et al., 2019). Other severe constraints include fluctuation and poor prices of poultry products (mean=1.69, 1.50), inadequate access to credits (mean=1.66, 1.59) and extreme weather condition (mean=1.65, 1.78) and inadequate access to training and information (mean=1.55, 1.68). The least problems indicated by both genders include high-cost labour, theft and insecurity, and high mortality. The findings imply that relevant agricultural development agencies should give priority focus on how to reduce these identified problems to stimulate maximum participation of both male genders in poultry production for enhanced productivity and food security.

Table 4: Constraints to Poultry Production (n= 110)

Constraints	Male	Female
	Means	Mean
High cost of feeds	1.77	1.60
Inadequate access to quality drugs and Vaccines	1.71	1.67
Outbreak of diseases	1.69	1.75
Fluctuation and poor of prices of poultry products	1.67	1.50
Inadequate access to credits	1.66	1.59
Extreme weather condition	1.65	1.78
Inadequate access to training and information	1.55	1.68
Availability of healthy day old chicks	1.46	1.31
Waste management	1.38	1.48
Insecurity and theft	1.31	1.42
High mortality	1.24	1.15
High cost of labour	1.15	1.44

Sources: Field survey, 2020

3.5 Difference in the Level of Participation of Respondents

Results of one-way analysis of variance in Table 5 show that no significant difference (F = 0.775) existed in male and female participation among smallholder farmers in poultry farming practices. This implies that there is no gender disparity in male and female participation in poultry production. The reason for this may be attributed to the fact that both genders now share the same roles that were previously assigned to one specific gender by the society and dominated by that gender are now being participated both almost at the same levels. This finding is disagree with reports of who established that there was a significant difference between male and female involvement in dairy production practices (Agboola et al., 2020).

Table 5: Analysis of Variance of Respondents' Participation in Poultry Production Activities

	Sum of Squares	D.f	Mean Square	F	Sig.
Between Groups	33.827	1	33.827	0.775	0.381
Within Groups	4714.545	108	43.653		
Total	4748.373	109			

Source: Field Survey, 2020

4. Conclusion

The study revealed both male and female poultry farmers were still in their productive age with moderate family size while male had better access to extension services and credits facilities. The study revealed that although both gender participated in poultry activities at moderate level, male counterparts were a little bit better in their participation. Furthermore, the study revealed that male respondents still have a little dominance in few activities like repairs of pens, purchase and transportation of chicks, while their female counterparts participated mostly in on farm poultry activities such as collection and grading of eggs, brooding and marketing of poultry products. The research concluded that both gender now participated in almost all the poultry farming activities at the same level and there is no statistical differences in male and female participation in poultry production activities, as most of the activities that were previously dominated by one gender before are now shared by both genders.

Based on the outcome of this research, government and relevant stakeholders should grant subsidy on poultry feeds and provide functional credit facilities to enhance their maximum participation. Male and female poultry farmers should be encouraged to join or form cooperative in order to pool their resources together, Also, more competent male and female livestock extension personnel should be employed by the government to dissemination of relevant poultry production technologies to poultry farmers. Male and female smallholder poultry farmers should be empowered through capacity building and training on improved poultry production. Finally, government should give priority in providing solutions to the all identified problems to stimulate maximum participation of both genders in poultry production for enhanced productivity and food security.

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