



Analysis of the training needs, preference and constraints of marginal and small poultry farmers of Bareilly district

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ABSTRACT : A study was conducted to assess the training needs, preference and constraints of small and marginal farmers of Bareilly District of Uttar Pradesh. Fifty poultry farmers were selected using snowball sampling technique from the Bhojipura Block of Bareilly district. They were interviewed with structured schedule prepared beforehand. Data on training needs were analysed based on Training Need Index of each major and minor farm operation. Training preference were analysed using percentage score and the constraints using mean score. Out of the major operations studied farmers preferred housing as the one in which they require training needs. Knowledge and financial needs were also very much relevant to the farmers. Farmers preferred on farm neighbourhood training, in forenoon and in the months between March and May. Farm visit is the most desired method of training as perceived by the farmers. Feeding and breeding problems were the chief constraints perceived by the farmers.

KEY WORDS : Training Needs, Preference, Constraints, Poultry farmers

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INTRODUCTION

In the current agricultural scenario of India, poultry is one of the fastest growing sectors. While the production of agricultural crops has been rising at the rate of 1.5 per cent to 2 per cent per annum, the Indian poultry industry (egg and broiler) has been rising at the rate of 8-10 per cent per annum (Mehta and Nambiar, 2002). This sector has been able to provide employment to about 16 million people in India (FAO, 2002). Globally India holds 3.6 per cent of the egg production in the world and is the fifth largest egg producer in the world. She is also the eighteenth largest broiler producer in the world. Cost wise also, the country has the lowest cost of egg production in the world with 2.55 US cents per egg.

Despite these shining facts, the consumption of egg and chicken in the rural India is very low. It stands at 7.7 eggs and 0.24 kg, respectively per annum (FAO, 2002) against the ICMR nutritional recommendations of 180 eggs and 1 kg meat. A significant cause of this glaring inequality is that 70 per cent of the total output of the Indian poultry industry is with the large scale private producers whereas only 30 per cent of the production is with the rural unorganised farmers. Data revealed that the growth of Indian backyard poultry sector is at a staggering rate of 16 per cent in the last 30 years whereas in countries like China the rural production contribute to 76 per cent of the total production. In order to enhance total production and also to fill protein deficiency of the rural people, the rural poultry sector needs to be strengthened.

One of the chief constraints that impede the growth of Indian rural poultry sector is the lack of scientific awareness in poultry husbandry practices. The Indian poultry sector is still in the grip of unscientific rearing practices. Proper training can enlighten the rural farmers with scientific poultry rearing practices and management techniques which in turn empower their contribution to the Indian poultry industry. This will enable them to make significant contribution to alleviate rural

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malnutrition. This will also augment to their entrepreneur skills which can cause a reduction in rural unemployment and poverty rate. With these backgrounds, the objectives of the current study was initiated, to analyse the training needs, training preferences and constraints felt in rearing poultry in the rural areas.

MATERIAL AND METHODS

The study was conducted in Bareilly district of Uttar Pradesh. Fifty marginal and small scale poultry farmers from the district were selected purposively for the study after employing snow ball sampling technique from the Bhojipura block of Bareilly district.

Evaluation of training needs :

Based on review of literature and standard managerial practices of poultry, a list of 4 major technical training domains (major farm operations) were identified, each consisting of selected minor farm operations. The minor farm operations were relevancy rated by 15 experts on a three point continuum *viz.*, most relevant, relevant and least relevant, the score being assigned as three, two and one, respectively. The item which received percentage scores below the mean of percentage scores were discarded after relevancy rating. From the data collected the training needs were analysed as followed :

Training need index :

For minor operation/item $N \frac{\text{Total training need for the item}}{\text{Maximum possible score for that item}} \uparrow 100$

For each major operation $N \frac{\text{Sum of the training need score for all item in that operation}}{\text{Sum of maximum possible scores of all items in that operation}} \uparrow 100$

Training preference :

A schedule to measure training preference was prepared based on discussion with poultry farmers, referring relevant reviews, by the observations made by the researchers and discussion with experts. Ranking were done for each item in the training preference based on percentage scores which was calculated as below :

Percentage score $N \frac{\text{Scores obtained for each item}}{\text{Maximum possible score for that item}} \uparrow 100$

Constraints perceived by the poultry farmers :

A structured schedule was developed to measure the constraints of the poultry farmers. After thorough reviewing of relevant literature and discussion with poultry farmers from non sample areas a preliminary schedule was prepared. This schedule was further rated for relevancy by 15 experts (Veterinary Doctors). Based on the suggestion the schedule was further modified. This structured schedule was employed to measure the constraints. Ranking of the constraints was

based on mean scores. Mean score for each problem was calculated as given below :

Mean score for a constraint $N \frac{\text{Sum of score of each constraint}}{\text{Total number of respondents}}$

The data were collected through direct face to face interview of the respondents. The data collected from sample respondents was coded, tabulated, analyzed and presented in the form of tables in the results.

RESULTS AND DISCUSSION

For each major farm operations training index (TNI) was analysed and based of TNI the major farm operations were ranked as shown in Table 1.

Table 1 : Training need index and ranks of major farm operations

Major farm operations	TNI	RANK
Housing	75.97	1
Feeding	64.72	4
Health care	58.38	5
Breeding	50.50	6

From the table it can be inferred that farmers perceived very high need of training in housing followed by breeding needs.

The perceived training needs in each minor farm operations, within the major farm operations were also analysed and given in the Table 2.

Table 2 : Training need index and ranks of each minor farm operation

Items	TNI	Rank
Housing :		
Construction of low cost sheds	73.16	1
Proper design of poultry sheds	65.27	2
Feeding :		
Balanced feeding	68.12	3
Feeding regime of poultries of different age groups	70.12	2
Compounding of feeds using locally available ingredients	81.12	1
Prebiotics, probiotic and other growth augmenters	54.55	5
Identification of nutritional disorders	62.13	4
Health care :		
Deworming	58.23	3
Vaccination	62.11	2
Control of ecto-parasites	55.44	4
Symptoms of common diseases	67.23	1
Breeding :		
Selection of eggs for hatching	58.75	4
Candling of eggs	47.88	5
Care and management of hatching eggs	59.55	2
Selection of suitable breeds	62.11	1
Isolation of breeding stocks	58.99	3

Training preferences :

The training preference of the respondents like preferred type and duration of training, method of preferred learning, most desired time and venue of training, preferred season (month) of Training and intervals between training desired was assessed and depicted in the Table 3.

Table 3 : Training preference of the respondents

Sr. No.	Type of training preferred	% score	Rank
1.	Institutional training	66	2
2.	On Farm Training (Neighbourhood Farms)	74	1
3.	Distance learning (TV, Radio, Farm publications learning)	57	3
Duration of training			
1.	One Day	31.28	4
2.	2-3 days	59.45	2
3.	1 week	66.08	1
4.	More than 1 week	48.00	3
Method of learning preferred			
1.	Lecture	37.11	6
2.	Group discussion	44.23	5
3.	Farm visit	75.56	1
4.	Study tour	67.01	2
5.	Film shows	56.85	4
6.	Demonstration	61.01	3
Preferred time for training			
1.	Forenoon	59.36	1
2.	Afternoon	48.33	2
3.	Any time	33.33	3
Venue of training			
1.	CARI	68.01	2
2.	KVK	65.75	3
3.	Veterinary hospital	62.68	4
4.	Neighbourhood houses	74.22	1
5.	Other extension training centres	55.01	5
Preferred season for training			
1.	Dec. - Feb.	36.22	3
2.	Mar. - May	66.26	1
3.	June - Sep.	26.36	4
4.	Oct. - Nov.	42.36	2
Interval between training			
1.	3 months	69.26	1
2.	6 months	40.11	2
3.	1 year	11.21	3

Constraints perceived by the respondents :

Constraints perceived by the respondents were also analysed and was expressed in mean score in Table 4.

Table 4 : Constraints perceived by the respondents

Sr. No	Constraint	Mean score
Breeding :		
	Low hatchability of eggs in summer	2.01
	Inability to select of eggs for hatching	2.44
	Availability of good breeds of layer	2.22
Feeding and management :		
	Inadequate knowledge of balanced feeding and malnutrition	2.12
	Lack of availability of cheap quality feeds	2.55
	High cost of feeds	2.48
	Problems of predators	1.95
	Lack of technical guidance in compounding feeds	2.22
	Lack of knowledge in management of starters, growers and layers	2.10
Housing :		
	Inadequate knowledge of scientific cage construction	2.11
	Lack of land	1.31
	Lack of cheap construction materials	1.57
	Lack of funds	2.01
Health care :		
	Non-availability of veterinary services	1.59
	Losses due to bacterial and viral diseases	1.74
	Problems of ecto-parasites	1.89
	Inadequate knowledge of vaccination schedule	1.95
	Inefficiency of the vaccines in prevention (due to lack of storage)	1.98
Marketing and finance :		
	Lack of markets to sell products	2.22
	Price fluctuations	2.15
	Lack of credit supply	2.08
	High interest rate of loan	1.77
	Problems of spoilage on storing	1.89
	Competition from organised private poultry firms	1.57

Assessment of training needs and preference is very important in the context of animal husbandry as it will enable in the formulation of effective training programme. One of the basic principles in programme planning is that all programmes should start on the perceived need of the trainers, since here the perceived need are analysed ,this can act as a foothold from where the trainer can take the farmers to their unfelt training needs. Regarding training needs housing occupied the primary position. This was followed by feeding and health care needs. Similar results were observed by Al-Shadiaheh (2007), Adebayo

and Adelo (2005). Regarding training preference on farm training was the preferred type of training. Farm visit was the most preferred method of training followed by the study tour. With respect to duration one week duration is the most opted one. Farmers preferred to have training at 3 months interval and also during forenoon. Regarding venue neighbourhood farms are the most preferred followed by CARI and KVK. March to May is the preferred season. Similar results have been observed by Durgarani (2006), Alders *et al.* (2007) for preferred season and durations. The preference for March to May be due to conducive temperature during this season in Bareilly.

Perceived constraints help in exact identification of problems. This identification of problem helps the trainer in the assessment of exact situation and help to understand both the felt and unfelt need of the respondents. Constraint analysis help in identification of problems and help to identify what constraints could be solved by training and what could not be solved by training. It also helps to identify the problems like lacunae of resources and market constraints where administrative interventions are required. Among Constraints high feed cost obtained the maximum scores is for high feed cost. This may be true because in any animal husbandry venture approximately seventy per cent costs are spent on feeds. Similar work on the present investigation was also carried out by Chander *et al.* (2006); Chander (2009); Heller (2006) and Lampkin (1997) and Subrahmanyeswari and Mahesh (2008).

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