

DETERMINANTS OF VALUE ADDED BY BROILER VALUE CHAIN MAIN ACTORS IN SOUTHWEST, NIGERIA

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ABSTRACT

This study determined value added in broiler production by actors in Lagos and Ogun States, Nigeria. Multistage sampling procedure was used to select 230 broiler value chain actors comprising of 110 producers, 40 processors, 40 live broiler marketers and 40 dressed broiler marketers. Primary data were collected from respondents using structured questionnaires. Descriptive statistics, financial analyses and multiple regression analysis were used to analyse the data collected. Descriptive statistics results showed that the actors were small-scale entrepreneurs and had mean age of 40 years. Hence, actors were in their productive years. The actors were made up of 52.2% male and 47.8% female. Majority (53.5%) of the actors had formal education at tertiary level. Most (70.9%) of the respondents had less than 10 years' experience in broiler value chain enterprise and the mean household size of the respondents was 3 persons. Majority (64.8%) of the respondents did not belong to any association. Value added by actors were producers (₦255,491,270.00), processors (₦329,455,800.00), live broiler marketers (₦578,389,080.00) and dressed broiler marketers (₦117,699,080.00). Multiple regression analysis results revealed that, determinants of value added by broiler main actors are stock size and price of broiler. The study recommends that government and NGOs should consider broiler value chain enterprise in youth empowerment scheme to help reduce youth unemployment and improve earnings of broiler farmers in Nigeria.

Keywords: Determinants, value added, broiler, value chain, actors, Nigeria

INTRODUCTION

Broiler production is a major and promising source of meat in the poultry enterprise. Other sources of poultry meat include local poultry birds, cockerel, spent layers, turkey and duck amongst others. Despite being the fastest growing agribusiness sector in sub-Saharan Africa, poultry industries face challenges which include feed-food competition which has led to high cost of feeds and dependency on the import of improved breeds, limited supply of day old chicks (DOCs), need for improved processing and marketing, health hazards due to lack of bio-safety precautions, inadequate availability of vaccines, weak production skills by farmers, exacerbated by poor extension services, lax implementation of import controls for frozen chicken meat, fragmented and ineffectual industry associations (Aboul-Naga and Elbeltagy 2007; Foundation for Partnership Initiative in the Niger Delta (PIND), 2013).

In Nigeria, there is a gap in chicken consumption with as low as 2.5kg per capita consumption compared to Brazil and South Africa at 30kg and 40 kg respectively (CBN, 2019).

Broiler meat was not popular at the onset of poultry production because markets preferred the tougher chicken meat from local varieties and old layers (Akinwumi, Okike and Rich, 2010). Over the years the scale of poultry production increased as a result of higher demands for food of animal origin (Food and Agricultural Organization (FAO), 2011 and Knoema, 2019).

Broiler is a poultry bird which has rapidly grown at the age of 1-5 weeks. At 6-weeks old, broiler is as big as 8-months old general adult chicken. The broiler excellence is supported by the genetic traits and environmental circumstances including food, environmental temperature and maintenance. As fast growing birds, many commercial farms in Nigeria harvest their broilers at age six (6) weeks reaching average dressing weight of between 1.3 – 1.5 kg (Rasyaf, 1999; National Chicken Council, 2015).

Broiler birds could be marketed live or processed. Marketing functions are germane to broiler value chain because it helps to link other broiler value chains functions to consumption. The goal of broiler value chain is to deliver the birds to the final consumer and generate more income. The large-scale farmers have direct marketing links to supermarkets while small-scale farmers do not have direct access to the primary poultry market such as supermarkets. The access of large scale farmers to organized markets put them in better advantage (Masole, Mphothwe and Moreki, 2015). Broiler chicken has greatest demand during festive periods such as Christian and Muslim festivals. Many broiler farmers target these periods or deliberately produce for these periods. Value chain analysis plays important roles in food security analysis because it analyzes natural and economic assets, household food production systems, and then explores the links with household food security and livelihoods for decision making. Value Chain Analysis involves breaking a chain into its constituent parts. The costs involved and value created at each chain will be determined during value chain analysis. In addition, various untapped opportunities will be identified during value chain analysis [United Nations Industrial Development Organization (UNIDO), 2009).

The main objective of the study is to estimate ‘Determinants of Value Added by Broiler Value Chain Main Actors in Southwest, Nigeria’. The specific objectives of the study are to:

- i. describe the socio-economic characteristics of broiler value chain actors;
- ii. estimate value added by actor at each stage of value chain; and
- iii. identify the determinants of value added by main actors along the stages of broiler value chain.

METHODOLOGY

Study Area

The study was conducted in Southwest, Nigeria. Oluwatosin. & Ojo (2018) posited that, Southwest zone lies between latitude $6^{\circ} 21^1$ and $8^{\circ} 37^1$ North and longitude $2^{\circ} 31^1$ and $6^{\circ} 00^1$ East. The zone has two distinct seasons namely: rainy season (April-October) and dry season (November-March) with temperature made up of 21°C and 28°C and high humidity of 77%. Southwest zone has weather conditions that support cultivation of different crops and rearing of varieties of livestock. Africa Development Bank (2014), reported that the zone has international boundaries with Republic of Benin in the West and the Gulf of Guinea in the south (Africa Development Bank, 2014).

Sampling Procedure

Broiler producers, processors and marketers who are value chain main actors in the Southwest were the population of the study. Selection of representative was achieved using multistage sampling technique carried out in three stages of sampling. The first stage was purposeful selection of Ogun and Lagos States from the Southwest zone because they were most active in broiler value chain activities [Lagos State Agricultural Development Authority (LASADA), 2021] The second stage was purposeful selection of Lagos East and Lagos Far East Zones of LASADA because they were the most active zones in broiler value chain (LASADA, 2021) and random sampling of Ijebu Ode and Ilaro Zones from the four Ogun State Agricultural Development Programmes (OGADEP). As used by Chidiebere-Mark (2017), the third stage involved the proportionate random sampling from the list of broiler main actors obtained from the ADPs using the formula:

$$n_j = \frac{K}{N} \times n$$

Where:

n_j = size of the j th stratum;

K = the population size in the stratum;

N = the entire population; and

n = sample size

The proportionate samples of the broiler value chain actors are presented in Table 1.

Table 1: Proportionate Samples of the Broiler Value Chain Actors

Actor	Lagos ADP	Sampling Frame	Sample Size	Ogun ADP	Sampling Frame	Sample Size	Total Actors
Producers	Lagos East	130	26	Ijebu Ode	160	32	
	Lagos Far-East	115	23	Ilaro	145	29	
Sub-Total			49			61	110
Processors	Lagos East	70	14	Ijebu Ode	40	8	
	Lagos Far-East	30	6	Ilaro	62	12	
Sub-Total			20			20	40
Live broiler marketers	Lagos East	119	15	Ijebu Ode	61	8	
	Lagos Far-East	39	5	Ilaro	90	12	
Sub-Total			20			20	40
Processed broiler marketers	Lagos East	65	12	Ijebu Ode	36	7	
	Lagos Far-East	42	8	Ilaro	71	13	
Sub-Total			20			20	40
Total							230

Source: Field survey, 2022

Sources of Data

The study used primary data collected from the producers, processors, live broiler marketers and dressed broiler marketers using structured questionnaires. The data were obtained in line with the stated specific objectives.

Analytical Techniques

Descriptive statistics, financial analysis and Ordinary Least Square (OLS) multiple regression analysis were the analytical techniques used for the study.

Descriptive Statistics

Descriptive Statistics such as mean, standard deviation and percentage were used to analyse the socioeconomic characteristics of the respondents.

Financial Analysis

Financial analysis equation (FAO, 2005a) to estimate value added at each stage is given as below:

$$VA = V_o - V_i$$

Where:

VA = Value Added (₦), V_o = Value of output (₦), V_i = Value of intermediate inputs used (₦)

VA_{chain} = value added throughout the chain, Y_{chain} = value of the output in the chain
 Z_{chain} = value of intermediate inputs used in the entire value chain; and $VA_{chain} = \sum VA_{actors}$

Where:

VA_{chain} = Value added throughout the chain (₦); and VA_{actors} = Value added by each actor (₦)

$GP = VA - (WS + I + T)$

GP = Gross profit (₦), VA = Value added (₦), WS = Wages and salaries (₦)

I = Interest rate (%), Tc = Taxes (₦)

$VA = PR + I + T + GP$

VA = Value added (₦), PR = Personnel remuneration (₦), I = Interest charges (₦)

T = Taxes (₦), GP = Gross profit (₦)

Multiple Regression Analysis

$Q = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + e_i$

Where:

β_0 = intercept (Constant), $\beta_1 - \beta_n$ = slope coefficients for each explanatory variable
 $X_1 - X_n$ = independent variables, e = error term, dependent variable (Q) = value added (₦) by main actors

X_1 = Stock size/number of birds (in number), X_2 = Price of broiler/kg (in Naira), X_3 = Weight of broilers (in kg), X_4 = Sale location (Farm gate = 0, Local market = 1, Urban market = 2); X_5 = Marketing experience (in years), X_6 = Total amount invested (in Naira), X_7 = Association membership (Yes = 1, No = 0), X_8 = Entrepreneurship training (Yes = 1, No = 0), X_9 = Household size (in No.), X_{10} = Age (in years).

These set of independent variables aligns with the study of Olaleye (2020).

RESULTS AND DISCUSSION

Socioeconomic Characteristics of Broiler Value Chain Actors

Results in table 2 revealed that the actors had below 2,000 stocks of broiler chickens having less than 500 birds' capacity, between 500 and 1,500 birds' capacity. This aligns with the study of Afutu (2011) that 70.0% of broiler value chain actors had below 2,000 birds' capacity classified as small scale poultry enterprise. Results show that 52.2% were male and 47.8% were females, indicating male dominance of broiler value chain in the study area. This result is in line with the work of Olorunwa (2018) who reported male dominance of broiler value chain in the southwest. The implication of this result is enabling environment needed to be provided for more females to participate in broiler value chain activities. Respondents had mean age of the respondents was 40 years with majority (79.2%) of the respondents below 50 years of age. This implies that most actors were in their productive ages and have the propensity to make more investment in broiler value chain and adopt technology that will lead to increased income (Awoyomi, 2021).

Marital distribution of the respondents' show that, majority (78.3%) of the actors was married and in line with Jolaosho (2014) that 84.0% of broiler value chain actors in the Southwest, Nigeria were married. The implication of this result is that the actors are in better position to get various labour inputs from their spouses. Results on level of education show that majority (53.5%) of the respondents had tertiary education and supported by Adeyonu (2016) who reported that majority of broiler value chain actors in the Southwest Nigeria had tertiary education. It is expected that the majority of the actors are well placed to take good decisions which are expected to enhance profitability.

Years of experience show that majority (70.9%) had less than 10 years. The need for efforts in building the capacity of the actors to compensate for low experience in broiler value chain is sacrosanct hence, Awoyomi (2021) recommends more extension visits to value chain actors who have low value chain business experience for increased profitability. Membership of association of the actors show that 71.8% producers, 70.0% processors, 22.5% of live broiler marketers and 62.8% of dressed broiler marketers did not belong to any association. The result is in line with the outcome of the study of Awoyomi (2021) who reported that, actors do not belong to any association which implies that, they don't benefit from opportunities offered to members and may include self-help, savings and credit opportunities amongst others (Chidiebere-Mark, 2017). Result shows that the mean household size of respondents was three (3) persons and 62.2% of the actors had household size of between one to five (1-5) persons, it is expected that household members of working ages will contribute to family labour source for the value chain activities (Adeoye (2015).

Value Added by the Broiler Main Value Chain Actors

Broiler chickens moved from the producer to the processors, live broiler chicken marketers, dressed broiler chicken marketers along the chain until it got to the final consumers and values were created. It was discovered during the estimation of value added by various actors that unlike producers, cost item was concentrated on the broiler chicken either as live or dressed. The cost of live and dressed broiler chickens for processor, live broiler chicken marketers and dressed broiler chicken markers respectively were 94.9%, 98.3% and 97.1% of the variable cost. The implication of this result is production stage determines what happened to other broiler value chain stages.

Table 2: Socioeconomic Characteristics of Broiler Value Chain Main

Variables	Producers		Processors		Live Marketers		Dressed Marketers		Pooled	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Number of Stock										
< 500	89	80.9	34	85.0	32	80.0	40	100	195	84.8
500 – 1,000	19	17.2	6	15.0	6	15.0	0	0.0	31	13.8
1,001 – 1,500	2	1.8	0	0.0	2	5.0	0	0.0	4	1.7
Sex										
Male	75	68	22	55.0	12	30.0	11	27.5	120	52.2
Female	35	31.8	18	45.0	28	70.0	29	72.5	110	47.8
Age Mean = 40										
<30	23	20.9	4	10.0	4	10.0	0	0	31	13.5
30-39	36	32.7	15	37.5	13	32.5	4	10.0	68	29.6
40-49	30	27.5	13	32.5	16	40.0	24	60.0	83	36.1
50-59	15	13.6	7	17.5	6	15.0	10	25.0	38	16.5
>60	6	5.5	1	2.5	1	2.5	2	5.0	10	4.3
Marital Status										
Single	23	20.9	5	12.5	5	12.5	6	15.0	39	17.0
Married	85	77.3	34	85.0	30	75.5	31	77.5	180	78.3
Divorced	1	0.9	0	0	2	5.0	1	2.5	4	1.7
Widow	1	0.9	0	0	1	2.5	2	5.0	4	1.7
Widower	0	0	1	2.5	2	5.0	0	0	3	1.3
Educational Level										
No Formal	3	2.7	0	0	2	5.0	0	0	5	2.2
Primary	7	6.4	0	0	2	5.0	0	0	9	3.9
Junior	7	6.4	0	0	2	5.0	4	10.0	13	5.6
Secondary										
Secondary	26	23.6	14	35.0	26	65.0	14	35.0	80	34.8
Tertiary	67	60.9	26	65.0	8	20.0	22	55.0	123	53.5
Years of Business Experience Mean = 6										
<10	83	75.5	19	47.5	25	62.5	36	90.0	163	70.9
10 – 19	18	16.4	11	27.5	13	32.5	4	10.0	46	20.0
20 – 29	6	5.5	6	15.0	1	2.5	0	0	13	5.6
30 – 39	3	2.7	4	10.0	1	2.5	0	0	8	3.5
>40	0	0	0	0	0	0	0	0	0	0
Household Size Mean = 3										
1 – 5	80	72.7	18	45	20	50	25	62.5	143	62.2
6 – 10	24	21.8	18	45	20	50	15	37.5	77	33.5
11 – 15	6	5.5	4	5	0	0	0	0	10	4.3
Membership of Association										
Member	31	28.2	12	30.0	31	77.5	7	17.5	81	35.2
Non-member	79	71.8	28	70.0	9	22.5	33	82.5	149	64.8

Source: Researcher’s computation, 2022.

Value Added by Producers in Broiler Value Chain

Results in table 3 show that variable cost accounted for about 71.0% total amount expended. This result aligns with the findings of Olugbenga, Abayomi, Oluleye and Taiwo (2015); Oladokun and Johnson (2012) and Gunasekar (2007) that cost of feeds in broiler production accounted for more than 70% of total cost of production. This implies that, cost of feed is a major determinant in broiler production. Cost of labour gulped 1.9% of total cost of production and depreciation of fixed assets took 7.20% of the total cost of production. The reason for this may be due to the fact that under small-scale poultry production, assets such as housing, feeders and drinkers are improvised.

Table 3: Value Added by the Producers in Broiler Value Chain

Revenue and Cost	Amount (₦)	%
Gross Revenue/Year (Quantity x Price)		
Live broiler	669,663,590.00	
Manure	1,943,000.00	
Gross Revenue	671,606,590.00	
Cost Items		
Intermediate Materials (Quantity x Price)		
Day Old Chicks	102,879,420.00	22.5
Broiler Starter	123,541,650.00	27.0
Broiler Finisher	173,493,750.00	37.9
Drugs	3,951,900.00	0.9
Vaccines	4,870,000.00	1.1
Wood Shavings	1,944,100.00	0.4
Water	1,578,700.00	0.3
Charcoal	2,029,200.00	0.4
Cleaning Agent	383,350.00	0.1
Fuel	1,443,250.00	0.3
Sub-Total	416,115,320.00	90.9
Cost of labour	8,635,600.00	1.9
Depreciation	33,153,532.50	7.2
Total Cost	457,904,452.50	100.0
Value Added		
Intermediate Consumption	416,115,320.00	
Total Value Added	255,491,270.00	

Source: Computed from Field Survey Data, 2022

Value Added by Processors in Broiler Value Chain

The result shows that cost of live broiler chickens was estimated to be ₦590,472,000.00 and represented 94.9% of variable cost. The major products of the processors were found to be dressed broiler chickens and offal.

Table 4: Value Added by Processors in Broiler Value Chain

Revenue and Cost Per Year	Amount (₦)	%
Dressed Broiler Chicken (Quantity x Price)	931,479,000.00	
Offal	7,224,000.00	
Total Revenue	938,703,000.00	
Cost Items		
Live Broilers Chickens	590,472,000.00	94.9
Labour	12,063,000.00	1.9
Feeds	870,000.00	0.1
Water	858,000.00	0.1
Wood and Gas	1,186,800.00	0.2
Transport	3,570,000.00	0.6
Packaging Material	1,586,400.00	0.3
Levy	1,356,000.00	0.2
Energy	771,000.00	0.1
Fuel	7,047,000.00	1.1
Rent	1,530,000.00	0.2
Tax	600,000.00	0.1
Total Variable Cost	621,910,200.00	100.0
Value Added (₦)	329,455,800.00	
Gross Profit (₦)	316,792,800.00	

Source: Computed from Field Survey Data, 2022

Value Added by Live Broiler Chicken Marketers

The results in table 5 show that live broiler marketers added ₦578,389.080 of value along the chain. The gross revenue of live broiler marketers was estimated to be ₦2,739,204,480.00. Total variable cost of the live broiler chicken marketers was estimated to be ₦2,169,707,400.00 while the gross profit was estimated to be ₦569,497,080.00. Various cost items used by the live broiler marketers included live broiler chickens, feeds, packaging materials, levy, rent and tax. Live broiler chickens which the marketers got from the producers accounted for 98.3% of the cost of variable cost. The implication of this result is live broiler chickens were the major determinant of the value added by the live broiler marketers.

Value Added by the Dressed Broiler Chicken Marketers

The value added by the dressed broiler chicken marketers is presented in Table 6. The result shows that dressed broiler marketers added a value of ₦117,699,080.00 to the broiler chicken value chain. The total revenue of the dressed broiler marketers was estimated to be ₦1,033,129,800.00 while the variable cost and gross profit respectively were ₦923,142,360.00 and ₦109,987,280.00. The cost items of the respondents included dressed broiler chickens, labour, transportation, levy, tax and packaging materials. The results shows that cost of dressed broiler chickens estimated to be ₦896,254,560.00 accounted for 97.1% of variable cost.

Table 5: Value Added by Live Broiler Chicken Marketers

Revenue and Cost Per Year	Amount (₦)	%
Live Broiler Chickens (Quantity x Prices)	2,739,204,480.00	
Cost Items (Quantity x Prices)		
Live Broiler Chickens	2,131,932,000.00	98.3
Feeds	8,988,000.00	0.4
Labour	5,586,000.00	0.3
Transportation	9,750,000.00	0.4
Packaging Materials	1,778,400.00	0.1
Energy	570,000.00	0.0
Levy	3,684,000.00	0.2
Union	2,102,400.00	0.1
Rent	3,663,600.00	0.2
Tax	1,653,000.00	0.1
Total Variable Cost	2,169,707,400.00	100.0
Value Added (₦)	578,389,080.00	
Gross Profit (₦)	569,497,080.00	

Source: Computed from Field Survey Data, 2022

Table 6: Value Added by the Dressed Broiler Chicken Marketers

Revenue and Cost Per Year	Amount (₦)	%
Dressed Broiler Chickens (Quantity x Prices)	1,033,129,800.00	
Cost Items (Quantity x Prices)		
Dressed Broilers Chickens	896,254,560.00	97.1
Labour	4,146,000.00	0.4
Transport	4,344,000.00	0.5
Packaging Materials	1,746,000.00	0.2
Energy	2,322,000.00	0.3
Fuel	4,824,000.00	0.5
Levy	1,692,000.00	0.2
Rent	4,248,000.00	0.5
Tax	3,565,800.00	0.4
Total Variable Cost	923,142,360.00	100.0
Value Added (₦)	117,699,080.00	
Gross Profit (₦)	109,987,280.00	

Source: Computed from Field Survey Data, 2022

Determinants of Value Added by Main Actors in the Value Chain

The result of determinants of value added by the producers is presented in Table 7. The result showed the coefficient of multiple determination of 0.895 which indicated that about 89.5% variations in value added by the producers of broiler chickens was explained by the joint action of the explanatory variables. The implication of this result is that the model is reliable and has predictive ability. The F- value was found to be 96.29 and significant at 1% level of probability which indicated the overall significance of the model. In the analysis, only number price of birds/kg and weight of birds were related to the value added by the producers. The coefficient of price of birds/kg was significant at 1% level and positive. The implication of this result is that increasing price of birds/kg will increase value added by producers. Also, the coefficient of weight of birds was significant at 5% probability and positive indicating that weight of birds has relationship with value added by the producers.

The result of determinants of value added by processors shows and R^2 of 0.994 which is an indication that about 99.4% of variation in value of processors was by joint action of the explanatory variables in the model. It implies that the model is reliable and has strong predictive ability. The F-value was estimated to be 632.649 and significant at 1% level. Price of broilers, weight of broilers, total amount invested, association membership, entrepreneurship training and age of respondents' variables were determinants of value added by the respondents. Coefficient of price and weight of birds were significant at 1% level and positive. The implication of this result is that increase in the price of birds and weight of broiler birds will increase value added by the processors. Coefficient of membership of association society by the respondents was significant at 5% level and positive. It was discovered that only 17.5% of respondents belonged to association. Therefore, more value will be added by the respondents if they belong to association. Total amount invested, entrepreneurship training and age of the respondents were significant respectively at 1%, 5% and 1% and negative. This result was contrary to *apriori* expectation and could be due to inability of farmers to translate trainings acquired to practice.

The result of determinants of value added by live broiler marketers shows an R^2 of .952 which is an indication that about 95.2% of variation in value of the respondents was by joint action of the explanatory variables. The F-value was estimated to be 96.659 and significant at 1% level. Price of broilers, weight of broilers and total amount invested were the determinants of value added by the live broiler marketers. The coefficients of price, weight of birds and total amount invested were significant at 1% level and positive. The implication of this result is that increase in the price of birds, weight of broiler birds and total amount invested by the actors will increase value added. Coefficient of marketing experience was significant but negative. This implies that, years of marketing experience may not translate improvement in value addition and may require that capacity is built to enhance improvement.

Table 8: **Determinants of Value Added by value chain actors**

Variables	Producers	Processors	Live Broiler Marketers	Dressed Broiler Marketers
Constant	-659845.794*** (-3.405)	-742033.580*** (-5.563)	940281.751*** (-4.951)	-142236.035** (-2.072)
Stock size	1001.754*** (4.278)	14.207 (.032)	40.413 (0.162)	-282.271 (-1.602)
Price	519.224*** (3.450)	439.749*** (5.821)	628.497*** (5.324)	78.036** (2.242)
Weight	0.288 (1.537)	1746.419*** (9.484)	832.137*** (4.612)	390.728*** (4.015)
Sale location	10742.639 (0.330)	14669.107 (1.460)	-1337.369 (-.668)	11700.751*** (4.193)
Experience	-599.113 (-.333)	9461.020 (1.966)	-.429*** (-3.531)	-1559.412** (-2.090)
Total amount invested	-0.064 (-1.887)	-1.007*** (-28.638)	57015.483*** (2.274)	-0.038 (-1.666)
Cooperative membership	-20422.545 (-0.819)	21951.807** (2.024)	-4308.955 (-0.937)	6519.733 (1.635)
Entrepreneurship training	31533.209 (1.212)	-19497.166** (-2.143)	547.387 (0.423)	3808.746 (.962)
Household size	7086.402 (1.315)	1529.470 (0.803)	-940281.751 (-4.951)	1100.012 (1.623)
Age	632.834 (0.449)	-1601.421** (-2.200)	40.413 (0.162)	-412.067 (-1.336)
R ²	0.895	0.994	0.952	0.915
F-value	90.251***	632.649	96.659	43.022***

Source: Computed from Field Survey Data, 2022 *** and ** represent significant at 1% and 5% respectively

Note: figures in parentheses are the t-ratio

The analysis of determinants of value added by dressed broiler marketers is presented in Table 8. The result shows the coefficient of multiple determination R^2 to be .915, this implies that about 91.5% of variation in value of the respondents was by joint action of the explanatory variables in the model. It implies that the model is reliable and has strong predictive ability. The F-value was estimated to be 43.022 and significant at 1% level. Price of broilers, weight of broilers, sale location and marketing experience were the determinants of value added by the dressed broiler marketers. The coefficient of price of broiler chicken was significant at 5% level and positive while coefficients of weight of broiler birds, sale location and marketing experience were significant at 1% level and positive. This implies that, improvement in value added to broiler chicken will command increase in the market price of the product.

CONCLUSION AND RECOMMENDATION

The study concluded that values added by actors were producers (₦255,491,270.00), processors (₦329,455,800.00), live broiler marketers (₦578,389,080.00) and dressed broiler marketers (₦117,699,080.00). Also, the stock of birds, price of birds, weight of broilers, total amount invested, association membership, entrepreneurship training, age of respondents, sale location and marketing experience were the determinants of value added by the actors. However, the study recommends that, adding value to broiler products command better market price hence, processing, packaging and storage machine can be subsidised by the government to farmers. Government and interested stakeholders should consider broiler production as a guaranteed enterprise that will empower and build the capacity of farmers and help reduce youth unemployment in Nigeria.

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