GENDER ANALYSIS OF FINANCIAL INCLUSION ON POULTRY FARMERS IN DELTA STATE, NIGERIA

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ABSTRACT
The study examined the financial inclusion services on male and female poultry farmers in Delta State in Nigeria. It specifically described the socio-economic characteristics of poultry farmers, assessed the level of financial inclusion among poultry farmers, and analyzed the determinants influencing financial inclusion among the poultry farmers. Data were collected with the aid of well-structured questionnaire from a total of 185 respondents and analyzed using descriptive statistics, multivariate regression and t-test. The result showed that bank account ownership, Mobile banking, Access to Credit Loan, Credit Approval, Debit Card Ownership, Access to Insurance, Savings, Financial Literacy Training showed significant disparities between the male and the female's gender. The levels of financial inclusion showed a significant difference as males tend to have higher levels of financial inclusion than females. Also, he null hypotheses involving gender and financial inclusion levels was rejected as the result showed a p-value of .000 ($p < .001$), indicating a significant association between gender and financial inclusion levels. The multivariate result revealed that Cooperative Membership was the strongest positive predictor across all three financial metrics. Gender and Financial Literacy also had significant effect on access to credit and mobile banking app usage respectively. Common constraints included high interest rates, complex loan processes, and financial illiteracy. The study therefore recommends that supporting farmers in improving their income through access to better markets, training, and technology can lead to higher financial inclusion. Additionally, financial institutions should design income-based financial products that cater to male and female poultry farmers.

INTRODUCTION
Financial inclusion refers to the access and usage of financial services by individuals and businesses, encompassing banking, credit, savings, insurance, and payment services.

In this era of inclusive growth, financial inclusion remains an important mechanism of reducing poverty substantially thereby attaining national progress and prosperity. This is because finance is necessary for economic growth (Fowowe, 2020). In view of these benefits, financial inclusion has been so much prioritized world over by both policy makers and financial regulators in their quest to fully develop financial sector (Demirguc-Kunt, Klapper, Singer and Oudheusden, 2020).

However, despite the progress in financial inclusion, there is still a financial inclusion gender gap. The data from the latest Global Findex Database from 2017 show that, on average, men more often than women have a formal financial account, access an account via telephone or the Internet more frequently, own credit cards, save at and borrow from a financial institution, use the Internet to pay bills or to buy something online, and make or receive digital payments (Marija et al, 2022).

The 2014 Global Findex Data by World Bank (2015) reported also that Nigeria is among these countries with about 56 per cent financially excluded people as compared to 30 and 24 per cents in South Africa and Kenya respectively (Demirguc-Kunt *et al*, 2020). This means that there exists a gender gap in financial inclusion on the globe.

However, due to impact of changing weather pattern on agricultural production, the agricultural industry is said to rely on credit more than any other sector of the economy. The lack of access to credit presents a significant challenge for both male and female poultry farmers, but it may affect each gender differently due to various socio-economic factors and cultural norms. For instance, in many households,

men are traditionally considered the primary decision-makers and managers of finances. Even if credit is available, women may have limited control or autonomy over the borrowed funds. This lack of control usually affects their ability to invest in their poultry farming businesses effectively (Adebayo & Adeola., 2017). Additionally, in many cases, financial institutions require collateral or assets to secure loans. Traditionally, men in many societies have had greater access to assets such as land or property, which can serve as collateral. This has disadvantaged women, especially in contexts where property ownership is skewed towards men, making it harder for them to access credit (Ashoro et al, 2024). In this study, a comprehensive measure of financial inclusion should be able to incorporate information on several aspects (dimensions) of financial inclusion, preferably in one single number. Such a measure can be used to compare the levels of financial inclusion across genders at a particular time point. The proposed IFI takes values between 0 and 1, zero indicating lowest financial inclusion (complete financial exclusion) and 1 indicating complete financial inclusion. Such an index, in our view, will be most useful for policy makers and academic researchers.

Depending on the value of IFI, level of inclusion was categorized as follows,

i. $0.61 < IFI \leq 1$ – high financial inclusion
ii. $0.30 \leq IFI < 0.60$ – medium financial inclusion
iii. $0 \leq IFI < 0.29$ – low financial inclusion

Poultry offers the greatest opportunity for increasing the quantity and quality of animal protein intake of Nigerians, as poultry meat and eggs account for about 30% of total livestock output of which eggs account for over 80% (Evbuomowan, 2005; Ike, 2011). Commercial poultry farms are well organized in Nigeria with substantial infrastructure on ground. Thus, poultry meat and eggs are capable of providing animal protein in terms of quantity and quality and can slide down the animal protein supply gap in a minimum possible time when compared to other sources of animal. More than 50 billion chickens are reared per annum all over the world as a source of food. This is attributed to the importance of poultry products in terms of nutritional values such as quality protein, lipids, carbohydrate, vitamins, cholesterols and pigments (FAO, 2020). Gbigbi et al (2022), agreed to the profitability of chicken production as they reported a net return of ₦930,700.00 per annum and a ROI of 1.73-naira on a study on exotic chicken enterprises. Poultry agribusiness needs capital to run their operations. Generating capital through credit systems has become a necessity for growth of small-scale agribusinesses so as to meet up the demand for food.

Gender is a socio-economic parameter that is useful in analyzing the roles, responsibilities, opportunities and constraints of both men and women along different ethnic, cultural, religion and ecological lines (Simonyan *et al..,* 2019). In agriculture, gender roles and access to credit feature prominently as these factors are believed to constitute major resources for growth and development of the agricultural sector. Gender difference in financial inclusion is generally conceptualized as the likelihood that women have lower access to and utilization of (formal) financial services relative to men. Studies of this phenomenon however, conclude the existence of a financial gender gap across financial service providers as well as across categories of financial inclusion beneficiaries. Accordingly, the most significant challenge facing the poultry sector is limited supply, a challenge that partly reflects the high poultry mortality experienced by smallholders. Two main diseases account for poultry mortality in this context: Newcastle disease and fowl pox, with the first more prominent and lethal. (Jessica *et al..,* 2020).

In addition, poultry production by smallholders is often primarily the responsibility of women, who manage the daily care of poultry. Qualitative work linked to this study found that husbands often sell poultry on women's behalf, as there are norms against women entering into the areas of the market where meat is sold and traveling poultry traders often will not purchase from women without their husband's consent (Eissler etal., 2020). Although there are literatures on financial inclusion, but they have not addressed gender differences in poultry farming. For these reasons, this paper therefore will fill this gap by examining how gender influences these aspects among poultry farmers in Delta State, Nigeria.

Objectives of the Study

The objectives are the study are to:

i. describe the socio-economic characteristics of male and female poultry farmers;
ii. examine the level of financial inclusion among male and female poultry farmers;
iii. identify the determinants of financial inclusion among male and female poultry farmers;

Hypothesis of the Study

The following null hypothesis was tested in the course of the study:

Ho_1. There is no significant difference in the level of financial inclusion between male and female poultry farmers

MATERIALS AND METHODS

This study was conducted in Delta State, which is one of the nine states of the Niger Delta in Nigeria and located between longitudes 5° 50` and 6° 45` east of the Greenwich meridian and latitudes 5°, 25` and 6° 30` north of the equator. The state has a population of 4.1 million (NPC, 2006) with a total land area of 17,440 square kilometers, of which about one-third is swampy and water logged. It is delineated into three agricultural zones namely Delta north (9 LGAs), Delta central (8 LGAs) and Delta South (8 LGAs).

Data for this study were mainly primary data which were collected with the aid of questionnaires applied to poultry farmers in the study area. A two-stage random sampling technique was adopted for this study. At the first stage ten (10) Local Government Areas (LGA) were randomly selected from the Agricultural Zones. The next stage of the sampling involved the random selection of poultry farmers from the Local Government Areas (LGA) to give a total of 185 poultry farmers which was used for the analysis.

Multivariate Regression

In order to ascertain the determinants of financial inclusion, multivariate probit regression analysis was employed. The model is specified as follow

$$Y_{ij} = \beta_i' X_{ij} + \epsilon_i \quad \text{..... (1)}$$
$$Y_1 = \beta_1 X_1 + \epsilon \quad \text{..... (2)}$$
$$Y_2 = \beta_2 X_2 + \epsilon \quad \text{..... (3)}$$
$$Y_3 = \beta_3 X_3 + \epsilon \quad \text{..... (4)}$$

Where:

Y_{ij} denotes the outcome for the *j*-th dependent variable in the *i*-th observation,
Y1 = Owned Bank account (Yes=1, No=0)
Y2 = Using digital financial services (Yes=1, No=0)
Y3 = Access to credit loan (Yes=1, No=0)
X1= Age (Years)
X2= Gender (male = 0, female = 1)
X3= Marital Status (Married=0, otherwise)
X4= Level of education
X5= Household size (number)
X6= Size of poultry farm
X7= Cooperative membership (Yes=1, No=0)
X8= Poultry Size (Urban = 1, Rural = 0)
X9= Income (Naira)
X10 = Access to financial literacy (Yes=1, No=0)
X11 = Distance to financial institution (km)
X12= Primary occupation (Poultry Farming=0, otherwise)
X13= Poultry farming experience (years)
βi are the coefficients to be estimated for each outcome
ϵ_i = Error term

RESULTS AND DISCUSSION

Result in Table 1 shows the socioeconomic characteristics of the poultry farmers. From the 185 respondents, 65.9% were female, while 34.1% are male. The large female representation could indicate that women are increasingly participating in agricultural activities, particularly in poultry farming, which allows them to balance household responsibilities with income generation.

Table 1 Socioeconomic Characteristics of Respondents

Variable	Male (N=63) (Freq / %)	Mean	Female (N=122) (Freq / %)	Mean
Gender	63 (34.1)		122 (65.9)	
Age				
18-28	11(17.5%)	**37**	8 (6.6%)	**41**
29-39	31(49.2%)		57 (46.7%)	
40-50	13(20.6%)		32 (26.3%)	
51-61	7(11.1%)		17 (13.9)	
62-72	1(1.6)		8 (6.6%)	
Marital status				
Single	26 (41.3%)		16(13.1)	
Married	37 (58.7%)		90(73.8)	
Divorced	0		8(6.6)	
Widowed	0		8(6.6)	
Educational Status				
Primary	16 (25.4%)		24 (19.,7%)	
Secondary	18 (28.6%)		8 (6.6%)	
Tertiary	29 (46%)		74 (60.7%)	
Post-graduate	0		16 (13.1%)	
Household Size				
1-3	10 (15.9%)	**5**	16 (13.1%)	**6**
4-6	41 (65.1%)		74 (60.7%)	
7-9	8 (12.7%)		20 (19.2%)	
10-12	4 (6.3%)		12 (7.0%)	
Primary Occupation				
Poultry Farming	40 (63.5%)		90 (73.8%)	
Trader	8 (12.7%)		16 (13.1%)	
Civil Servant	9 (14.3%)		16 (13.1%)	
Artisan	6 (9.5%)		0	
Farm Experience (years)				
1-5	17 (27.0)	**10**	48 (39.3)	**7**
6-10	19 (30.2)		57 (46.7)	
11-15	15 (23.8)		8 (6.6)	
16-20	8 (12.7)		5 (4.1)	
21-25	4 (6.3)		4 (3.3)	
Farm Location				
Urban Area	45 (71.4)		106 (86.9)	
Rural Area	18 (28.6)		16 (13.1)	

Age is an important factor in Agriculture. It determines farmer's productive ability and consequently his output. From table 1, the mean age of male farmers is 37, slightly younger than the females' mean age of 41 which means that majority of the poultry farmers were below 30 years and in their active age. These findings align with Olorunwa (2015) showing that middle-aged individuals are often more financially stable and able to engage in entrepreneurial activities like poultry farming.

The table also revealed that a higher percentage of female respondents are married (73.8%) compared to their male counterparts (58.7%) while a significant number of female farmers are also single (13.1%) compared to male farmers (41.3%), showing that a larger proportion of male farmers remain unmarried. Education levels among respondents reveal a disparity, particularly at higher levels of education with male farmers having a more balanced distribution across primary, secondary, and tertiary education (25.4%, 28.6% and 46%), whereas female farmers concentrate more in higher education levels (73.8%). This suggests that educated women are more inclined toward poultry farming, perhaps due to its relatively low entry barrier compared to other sectors and may influence more modern or efficient farming practices, access to resources, and involvement in cooperative activities. This negates Gibson *et* al (2017) that suggest women with lower education dominating poultry farming. The shift could be influenced by rising educational opportunities for women and awareness of agricultural entrepreneurship.

Males (65.1%) and females (60.7%) primarily belong to households with 4-6 members. A slightly higher percentage of females report larger household sizes (7-9 and 10-12 members) compared to males as this can impact labor availability, division of responsibilities, and economic stability. The mean household size is slightly larger for females (6) compared to males (5), suggesting that females might have more dependents or live in more extended family settings.

A significant majority of both male and female respondents were engaged in poultry farming which suggests reliance on this sector for income, which has implications for economic resilience and vulnerability to market or environmental changes. More male farmers (14.3%) are civil servants than female farmers (13.1%), and only male farmers are involved in artisan work (9.5%). Previous literatures indicated a male-dominated agricultural sector, but the result here suggests that women are increasingly taking up poultry farming, likely due to flexibility and income-generating potential

When it comes to poultry farming experience, both genders have a significant proportion with 1-10 years of experience, but male farmers have a more even distribution across all experience levels. Female farmers are predominantly in the 6-10 years category, with fewer in higher experience brackets This suggests that male farmers might have longer involvement in poultry farming than female farmers. This shows that the production of poultry has been a long-running industry in the area under study according to Gbigbi and Ojogbane (2022)

A higher percentage of male respondents (79.4%) belong to cooperatives compared to females (47.5%). This suggests that men might have greater access to the benefits of cooperative membership, such as loans and training, pooled resources, knowledge sharing, or collective bargaining power, which could influence their socioeconomic status. This gender disparity suggests the need for more initiatives targeting women to improve their cooperative participation, as studies have shown the benefits of cooperative involvement in improving agricultural yields. This finding is consistent with Gbigbi and Ikechukwuka (2020).

71.4% of male respondents farm in urban areas while an even larger proportion of female respondents (86.9%) farm in urban areas. However, males are more likely to have farms in rural areas (28.6%) compared to females (13.1%). This distribution may reflect the ease of accessing markets and resources in urban settings. It also contradicts Abraham (2018) where rural areas were the agricultural hub, suggesting a shift towards urban agriculture, likely driven by urbanization and the growing demand for eggs and meat within cities. The higher urban involvement by women might indicate a preference for less physically demanding work environments typically associated with urban settings.

The income distribution showed that 65.1% of male respondents earn less than 200,000 per month, while 34.9% earn above 200,000 while 64.8% of female respondents earn less than 200,000 per month, while 35.2% earn above 200,000. Both genders have a very similar cumulative income distribution. The difference between those earning above 200,000 for males and females is minimal (34.9% for males vs. 35.2% for females), indicating that despite differences in individual income brackets, the overall earnings potential in poultry farming is quite comparable between genders.

The result in Table 2 showed the distribution of financial inclusion metrics across male and female farmers.

Bank account ownership was a critical indicator of financial inclusion, as it denotes access to institutional financial systems. The result showed that, bank account ownership is relatively widespread among both genders. However, males (85.7%) have a slightly higher percentage compared to females (80.3%). Access to digital services, such as online banking or mobile payment platforms, is another crucial metric of financial inclusion. The result reveals that 84.1% of males have access to digital services compared to 71.3% of females. This significant gender gap underscores the digital divide, where women are less likely to access or use digital financial services. This disparity could be attributed to lower levels of digital literacy, societal norms, or economic barriers that disproportionately affect women. (Kabeer, 2012).

A stark difference is observed in access to credit loans, with 79.4% of male respondents having access compared to only 23.8% of female respondents. Although, both genders have their poultry farm to serve as collateral, this disparity could reflect gender biases in lending practices, lower financial literacy among women, or more stringent creditworthiness assessments for women.

Following the trend seen in access to credit loans, their credit approval rates are significantly higher for men (60.3%) compared to 21.3% of female farmers who accessed the credit loan.

Debit card ownership closely mirrors the trends seen in bank ownership, with 85.7% of males and 80.3% of females owning debit cards. This metric suggests that once individuals have bank accounts, debit card ownership is relatively high among both genders. and while the gender gap is not as pronounced here, it still reflects the broader trend of men having marginally better access to financial tools. This could be due to socio-economic factors that afford men more opportunities to engage with financial institutions (Sahay et al., 2015).

The most striking gender disparity is seen in access to insurance, with only 4.1% of female farmers having insurance compared to 27.0% of male farmers. Insurance is crucial for managing risks and ensuring financial stability, yet women are significantly underrepresented in this area. This may be attributed to a lack of awareness, affordability issues, or the perception that women have fewer assets to insure (Patel & Gaikwad, 2020). This disparity leaves women more vulnerable to financial shocks, further entrenching their economic insecurity. However, the outcome is not consistent with research by Aroyehun (2023).

Savings behaviour also shows a considerable gender gap, with 79.4% of males reporting savings compared to 53.3% of females.

More men (41.3%) have undergone financial literacy training than women (31.1%), which could contribute to the observed disparities in financial inclusion metrics like access to credit and savings. This gap suggests that women may have less access to or engagement with financial education programs, which are crucial for improving financial decision-making and inclusion. Efforts to enhance financial literacy among women could help bridge other gaps in financial inclusion.

Table 2: Financial Inclusion Metrics Across Genders

Variables		Males		Females	
		Freq = 63	(%)	Freq =122	(%)
Bank Account Ownership	Yes	54	85.7	98	80.3
	No	9	14.3	24	19.7
Access to Digital Services	Yes	53	84.1	87	71.3
	No	10	15.9	35	28.7
Access to Credit Loan	Yes	50	79.4	29	23.8
	No	13	20.6	93	76.2
Credit Approval	Yes	38	60.3	26	21.3

	No	25	39.7	96	78.7
Debit Card Ownership	Yes	54	85.7	98	80.3
	No	9	14.3	24	19.7
Access to Insurance	Yes	17	27.0	5	4.1
	No	46	73.0	117	95.9
Savings	Yes	50	79.4	65	53.3
	No	13	20.6	57	46.7
Financial Literacy Training	Yes	26	41.3	38	31.1
	No	37	58.7	84	68.9
Cooperative Membership	Yes	50	79.4	58	47.5
	No	13	20.6	64	52.5

Table 3: Levels of Financial Inclusion

Financial Inclusion Levels	**Males**		**Females**	
	Freq = 63	(%)	Freq =122	(%)
Low (0.00 – 0.29)	0	0	3	2.5
Medium (0.30 – 0.60)	7	11.1	33	27.0
High (0.61 – 1.00)	56	88.9	86	70.5

Table 3 shows the Index of Financial Inclusion Levels for male and female poultry farmers. The results clearly show that males tend to have higher levels of financial inclusion than female farmers. A much larger percentage of males (88.9%) fall into the highest financial inclusion category compared to females (70.5%), suggesting that males have more comprehensive access to financial resources. On the other hand, females are more likely to fall into the moderate inclusion range (27.0% compared to 11.1% for males), indicating that a significant portion of women face partial barriers to financial services. Additionally, 2.5% of female farmers experience very low financial inclusion, a situation not observed among males, further underscoring the gender gap in access to financial resources. This result, therefore is consistent with the research by Odum (2023)

Table 4 shows the output of the multivariate probit regression analysis of the determinants of financial inclusion regressed against some indicators of financial inclusion.

Table 5: Determinants of Financial Inclusion among Poultry Farmers

Variables	**Parameter**	**B**	**Std. Error**	**T**	**Sig.**
Bank Account Ownership	Gender	.016	.068	.241	.810
	Age	.007	.005	1.585	.115
	Marital Status	-.100	.043	-2.347	.020**
	Educational Status	.120	.026	4.627	.000***
	Farm Location	-.330	.067	-4.932	.000***
	Household Size	.005	.017	.328	.744
	Primary Occupation	.124	.044	2.821	.005***
	Cooperative Membership	.137	.040	3.435	.001***
	Poultry Size	.095	.034	2.775	.006***
	Poultry Farm Experience	.000	.008	.018	.986
	Distance to Fin. Institution	.078	.029	2.674	.008***

	Financial Literacy	.067	.051	1.321	.188
	Revenue	-6.69	5.25	-1.274	.204
Mobile Bank Application Usage	Gender	.017	.085	.202	.840
	Age	.007	.006	1.133	.259
	Marital Status	-.016	.053	-.302	.763
	Educational Status	.040	.032	1.241	.216
	Farm Location	.173	.083	2.072	.040**
	Household Size	-.001	.021	-.053	.958
	Primary Occupation	-.098	.055	-1.789	.075*
	Cooperative Membership	.175	.050	3.507	.001***
	Poultry Size	-.010	.043	-.236	.814
	Poultry Farm Experience	-.010	.010	-1.045	.298
	Distance to Fin. Institution	-.033	.036	-.905	.367
	Financial Literacy	.272	.064	4.277	.000***
	Revenue	-2.22	6.55	-.340	.734
Access to Credit	Gender	-.307	.083	-3.700	.000***
	Age	-.003	.006	-.498	.619
	Marital Status	.050	.052	.955	.341
	Educational Status	-.007	.032	-.215	.830
	Farm Location	-.011	.082	-.138	.890
	Household Size	.015	.020	.726	.469
	Primary Occupation	-.095	.053	-1.785	.076*
	Cooperative Membership	.389	.049	7.985	.000***
	Poultry Size	.107	.042	2.570	.011**
	Poultry Farm Experience	.012	.009	1.238	.218
	Distance to Fin. Institution	.065	.036	1.815	.071*
	Financial Literacy	.082	.062	1.324	.187
	Revenue	-8.35	6.41	-1.303	.194

***, **, * means significant at 1%, 5% and 10% respectively

Across the three financial behaviours, several variables emerge as common factors that influence individuals' likelihood of engaging with different financial services. Notably, Cooperative Membership stands out as a consistently positive predictor, significantly impacting all three outcomes. Being part of a cooperative society has a robust effect on financial engagement; it positively influences Bank Account Ownership (B = 0.137, p = 0.001), Mobile Bank Application Usage (B = 0.175, p = 0.001), and Access to Credit (B = 0.389, p < 0.001). This indicates that cooperative members may benefit from social and financial support systems within their cooperative network, which increases their access to banking services, digital banking tools, and credit. Cooperative membership might facilitate financial awareness and provide better access to resources or community guarantees, making financial services more accessible.

Poultry Size also plays a consistent role across the financial behaviours. It shows a positive and significant relationship with Bank Account Ownership (B = 0.095, p = 0.006) and Access to Credit (B = 0.107, p = 0.011), indicating that individuals with larger poultry operations are more likely to own a bank account and access credit. This suggests that larger poultry businesses may have greater financial needs and perhaps more substantial financial inflows, making it necessary or easier to access formal banking and credit services. However, for Mobile Bank Application Usage, Poultry Size does not show a significant effect (p > 0.05), indicating that the size of a poultry operation alone may not drive digital banking adoption.

Constraints in Accessing Financial Inclusion Services

Table 6 examines the constraints poultry farmers experience in accessing and utilizing Financial Inclusion services. While both male and female respondents generally disagree that the lack of collateral, discrimination and lack of trust in financial institutions are significant constraints to financial

inclusion, they also agree that high interest rates, lack of financial literacy pose a barrier to financial inclusion. Males express slightly stronger agreement than females, but the difference is not substantial. Males tend to disagree that distance to financial institutions and cultural norms are major barrier, while females generally agree. This suggests that location and cultural barriers may have a more significant impact on women's financial inclusion respectively. Males agree that unavailability of mobile data is a barrier, while females disagree. This could indicate that men rely more on mobile technology for financial services, or that women may have better access to mobile data.

Table 6: Constraints of Financial Inclusion Between Genders

Variables	MALE			FEMALE		
	Mean	**S.D**	**Remark**	**Mean**	**S.D**	**Remark**
Lack of Collateral	2.40	1.140	Disagreed	2.41	.759	Disagreed
High Interest Rates	2.89	.964	Agreed	2.72	.691	Agreed
Complex application process	2.94	1.235	Agreed	2.60	1.009	Agreed
Lack of Financial Literacy	2.46	1.022	Agreed	2.50	.622	Agreed
Distance to Financial Institution	2.26	.925	Disagreed	2.59	.796	Agreed
Discrimination	2.25	1.065	Disagreed	2.22	.991	Disagreed
Unavailability of mobile data	2.70	1.081	Agreed	2.21	.408	Disagreed
Cultural norms	2.25	1.070	Disagreed	2.78	.750	Agreed
Lack of Trust in Financial Institution	2.16	1.073	Disagreed	2.19	1.162	Disagreed

Source; Field, Survey (2024)

Table 7: T-test for Constraints of Gender

Groups	Total	Mean	S.D	Mean Diff	S. D	t	df	Sig. (2-tailed)
female constraints	122	2.67	1.63	.26279	.49902	4.180	62	.000
male constraints	63	2.48	1.575					

Table 7 above shows the T-test for constraints of gender in the study area. The mean difference between the groups was 0.26279, indicating that, on average, females scored 0.26279 units higher on the constraints measure than males. This suggests that females experience more constraints than males. The standard deviation of 0.49902 and p-value of 0.000 shows how consistent the differences are across the individuals in the sample. Thus, the difference between female and male constraints scores is statistically significant, indicating that the observed difference is likely to reflect a true difference in the population. However, the outcome is consistent with research by Gbigbi (2021)

Results of Hypotheses Testing

Ho_1: There is no significant difference in the levels of financial inclusion between male and female poultry farmers.

Table 8 presents the result of the relationship between the levels of financial inclusion among gender of poultry farmers.

Table 8: Gender and Financial Inclusion Levels

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	25.129[a]	3	.000
Likelihood Ratio	25.886	3	.000
Linear-by-Linear Association	21.600	1	.000
N of Valid Cases	185		

Based on the Chi-square test results, we would reject the null hypothesis, "There is no significant difference in the levels of financial inclusion between male and female poultry farmers." The Pearson Chi-Square test shows a statistically significant result, with a p-value of .000 ($p < .001$), indicating a significant association between gender and financial inclusion levels. This low p-value provides strong evidence that there is a difference in financial inclusion levels between male and female poultry farmers. Thus, we conclude that gender significantly influences financial inclusion levels, suggesting disparities

that may need to be addressed to achieve more equitable financial access among poultry farmers. However, this result is consistent with the findings of Kairiza *et al.* (2017)

CONCLUSION

From the study, it was found that most of the farmers owned a bank account and possessed a mobile banking application. Most of the female poultry farmers also lacked awareness in the use and existence of most financial products and services provided by the financial institutions like access to credit. Women are increasingly involved on urban farming, with higher educational backgrounds but lower participation in cooperative networks. Among the determinants, Cooperative Membership is the strongest and most consistent positive predictor across all three financial behaviors, indicating its vital role in enhancing access to financial services. Gender and Farm Location show specific negative impacts, with Gender significantly limiting access to credit and Farm Location hindering bank account ownership. Educational Status, Financial Literacy, and Primary Occupation contribute positively to financial behaviors but vary in significance across the behaviors, illustrating that education and literacy are valuable for financial engagement, particularly in digital banking.

RECOMMENDATIONS

This study therefore recommends that financial institutions should increase the level of awareness on their financial products through television and radio stations, social media and bank application development. Financial literacy should also be part of agricultural extension teaching programmes that shall be used to reach out to the rural farmers.

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