

RESEARCH ARTICLE

Knowledge and Attitude of Poultry Farmers towards Poultry Enterprise

Umesh Kumar Jaiswal¹, Anika Malik², Anju Bala³, Ravi Kumar⁴ and Rohit Sharma⁵

1.Ex-M.V.Sc. Student,

2 Assistant Professor,

3. Ph.D Scholar,

Dept. of Vet. and AH Ext.Edu.,

4. Ph.D Scholar, Depat. of LPM

5. Ph.D Scholar, Dept. of AGB

Lala Lajput Rai University of
Veterinary and Animal Sciences,
Hisar 125004, India.

Corresponding author e-mail:
20umeshjaiswal@gmail.com

ABSTRACT

Today poultry is one of the fastest-growing sector of agriculture in India with fifth rank in the world comprising 2.6 percent of the world's total population. India is one of the countries which have seen remarkable growth in the field of poultry which is not only in the production but also in the productivity. But profitability in any business depends upon the knowledge, use and attitude towards various inputs of quality and quantity parameters. Evidently good poultry farming practices are contributor to poultry sector development. Present study was conducted to assess poultry farming practices (PFP) among poultry farmers from two different district of the Haryana. The data was collected from well-structured interview schedule consisted of 39 items assessing knowledge and 18 items assessing attitude regarding PFP. Data analysis was done by using Microsoft Excel and Statistical Package for Social Sciences on total responses received. The result showed that majority of farmers were having poor knowledge about PEP but their attitude towards PEP was satisfactory with medium level. A highly significant association was found between age, education, mass media exposure, training, extension contact and financial status with total knowledge score. And positive significant relation was also found between age, education, financial statuses and with attitude of poultry keepers. So, intervention program needs to be adopted to increase the knowledge & to improve attitude regarding PEP among the poultry farmers.

Key words: Egg production; Poultry farming practice; Knowledge; Attitude.

Poultry is an excellent example of a global food. The poultry industry is a global phenomenon that is gaining popularity. Food security and risk spreading through subsidiary income are the main concerns for the lowest of the poor and the landless, which are not handled by the private business sector (Panda, 2016). It is a well-known fact that a considerable number of marginal and landless farmers survive by raising chickens and other small ruminants. India is the fifth-largest producer of poultry (chicken), accounting for 2.6 percent of the world's population. India is the world's fourth-largest producer of eggs and the tenth-largest producer of broilers (Anonymous, 2019-20). A review of all the recent advancements in egg and broiler production, as well as estimates for the next ten years shows that interdisciplinary improvements in poultry production have been made.

Poultry farming contributes significantly to India's

economy by creating jobs and increasing the Gross Domestic Product by delivering animal-source proteins for human consumption. Malnutrition, unemployment, and supplemental income have all been identified as three evils of our contemporary society that can be combatted with the help of this (Jat and Yadav, 2016). Farmers that raise poultry are still unaware of better breeding, management, and marketing techniques for poultry. In the districts of the Haryana Region, this study was conducted to measure the farmers' knowledge levels, attitudes, and practices about the usage of poultry farming with following objectives :

- To assess the knowledge level of poultry farmers
- To measure the farmer attitude towards poultry farming
- To ascertain effect of independent attributes on knowledge and attitude
- A self-observed report of poultry practices followed by Haryana farmers

METHODOLOGY

The population of the study was made up of individuals who were involved in poultry farming in the Haryana province's Hisar and Jind districts. The following were the variables that influenced the choice of this area i.e. The ability to effectively reflect the Haryana region is provided by the region's high concentration of poultry workers. Its ability to accurately represent the region. The researchers' familiarity with the area in terms of gathering trustworthy data.

More than 1000 farmers who operate in the districts of Hisar and Jind in the Indian province of Haryana make up the study's population. No upper age limit was mentioned. Two villages from each district—Pirawali and Balsamand in the Hisar district and Ikkas and Kandela in the Jind district—were chosen randomly. From each village, 25 farmers who had been expanding their poultry farming for the previous year were chosen. In total, 100 poultry farmers were chosen as respondents from 4 villages. Farmers were chosen using simple random sampling from a list of names obtained from the authorities. A well-structured interview schedule was prepared containing three sections of questions about the farmers' socioeconomic status, attitude, and level of knowledge.

With slight modifications, a previously created knowledge test by *Goswami et al. (2012)*, containing 39 items was utilized to gauge the respondents' level of knowledge. Each correct response received a score of one, while each incorrect response received a score of zero when calculating the knowledge score. Finally, the sum of all the scores was used to determine each individual poultry farmer's knowledge score. Responses were collected in three categories viz. knowledge about layer farming, knowledge about feature of good layer, and knowledge about symptoms of ailing poultry bird.

The attitude scale created by *Paul et al. (2011)*. was used to gauge attitude. The Likert scaling method was used to calculate the scale. Strongly agree, agree, neutral, disagree, and strongly disagree were the predominant answer patterns. The scoring system used was 5, 4, 3, 2, 1 for positive remarks and 1, 2, 3, 4 and 5 for negative remarks. All 100 of the intended participants had been reached by the end of the study, and one-way ANOVA, frequency, average, and percentage analyses were carried out using SPSS.

RESULTS AND DISCUSSION

Socio-economic status of poultry farmers : It is clear from Table 1 that the majority (72%) of responders were young people between the ages of 21 and 40. More than half of the respondents (53%) were literate, whereas 47 per cent were not. Male poultry farmers made up a bigger percentage of the industry than female farmers. One-half of the respondents had favourable media exposure, whereas the other half did not. The information in the same table shows that 51 per cent of the respondents had a stable financial situation. More than half of the farmers (55%) attended training sessions on best techniques for raising poultry, and 57 per cent had strong relationships with extension agents.

Most of them worked with poultry and resided in rural areas; the present findings are also supported by *Alam et al. (2014)*, *Obayelu et al. (2007)* and *Suresh et al. (2015)*. According to *Suleiman et al. (2018)* most respondents (71.3%) were men, 58.7 per cent were married, 47.5 per cent were between the ages of 31 and 40, and 98 per cent had some type of education. With a mean age of 35 years, the majority of respondents to the *Jacob et al. (2018)* study was still in their prime working years (between 21 and 30 years). Less than half (45.8%) of the respondents had formal education, with a mean of 6 years of schooling.

Knowledge level of poultry farmers : The Table 2 clearly indicates that the about half of respondents (54%) had poor knowledge level from total score. The data presented in same table also indicate that 28 per cent, 18 per cent poultry farmers had satisfactory and good knowledge level respectively.

Table 1. Personal and socio- economic features of poultry farmers (N=100)

Variables	Status	No.	%
Age	Young	72	72
	Old	28	28
Education	Literate	53	53
	Ill-literate	47	47
Sex	Male	64	64
	female	36	36
Mass Media Exposure	Good	50	50
	Poor	50	50
Training	Yes	55	55
	No	45	45
Extension Contact	Good	57	57
	Poor	43	43
Financial status	Good	51	51
	Poor	49	49

Table 2. Total knowledge score of poultry farmers (N=100)

Knowledge score	No.	%
Poor knowledge (10-20)	54	54.00
Satisfactory knowledge (21-31)	28	28.00
Good knowledge (32-42)	18	18.00

In their work, *Bhuiyan et al. (2013)* also noted results of this kind. According to *Jat and Yadav (2016)* medium knowledge of recommended poultry farming practices was held by 64.62 per cent of big poultry farmers, who were registered, 18.46 percent and 16.92 per cent by unregistered big poultry farmers, and 72.73 per cent, 9.09 per cent, and 18.18 per cent by unregistered big poultry farmers. According to *Raju et al. (2007)*, the majority of layer and total farmers had good understanding of poultry production, whereas most broiler farmers had medium expertise. According to their mean score values, *Jacob et al. (2018)* found that farmers' knowledge level was high for de-breaking, vaccination, de-worming, feeding and feed formulation, watering, transportation, record keeping, finance management, and medication, but low for culling, waste disposal, egg picking, packaging and marketing, and bio-security principles. Geographical diversity, traditional sources, and ignorance are all causes of this knowledge gap.

It is revealed from figure 1, 2, 3 that majority of farmers had poor knowledge about layer farming (71%) but satisfactory knowledge about features of good layer (59%) and symptoms of ailing poultry bird (58%). About 16.33 per cent of farmers were found to have high level of knowledge regarding layer farming, good layer feature and ailing poultry symptoms.

Eltayb et al. (2012) reported a similar outcome in their trials. *Paul and Sharma (2005)* discovered that poultry farmers had limited knowledge of the ideal weight of day-old chicks, when to remove the chick guards, how much moisture should be kept in the litter, how high above the litter a thermometer should be fixed on a wall, how much protein should be in poultry feed, where to place the chick drinkers, how to administer the fowl-pox vaccine, and other important topics. According to *Amudha and Veerabhadraiah (2000)*, Most of the women were found to have correct and moderate knowledge of basic chicken husbandry operations. It was determined that they lacked appropriate knowledge about vaccination regimens, deworming times, and disease control and control measures.

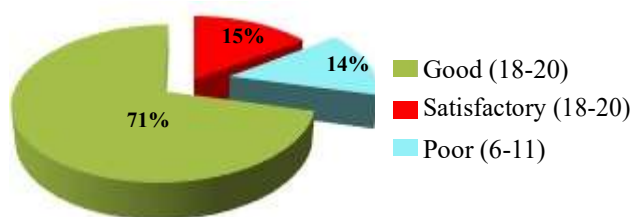


Fig. 1. Knowledge about layer farming

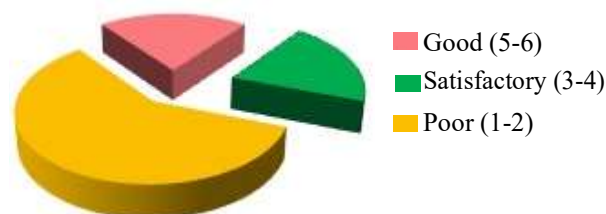


Fig. 2. Knowledge about good farming

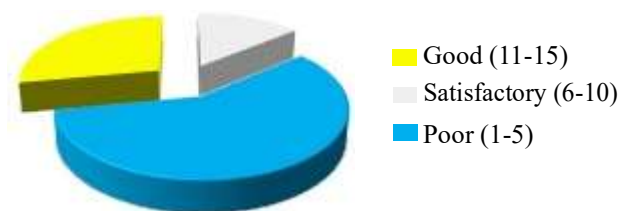


Fig. 3. Knowledge about symptoms of ailing poultry bird

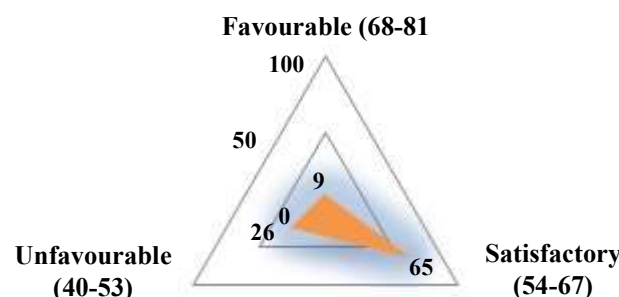


Fig. 4. Attitude towards poultry farming

Attitude of farmer towards poultry farming : According to statistics in Figure 4, just 9% of poultry farmers had a positive attitude toward raising poultry, 26% of poultry farmers had a negative attitude, and 65% of farmers had a satisfactory attitude toward poultry farmers. The majority of small farmers (74%) had a positive (favorable + satisfactory) attitude toward poultry farmers; it may be inferred from the aforementioned rationale. Similar results support the findings of *Patel et al. (2013)*.

Effect of independent attributes on knowledge and attitude : It is evident from Table 3 that there is significant positive relation between age, education, mass media exposure, training, extension contact, financial status and the knowledge of the poultry farmers regarding

Table 3. Relationship between knowledge and attitude of poultry farmers towards poultry enterprise and socioeconomic characteristics of poultry keeper

Demographic characteristics		Mean score of knowledge [MS±SD]	Total Knowledge p-value	Mean score of attitude [MS±SD]	Total Attitude p-value
Age	Young	24.54±7.61	<0.01**	58.94±7.46	0.022*
	Old	17.21±3.70		54.71±9.75	
Education	Literate	24.66±7.96	<0.01**	56.77±7.96	0.011*
	Illiterate	20.04±6.15		58.87±8.69	
Sex	Male	23.03±8.33	0.338	57.57±8.27	0.032*
	female	21.53±5.71		58.08±8.56	
Mass media exposure	Good	24.80±8.12	<0.01**	58.18±8.47	0.617
	Poor	20.18±6.07		57.34±8.26	
Training	Yes	25.00±8.20	<0.01**	57.91±7.37	0.844
	No	19.42±5.14		57.57±9.47	
Extension contact	Good	24.03±7.35	0.017*	58.14±7.84	0.602
	Poor	20.44±7.27		57.25±9.02	
Financial status	Good	24.47±8.52	<0.01**	58.45±8.24	0.014*
	Poor	20.43±5.64		57.04±8.46	

*($P \leq 0.05$)-Significant **($P \leq 0.01$)-Highly Significant

poultry enterprise. It denotes that the farmers were young, educated, financially secure, well-connected to extension agents, and well-versed in matters pertaining to poultry farming. A significant relation was observed between age, education, financial statuses, sex and attitude of the poultry farmers regarding poultry enterprise. It indicates that the farmers were male, young, educated, wealthy, and had a positive attitude toward raising poultry. Findings are in accordance with the findings of the *Thongpalad et al. (2019)*.

Self-observed report of poultry practices : Haryana is a poultry-industry-self-sufficient state. It was determined that Jind district was more suited for this enterprise than Hisar. Even though the farmers in both areas were mostly organised, they are still a long way from dominating this market. Most of the time, compliance with all biosecurity controls was absent. Farmers expressed a greater interest in raising broilers. Vaccine availability and disposal facilities were at the proper level, albeit there was little awareness of marketing practices and tactics.

Most persons engaged in integrated poultry farming. It was found that the primary factor affecting this sector was seasonal volatility. In Haryana, where most people readily accept eggs but fewer people do so with chicken, regional and cultural norms may also play a role. This should raise concerns for this business. Generally, farmers can succeed in this industry provided they operate with sound expertise, dedication, and government backing.

CONCLUSION

Findings help to conclude that majority of farmers were young age group and belonged to male sex, half of the respondents were literate, half of respondents were having good mass media exposure and half of them were not attended of any training of poultry business, about half of respondents were having good extension contact and financial status. Most of them were living in rural areas and engaged in poultry farming, majority of the respondents were running their farm operation with poor poultry infrastructure facilities. More than half of the respondents belonged to medium to high level of socio- economic status.

The study further revealed that majority of the poultry farmers was having poor to satisfactory knowledge about poultry enterprise. However, more than half (65%) of the poultry farmers had satisfactory attitude towards poultry farming. A highly significant association was found between age, education, mass media exposure, training and financial status with total knowledge score, whereas, only one variable i.e. sex was found non-significantly associated with knowledge of poultry keeper towards poultry enterprise. In case of attitude of poultry farming study highlighted that positive significant relation was found between age, education, financial statuses and sex towards attitude of poultry keepers. While, non-significant association was found between mass media exposure, training, extension contact towards attitude poultry farmers.

CONFLICT OF INTEREST:

The authors have no conflicts of interest.

REFERENCES

- Alam, M.; Sultana, S.; Hassan, M. M.; Hasanuzzaman, M. and Faruk, M.S.A. (2014). Socio-economic status of the farmers and economic analysis of poultry farming at Gazipur district in Bangladesh. *Intl. J. Sci. Nat.*, **4** (2): 8-12.
- Amudha, S. and Veerabhadraiah, V. (2000). Knowledge status of farm women in poultry farming. *Curr. Agri. Res. J.*, **29** (11/12): 189-190.
- Anonymous (2019-20). Basic Animal Husbandry Statistics Department of Animal Husbandry, Dairying and Fisheries. Ministry of Agriculture, Government of India. Available online at: <http://www.dahd.nic.in>.
- Bhuiyan, M. A. H.; Siwar, C. and Ismail, S. M. (2013). Tourism development in malaysia from the perspective of development plans. *Asian Soc. Sci.*, **9** (9) : 11–18.
- Eltayb, A.; Barakat, S.; Marrone, G.; Shaddad, S. and Stålsby Lundborg, C. (2012). Antibiotic use and resistance in animal farming: a quantitative and qualitative study on knowledge and practices among farmers in Khartoum, Sudan. *Zoonoses Public Health*, **59** (5): 330-338.
- Goswami, A.; Ghosh, R. K. and Biswas, S. (2012). Development of Cognitive Learning Scale to Test the Knowledge of Poultry Farmers. *Intl. J. Bio-reso. and Stress Mngt. (IJBSM)* **3**(3): 358-361.
- Jacob, T. H.; Ibrahim, T, S.; Yakubu, M. and Philip, F. (2018). Knowledge level and poultry farmers' perception on poultry management practices in Niger State, *Nigerian J. Agril. Ext.*, **19** (1) : March 2018
- Jat, S.M. and Yadav, J.P. (2016). Knowledge level of Indian Res. J. Ext. Edu. **23** (3), July-September, 2023
- poultry farmers about recommended poultry farming practices. *Indian J. Ext. Edu.*, **12** (1): 51-54.
- Obayelu, A.E. (2007). Socio-economic analysis of the impacts of avian influenza epidemic on households' poultry consumption and poultry industry in Nigeria: empirical investigation of Kwara State. *Livest. Res. Rural. Dev.*, **19** (1): 4.
- Panda, N. (2016). Back yard poultry- A viable option for poverty alleviation. *Root and tuber crops based integrated farming system: A way forward to address climate change and livelihood improvement*. 133.
- Patel, T.R.; Patel, J.K.; Chaudhary, K. and Patel, J. (2013). Correlates of attitude towards poultry farmers about poultry technology. *Gujrat J. Ext. Edu.*, **24**: 45-47.
- Paul, N. and Sharma, V.P. (2005). Knowledge of poultry farming practices among poultry farmers of Jammu. *Indian J. Ext. Edu.*, **5** (2&3): 67-71.
- Paul, N.; Slathia, P.S.; Punjabi, N.K. and Sharma, V. P. (2011). Attitude of the farmers towards poultry enterprise in Jammu. *Rajasthan J. Ext. Edu.*, **19**: 38-43.
- Raju, D. T.; Rao, B. S. and Gupta, B.R. (2007). Knowledge level of commercial poultry farmers. *Indian J. Anim. Res.*, **41**(1): 51-54.
- Suleiman, R.; Mahmud, A. M.; Oladimeji, Y. U.; Olanrewaju, T. O. and Ojeleye, O. A. (2018). Effects of socio-economic characteristics on the profitability of poultry production among poultry farmers in Kaduna State. *J. Agric. Ext.*, **22** (1): 185-195.
- Suresh, D.K.; Nanjappa, D.; Yashashwini, M.A. and Gopala, Y. M. (2015). Impact of poultry farming on socio-economic status of farmers in Mandya district of Karnataka. *Trends in Biosci.*, **8** (17): 4597-4602.
- Thongpalad, K.; Kuwornu, J. K.; Datta, A.; Chulakasian, S. and Anal, A.K. (2019). On-farm food safety knowledge, attitudes, and self-reported practices of layer hen farmers. *British Food J.*, **8**(121): 1912-1925.

