

Adoption dynamics of poultry entrepreneurs' in relation to poultry management practices

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Abstract

The scientific management and high breed have a great potential to increase the poultry production. The success of poultry technology program lies on the extent to which, the poultry entrepreneurs accept the technology. The present research was deigned to know the level of adoption of poultry management practices. The result of this study indicated that majority (70.00 per cent) of the poultry owner were found with medium level of adoption of poultry management practices. The level of adoption like record keeping, marketing, water management and feed management was high. The organizational participation, mass media exposure, extension contact, size of the poultry farm, knowledge about poultry management practices of the poultry entrepreneurs' were positive and significant correlated with their adoption level.

Key words: Poultry management, Dynamics, practice, Adoption

Introduction

Some challenges facing poultry farmers in Ghana as uncompetitive interest rate, lack of high subsidizing cost of maize production and tariffs to enable poultry farmers to compete with influx of imported poultry products which threaten their jobs and employment generation for the youth (Altman, E. 1983 and Hall, 2004).

Most banks in the country are unwilling to finance poultry production. In the view of Derek Leebaert, (2005) the ADB is the main bank that has supported poultry farmers through the provision of credit and animal husbandry training. Even then, most small-scale poultry keepers have not received credit from the ADB as they fail to meet the benchmarks set for gaining access to credit (Modern Ghana News, 2010). A case in point is in the Ghana West Municipality of the Greater Accra region where the bank is able to provide long-term credit to farmers who have appropriate collateral that guarantees loan repayment whiles small-scale poultry farmers without land titles do not have access to loans from the bank (Derek Leebaert, 2005).

Considerable research is done in our country for development of poultry sector. Many scientists are working to evolve best strain, best feed, best precaution against various disease and best managerial practices. The scientific management and high strain have a great potential to increase the poultry production. However the success of poultry technology lies on the extent to which it poultry owners accept

the technology. Poultry production is governed by various practices viz., improved breed, feed management, water management, lighting, culling, health care, rearing, summer and winter management, record keeping and marketing. To have the optimum yield, all these components must be rationally adopted. The wide gap exists between actual production and its potential production might be due to various factors but low extent of adoption of poultry technology is major one. Therefore, it is worthwhile to study the adoption dynamics of poultry entrepreneurs' in relation to poultry management practices. Keeping this in view, the present study was carried out with the following objectives:

1. To find out the extent of adoption of poultry management practices by the poultry owners'.
2. To find out the extent of practice wise adoption of poultry management practices,
3. To ascertain the relationship between adoption level and selected independent variables.

Methodology

The present study was undertaken in Anand district of Gujarat State. A random sample of total 110 respondents from thirty villages was selected. All the respondents were personally interviewed for the study, with the help of specially structured interview schedule. To develop an adoption index initially the poultry management practices were divided in to ten different practices by consulting the experts in the field as well as review of literature. The list of ten practices was then administered to experts to assign the weightage to each practice making a total of 100. The opinion of

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30 experts who responded our efforts was considered for the development of an adoption index. The practice wise weightage was determined on the basis of mean response of experts and all the ten practices duly weighted by experts constituted the index.

Results and Discussion

A. Level of adoption

The data pertaining to level of adoption of poultry management practices are furnished in Table 1. The data clearly indicated that great majority (70.00 per cent) of the poultry owner were found with medium level of adoption of poultry management practices, followed 15.45 per cent with high and 14.55 per cent with low adoption level of management practices.

However, on an average the adoption of recommended poultry management practices was

B. Practice wise adoption

The data presented in Table 2 indicated that the practice wise level of adoption was found very high in the practices like marketing (I rank), water management (II rank), rearing (III rank), summer and winter management (IV rank).

C. Relationship with independent variables

The correlation coefficients of fourteen antecedent variables related to socio-economic, psychological and communicational attributes of respondents with their extent of adoption of watershed technologies (consequent variable) were computed and presented in Table.

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An attempt was also made to find out the relationship between the adoption and selected independent variables (Table 3).

It is clear from the result of this study that variables, namely organizational participation, mass media exposure, extension contact, size of the poultry farm knowledge about poultry management practices were positive and significant relationship with the adoption level of the respondents. This may be due to fact that the higher knowledge of poultry management practices leads to high adoption of the technology,

which in turn resulted in higher production.

The size of the poultry farm was significantly correlated with level of adoption of poultry management practices. The reason behind this might be that the size of the poultry farm is the main factor contributing to economic betterment of the farmers. The better economic conditions allow them to try and evaluate the practices at their farm, which ultimately leads to adoption of the poultry management practices. Organizational participation, mass media exposure and extension contact were also significantly correlated with level of adoption of poultry management practices.

Our findings are totally corroborated with Emmanuel, A. (2011) who reported risk management practice is one of the key components in a business set up. One cannot overlook such practices in the poultry industry which involves a lot of risk (such as diseases and other on for seen contingencies). The research results about respondents knowledge on risk management was not encouraging, there was an average score of 54.7percent. One would have loved to see a higher score in this knowledge area. The practices were even worse, responses from respondent on risk management practices as to whether they have insurance policy revealed that no farmer/entrepreneur have taken any insurance policy for his farm. In the same way only 23.4percent, 20percent and 24 percent have regular visit from the veterinary, buying feed from approved dealers and delegate authority to others respectively. Those who reported buying feed from approved source were mainly from the large scale farmers such as A M Unity farms.

Among total farmers, age, experience, and social participation correlated non-significantly with ICT utilization. Knowledge on poultry, poultry farm size, information seeking behavior, economic orientation, and achievement motivation, management orientation, scientific orientation and risk orientation correlated positively and significantly at 1% level of probability. The variables knowledge on ICT, socio economic status, rationality in decision making, were positively correlated with ICT utilization at 5% level of probability. Layer farmers: computed 'r' values between independent variable viz. knowledge on poultry farming, poultry farm size, information seeking behavior,

Table 1: Distribution of the respondents according to their level of adoption of poultry management practices.

N =110

S. No	Adoption level	Number	Per cent
1	Low level (Below 44.29)	17	15.45
2	Medium level (In between 44.29 – 58.97)	77	70.00
3	High level (Above 58.97)	16	14.55
	Total	110	100.00

Table 2: Extent of adoption of different practices of poultry management practices

N = 110

S. No.	Name of the practices	Adoption level			Total score	Mean score	Rank
		Low	Medium	High			
1	Improved breed	35(31.82)	67(60.91)	8(7.27)	193	1.75	IX
2	Feed management	32(29.09)	52(47.27)	26(23.64)	214	1.94	VII
3	Water management	22(20.00)	56(50.91)	32(29.09)	230	2.10	II
4	Lighting	30(27.27)	50(45.45)	30(27.27)	220	2.00	VI
5	Culling	12(10.91)	84(76.36)	14(12.73)	222	2.02	V
6	Health care	17(15.45)	86(78.18)	7(6.36)	210	1.91	VIII
7	Rearing	9(8.18)	99(90.00)	6(5.45)	225	2.05	III
8	Summer and winter management	9(8.18)	88(80.00)	13(11.82)	224	2.04	IV
9	Record keeping	65(59.09)	40(72.73)	5(4.54)	160	1.45	X
10	Marketing	1(0.91)	80(72.73)	29(26.36)	248	2.25	I

economic orientation, rationality

in decision making, achievement motivation, management orientation, scientific orientation, risk orientation with utilization of ICT tools were significantly related at 0.01 level of probability among layer farmers. Knowledge on ICT tools positively correlated at 5% level of significance. Age, experience in poultry farming, socio economic status and social participation were non-significantly correlated with ICT utilization among layer farmers.

Conclusions

It is evident from the result of this study that majority (70.00 per cent) of the poultry owner were found with medium level of adoption of poultry

Table 3: Correlation of independent variables with the level of adoption of poultry management practices

S. No.	Independent variables	r-value
1	Age	0.0421
2	Education	0.0693
3	Experience in poultry	0.1802
4	Training in poultry	0.1839
5	Caste	0.1569
6	Organizational participation	0.2268*
7	Mass media exposure	0.4079*
8	Extension contact	0.2284*
9	Occupation	0.1574
10	Size of the poultry farm	0.1880*
11	Annual income	0.1598
12	Scientific orientation	0.1808
13	Risk orientation	0.0368
14	knowledge	0.4569*

*= Significant at 0.05 level

management practices. The level of adoption like record keeping, marketing, water management and feed management was high. The organizational participation, mass media exposure, extension contact, size of the poultry farm knowledge about poultry management practices were positive and significant correlated with the adoption level of the respondents.

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