

### **Research Paper**

## **Veterinary Science**

## Problems and Suggestions in Utilization of ICT Tools of Commercial Poultry Farmers of Andhra Pradesh

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#### **ABSTRACT**

The problems voiced by both layer and broiler farmers put together, were No regular mechanism for dissemination of scientific information (76.67%), Non availability of market information on feeds, prices etc (70.83%), Dependence for information on technical persons of hatcheries (68.33%), No efforts on customer education on value added poultry

products (50.00%), Non availability of experts during emergency / crisis (31.67%), Lack of awareness on food quality standards (29.16%), with percentage in parenthesis. The suggestions perceived by both broiler and layer farmers put together, were 'Availability of latest scientific information on production aspects in local language (80.83%), 'Forecasting of market trends, availability of feed ingredients etc' (79.17%), Better access to information technology innovations (72.00%), 'Provision of value added information such as marketing through mobile telephones' (70.83%), 'Provision of infrastructure in the vicinity (56.67%), 'Development of interactive ICT tools – expert systems, multimedia modules etc' (30.83%), 'Proper management of data and information' (25.00%), in the order of ranking. The suggested strategies for increasing farming performance of poultry farmers through utilization of ICTs include: 1) provision of adequate infrastructure, 2) provision of information access to farmers through creating awareness, 3) establishing information kiosk at each village, 4) orientation of human resources towards ICT extension, 5) developing IT related curricula through distance education mode, 6) promotion of public-private partnership and 7) attitude of Veterinary scientists and extension service providers towards utilizing ICT for commercial poultry development.

#### **KEYWORDS:**

# MATERIAL AND METHODS RESEARCH DESIGN

Ex-post facto design adopted for the present study since the variables chosen have occurred. According to Kerlinger(1978) Ex-post facto research design is defined as systematic and empirical enquiry in which the researcher does not have control over independent variables because their manifestation already or they are inherently not manipulated.

#### **LOCALE OF THE STUDY**

The state of Andhra Pradesh was chosen purposively for the study as the researcher is familiar with local language that could definitely help the researcher to build good and quick rapport and facilitates in depth study through careful observations.

# SAMPLING PROCEDURE Location of Regions

The present study was carried out in three regions of the state i.e. Telangana, Costal Andhra, Rayalaseema of Andhra Pradesh state and one district from each of region with highest poultry population (both in layers and broilers) was selected purposively.

#### **Selection of Districts**

Three districts viz. Rangareddy, Chittoor and East Godavari of Andhra Pradesh were selected for the study based on highest poultry population i.e layers and broilers. The map showing Andhra Pradesh state with study area was depicted in the fig.1.

#### 3.2.3 Selection of Respondents:

From each district 40commercial poultry farmers in equal number of 20 layer farmers and 20 broiler farmers were selected randomly. Thus a total 120 respondents from three districts were chosen for the study.

#### Problems voiced by commercial poultry farmers

S. No	Problems voiced	Layer farmers		Broiler farmers		Total farmers	
		f	Rank	f	Rank	f	Rank
1	Non availability of market information on feeds, prices etc.	50 (83.30)	II	35 (58.30)	III	85 (70.83)	II
2	Dependence for information on technical persons of hatcheries	32 (53.30)	IV	50 (83.30)	I	82 (68.33)	III
3	No regular dissemination ofscientific information	52 (86.67)	I	40 (66.67)	II	92 (76.67)	I
4	No efforts on customer education on value added poultry products	35 (58.30)	III	25 (41.67)	IV	60 (50.00)	IV
5	Lack of awareness on food quality standards	20 (33.30)	VI	15 (25.00)	٧	35 (29.16)	VI
6	Non availability of experts during emergency / crisis	28 (46.67)	٧	10 (16.67)	VI	38 (31.67)	٧

(Figures in parentheses indicate percentage)

# RESULTS PROBLEMS AND SUGGESTIONS IN UTILIZATION OF ICT TOOLS

#### **Problems**

The problems voiced by layer and broiler farmers were recorded and presented in

The problems voiced by layer farmers were 'No regular mechanism for dissemination of scientific information' (86.67%) , 'Non availability of market information on feeds, prices etc.,' (83.30%), 'No efforts on customer education on value added poultry products' (58.30%), 'Dependence for information on technical persons of hatcheries' (53.30%), 'Non availability of experts during emergency / crisis' (46.67%) and 'Lack of awareness on food quality standards' (33.30%), with percentage in parenthesis.

The problems voiced by broiler farmers were Dependence for information on technical persons of hatcheries (83.30%), No regular mechanism for dissemination of scientific information (66.67%), Non availability of market information on feeds, prices etc (58.30%), No efforts on customer education on value added poultry products (41.67%), Lack of awareness on food quality standards (25.00%), Non availability of experts during emergency / crisis (16.67%), with percentage in parenthesis.

The problems voiced by both layer and broiler farmers put together, were No regular mechanism for dissemination of scientific information (76.67%), Non availability of market information on feeds, prices etc.,(70.83%), Dependence for information on technical persons of hatcheries (68.33%), No efforts on customer education on value added poultry products (50.00%), Non availability of experts during emergency / crisis (31.67%), Lack of awareness on food quality standards (29.16%) with percentage in parenthesis.

#### Suggestions

The suggestions elicited from layer and broiler farmers and presented in Table 28.The objective of the present study is to elicit suggestions for utilization of ICT tools as perceived by the Commercial Poultry farmers, hence the suggestion specific to the objective presented here

The suggestions perceived by layer farmers were 'Forecasting of market trends, availability of feed ingredients etc.' (91.67%), Availability of latest scientific information on production aspects in local language(86.67%), 'Provision of value added information such as marketing through mobile telephones' (83.33%), Better access to information technology innovations(78.33%), Provision of infrastructure in the vicinity(63.33%), 'Development of interactive ICT tools – expert systems, multimedia modules etc.' (36.67%), 'Proper management of data and information' (33.33%), in the order of ranking.

The suggestions perceived by broiler farmers were 'Availability of latest scientific information on production aspects in local lan-

guage(75.00%), 'Forecasting of market trends, availability of feed ingredients etc.' (66.67%),'Provision of value added information such as marketing through mobile telephones' (58.33%),'Provision of infrastructure in the vicinity(50.00%),Better access to information technology innovations(41.67%), 'Development of interactive ICT tools – expert systems, multimedia modules etc.' (25.00%), 'Proper management of data and information' (16.67%), in the order of ranking.

The suggestions perceived by both broiler and layer farmers put together, were 'Availability of latest scientific information on production aspects in local language(80.83%), 'Forecasting of market trends, availability of feed ingredients etc' (79.17%),Better access to information technology innovations(72.00%),'Provision of value added information such as marketing through mobile telephones' (70.83%),'Provision of infrastructure in the vicinity(56.67%),'Development of interactive ICT tools – expert systems, multimedia modules etc.' (30.83%), 'Proper management of data and information' (25.00%), in the order of ranking.

#### Suggestions voiced by commercial poultry farmers

S. No	Suggestions voiced	Layer farmers		Broiler farmers		Total farmers	
	Suggestions voiced		Rank	f	Rank	f	Rank
1	Proper management of data and information	20 (33.33)	VII	10 (16.67)	VII	30 (25.00)	VII
2	Provision of value added information such as marketing through mobile telephones	50 (83.33)	Ш	35 (58.33)	Ш	85 (70.83)	IV
3	Forecasting of market trends, availability of feed ingredients etc	55 (91.67)	I	40 (66.67)	II	95 (79.17)	II
4	Development of interactive ICT tools – expert systems, multimedia modules etc	22 (36.67)	VI	15 (25.00)	VI	37 (30.83)	VI
5	Provision of infrastructure in the vicinity	38 (63.33)	٧	30 (50.00)	IV	68 (56.67)	٧
6	Availability of latest scientific information on production aspects in local language	52 (86. 67)	II	45 (75.00)	I	97 (80.83)	I
7	Better access to information technology innovations	47 (78.33)	IV	25 (41.67)	٧	72 (72.00)	Ш

(Figures in parenthesis indicate percentage)

# DISCUSSION PROBLEMS AND SUGGESTIONS IN UTILIZATION OF ICT TOOLS

#### Problems in utilization of ICT tools

The constraint 'No regular mechanism for dissemination of scientific information' ranked as 1st by layer and total farmers and 2nd by broiler farmers. In the study area, poultry farmers either layer and or broiler farmers were getting the information either from poultry experts in the vicinity or by technical persons of hatcheries. Poultry sector in the study area had grown from backyard to commercialized enterprise in the last four decades and Andhra Pradesh is a leading producer of either eggs or chicken. Because of its commercial development several hatcheries, feed manufacturing companies, equipment suppliers etc entered into the business and the role of Government Animal Husbandry department reduced to minimal or nil. The only channel for information flow is either experts or representatives of hatcheries. State Veterinary University's role in poultry development also reduced to few research studies and hence farmers expressed the problem of 'No regular mechanism for dissemination of scientific information' and given top priority.

Other constraint viz. 'Non availability of market information on feeds, prices etc' ranked 2<sup>nd</sup> by layer, 3<sup>rd</sup> by broiler and 2<sup>nd</sup> by pooled sample. In the study area, the poultry farmers engaged in feed formulation and preparation on their own with the help of poultry consultants. Farmers procure feed ingredients from known sources regularly over years. However, they lack information on availability of feed ingredients across different location and their availability. Because of lack of information, farmers forced to procure feed ingredients at higher rates, especially during lean season. Major share of cost of production goes to feeding alone. That's why farmers expressed this constraint. Even though broiler farmers under integration not concerned directly feed preparation prices etc, but they are eager to upscale broiler farming in future on par with layer farming.

The third major problem expressed by layer farmers was 'No efforts on customer education on value added poultry products'; which was rated fourth by broiler and pooled sample. Change in food habits, urbanization, and increased purchasing power making people afford and relish alternate food preparations. Chicken and egg products are gaining momentum and several valued added products such as nuggets, sausages etc are marketed now-a-days in limited scale. But customer education on these value added products is negligible except commercial promotion by few companies. Proper publicity and customer education enhances market demand for poultry chicken and eggs; poultry farming becomes profit oriented.

About 54 per cent of layer farmers expressed that 'Dependence for information on technical persons of hatcheries' (53.30%), as a problem, which was given 1st by broiler farmers and 3st by pooled sample. In layer farming all the farming activities performed by themselves with their experience and occasional advices by poultry experts. In integrated broiler farming, all activities done under the strict supervision of respective hatcheries, who supply all inputs such as feed, medicines, vaccines etc. The broiler farmer has no option for getting information except depend on technical personnel. This is the plausible reason for this constraint.

'Non availability of experts during emergency / crisis 'was another constraint expressed by about 47 per cent layer farmers, ranked as  $5^{\rm th}$  and by very few broiler farmers ( 17%) and ranked  $6^{\rm th}$  by them. Technical personnel and experts are not available  $24 \times 7$ . Poultry birds subjected to diseases outbreaks and some are fatal. Non-availability of technical personnel in emergencies becomes catastrophic, incurring heavy losses.

About one third of layer farmers and one fourth of broiler farmers expressed the constraint of 'Lack of awareness on food quality standards'. Few enthusiastic farmers who are contemplating entry into global markets expressed this constraint.

#### Suggestions in utilization of ICT tools

Forecasting of market trends and availability of feed ingredients etc.' was the major suggestion expressed by over 90 per cent layer farmers and ranked 1st, while it was ranked 2nd by broiler farmers. This clearly portrays current situation and the desire for development of their trade. Poultry farmers of the study area waiting for forecasting of market trends and availability of feed ingredients to plan their production activities properly.

Layer and broiler farmers expressed another suggestion 'Availability of latest scientific information on production aspects in local language'. The information flow by technical personnel and poultry experts was selective and specific and farmers devoid of comprehensive information. Information in local language enhances understandability, so farmers expressed this suggestion.

Provision of value added information such as marketing through mobile telephones expressed by 83.33 per cent of layer and 58.33per cent of broiler farmers and ranked 3<sup>rd</sup> by both. Portable technology such as mobile telephony brought many changes in information dissemination and hence farmers wanted value added information such market price on a regular basis through SMS, Voice SMS, MMS etc.

Layer farmers had given 4<sup>th</sup> rank and broiler farmers 5<sup>th</sup> rank to a suggestion 'Better access to information technology innovations'. Information Technology swept the society and brought significant changes in all walks of life. Connectivity, reliability, accessibility, affordability and user centered interactivity are keys areas to be considered in development of ICT innovations such as expert systems, web portals, information kiosks, online information systems.

Layer farmers had given 5<sup>th</sup> rank to a suggestion Provision of infrastructure in the vicinity and broiler farmers gave 4<sup>th</sup> rank to the same. Infrastructure such as computer systems, internet, information kiosks, mobile towers etc. is not available in rural areas to required extent. Hence, this suggestion voiced.

Slightly more than one third of layer farmers and one-fourth broiler farmers expressed a suggestion 'Development of interactive ICT tools – expert systems, multimedia modules etc. New upcoming IT appli-

cation such as experts systems, multimedia modules, web portals are showing promising results in capacity building of farmers and hence this suggestion.

Few layer and broiler farmers voiced a suggestion Proper management of data and information. This suggestion mainly pertains to regular updation of content on websites. Generally, regular updation is not being done and very much essential to update dynamic information such as market prices.

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