

Constraints to Utilization of Poultry Production Technology among Farmers in Oyo State, Nigeria

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ABSTRACT The study examined the constraints to utilization of poultry production technology in Oyo State, Nigeria. Primary data were collected using a set of structured and validated interview schedule from 120 poultry farmers who were selected using multistage sampling techniques from four Local Government Areas of Oyo State, Nigeria. Data analysis was carried out using frequency counts, percentages and Pearson Product Moment Correlation (PPMC). The result of the analysis showed that the major constraint to utilization of poultry production technology was access to capital and inadequate extension contact. Empirically, Age, awareness and education shows negative and relationship with constraints to utilization while source of information had positive and significant relationship with constraints to utilization of poultry production technology. The major recommendation that emanated from the study are: provision of credit facilities to the farmers by the government through the banks and making inputs such as vaccines available to the farmers at a subsidized rate.

INTRODUCTION

In Nigeria, food production has not increased at the rate that can meet the increasing population. While the food production increases at the rate of 2.5%, food demand increase at a rate more than 3.5% due to the high rate of population growth of 2.8% (FOS, 1996). Therefore, poultry represents an appropriate system to feed the fast growing population and also play an important role in household food security. Although, there are 800 million people that are suffering from malnutrition all over the world due to inadequate animal protein in the diet of a large proportion of the population especially in the rural areas which constitute 70% of Nigeria population (FAO, 1993; Ojo, 2003).

Animal protein is essential in human nutrition because of its biological significance. Poultry and poultry products such as poultry meat and eggs are important foods for improving nutritional and health status particularly for at risk populations; like children, pregnant women and weaken persons.

In realization of the importance of animal protein, the various governments in Nigeria have been pursuing programmes at various levels Federal, State and Local Government to boost mass production of livestock products to ensure the attainment of FAO (Food and Agriculture Organization) recommendation of 35g/input of animal protein per day. Some of these

programmes include Farm settlement scheme, Agricultural Development Projects (ADP's) Microcredit scheme for livestock production and lately the United Nation Development Programme (UNDP) with the concern of establishment of poultry production programme at community level in Nigeria.

Extension and research are well-organized systems that design and disseminate technological innovations to farmers. Despite all the technological innovation transfer, the wide gap between levels of production which research contends is attainable and that which farmers achieve suggests a missing link (Oladele, 2002). Much research has been conducted to find solution to improve productivity in agriculture especially poultry production, but in fact, those farmers who are expected to be the end users utilize very few research results. The important element of any innovation transfer is the appropriate adoption of such technology without any hitch.

Emperically, researchers including: Onyenwaku (1988); Iwueke (1989); Mijindadi and Njoku (1998) have investigated factors related to the adoption of improved technology and they found that technology adoption was related to (1) farmers characteristics such as age, level of education on social and marital status, (2) characteristics of the farm, in term of farm size, location and credit. (3) Characteristics of innovation itself in terms of relative advantage,

compatibility, complexity, durability and communicability and (4) characteristics of the change agents in terms of personal characteristics techniques of communication and amount of participation obtained.

Objective of the Study

The general objective of the study was to assess the constraints to utilization of poultry production technology in Saki zone of Oyo State.

Specific Objectives

The following objectives were developed to guide the investigation. These include to:

- (i) describe the personal characteristics of the poultry farmers in the study area.
- (ii) determine the level of Awareness of poultry production technology by the respondents.
- (iii) identify the sources of information available to poultry farmers on poultry production technology in the study area.
- (iv) examine constraints affecting utilization of poultry production technology.
- (v) determine relationships, if any between selected variables and constraint to utilization.

RESEARCH METHODOLOGY

The study was carried out in Saki zone located in Oyo North of Oyo State. The study area consists of six Local Government Areas. These are Iwajowa, Kajola, Atisbo, Itesiwaju, Saki East and Saki West Local Government Areas. The sampling method used was multistage sampling technique. The first stage involved a purposively sampling of four local government areas, these are, Atisbo, Itesiwaju, Saki East and Saki west Local Government Areas based on population of poultry farmers. The second stage involved a simple random selection of 30 respondents from each local government area. Making a total of 120 respondents selected for the study. Only 108 responses were found to be useful for the data analysis.

The survey instrument was structured and validated interviewed schedule. The survey instrument contained four sections. Section one consisted of questions regarding to poultry farmers characteristics, section two inquired about awareness of poultry production technology while section three asked about

information sources used by poultry farmers and section four requested information on constraints to utilization of poultry production technology.

Descriptive statistics (frequency counts and percentages) inferential statistics (Pearson correlation) were used to analyze the data collected.

RESULTS AND DISCUSSION

A. Personal Characteristics of Poultry Farmers

(i) Age: The result of the analysis shows that more than one- third (34.3%) of the respondents were between the ages of 26-35 years, 29.6% were between 36-45, 25.9% were 46 or older and 10.2% were under 25 years of age (Table 1). The age modal class is 26-35 years. It could be inferred from this result that there is high percentage of youths (under 40 years) among the poultry farmers. This age distribution among farmers suggests high level of vitality for agricultural activities and play central role in productive enterprises (Durstun, 1996).

(ii) Marital Status: over one half of the respondents (57.3%) were married while 25.0% were single and others 17.7% were either Divorced/Widowed or separated respectively (Table 1). The implication of this finding is that majority of the respondents were married, who are considered to be responsible and rational in taking decisions.

(iii) Gender: majority (61.1%) of the respondents were male while 38.9% were female (Table 1). This result showed that high percentage of men involved in poultry production than women. This could be as a result of drudgery nature, physical and energy demand as well as capital-intensive nature of investment required by poultry production, which discouraged women.

(iv) Education: Table 1, further revealed that there is high level of education among the respondents as 94.4% had one form or the other formal education ranging from adult literacy to tertiary education. This showed that majority of the respondents are literate. The relative high level of literacy is expected to enhance innovativeness of farmers.

(v) Poultry Size: Close of half (42.6%) of the respondents keeps between 500-1000 birds, 30.6% under keeps 500 birds and 26.8% had poultry size

100 and over. This result indicated that majority of the poultry farmers belong to small scale category. This agreed with the classification of Omotosho and Ladele (1988), which classified. Small scale poultry farmers as drawing up to 1,000 birds.

Table 1: Frequency distribution of respondents according to personal characteristics

Variables	Frequency	Percentage
<i>Age (years)</i>		
Under 25	11	10.2
26-35	37	34.3
36-45	32	29.6
46-55	17	15.7
55 and above	11	10.2
<i>Marital Status</i>		
Single	27	25.0
Married	62	57.3
Divorced	03	2.8
Widowed	14	13.0
Separated	02	1.9
<i>Gender</i>		
Male	66	61.1
Female	42	38.9
<i>Education</i>		
No formal education	06	5.6
Adult literacy	17	15.7
Primary school	08	7.4
Secondary school	52	48.2
Higher education	25	23.1
<i>Poultry Size</i>		
Under 500 birds	33	30.6
500 – 1000 birds	46	42.6
1001 and over	29	26.8

Source: Field Survey, 2005

B. Level of Awareness of Poultry Production Technology

Farmers were asked to indicate their awareness of poultry production technology. Six recommended technologies were made available for the farmers to indicate their level of awareness out of two options of Yes or No for each of six recommended practices.

The result of the analysis presented in table 2 shows that farmers have high awareness for all the recommended technologies as 82.4% of the farmers indicated awareness of improved poultry breeds, 82.4% claimed the awareness of improved feeding, 78.8% vaccination, 70.4% debeaking, 88.9% control of pests and diseases and 64.8% of the respondents claimed the awareness of deworming. Though there is high level of awareness of technology but Roger and Shoemaker (1977) however cautioned on the use

of awareness to determine adoption of innovation in that it is not always certain that farmers who are aware of innovation will adopt.

Table 2: Distribution of respondents according to awareness of poultry production technology

Technology	Awareness	
	Yes	No
Improved poultry breeds	89 (82.4)	19 (17.6)
Improved feeding	89 (82.4)	19 (17.6)
Vaccination	85 (78.8)	23 (21.3)
Debeaking	76 (70.4)	32 (29.6)
Control of pests and diseases	96 (88.9)	12 (11.1)
Deworming	70 (64.8)	38 (36.6)

Source: Field Survey, 2005
(parentheses indicates percentages)

C. Farmers Sources of Information

The findings of this study revealed that farmers obtained information on poultry technology from various sources ranging from interpersonal to mass media. About half (49.1%) of the sampled farmers indicated extension agents/Veterinary doctors as their major source of information on poultry technology; this is followed by Radio/Television (16.7%), contact farmers/family members (11.1%), friends/neighbour (10.1%) and Newspapers (13.0%) (Table 3). From this result it could be inferred that extension agents/veterinary doctors serves as the main source of information to the farmers on poultry production technology. This finding is similar to the findings of Adekoya et al, (2000), Mohammed and Waneso, (1993) who reported that extension agents were the major source of information used by farmers.

Table 3: Sources of information on poultry production technology

Sources of information	Frequency	Percentage
Contact farmers	12	11.1
Extension agents/ Veterinary Doctors	53	49.1
Radio/ Television	18	16.7
Friends/ Neighbours	11	10.1
Newspapers	14	13.0

Source: Field Survey, 2005

D. Constraints to Utilization of Poultry Production Technology

Sampled poultry farmers were asked to rate the constraints to utilization of poultry technology on a 3 point of scale of severe, = 3 moderate = 2 and Mild = 1. The result of the analysis presented

in table 4 revealed the constraints to utilization of poultry production technology in declining order of severity as farmers rated Access to capital (65.0%) as most severe followed by inadequate extension contact (55.0%), inadequate information (27.5%). Inadequate input supply (15.0%) and marketing of products. (11.2%).

Table 4: Constraints to utilization of poultry technology

Constraints	Severe	Moderate	Mild	Rank
Inadequate extension agents contact	44 (55.0)	30 (37.5)	6 (7.5)	2nd
Inadequate access to capital	52 (65.0)	19 (23.8)	9 (11.2)	1st
Inadequate input supply	12 (15.0)	30 (37.5)	38 (47.5)	4th
Marketing of products	9 (11.2)	37 (46.3)	34 (42.5)	5th
Inadequate information	22 (27.5)	46 (57.5)	12 (15.0)	3rd

Source: Field Survey, 2005
(Parentheses indicates percentages)

E. Relationship Between Selected Variables and Constraints to Utilization of Poultry Production Technology

Hypothesis was set based on the objectives of the study to test relationship between selected variables and constraints to utilization of poultry production technology. This was carried out using Pearson correlation.

{Age ($r = -0.133$, $p < 0.05$), Awareness ($r = -0.101$, $p < 0.05$), information source ($r = 0.445$, $p < 0.05$), and education ($r = -0.515$, $p < 0.05$) }

The results of the analysis showed that age, awareness of technology and education were negatively related with constraints with education only being significant while information sources was positively and significantly related to constraints.

CONCLUSION AND RECOMMENDATIONS

The findings of this study have shown that poultry farmers were able bodied, still young with modal class age of 26-35 years who are married and mostly males with high level of education. The farmers are small-scale producers rearing between 500-1000 birds.

The level of awareness of poultry production

technology by the farmer was very high especially control of pest and diseases.

Farmers' sources of information were mostly extension agents/veterinary doctors. The major constraints to utilization of poultry production technology include each access to capital and inadequate extension agents contact.

The results of the analysis showed that age, awareness of technology and education were negatively related with constraints with education only being significant while information sources was positively and significantly related to constraints.

Based on these findings, should be encouraged to form cooperative societies in order to acquire loan for the poultry farmers and inputs at subsidized rate. This will have a lot to do with increase in production from small scale to large scale. Also, frequency of extension contact with the farmers with adequate information on new technology should be encouraged among the extension agents. Also the use of mass media should be intensified upon by the farmers, in order to access needed information.

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