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EFFECT OF AGRICULTURAL EXTENSION PRACTICES ON POULTRY FARMERS' STANDARD OF LIVING IN EKITI STATE

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ABSTRACT

This study assessed the impact of agricultural extension practices on the standard of living of poultry farmers in Ekiti State, Nigeria. Specifically, it identified the practices extended to poultry farmers by the extension outfit in the state, adoption of the extended practices and its impact. A structured interview schedule was used to obtain information from one hundred and sixty (160) poultry farmers who were selected using a random sampling technique from all the Local Government Areas of the State, Descriptive statistics such as frequency distribution and percentages were used to describe the data. The results show that farmers adopted most of the practices and there was a considerable improvement in the living standard of the poultry farmers. Majority of the farmers had positive perception of the impact of the adopted poultry practices on increased income, improved household food security and nutrition and acquisition of more poultry equipment.

Keywords: poultry, farmers, standard of living, impact, extension practices.

INTRODUCTION

In Nigeria, poultry represents an appropriate system to feed the fast growing population and to provide income for small-scale farmers. The development of the poultry industry in Nigeria has been described as the fastest means of bridging the protein deficiency gap prevailing in the country. It has been reported that most Nigerian diets are deficient in animal protein, which results in poor and stunted growth as well as increase in spread of diseases and consequently death (Maziya-Dixon *et al*., 2004). Poultry farming secror has a significant impact on the country's domestic revenue, contributing about 6-8% of Nigeria's GDP (Adedotun, 2020). However, limitations confronting the industry are numerous. The problems confronting the poultry industry in Nigeria include low egg production, poor chick quality, poor and low performing breeds, poor weight gain, feed conversion, feeding and management problems and lack of capital (Lawal *et al*, 2009). In order to sustain the interest of poultry farmers in poultry production, effective research and extension are necessary to ensure meaningful impact on poultry productivity and farmers' standard of living. The aspirations of the farmers must be met to a reasonable extent by the income accruing from the business. Proper care and management of the birds are necessary to ensure increase in egg production and/or increased weight gain (Lawal *et al*, 2009).

The extension service operates from the back drop belief that increased agricultural productivity depends primarily upon acceptance of improved cultural and technological change at the rural farm level and that peasant farmers can achieve improved production only if they adopt recommended agricultural practices in place of traditional ones. The system of extension entails that each extension agent is required to regularly visit the farmers/farmers' group with relevant messages that are specific to the farm practices taking place in the field at that point in time. Feedback is also taken by the extension agents from farmers to the Research stations. The agricultural extension service in recent years has however played a significant role in improving poultry production in Nigeria through advisory services and adequate access to information on improved techniques of production. Agricultural extension plays a pivotal role in ensuring the awareness and subsequent adoption of the contemporary methods of poultry management. Successful adoption of improved agricultural practices is predicated upon rural farmers acquiring the required knowledge and understanding of these technologies. This will improve productivity and raise the living standards of the farmers who are the beneficiaries of the service (Benor and Harrison, 1983). The objectives of this study are to describe the socio-economic characteristics of poultry farmers, identify the extension practices adopted by poultry farmers and determine farmers' perception of the effect of adopted practices on their standard of living.

METHODOLOGY

The study was conducted in Ekiti State in southwestern Nigeria. Ekiti State is located 7825^0 –8820^0 N, 5800^0 – 6800^0 E in the rainforest belt of southwestern Nigeria (Ekiti State Government(EKSG) 1997) and lies south of Kwara and Kogi States, east of Osun State and bounded by Ondo State in the east and south (EKSG, 1997).This paper presents findings collected from the field. The research report is thus based on the questionnaires administered on the residents of 16 Local Government Areas of the State. Ten respondents were selected each from the administrative headquarters of all the sixteen local government respectively making a total of 160 respondents selected for this study. The administrative headquarter of each Local Government Areas were purposively selected for the study. Data were obtained from 160 respondents by random sampling. Ten (10) questionnaires were administered on each Local Government Areas. A total of one hundred and sixty (160) questionnaires were therefore administered during the survey. Descriptive statistics such as frequency distribution and percentages were used to describe the data.

RESULTS AND DISCUSSION

Poultry farmers' socio-economic characteristics are presented in Table 1. Majority (50%) of the poultry farmers were between 21 and 40 years of age, only 15% were above sixty-one years and above. Majority (75%) of the respondents was male and married (62.5%). About 37.5% of the respondents had post-secondary education while 15% had no formal education. Poultry farming was the unique occupation of most (65%) of the respondents while 35% had other professions such as trading, teaching and nursing. The data on years of experience of poultry farmers show that 31.25% had spent between 6-10 years in the business while those who have spent between 21 years and above constitute 8.75% of the respondents. 50% of the poultry farmers interviewed had 1- 1,000 birds. The real big timers, that is, those with more than 5,001 birds constitute 6.25% of the farmers. 43.75% of the respondents kept layers while 15% reared cockerels. More than half (62.5%) of the respondents rely on hired labour.

Table 2 show the adoption of poultry management practices by poultry farmers. Majority of the respondents adopted most of the extended practices. 87,5% adopted preparation of pen for birds, 90.63% adopted brooding of chicks, 96.88% of the farmers adopted improved method of birds rearing techniques, 95% adopted vaccination, 90.63% adopted recognition of infections and ectoparasite infestations. The least adopted of the practices were delousing methods (49.38%) and feed milling/mixing (43.75%). This implies that most of the poultry farmers did not delouse birds and most farmers also purchase feeds and do not mill feed themselves probably because of lack of adequate knowledge of the techniques involve in feed mixing. Delousing is avoided probably because it is a tedious operation that involves dipping or spraying of birds. Low production was however recorded by farmers who indicated that they purchased feeds for their birds. The adoption level of farmers of the poultry practices show that majority (67.5%) of the respondents were within the medium adoption level, 16.7% were within high adoption level and 16.7% were within the low level of adoption of the poultry practices.

The distribution of respondents by their perception of the impact of adopted poultry practices on the standard of living and farm operations before and after adoption of improved practices is shown in Table 3. Majority of the farmers had positive perception that the adopted poultry practices had increased their income (75%), improved household food security and nutrition (75%), and they were able to purchase more poultry equipment (65%). Quite a sizeable percentage also indicated that they had positive perception of increased weight of their birds (68.13%). 56.25% of the respondents also had strong perception of the fact that their egg production had increased while 65% of the respondents were able to purchase some articles
of convenience as a result of increased income. Also, 62.5% of respondents indicated positive perception of the fact that there was reduced mortality as a result of their adoption of poultry practices. Majority of the respondents (65.63%) perceived that milling of feed has not been improved, which was evident in the negative perception indicated by respondents. This is however expected since majority also purchased their feeds and do not mill the feed themselves.

Table 1. Distribution of respondents by socio-economic characteristics

Variables	Frequency	Percentage (%)
Age		
1-20	16	10.0
21-40	80	50.0
41-60	40	25.0
61 and above	24	15.0
Sex		
Male	120	75.0
Female	40	25.0
Marital status		
Single	24	15.0
Married	100	62.5
Divorced	36	22.5
Educational status		
No formal education	24	15.0
Primary education	36	22.5
Secondary education	40	25.0
Post-secondary education	60	37.5
Primary occupation		
Poultry farming	104	65.0
Others	56	35.0
Years of experience in poultry farming (year)		
1-5	40	25.0
6-10	50	31.25
11-15	30	18.75
16-20	26	16.25
21 and above	14	8.75
Farm size (number of birds)		
1-1000	50	31.25
1001-2000	34	21.25
2001-3000	26	16.25
3001-4000	25	15.63
4001-5000	15	9.38
5001 and above	10	6.25
Type of birds rearing		
Layers	70	43.75
Broilers	36	22.5
Cockerels	24	15.0
All types of birds	30	18.75
Type of labour		
Self only	36	22.5
Family labour	24	15.0
Hired labour	100	62.5

Table 2. Distribution of respondents by knowledge and adoption of are poultry management practices.

Poultry Practices	Knowledge of are poultry management practices.	Adoption of poultry management practices.
Preparation of pens for birds	150(93.75)	140(87.5)
Brooding of chicks	150(93.75)	145(90.63)
Improved methods of Bird Rearing	155(96.88)	155(96.88)
Vaccination	152(95.0)	152(95.0)
Timing of Operations	140(87.5)	130(81.25)
Methods of debeaking	100(62.5)	80(5.0)
Proper management of laying birds	85(53.13)	81(50.63)
Delousing methods	85(53.13)	79(49.38)
Type and proper use of drugs	155(96.88)	130(81.25)
Recognition of infections and ectoparasite infestations	150(93.75)	145(90.63)
Control measures for infection	104(65.0)	102(63.75)

Marketing of products	100(62.5)	95(59.38)
De-worming	150(93.75)	120(75.0)
Feed milling and mixing	100(62.5)	70(43.75)
Mean	126.9	116.0

Percentage in parentheses

Table 3. Distribution of the perception of farmers about the effect of adopted poultry practices on standard of living

Impact on	Positive perception	Negative perception	Neutral perception
Increased income	120(75.0)	16(10)	24(15.0)
Improved household food security and nutrition	120(75.0)	20(12.5)	20(12.5)
Increased weight of broilers	109(68.13)	26(16.25)	25(15.63)
Purchase of articles of convenience	104(65.0)	30(18.75)	26(16.25)
Purchase of more poultry equipment	101(63.13)	30(18.75)	29(18.13)
Improved housing condition	100(62.5)	31(19.38)	29(18.13)
Improved educational status	100(62.5)	33(20.63)	27(16.88)
Decreased mortality	100(62.5)	40(25.0)	20(12.5)
Increased stock level	95(59.38)	55(34,38)	10(6.25)
Increased Egg Production	90(56.25)	30(18.75)	40(25.0)
More labourers employed	85(53.13)	25(15.63)	50(31.25)
Better feed milled	35(21.88)	105(65.63)	20(12.5)

Percentage in parentheses

CONCLUSION AND RECOMMENDATIONS

Poultry farmers adopted extension practices, which include preparation of poultry houses, techniques of brooding chicks, vaccination, and timing of operation, debeaking, delousing, and drug administration, recognition of infection, deworming and tips on marketing of produce. More than half of the respondents were within the medium adoption level; Majority of the farmers had positive perception of the impact of the adopted poultry practices on increased income, improved household food security and nutrition and acquisition of more poultry equipment. This study has shown that the adoption of most of the practices has helped in raising the standard of living of the farmers, that is agricultural extension practices have effect on poultry farmers' standard of living in Ekiti State.

Based on the findings of this research, it is recommended that Continuous training programs should be further organized for poultry farmers and workers in the industry to keep them abreast of latest technologies in the business and also to provide ways of removing most of the identified constraints. Constant contact between farmers and extension agents should be further encouraged as this is an important factor in the adoption of improved practices by farmers. Extension agents should link farmers with Subject Matter Specialists that can train them on how to mix feed ingredients. Farmers should make themselves available where such feeds are milled so as to ensure use of correct amount of feed ingredients

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