

## **KNOWLEDGE LEVEL OF LIVESTOCK FARMERS ON IMPROVED HUSBANDRY PRACTICES IN KASHMIR VALLEY**

**K. H. BULBUL<sup>1</sup>, I. U. SHEIKH<sup>1</sup> AND R. H. KANTH**  
**Sher-e-Kashmir University of Agricultural Sciences and Technology- Kashmir,**  
**Shalimar, Srinagar-190 025, Jammu and Kashmir, India**

**Received : 04.03.2014**

**Accepted : 30.04.2014**

### **ABSTRACT**

The present study was carried out in hilly areas of district Budgam and Srinagar, Jammu and Kashmir during June, 2010 to May, 2013 to assess the level of knowledge among the livestock farmers and nature of disease prevalence in livestock. A total of 200 farmers were randomly selected from different awareness cum training programmes conducted and 500 numbers of clinical cases presented in Krishi Vigyan Kendra, Srinagar (Old Budgam) were considered for the study. The study revealed that 50.50, 61.50, 42.00 and 24.50% farmers were aware about the methods of concentrate feed preparation, silage / hay making, high yielding varieties fodder cultivation and utilization of medicated urea mineral block respectively. Similarly 68.50, 85.50, 34.50 and 39.50 % farmers were found to be aware about importance of Artificial Insemination (AI), heat detection, length and duration of estrus in cows and proper timing of AI in cows respectively. Regarding managerial practices 25.50, 69.50, 81.00, 76.00 and 65.50 % livestock holders were found to be aware about care of animals, cleaning /sanitation of animal shed, feeding of colostrum, manure disposal and castration of animals respectively. In respect of disease management, the farmers were more aware about vaccination of animals (75.50 %), vaccination of poultry (47.04 %), de-worming of animals (92.50 %), de-worming of poultry (19.50 %) and disposal of dead animals / birds (51.50 %). The highest numbers of clinical cases (72.00 %) recorded, were related to medicinal followed by reproductive disorders (24.80 %) and surgical cases (3.20 %).

**Key Words :** Knowledge, management, disease, livestock, Kashmir

India accounts among for the largest livestock population (529.7 million) in the world distributed over 100 million households in approximately 6, 38,598 villages<sup>1</sup>. Contribution of livestock sector in India has provided sustainability and stability to the national economy. India ranks first in milk production in the world contributing about 15 per cent to the global milk pool. Total

milk production in India, in the year 2013 is 130 million tones. The compound growth rate of milk production has been more than 2.5 per cent per annum in ongoing decade (2010 onwards). About 70 million farm families, one out of every two rural households, are involved in dairying. India with a production of about 3,822 thousand tones of meat per year<sup>1</sup> ranks 5<sup>th</sup> in the total meat production in the world. Though India possesses about 16 per cent of the livestock population of the world, but produces only 2.2 per cent of the world's meat

<sup>1</sup>Present address: Ph. D. Scholar, C.V.Sc., AAU, Khanapara, Guwahati-781022

production. Training cum awareness program is the most frequently conducted programmes in India through Krishi Vigyan Kendra (KVK) of State Agricultural University and Indian Council of Agricultural Research (ICAR) in India to augment the knowledge and skills of the farmers deprived from basic veterinary facilities. Besides, with conductance of proper awareness campaign most of the common livestock ailments can be overcome and increase milk production per cow and thereby reduces the number of cows needed consequently<sup>4</sup>. For better disease management both in animals and poultry disease diagnostic visits frequently conducted by the KVK. Therefore an attempt was made to evaluate the level of knowledge among the livestock farmer in Budgam and Srinagar districts of Jammu and Kashmir.

#### **MATERIALS AND METHODS**

The present study was carried out in hilly areas of district Budgam and Srinagar, Jammu and Kashmir during June, 2010 to May, 2013 to assess the level of knowledge among the livestock farmers and nature of disease prevalence in livestock. A total of 200 farmers were randomly selected from different awareness cum training programmes conducted and a total of 500 clinical cases were attended during the disease diagnostic visits in different villages under the jurisdiction of KVK Srinagar (Old Budgam) were considered for the present study to ascertain the nature of disease prevalence in livestock. For primary source of data, a pre-designed semi-structured interview schedule was constructed to collect the information for estimating the level of responsiveness on different animal husbandry operations. Animal husbandry operation was conceptualized as the basic farm operations performed by the farmers in respect of breeding, feeding, general care and disease prophylactic measures. Knowledge level in respect of selected animal husbandry operations were estimated by asking direct question to the respondents and asked to place their opinion as 'Yes' or 'No'.

### **RESULTS AND DISCUSSION**

#### **Level of Knowledge**

On the basis of the opinion of the farmer i.e. either 'Yes' or 'No' it was revealed that the frequency distribution of awareness level were found to be positive in the field of Animal husbandry operations in Budgam and Srinagar district of Kashmir Valley of Jammu and Kashmir, India (Table 1).

#### **Breeding**

A good number of respondent (68.50 per cent) were found to be aware about importance of Artificial Insemination (AI), heat detection (85.50 per cent), length and duration of estrus (34.50 per cent) in cows and proper timing of AI (39.50 per cent) in cows, respectively. Farmers knowledge regarding AI was found to be better which might be due the farmers awareness that crossbred animal yields more milk. The lower per cent of farmers were aware about length and duration of estrus and proper timing of AI of their animal which might be due to fact that some animals do not show proper heat symptoms. The majority of the farmers (70.00 per cent) were possessing high level of knowledge in different aspects of breeding in North Kashmir as reported by few workers<sup>8</sup>.

#### **Feeding**

The study revealed that 50.50, 61.50, 42.00 and 24.50 per cent farmers were aware about the methods of concentrate feed preparation, silage / hay making, high yielding varieties fodder cultivation and utilization of medicated urea mineral block respectively. However,<sup>2</sup> reported higher per cent of respondents having lack of knowledge about the methods of concentrate feed preparation, A quite few number of farmers were found to have knowledge on high yielding varieties of fodder, might be due to considerable level of fodder production by crossbred cattle owners. About 78.50 per cent of the farmers having knowledge of the importance of colostrum feeding to newborn calves. This is in agreement with the findings of <sup>3</sup> in Udham Singh Nagar districts of Uttaranchal.

## Management

Regarding managerial practices like care of pregnant animals, drying off cows, cleaning / sanitation of animal shed, feeding of colostrum, manure disposal and castration of animals 74.50, 80.00, 69.50, 81.00, 76.00 and 65.50 per cent respectively, were found to be aware. Seventy six percent farmers having the knowledge of proper disposal of manure which might be due to popular use of cow dung in the agricultural field within the locality. A vast majority of the farmers (80.00 per cent) have the knowledge of timely drying off cows. This is in agreement with the findings of <sup>8</sup> in North Kashmir and also the report of <sup>2</sup> in Udham Singh Nagar districts of Uttaranchal.

## Disease Prophylactic Measures

In respect of disease management the study revealed that the farmers have knowledge about vaccination of animals (75.50 %), vaccination of poultry (47.04 %), de-worming of animals (92.50 %), de-worming of poultry (19.50 %) and disposal of dead animals / birds (51.50 %). The majority of the beneficiaries (76.60 %) have the knowledge de-worming of calves in Udaipur district of Rajasthan as observed by few workers <sup>6</sup>. The highest numbers of clinical cases (72.00 %) recorded were related to medicinal followed by reproductive disorders (24.80 %) and surgical cases (3.20 %). Most of the peoples were unawareness about poultry disease prevention in backyard poultry by vaccination than that of cattle that might be smaller flock size of poultry and various vaccination drive carried out by government line departments in large animals. Similarly, a very less number of farmers having the knowledge of de-worming in case of poultry which otherwise very much popular in case of large animals.

## Disease Prevalence

The occurrence of diseases revealed that the highest number of cases was found to be medicinal cases 360 (72.00 %) followed by reproductive disorder 124 (24.80 %) and surgical cases 16 (3.20 %). Species wise distribution of

clinical cases as summarized in the present study depicted that out of the 500 cases treated 236 (47.20 %), 144 (28.80 %), 37 (7.4 %), 16 (3.20 %) and 67 (13.40 %) numbers were cattle, sheep, goat, equine and poultry respectively. Irrespective of season frequency of diseases of cattle was reported much higher than other species which may be due to more cattle population as well as greater concerned towards cattle. Though the area is having a few numbers of broiler farms, the present study was confined to backyard poultry. Hence, disease incidence was very less as reported by farmers. Similarly, farmers were ignorant about the incidence of diseases in sheep and goat as they do not accompany the flock during winter.

Among the medicinal cases, maximum numbers of animals 123 (52.12 %) were found to be suffered from parasitic infestation and mal-nutrition resulting emaciation, anorexia and reduced milk yield especially in cows which confirming the findings of some workers <sup>5</sup>. Ruminal acidosis was one of the major problems in the month of March and April may be due to ingestion of pre-flowering sweet clovers. Other medicinal cases reported during the study includes, respiratory infection 43 (18.22 %), mastitis 39 (16.52 %), acidosis 20 (8.47 %) skin infection 6 (2.54 %) and urinary tract infection 5 (2.12 %). In case of poultry Ranikhet disease, Infectious bursal disease, Infectious bronchitis, Coccidiosis, Ascites, Gout, Liver infection, Respiratory disease, Pullorum disease etc. were observed in broilers whereas, Cannibalism, Bacillary white diarrhoea, Salmonellosis, mineral deficiency were some of the observation made in backyard poultry.

The various reproductive disorders like repeat breeding and anoestrus were the most predominant. Among the cases of reproductive disorders like repeat breeding (43.55 %), anoestrus (33.04 %), retention of placenta (16.94 %), cystic ovary (4.03 %) and pyometra (2.42 %) were recorded respectively. History and clinical examination of the cases reveals that mal-nutrition,

### Knowledge level of livestock farmers

poor sanitation and inadequate knowledge on breeding aspects were few of the causes for such high incidence reproductive disorder. Similar findings were also reported by other workers<sup>7</sup>. Very

few cases 16 (3.20 %) of surgical interventions needed in respect of abscess, lacerated wound, complication following castration etc compared to medicinal and reproductive disorders.

**Table 1: Knowledge level of livestock farmers in respect of various aspects of animal husbandry**

Aspect	Good	Poor
<b>Breeding</b>		
Age at first mating	100%	0%
Seasonal breeding	100%	0%
Age at first calving	100%	0%
Interval between calving	100%	0%
<b>Feeding</b>		
Quality of feed	100%	0%
Quantity of feed	100%	0%
Frequency of feed	100%	0%
Water supply	100%	0%
Health of feed	100%	0%
<b>Management</b>		
Sanitation	100%	0%
Record keeping	100%	0%
Health of animals	100%	0%
Water supply	100%	0%
<b>Disease prophylactic</b>		
Vaccination	100%	0%
Quarantine	100%	0%
Isolation	100%	0%
Disinfection	100%	0%
Health of animals	100%	0%
Water supply	100%	0%
Sanitation	100%	0%
Record keeping	100%	0%
Health of animals	100%	0%

**Figure 1: Knowledge level of livestock farmers**

### CONCLUSION

The farmers of the two districts possess good knowledge on various aspects of breeding, feeding, management and disease prophylactic measures. The farmers are more concern about

disease prophylactic measures of cattle than poultry. The highest numbers of clinical cases recorded related to medicinal followed by reproductive disorders and surgical. Distribution of clinical cases recorded was highest in cattle and lowest in poultry.

## REFERENCES

1. Anonymous. (2010). Basic Animal Husbandry Statistics, Govt. of India.
2. Dar, M. A. Rade, V. M. and Parrah, J. D. (2002). A study on problems faced by member farmers of a Dairy cooperative society in district of Solapur, Maharashtra. *SKUAST J Res* **4**: 204-206.
3. Dwaipayan, B, Dabas, Y.P.S and Kumar, A. (2005). Assesment of Farmers awareness about improved dairy husbandry practice. *Indian, Vet. Journal*.**82**: 62-64.
4. Gelderman, H. (1996). Some general suggestion s for improvement in dairy production in Jammu and Kashmir. In proceeding of a seminar on artificial insemination and breeding policy held at Faculty of Veterinary Sciences and Animal Husbandry, SKUAST, Shuhama. Pp: 326
5. Intodia, S. K. Rajeev, B. and Dhuria, R. K. (1999). Technology exposure of livestock keepers through animal treatment camp. A case. *Intenstive Agril* **37**: 3-6
6. Panjabi, N.K.,mohammed, A andShani, A. (1999). Knowledge assessment of animal keepers about livestock management. *Maharastra J. Extn. Educ.*,**18**: 245-248.
7. Parrah, J. D. Wani, G. M. Bachoo, B. A. Malik, H. U. and Khan, M. Z. (2003). Animal disease prevalence and awareness among livestock farmers of Kashmir. *SKUAST J. Res.* **5**: 251-256
8. Sheikh, I.U. and Islam, M.A. (2008). Knowledge about improved dairy husbandry practices among farmers in North Kashmir, *Environment and Ecology*, **26(4B)**: 2086-2088.

★ ★ ★