

ACQUISITION OF SKILLS AND KNOWLEDGE THROUGH POULTRY CAPACITY BUILDING PROGRAMS

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Abstract– KVK's serve as a source of information for farmers, farm women and rural youth through skill-based training programs for entrepreneurship development. The present work has been designed to assess the acquisition of skills and knowledge through poultry capacity building programs. Using a random sampling method, 60 poultry entrepreneurs were selected as respondents in the study. Data were collected from the respondents by asking specific questions. Research has shown that skills-based training organized by KVK has had a positive impact on the knowledge gain in various domains of poultry. The study also revealed that there was significant skill acquisition in vaccination methods (70.00%), feeding practices (67%), brooding (65%), and deep litter raising methods (40%) and debeaking (38%) after exposure to training programs. It was also observed that majorly of the entrepreneurs has high production efficiency. It was also revealed by the study that the poultry business has had a positive and tangible impact on the lives of entrepreneurs. Skills development training has a positive impact on the effective management of poultry which reduces mortality and improves the income of poultry entrepreneurs.

INTRODUCTION

Poultry is one of the fastest growing sectors of the Indian agricultural sector. Livestock and Poultry provide a major contribution to the Indian Economy (Nath *et al.*, 2012). Poultry production in India emerges as a poultry industry from backyard poultry production system. The Indian Council of Agriculture Research (ICAR) introduced an advanced project by establishing Krishi Vigyan Kendras (KVK's) in the country for imparting vocational training to farmers, farm women, rural youth and its field level extension functionaries during fifth five Year plan (Chawla *et al.*, 2014). KVK's are acting as an information hub to the farmers, farm women and rural youth through vocational trainings (Jana, 2015). The two main components of these training courses are the "skill training" and "need based training". It provides initial training and continuing professional development to each individual and also helps to develop knowledge, skill and attitude about a particular form of employment among its trainees (Harvey, 2016). These vocational training courses

help in income generation and establishing an enterprise to its trainees. It also provides flexible working hours according to the needs of young farmers, which helps to up-scaling the technical skills of the rural youth of the country. Youth plays vital role in meaningfully transforming Agriculture in India

Realizing the potential offered by poultry farming Krishi Vigyan Kendra, Bathinda initiated skill development training programmes on poultry farming especially focused on backyard poultry production in rural areas of Bathinda district of Punjab. Poultry production improves the socio economic status of rural farmers by adoption of this subsidiary occupation at village level. These need based skill development trainings have played a significant role in popularizing backyard poultry among the rural youth, ex-service men, laborers, farmers and farm women. However, rare work has been carried out to study the impact of these skill development training programmes. Therefore, the present work has been designed to study the acquisition of skills and knowledge through poultry capacity building programs.

MATERIALS AND METHODS

The Krishi Vigyan Kendra, Bathinda has organized skill based as well as vocational training programs of 10 days duration for farmers. During the last three years, KVK Bathinda has organized 6 skill-based vocational training programs on poultry farming. Total 240 farmers, farm women and rural youths were trained on poultry farming, of which 105 trainees were started independent poultry enterprise. The training recipients those have established fully functional poultry unit were considered for the study. By using a random sampling method, 60 poultry entrepreneurs were selected as respondents for the study. The data were collected personally from these 60 entrepreneurs through a previously developed interview schedule and questionnaire basis. Pre-test and post-test evaluation of participants was carried out during the training program. This helps to know the extent of knowledge gain and skill acquisition by the participants during the training program. After pre-testing of schedule, data was collected from sampled respondents by interviewing them personally.

RESULTS AND DISCUSSION

Dimensions of Poultry Units

In this study data presented in Table 1 shows type of

Table 1. Dimensions of Poultry Units Established by Entrepreneurs

Category	<i>f</i> (N=60)	%
Type of breed reared		
Non-descript (Local)	9	15
Broiler	27	45
Layers	24	40
The capacity of unit (No of birds/batch)		
Up to 500	18	30
501 to 1000	24	40
1001 to 2000	15	25
>2000	3	5
Source of feed		
Homemade (Maize + Soya/fish meat+DCP)	24	40
Venky's	16	27
Godrej	20	33
Source of vaccination		
Medical store	32	53
Veterinary dispensary	16	27
Contractors	12	20

breed reared, capacity of unit (No of birds/batch), source of feed and Source of vaccination in the poultry units established by trainees. Majority (45 %) of the entrepreneurs preferred to rear broiler breed which was followed by the entrepreneurs engaged in only egg production (40%), while remaining 7 percent of respondents were rearing local or desi breeds. The majority (40.00%) of entrepreneurs were reported that they have poultry units of 501 to 1000 birds/batch capacity and 30 per cent were possessed units up to 500 birds/batch capacities. Most of the (40 %) poultry entrepreneurs used homemade (Maize + Soya/fish meat+DCP) feed and 33 per cent were used godrej feed for body weight gain and remaining 27 percent were using Venky/s feed. The majority (53%) of poultry entrepreneurs purchased vaccine from a medical store and 27 per cent of respondents called veterinary practitioners from government dispensary to make vaccination of chicks.

Knowledge Gain

The data regarding knowledge gain of respondents revealed that before training 32%, 21%, 12% and 5% farmers had knowledge about improved poultry breeds, feeding practices, vaccination and disinfection /sterilization, respectively (Table 2). However, 100% farmers possessed knowledge about improved poultry breeds after training which indicated that skill development trainings were effective in improving their knowledge. Data in Table 3 indicated that majority of entrepreneurs have gained knowledge about vaccination. Further, 47 per cent of the entrepreneurs have gained knowledge about Improved Poultry Breeds, followed by the knowledge gain in Disinfection / Sterilization (55 %). Minimum knowledge gain was seen in the domain of feeding practices. The knowledge level of beneficiaries on backyard poultry production technology was higher for the least cost method of egg storage, deworming, feeding technique and hatching (Mathialagan, 2014). Ashraf *et al.* (2012) and Singh and Jadoun (2013) also reported significant improvement in the knowledge level of the participants after the training.

Skill Acquisition

Data regarding impact of training on acquisition of skill is presented Table 3 revealed that higher percentage of entrepreneurs had acquired skill regarding vaccination methods (70.00%) feeding practices (67 %), brooding (65%), deep litter raising

Table 2. Distribution of poultry entrepreneurs according to their knowledge gain

Knowledge domain	Before training (N=60)		After training (N=60)		Gain in knowledge (N=60)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Improved Poultry Breeds	32	53	60	100	28	47
Vaccination	12	20	48	80	36	60
Feeding Practices	21	35	42	70	21	35
Disinfection /Sterilization	5	8	42	63	37	55

Table 3. Distribution of poultry entrepreneurs according to their skill acquisition

Type of skill	Before training (N=60)		After training (N=60)		Skill Acquisition (N=60)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Debeaking	3	5	26	43	23	38
Feeding practices	18	30	58	97	40	67
Vaccination methods	8	13	50	83	42	70
Brooding	7	12	46	77	39	65
Deep litter raising methods	4	7	28	47	24	40

Table 4. Distribution of poultry entrepreneurs according to their change in management tasks

Management task	Before training (N=60)		After training (N=60)		Change in the management task (N=60)	
	Frequency	percentage	Frequency	percentage	Frequency	Percentage
Brooding (up to 4 weeks)	6	10	50	83	44	73
Vaccination on time	3	5	48	80	45	75
Watering and feeding through appropriate vessels	4	7	53	88	49	81
Litter management	2	3	28	47	26	44

method (40 %) and debeaking (38%) after exposure to skill-based training programs organized by the KVK. Before undergone training, very few respondents have possessed the skill of debeaking, feeding, vaccinations, brooding and raising methods. It could be inferred that training programs organized by KVK Bathinda have made a positive impact on the acquisition of poultry entrepreneurial skills by the participants.

Management Tasks

Table 4 indicates the change in different poultry management task performed by entrepreneurs while running small- scale poultry. It was found that training programs improved the management tasks of the participants. Majority 81 % gave watering and feeding by using appropriate vessels, 75 % done vaccination on time, 73 per cent had regularly performed brooding up to 4 weeks and 44 % started litter management practices after going through the training program. These findings are in line with the results reported by Mathialagan (2014).

Production Efficiency

The production efficiency of poultry units established by entrepreneurs is presented in Figure 1. The production efficiency is the ratio of total per cent of birds to the per cent of mortality in the birds. It is observed that the majority of entrepreneurs (60%) were reported high production efficiency and 35 per cent belonged to medium category. Very important thing only 5 % of the entrepreneurs belonged to the low category of production efficiency. It could be said that the production efficiency of poultry entrepreneurs was improved due to skill-based training programs. Similar to the present finding Ram *et al.* (2017) also assessed the importance of training and concluded that the farmer needs training. Chatterjee and Rajkumar (2015) highlight the importance of farmers training and state that the success of poultry production depends primarily on the locally adapted bird employed, favorable environment and availability of good feed.

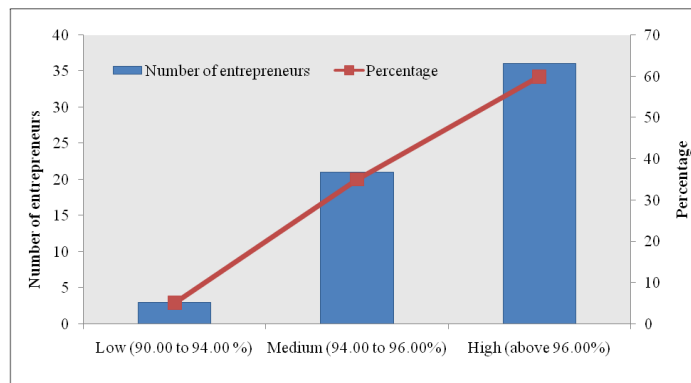


Fig. 1. Distribution of poultry entrepreneurs according to their production efficiency

CONCLUSION

The study leads to the conclusion that the skills-based training organized by KVK has had a significant impact on knowledge gain and skill acquisition about poultry breeds, debeaking, feeding, vaccinations, rearing and breeding techniques. Most entrepreneurs have reported high production efficiency. There was a positive impact of skill-based training programs on the performance of poultry entrepreneurs. The poultry business has made a positive and tangible impact on the lives of entrepreneurs. Skill development trainings have a good impact on the practical handling of poultry birds which decreases the mortality and improves the net income of poultry entrepreneurs.

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