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Bank of industry's small and medium enterprise programme: an exploratory impact analysis on the livelihood status of poultry farmers in Nigeria

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A B S T R A C T

The study evaluated how the small and medium business (SME) program of the Bank of Industry (BOI) affected the livelihood situation of chicken producers in Osun State, Nigeria. Using a two-stage sampling process, data was gathered using a structured interview schedule from 185 beneficiaries (poultry farmers) who were chosen at random from each of the six administrative zones. Descriptive statistics were utilized to analyze the data, and inferential conclusions were drawn using paired sample t-tests, correlations, and chi-square. The survey found Osun State's small and medium-sized poultry producers now have better living conditions thanks to the BOI's SME programme. It was observed that the programme brought about an increase in innovative thinking and ideas of the beneficiaries. However, there was a significant association between the socio-economic characteristics of the beneficiaries and their livelihood status; it revealed a significant difference ($t= 21.424$; $P \leq 0.05$) in the livelihood status of the respondents before and after the programme, which implies that respondent's income increases, experience tremendous growth in business output and were able to acquire more assets; hence, the programme should be sustained by successive government's administration and should be extended to other enterprises.

Keywords: Bank of Industry, Poultry farmers, Small and medium enterprises, Livelihood status

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Introduction

The topic of livelihood is extremely important since it is essential to human existence. A person's livelihood consists of the abilities, assets, income, and pursuits required satisfying their fundamental needs (Nyale, 2018). A person's, households', or society's overall livelihood status is determined by their possessions and activities. Assets, which are various forms of capital that can be used to create money directly or indirectly, are crucial to rural and urban survival strategies (Mphande, 2016). In their 2002 livelihood frameworks, the FAO and DFID identified five essential capital assets: human, natural, social, financial, and physical assets (FAO, 2002; DFID, 2002). A pentagon was used to represent these assets. The agricultural sector employs over 75% of Nigeria's workforce and is the country's largest employer of workers and GDP contributor, second only to oil (Adesugba and Mavrotas, 2016; NBS, 2018).

Financing the development of large, medium, and small projects, the modernization, diversification, and expansion of already-existing firms, and the rehabilitation of failed ones is the Bank of Industry's (BOI) objective. The Bank of Industry has played a significant role in the Nigerian economy by promoting entrepreneurship, lowering poverty, generating jobs, and generating wealth to boost the country's economy. Numerous non-governmental and self-help initiatives targeting rural livelihoods have received recognition for significantly raising participants' quality of life (Olanrewaju *et al.*, 2018). SMEs are the main driver of economic growth since their share has grown significantly in recent years. Increasing the welfare of Nigerians, guaranteeing food security, lowering poverty, producing wealth, and creating jobs are all part of the Bank of Industry's objective for small and medium-sized businesses. However, few studies assess its impact, especially on the financial situation of poultry farmers.

Objectives of the study

The main objective of the study is to assess the impact of the Bank of Industry's small and medium enterprise programme on the livelihood status of poultry farmers in Osun State. However, the specific objectives of this research include:

i. To describe the socio-economic characteristics of poultry farmers who are beneficiaries of BOI's small and medium enterprise programme in the study area.
ii. To identify other BOI programmes prevalent in the study area.
iii. To compare the livelihood status of respondents before and after the programme.
iv. To examine the perception of the respondents about BOI's small and medium enterprise programme on their livelihood status in the study area.

Methodology

The study was carried out in the state of Osun in Nigeria. When the Federal Military Government of the time split the former Oyo State into nine new states on August 27, 1991, the state was created. The sample was chosen from the six administrative zones in Osun State, Nigeria: Osogbo, Ilesha, Ikirun, Ife, Iwo, and Ede. A two-stage selection procedure was used to choose study participants who were BOI small and medium enterprise program beneficiaries. During the first phase, 80 percent of the Local Government Areas (LGAs) participating in BOI activities were chosen randomly from each of the six administrative zones. Among the 240 second-level participants in the BOI's SME program.

A total of 185 beneficiaries make up the population size; they were hand-picked from among the 24 LGAs based on their accessibility and prompt loan repayment. Quantitative and qualitative data analysis methods were used to assess the hypotheses, using the paired sample t-test statistical tool and chi-square (x^2). The data for this study were essentially shown and analyzed using tables, simple percentages, chi-square (x^2), and the paired sample t-test statistical tool. Therefore, the hypotheses were tested at 0.05 to see if they were accepted or rejected.

Theoretical framework

The theory employed in this study is the logic model and program theory created by Funnel (1997) and Batterham *et al.* (1999). It outlines several methods for developing a model that links program inputs and activities to several intended or actual outcomes. According to Davidoff *et al.* (2015), program theory is the overarching theory or model that describes how an intervention is intended to function. More recently, program theory has been promoted to assist evaluators in understanding "what works, for whom, and under what circumstances" in complex interventions (Anderson *et al.*, 2013). Program managers utilize the logic model as a tool to support the efficacy of their initiatives. The model explains how program resources, actions, outputs, audiences, and short-term, intermediate-term, and long-term results logically link to a particular problem or situation (Lawton *et al.*, 2014). Logic models are graphical or narrative representations of real-world processes that explain the presumptions underlying an action's projected effect. The logic model prioritizes predictable results over unexpected ones.

Results and Discussion

Tables 1 and 2 summarize and present the respondents' socioeconomic characteristics. According to the results, half (50.3%) of the respondents were between the ages of 21 and 40, fewer than the average (35.7%) were between the ages of 41 and 50, and just a small percentage (14.1%) were between the ages of 51 and 60. According to the findings, most respondents were middle-aged and more likely to be energetic, active, and productive. The study also showed that while just 13.5% of respondents were female, the bulk (86.5%) were male. According to this finding, male respondents engaged in the development program at a

higher rate than female respondents, indicating their dominance in the research area's chicken industry. According to the findings, most respondents (58.9%) identified as Christians, 40.0% as Muslims, and 1.1% as traditionalists. The implication is that should development initiatives be implemented to improve people's quality of life, they might be a helpful indication for finding them. 75.7 percent of the respondents were married, 13.0 percent were single, 5.4 percent were widowed, 3.2 percent were separated, and 2.7 percent were divorced, according to the other findings of the survey. According to these statistics, most recipients were married, and their partners encouraged them to join the program to earn more money.

Additionally, 61.6 percent of the beneficiaries reported having a household with four to six people, 28.1 percent with one to three people, 8.6 percent with seven to nine people, and just 1.6% with more than nine people. However, only 1.1% of the recipients had no formal education, whereas about half (50.3%) had higher education, 42.7% had secondary school, and 5.9% had finished primary education. The findings indicate that most of the beneficiaries had a high level of education and had attended some formal schooling, which significantly influenced their capacity to manage a sustainable way of life. The results showed that around 38.6% of the beneficiaries were artisans, 24.3% were civil personnel, and 66.5% were farmers. This suggests that a sizable percentage of the recipients worked as farmers to help meet their necessities and raise their standard of living.

Table 1. Socio-economic characteristics of the respondents.

Variables	Frequency	Percentage	Mean	Standard Deviation
Age (years)				
21-40	94	50.8		
41-50	66	35.7	41.39	7.77
51-60	25	14.1		
Sex				
Male	160	86.5		
Female	25	13.5		
Religion				
Christianity	109	58.9		
Islam	74	40.0		
Traditional	2	1.1		
Marital status				
Single	24	13.0		
Married	140	75.7		
Separated	6	3.2		
Divorced	5	2.7		
Widowed	10	5.4		
Household size (persons)				
1-3	52	28.1		
4-6	114	61.6	4.00	2.0
7-9	16	8.7		
>9	3	1.6		
Level of Education				
No formal education	2	1.1		
Primary education	11	5.9		
Secondary education	79	42.7		
Tertiary education	93	50.3		
****Occupations***				
Farming	123	66.5		
Artisan	68	36.8		
Civil servant	45	24.3		

Source: Field survey, 2022 ** Multiple responses*

The result show that majority (61.1%) of the respondents earn an annual income below ₦50,000, 30.3 percent earned between ₦50,000 - ₦100,000, 3.2 percent earned between ₦100,001- ₦150,000, 1.6 percent earned between ₦150,001 - ₦200,000, 2.2

percent earned between ₦200,001 - ₦250,000, while 1.6 percent of the respondents earned between ₦250,001 - ₦300,000. The study revealed that the majority of the respondents are low-income earners. This is in line with the findings of Jacob *et al.* (2016), Jacob *et al.* (2018) and Nelson and Jacob (2018), who noted that farmers' incomes are often insufficient to cover their expenses, leading to a high degree of poverty among the respondents. This may encourage them to apply for the Bank of Industry's small and medium enterprise program to improve their circumstances and outlook on survival. Of the beneficiaries, roughly 51.4 percent were members of a farmer group organization, 51.9 percent were members of a cooperative, 31.4 percent were members of a community organization, 26.5% were members of a religious organization, 23.2 percent were members of a social organization, and only 18.4% were members of a political organization. According to this result, the respondents were members of several organizations, which may have improved their exposure, financial access, ability to learn from and share knowledge, and market promotion and chances. According to the data, 10.3% of respondents did not look for information regarding BOI, whereas 89.7% did. Additionally, 81.1 percent of the respondents learned about the Bank of Industry from friends or relatives, 75.7% from social media, 64.3% from radio or television, 17.3% from conferences or seminars, and a small percentage (12.4%) from periodicals or the news. The outcome suggests that social media, radio, television, and family and friends are the most accessible sources of information on the Bank of Industry and play a significant role in its dissemination.

Table 2. Socioeconomic characteristics of the respondents (continue).

Variables	Frequency	Percentage	Mean	Standard Deviation
Annual income				
<500,000	113	61.1		
500,000-1,000,000	56	30.3	647,837	502,318
1,000,001-1,500,000	6	3.2		
1,500,001-2,000,000	3	1.6		
2,000,001-2,500,000	4	2.2		
2,500,001-3,000,000	3	1.6		
*Membership of organization				
Religious organization	49	26.5		
Community organization	58	31.4		
Cooperative organization	96	51.9		
Social organization	43	23.2		
Political organization	34	18.4		
Farmers group organization	95	51.4		
Information seeking from BOI				
Yes	166	89.7		
No	19	10.3		
*Source of information about BOI				
Family/ friends	150	81.1		
Magazine/newspaper	23	12.4		
Social media	140	75.7		
Conferences/seminar	32	17.3		
Radio/ television	100	64.3		

Source: Field survey, 2022 **Multiple responses*

Bank of Industry programmes prevalent in the respondents' area

The majority of respondents (98.9%) confirmed that the Government Enterprise and Empowerment Program (GEEP) were prevalent in their area. In comparison, only 23.8% indicated that the Agriculture-Value Chain Finance (AVCF) program was present. Additionally, 40.5% indicated that the Youth Entrepreneurship Support Program (YES-P) was prevalent, 34.6% confirmed the Cottage Agro Processor Fund (CAP), and 31.9% confirmed the Graduate Entrepreneurship Fund (GEF). Because the GEEP Bank of Industry initiative has significantly increased Nigeria's GDP, the majority of respondents were found to be well knowledgeable about it. In order to raise people's standard of living, this intervention program encourages young people, farmers, traders, and artisans to start their own businesses and grow them

through Bank of Industry funding, job opportunities, local resource utilization, and domestic savings mobilization (Okwe, 2019). GEEP increases the efficiency of SMEs' operators, leading to a more forward-thinking strategy (Onah and Olise, 2019).

Table 3. Identification of Bank of Industry programmes prevalent in the respondents' area.

Variables	Frequency	Percentage
Government Enterprise and Empowerment Programme (GEEP)	183	98.9
Youth Entrepreneurship Support Programme (YES-P)	75	40.5
Cottage Agro Processor Fund (CAP)	64	34.6
Graduate Entrepreneurship Fund (GEF)	59	31.9
Agriculture- Value Chain Finance (AVCF) Programme	44	23.8

Source: Field survey, 2022 **Multiple responses*

Livelihood status of respondents before and after Bank of Industry's Small and Medium Enterprise programme

Several asset categories were found after a thorough assessment of the literature. These include social, financial, natural, physical, and human resources. The status of these assets among respondents was investigated by meticulously analyzing each category.

Human Asset: This subsection provides an overview of the beneficiaries' health, education, knowledge, and abilities before and after the program. According to the findings, beneficiary children's educational attainment has increased in school, which significantly impacts an individual's attitude, abilities, knowledge, and behavior—all of which are critical for improving their livelihood. This is consistent with research showing that education significantly impacts a person's attitude, abilities, and knowledge (Ajayi, 2008; Amusat and Oyedokun, 2018). Additionally, the respondents' healthy decision-making and the health care system are positively impacted, which translates into an enhanced standard of living.

Natural Asset: According to the data, respondents' involvement in the program has resulted in them purchasing additional land, enabling them to expand their enterprises' size and ownership structure. The program improved the amount of produce that the participants produced, leading to better output and modern machinery for generating value to satisfy the perceived demands for profit. This, in turn, encouraged the expansion of entrepreneurial firms and businesses and improved the livelihood status of the participants.

Table 4. Human assets owned by the beneficiaries of the programme.

Variables	Before the programme			After the programme		
	Freq	%	Mean	Freq	%	Mean
Education						
Children in private primary school	48	25.9	0.46	62	33.6	0.36
Children in public primary school	21	11.4	0.16	16	8.6	0.09
Children private secondary school	61	33.0	0.56	64	34.5	0.54
Children in public secondary school	62	33.5	0.61	65	35.1	0.63
Children in private tertiary school	1	0.5	0.01	1	0.5	0.01
Children in public tertiary school	52	28.1	0.38	72	38.9	0.69
Skills/ Knowledge						
Production	126	68.1	0.68	36	19.5	0.19
Processing	69	37.3	0.37	116	62.7	0.63
Value addition	20	10.8	0.11	64	34.6	0.35
Market promotion	11	5.9	0.06	82	44.3	0.44
Waste management	8	4.3	0.04	45	24.3	0.24
Health						
No medication	1	0.5	0.01	1	0.5	0.10
Government hospital	103	55.7	0.56	116	62.2	0.63
Recognized private hospital	39	21.1	0.21	52	28.1	0.28
Traditional means	17	9.2	0.09	6	3.2	0.03
Health insurance	6	3.2	0.03	31	16.8	0.17

Source: Field survey, 2022 ** Multiple responses*

Table 5. Natural assets owned by the beneficiaries of the programme.

Variables	Before the programme				After the programme			
	Freq	%	Mean	SD	Freq	%	Mean	SD
Size of land (plot)								
<5	153	82.7	3.21	1.40	140	75.7	5.37	2.88
5-10	25	13.5			20	10.8		
11-15	7	3.8			11	5.9		
16-20	-	-			9	4.9		
>20	-	-			5	2.7		
Number of birds (pieces)								
<1,000	34	18.4	3.40	1.20	1	0.5	5.38	2.21
1,000-5,000	129	69.7			120	62.6		
5,001-10,000	15	8.1			40	21.6		
10.001-15,000	4	2.2			7	3.8		
15,001-20,000	3	1.6			4	2.2		
20,001-25,000	-	-			4	2.2		
>25,000	-	-			4	2.2		

Source: Field survey, 2022

Physical Asset: Table 4 summarizes the respondents' tangible assets. The results demonstrated that the respondents' agricultural and family assets are essential to a sustainable way of life. Respondents require a radio, television, automobile, landed property, cellphones, Android, and so forth for a rise in economic activities that raise their level of living. The respondents own feeders/drinkers, injectors, weighing scales, pumping machines, knapsack sprayers, and other essential farm equipment and help expedite and simplify all farm tasks. This finding suggests that participants' involvement in the program increased the accumulation of productive assets, which may have improved the efficiency of domestic and agricultural endeavors.

Financial Asset: According to Table 5's summary of respondents' financial assets, respondents' income was significantly impacted by their involvement in the program, which improved their economic welfare. Their business finance, which is essential for resolving the issue of financial accessibility and enhancing their business performance, came from personal savings, bank loans, and cooperative organizations.

Social Asset: Their interpersonal relationships with members of their community, their travel frequency and distance traveled, and their involvement in the organization they joined was used to gauge this. The results indicated that although the respondents had contributed to maximizing involvement in their poultry business, they were not actively interested in the organization to which they belonged.

Table 6. Physical assets (household /farm asset) owned by the beneficiaries of the programme.

Variables	Before the programme			After the programme		
	Freq	%	Mean	Freq	%	Mean
Radio						
None	2	1.1	1.02	3	1.6	1.09
Only one	177	95.7		162	87.6	
>1	6	3.2		20	10.8	
Television						
None	1	0.5	1.01	-	-	1.05
Only one	182	98.4		176	95.1	
>1	2	1.1		9	4.9	
Car						
None	98	53.0	0.55	78	42.2	0.71
Only one	73	34.5		84	45.4	
1-2	14	7.6		22	11.9	
>2	-	-		1	0.5	

Landed properties						
None	75	40.5	0.59	53	28.6	0.73
Only one	110	59.5		129	69.7	
>1	-	-		3	1.6	
Smartphone/Android						
None	2	1.1	1.08	1	0.5	1.85
Only one	167	90.3		46	24.9	
1-2	16	8.6		118	63.8	
>2	-	-		20	10.8	
Feeder/Drinker						
<100	131	70.8	312.40	95	51.4	206.70
100- 400	48	25.9		70	37.8	
401-600	4	2.2		9	4.9	
601- 800	2	1.1		5	2.7	
801-1000	-	-		5	2.7	
>1000	-	-		1	0.5	
Injector						
<2	183	98.9	0.37	173	93.5	0.63
3-4	2	1.1		11	9.5	
>4	-	-		1	0.5	
Weighing scale						
<2	139	75.1	2.05	104	56.2	2.78
3-4	31	16.8		43	25.2	
>5	14	8.1		38	20.5	
Pumping machine						
None	42	23.7	0.82	8	4.3	1.00
Only one	136	73.5		169	91.4	
2	6	3.2		8	4.3	
>2	1	0.5		-	-	
Knapsack sprayer						
<2	167	90.3	1.48	152	82.2	1.77
3-4	17	9.2		30	16.2	
>5	1	0.5		3	1.6	

Source: Field survey, 2022

Table 7. Financial asset owned by the beneficiaries of the programme

Variables	Before the programme			After the programme		
	Freq	%	Mean	Freq	%	Mean
Income						
<500,000	113	61.1	647,410	23	12.4	1,020,432
500,000-1,000,000	56	30.3		120	64.9	
1,000,001-2,000,000	9	4.9		29	15.7	
2,000,001-3,000,000	7	3.8		8	4.3	
>3,000,000	-	-		5	2.7	
Personal savings						
<500,000	183	98.9	167,135	177	95.7	215,675
500,000-1,000,000	1	0.5		8	4.3	
>1,000,000	1	0.5		-	-	
Loan from bank						
<300,000	4	2.1	13,243	43	23.2	12,540
300,000-600,000	51	27.6		88	47.6	
600,001-900,000	120	64.9		33	17.8	
>900,000	10	5.4		21	11.4	
Loan from cooperative						
<500,000	130	70.4	716,75	152	82.2	95,78
500,000-600,000	48	25.9		29	15.7	
600,001-700,000	2	1.1		3	1.6	
700,001-800,000	3	1.6		1	0.5	
800,001-900,000	1	0.5		-	-	
>900,000	1	0.5		-	-	

Source: Field survey, 2022

Table 8. Social asset of the beneficiaries of the programme.

Variables	Before the programme			After the programme		
	Low	High		Low	High	
	Freq (%)	Freq (%)	Mean	Freq (%)	Freq (%)	Mean
Interpersonal relationships with community people	50 (27.0)	135 (73.0)	1.73	47 (25.4)	138 (74.6)	1.75
Rate of travelling	87 (47.0)	98 (53.0)	1.53	112 (60.5)	73 (39.5)	1.39
Distance travelled	91 (49.2)	94 (50.8)	1.51	111 (60.0)	74 (40.0)	1.40
Participation in the organization	72 (38.9)	113 (61.1)	1.61	74 (40.0)	111 (60.0)	1.59

Source: Field survey, 2022

Overall impact of the programme on the respondents' five assets status

The overall effect of the Bank of Industry's small and medium business program on the five asset statuses of the respondents in the research area is depicted in Figure 1. The program's total effect on the five assets' state was divided into three categories: worsened, unaffected, and better assets. The beneficiaries' high standard of living and the resources at their disposal improved their livelihood status, indicating that the four assets—physical, financial, human, and natural—improved significantly. In contrast, social assets did not improve or raise respondents' income or the efficiency of economic relations. The Bank of Industry's small and medium-sized business program improved the recipients' standard of living and promoted positive financial change in the research region.

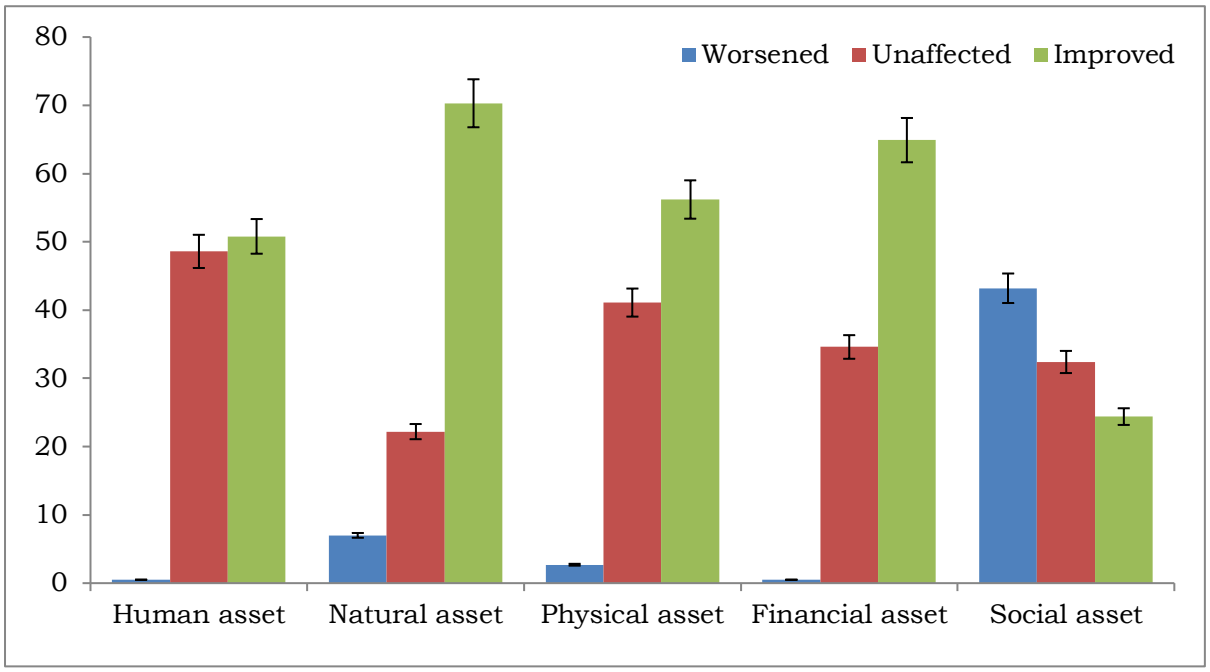

Fig. 1. Bar chart showing the overall impact of the programme on the respondents' asset status

Source: Field survey, 2022

Livelihood activities

Results show that respondents engaged in multiple sources of livelihood activities. The results indicate that respondents are mostly involved in agricultural-related businesses to improve their livelihood status.

Table 9. Livelihood activities of the respondents.

Variables	On- farm activities		
	Freq	%	Mean
Cash crop	33	17.8	0.18
Arable crop	132	71.4	0.71
Poultry production	183	98.9	0.99
Fish farming	66	35.7	0.36
Bee keeping	3	1.6	0.02
Small ruminant	16	8.6	0.09
	Non- farm activities		
Agricultural processing	161	87.0	0.87
Transportation	45	24.3	0.24
Marketing	146	78.9	0.80
Trading	42	22.7	0.23
Artisan	22	11.9	0.12
Okada business	2	1.1	0.01

Source: Field survey, 2022 ** Multiple responses*

Hypotheses Testing

Hypothesis one: There is no significant relationship between the socio-economic characteristics of poultry farmers (such as sex, age, marital status, religion, occupation) and their livelihood status. Chi-square analysis was used for variables measured at the nominal level, while Pearson correlation analysis was used for other variables measured at the interval level.

Result of chi-square analysis

A quick look at Table 10's results reveals that according to the chi-square analysis at the 0.01 level of significance (P≤ 0.01), the respondents' livelihood situation, religion (x^2 = 23.021), and marital status (x^2 = 12.380) were all positively and significantly correlated. This suggests that respondents' livelihood status significantly correlates with their religion and marital status. However, at P≤ 0.01 there was no significant correlation between the respondents' livelihood situation and sex (x^2=1.452) or occupation (x^2=0.216).

Result of correlation analysis

Results in Table 11 show that age (r= 0.452), household size (r= 0.327), years of farming experience (r= 0.454), and annual income from farming (r= 0.861) had a significant and positive relationship with the livelihood status of poultry farmers at P≤ 0.01 in the study area. The implication of the positive correlation between these variables indicates that the higher these variables, the better their livelihood status.

Table 10. Chi-square analysis showing association between selected socio-economic characteristics of respondents and their livelihood status.

Variable	x^2 - value	D.f	C	P-value	Decision
Sex	1.452	2	0.088	0.484	NS
Marital status	12.380	8	0.421	0.000**	S
Religion	23.021	4	0.333	0.000**	S
Occupation	0.216	4	0.012	0.610	NS

NS= Not significant, S= Significant
***Significant at P≤ 0.01;*
C = Contingency coefficient,
Df = Degree of freedom
x^2 = Chi-square
Number of respondents =185

Source: Field survey, 2022

Table 11. Correlation analysis showing the relationship between some selected socio-economic characteristics and their livelihood status.

Variable	r-value	p-value	Decision
Age	0.452**	0.000	S
Household size	0.327**	0.000	S
Years of formal education	-0.087	0.239	NS
Years of farming experience	0.454**	0.000	S
Annual income	0.861**	0.000	S

***Significant at P≤ 0.01;*
NS = Not significant;
S = Significant
r = correlation co-efficient
p = probability value
Number of respondents =185

***Source**: Field survey, 2022*

Hypothesis two: There is no significant relationship between the perception of respondents and their livelihood status.

Results in Table 12 show a positive and significant relationship between the perception of respondents and their livelihood status (r=0.269; P ≤ 0.01). By implication, it means that the more favorable the perception of respondents about BOI's small and medium enterprise programme, the better their receptiveness and openness to new ideas and utilization of innovation.

Table 12. Correlation analysis showing the relationship between the perception of the respondents and their livelihood status.

Variable	r-value	P-value	Decision
Perception of the respondents about the programme and their livelihood status	0.269**	0.000	S

***Significant at P ≤ 0.01*
S = Significant
r = correlation co-efficient
Number of respondents =185

***Source**: Field survey, 2022*

Hypothesis three: There is no significant difference in the livelihood status of the respondents before and after the programme.

Results in Table 13 show a significant difference in the livelihood status of beneficiaries after the programme using their asset base at P ≤ 0.05. Paired sample t-test was used to test this hypothesis. The finding revealed a significant difference in the livelihood status of beneficiaries after the programme. After the program, the overall livelihood status score (t= 21.242; df= 183; P ≤ 0.05, two-tailed test). The result implies that respondents were able to acquire more assets (physical, human, financial, natural, and social assets) as they participated in the programme, and the programme positively impacted the respondents' livelihood status in the study area.

Table 13. Paired sample T-test showing the relationship in the livelihood status of the respondents' assets before and after the programme.

Paired -Sample T-Test						
	Test Value = 0					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Overall livelihood status score after the program	21.424	183	.000	1355894.054	1231022.92	1480765.19
Overall livelihood status score before the programme	18.898	184	.000	904031.324	809651.85	998410.79

**Significant at P ≤ 0.05*
Number of respondents =185
Source: Field survey, 2022

Conclusion

Based on the data analysis results, we conclude that the program increases the beneficiaries' assets (financial, natural, human, and physical) and so improves their livelihood condition. The livelihood activities that the beneficiaries engaged in are mostly agricultural related, which led to an increase in their income and a good standard of living, thereby positively impacting their livelihood status.

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