

A Study on Constraints of Broiler Farming Entrepreneurship in Mansa District of Punjab

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ABSTRACT

A survey work was designed to study the present management status, impact of farm sizes on adoptability of various recommended practices and major constraints faced by broiler farmers in adoption of improved broiler farming technologies in Mansa districts of Punjab. To undertake this survey work, total 25 broiler farmers were selected for the collection of data. Analysis of data revealed that 40.00 per cent farmers complained about non-availability of quality day old chicks. Overall 60.00 per cent farmers expressed their views regarding the high cost and poor quality of inputs including costs of quality day old chicks, constructional material, feed, medicines, equipments and machineries. Total 80.00 per cent farmers also complained about non-availability of loan including rigid procedure for supply of loans. Total 24.00 per cent farmers also complained about high cost of electricity. Total 48.00 per cent farmers faced the problem of oligopsony marketing structure for purchase of quality day old chicks, feed, medicines and sale of broilers including high cost of transportation whereas total 72.00 per cent farmers also showed about their lack of knowledge of scientific broiler farming including construction of shed, winter and summer management, feeding and watering. Total 44.00 per cent farmers criticized the non-remunerative prices of broilers, 24.00 farmers faced the problem of non-availability and higher costs of labours whereas 64.00 farmers also faced the problem regarding incidence of diseases including lack of diseases investigation and monitoring facilities at proper time.

Keywords

Broiler farming, Adoption, Feeding, Production, Management, Constraint.

1. INTRODUCTION

Punjab is predominantly dependent on agricultural economy and the size of average land holding is very small. Moreover, the agricultural production has reached its plateau and there is not much scope of further improvement unless we increase the soil fertility and water resources that are costly inputs. At present, income from arable farming alone is hardly efficient to maintain the livelihood of farmers and their families. Therefore, adoption of mixed farming is the solution for increasing agricultural production and raising the economic status of the farmers. Mixed farming ensures judicious utilization of resources for agriculture and adopted suitable animal science enterprise viz. Layer farming, broiler farming, dairy farming, pig farming, rabbit farming, sheep and goat farming, Kennel/dog farming etc.

The main aim of animal science enterprise with crop farming is to improve the employment opportunities and income potential. The major thrust is to increase quality milk and milk products, meat, wool, pups production with crop production through transfer of improved animal husbandry technologies.

The results of existed animal science enterprise with crop production inferred that mixed farming system increase productivity and enhance the per capita income and provide employment throughout the year for the small and medium farmers in particular and large farmer in general. Therefore, we can say animal science enterprise with arable farming has immense potential to address the burning problems like unemployment, nutritional security and socio-economic upliftment of the people.

However, setting up of these enterprises and securing loans for them is not a planned option. The prospective borrowers set up these enterprises as a means of their livelihood, as they do not have the required background or training. Even, the educated youths, rural and/or semi urban dwellers do not possess the adequate knowledge of preparing a viable plan/project for these enterprises. Yet, bankers extend financial assistance to these untrained persons under compulsion, so as to meet the financial targets. The entire process, though not very scientific, has come to stay as proposals carry some short comings, which include:

- Higher investment in fixed assets;
- A little or no training;
- Higher borrowings;
- Non-profitability of enterprises and
- No background or forward linkage.

These lacunae lead to high rate of failures. In view of these facts and providing avenues for self employment and income generation, there is urgent need to sensitize the farmers/farm women, educated youths, rural and/or semi-urban dwellers to establish scientific broiler farming units as a subsidiary occupation amongst the animal science enterprises. In Punjab, broiler farming has emerged as the fastest growing segment of agriculture registering a phenomenal growth in production.

Hardly any survey work has been carried out to study constraints of broiler farming in Punjab. Accordingly, the identification/recognition of non-adoption of recommended technologies is essential to formulate adequate measures to circumvent the crisis befalling the broiler industry. Therefore, the present survey work has been designed to study the present management status in adoption of scientific methods of broiler farming in Punjab. Keeping these points in view, the present work will be undertaken with following specific objectives.

1. To study the existing management practices adopted by the broiler farmers.
2. To study major constraints faced by broiler farmers in adoption of dairy technologies.

2. AREA OF THE STUDY

To undertake this work all blocks of Mansa district was selected. Out of each block, two or three villages were selected where broiler farming was highly concentrated. In each block, 05 broiler farmers were selected at random. Accordingly, total 25 broiler farmers were selected for the collection of data by survey method as detail is given below in

Table-1: Selection of broiler farmers for collection of data in Mansa district of Punjab

Name of the District	Name of the Block	Name of the selected villages	Total no. of farmers selected
Mansa	Mansa	Khiala Kalan, Tamkot, Aliser	05
	Sardulgarh	Ahloopur, Fattamaluka	05
	Bhikhi	Kotra Kalan, Kishangarh Pharmahi	05
	Budhlahda	Boha, Baretta, Fafrebhaike	05
	Jhunir	Bajewala, Dasomdia	05
Total			25

3. COLLECTION OF DATA

By reviewing the literature and through discussions with university experts and extension personnel, a questionnaire was prepared. The responds of broiler farmers were collected on a two point response category viz. “agree” and “disagree”. The data collection commenced from the beginning of the July, 2014 and was carried through the end of December, 2014. The frequencies of each response/constraint were worked out and expressed in percentage.

4. IDENTIFICATION, DESCRIPTION AND ANALYSIS OF EXISTING DAIRY FARMING SYSTEMS

The data presented in table-2 shows that total number of poultry units is 90 in district Mansa. Out of these, two are layer units whereas 90 are broiler units. In addition of these, about 20 broiler units are under construction. There is no hatchery in District Mansa. Generally, the farmers purchased their day old chicks from Guargoan, Jind, Jalandhar, Hisar and, Malerkotla @ Rs. 22-28/ chick. They purchased the feed for broilers from Rajpura, Khanna, Dhuri, Lehragagga, Patiala, Jind, bathinda, Hisar, Dabawali @ Rs. 2700-2800/ quintal for starters and @ Rs. 2500-2600/ quintal for finishers.

A gap was observed in adoption of recommended practices regarding poor quality of day old chicks, balance feeding, deworming, and health care. Table-2 also reveals that farmers have lack of accurate knowledge to prepare domestic ration. It was also observed that broilers farmers do not prepare their own domestic feed. Farmers are also facing the difficulty in timely detection of diseases due to lack of knowledge and diseases diagnostic laboratories. Major reasons for low productivity are poor genetical potential of chicks, higher feed conversion ratio, poor management due to lack of knowledge of recommended broiler management practices and birds are

infected by numbers of diseases due to harsh climatic conditions.

Table-2: Identification, description and analysis of existing broiler farming systems

Sr. No.	Particulars	Existing situation
1.	Total poultry units	92
2.	Total layer units	02
3.	Total broiler units	90
4.	Broiler units started after obtaining the training from KVK, Mansa	60
5.	Total broiler units under construction	20
6.	No. of hatcheries in District Mansa	Nil
7.	Source of availability of day old chicks	Guargoan, Jind, Jalandhar, Hisar, malerkotla
8.	Existing rate of day old chicks	Generally @ Rs. 22-28/ chick
9.	Source of availability of broiler feed	Rajpura, Khanna, Dhuri, Lehragagga, Patiala, Jind, bathinda, Hisar, Dabawali
10.	Existing rate of broiler feed	Generally @ Rs. 2700-2800/ quintal for starters and @ Rs. 2500-2600/ quintal for finishers
11.	Preparation of balanced feed at domestic level	Lack of accurate knowledge to prepare domestic feed
12.	Use of vitamins, mineral mixtures, antibiotics, probiotics (growth promoters) for better productivity and health maintenance of the birds	Mainly use by medium and large broilers farmers
13.	Reasons for spread of various diseases	Winter/summer stress conditions and poor management
14.	Deworming	Lack of knowledge
15.	Correct practice of disposal of manure/ excreta produced	Proper FYM pits are not available. Generally sold to owners of Bricks Kiln or farmers as a manure

	waste	@ Rs. 100/ quintal
16.	Major reasons for low productivity	Poor genetical potential of chicks and poor management due to lack of knowledge of recommended broiler management practices
17.	Age at the time of sale of broilers	35-44 days
18.	Weight at the time of sale of broilers	1.5-3.0 kg
19.	FCR at the time of sale of broilers	1.5:01 to 1.8:01 (Feed in kg : weight in kg)
20.	Sale rate of broilers	Generally sales @ Rs. 70-120/ kg live weight
21.	Mortality	04-08%

5. GENERAL EXISTED MANAGEMENT PRACTICES ADOPTED BY VARIOUS CATEGORIES OF BROILER FARMERS

Do Overall 60 per cent farmers acquired broiler entrepreneurial development training programme before or after starting the broiler farms whereas total 20 per cent farmers have taken loan from various financial institutions for establishment of broiler farms. The orientation of broiler sheds should be East to West lengthwise and 70.00%, broiler farmers established correct broiler houses according to their directions. All the farmers are adopting deep-litter system of housing. They are adopting all-in all-out system (single batch at a time). Only 4.0% farmers analysed their feed and or water sample from various resources. As per the recommendations, height of roofs of broiler house should be minimum 10 feet, whereas height of side walls of house should not be more than 2 feet and rest of the space should be covered with wire netting which offer less resistance to air movement, the farmers do not adopted these recommendations due to lack of accurate knowledge and higher initial costs. Most of the farmers know very well that sprinklers on roof help in reducing the temperature even upto 100°F during the hot and dry weather. Fogging is an effective method for reducing the temperature in the house especially when relative humidity is low. Shade is the simplest and relatively inexpensive tool for combating heat. Shade trees scattered around the sheds help to keep the sheds cool during the season but the adoption of these recommendations is also very rare. Only 16% farmers are adopting vaccination schedule in broilers to control diseases (Marek's at 1st day, RDV F1 at 5-7th day, IBD Vaccine at 14thday, RDV La Sota at 21st day and IBD Vaccine-Booster at 28th day of age). Most of the farmers are adopting the proper floor space/bird, feeder space/bird and waterer space/bird as per the recommendations (450 cm², 3 cm and 1.5 cm up to the age of 18 days and 1000 cm², 6-7 cm and 3 cm, respectively at the age from 19 days to 42 days). The broilers farmers don't know about the maximum levels of certain ingredients in a safe water supply for broilers (total

dissolved solids =1000ppm, total alkalinity = 400ppm, pH = 8.0, Nitrates = 45ppm, Sulphates =250ppm, Sodium Chloride-growers=500ppm). They used fresh water but don't aware about water temperature and feed consumption (water temperature should be 65°F to 70°F and generally at 70°F chickens will consume two litter of water for one kg of feed consumed). Most of the farmers having lack of accurate knowledge about proper ventilation, litter management, light management, feed management and water management.

Table 3: Constraints encountered by the broiler farmers in adoption of recommended technologies (in percent) Place Tables

Sr. No	Constraints	Existing situation
1.	Non-availability of quality day old chicks	40 (10)
2.	High cost and poor quality of inputs including costs of day old chicks, constructional material, feed, medicines, equipments, machineries etc.	60 (15)
3.	Non-availability of loan including rigid procedure for supply of loans	80 (20)
4.	High cost of electricity	24 (06)
5.	Oligopsony marketing structure for purchase of quality day old chicks, feed, medicines and sale of broilers including high cost of transportation	48 (12)
6.	Lack of knowledge of scientific broiler farming including construction of shed, winter and summer management, feeding and watering	72 (18)
7.	Incidence of diseases including lack of diseases investigation and monitoring facilities	64 (16)
8.	Non-remunerative prices of broilers	44 (11)
9.	Lack of availability and higher costs of labours	24 (06)

Figures in parenthesis indicate number of broiler farms

6. CONSTRAINTS ENCOUNTERED BY THE VARIOUS CATEGORIES OF BROILER FARMERS IN ADOPTION OF DAIRY TECHNOLOGIES

The broiler farmers were asked to express their responses on constraints faced by them in adoption of broiler farming technologies. Their responses on constraints are presented in Table-3.

The data presented in Table-3 show that 40.00 per cent farmers complained about non-availability of quality day old chicks. Overall 60.00 per cent farmers expressed their views regarding the high cost and poor quality of inputs including costs of quality day old chicks, constructional material, feed, medicines, equipments and machineries. Total 80.00 per cent farmers also complained about non-availability of loan including rigid procedure for supply of loans. Total 24.00 per

cent farmers also complained about high cost of electricity. Total 48.00 per cent farmers faced the problem of oligopsony marketing structure for purchase of quality day old chicks, feed, medicines and sale of broilers including high cost of transportation whereas total 72.00 per cent farmers also showed about their lack of knowledge of scientific broiler farming including construction of shed, winter and summer management, feeding and watering. Total 44.00 per cent farmers criticized the non-remunerative prices of broilers, 24.00 farmers faced the problem of non-availability and higher costs of labours whereas 64.00 farmers also faced the problem regarding incidence of diseases including lack of diseases investigation and monitoring facilities at proper time.

7. RESULTS AND DISCUSSION

An in-depth analysis of practices followed under feeding aspect revealed that all the respondents fed purchased unanalyzed rations. Use of minerals, vitamins, antibiotics, pro-biotics, enzymes etc. for broiler feeding on regular basis was not common practice. High cost and poor quality of inputs, oligopsony marketing structure, non-remunerative prices of broilers including high cost of transportation, lack of knowledge of scientific broiler farming, incidence of diseases including lack of diseases investigation and monitoring facilities, high cost of electricity, non-availability of loan including rigid procedure for supply of loans and higher costs of labours are the major constraints of broiler farming.

On the basis of findings it could be concluded that the respondents scored highest in response to lack of accurate knowledge of different recommended management practices, feeding and health aspect. Similar results were also reported by Balamurugan and Manoharan (2014), Shaikh and Zala (2011) and Varinder Pal Singh, et. al., (2010) who observed that maximum constraints were found in management, feeding and health care practices.

8. CONCLUSION

There was difference in adoption levels between different categories of respondents with regard to procurement of day old chicks, feeding and management practices of broiler rearing. The finding of the study revealed that non-availability of quality day old chicks, high cost of ration, rigid procedure for supply of loans, high cost and poor quality of construction materials, oligopsony marketing structure, incidence of diseases, lack of knowledge of scientific

housing/feeding/lighting including temperature maintenance were the main constraints expressed by broiler farmers. To increase the adoption of broiler technologies, emphasis should be given to overcome all these constraints.

9. SUGGESTIONS

For upliftment of broiler production and to sustain the present pace of growth, certain steps are required to be taken like licensing of hatcheries, so that desired pressure is maintained for production and supply of quality chicks to the producers. Strengthening and establishments of disease diagnostic and feed testing laboratories are immediately required. Producers have to incur heavy losses for want of immediate diagnosis of diseases. Some kind of legislation is also required so that feed manufactures are obliged to put proper label on feedbags with respect of composition. Timely information about out-break of diseases must be monitored and supplied to producers. The efforts may be made to remove intermediaries by creating cooperative societies both at the level of producers and consumers.

Moreover, to adopt broiler farming on commercial scale, the economic feasibility and up to date management knowledge is a pre-requisite. Therefore, apart from PAU/GADVASU/KVK's, other departments and financial agencies must provide practical training and guidance on scientific management of broilers and framed the different schemes for the benefit of users according to the continuous changing scenario of feed and meat prices.

10. REFERENCES

- [1] Balamurugan, V. and Manoharan, M. (2014). Cost and benefit of investment in integrated broiler farming - A case study. International journal of Current Research and Academic Review, Vol.2 (4) pp. 114-123.
- [2] Shaikh and Zala, Y.C.(2011). Production Performance and Economic Appraisal of Broiler Farms in Anand District of Gujarat , Agricultural Economics Research Review, Vol.23 pp 311-323.
- [3] Varinder Pal Singh, et. al., (2010). Broiler Production in Punjab - An Economic Analysis , Agricultural Economics Research Review, Vol.23 pp 315-324.