LIVESTOCK BREEDS AND BREEDING PRACTICES IN HIMACHAL PRADESH (INDIA)

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ABSTRACT

The present study was undertaken to evaluate the livestock species, breed composition and breeding practices followed in high altitude regions of Himachal Pradesh, India. Investigations were carried out in 4-5 cluster villages of three blocks of Chamba district through personal interviews of 180 respondents. High proportion of households reared different livestock species (81.12 per cent cows, 66.12 per cent bulls, 27.78 per cent buffaloes and 36.67 per cent sheep and Goat) in the region .Livestock breeding practices in the form of natural service and Artificial Insemination(AI), were followed by livestock owners. In cows, AI was preferred whereas in Buffaloes natural service was preferred. Constraints affecting AI services were poor conception rate, poor accessibility of AI, higher input requirement for progeny and less awareness about AI .On the other hand, poor progeny and non availability of superior germ plasm were the major constraints associated with natural service in the region.

KEY WORDS: Artificial Insemination, Breeding Practices, Himachal Pradesh, Livestock Composition.

INTRODUCTION

Livestock rearing is an important source of livelihood security in hill and mountainous farming systems owing to multiple and diverse functions. At times, milk and meat may not be the primary reason for livestock keeping in these farming systems which are characterized by low farm mechanization and poorly developed markets (FAO, 2007). Any livestock development intervention must take into account the diversity of local livestock situation of a region. This ensures that the desired interventions raise the production base to a higher and sustainable level. Currently, there is dearth of relevant information on factors influencing rearing of different livestock species, breeds and breeding practices followed by farmers in this region. Keeping these factors in mind, the following study was conducted on livestock breeding practices for appropriate interventions in Chamba district of Himachal Pradesh, India.

MATERIALS AND METHODS

The present study was conducted in Chamba district of Western Himalayan State of Himachal Pradesh, India as part of National Agricultural Innovation Project. In Chamba district, three blocks namely Bhatiyat, Salooni and Bharmour were selected to represent three different agro-climatic areas with fragile eco-systems. Within these select blocks, an area of representative village clusters was included in the baseline survey. A semi-structured interview schedule was administered to understand livestock species and breed compositions, breeding practices followed and the constraints associated with them. Sixty respondents from the cluster villages of three different blocks were selected randomly making a total sample size of 180.

RESULTS & DISCUSSION

Livestock species and breed diversity in the region : High proportions of households in all the three blocks were engaged in livestock production. Cows, buffaloes, sheep and goat were the major species reared. As evident from the present study cows remain the most common live stock species

(81.12) reared by high percentage of house holds in all the three blocks of the district. Bulls still are very important for farmers, 66.12 % of house holds raised bulls/bullocks indicating their draught utility. Buffaloes were absent from Bharmour block probably due to higher altitude (2300 metre) of this block. The findings are in concurrence to some of the previous findings (GOI, 2005: Tulachan et al., 1999). Relatively, high percentages of Jersey crossbred animals were being reared in Bhatiyat block. However, on the whole, local livestock breeds formed bulk proportion of animals in the region. Small ruminants sheep and goat reared but still at last.

The Livestock owner's preference to breeding services was assessed in terms of the utilisation of natural service, Artificial Insemination (AI) either singly or using them alternately at different times. In cattle, it was observed that, artificial insemination (61%) was preferred more over use of natural service. In buffaloes however, natural service (73%) was still the more preferred option than the rest of practices. Reasons of preference of buffalo farmers to natural service in south Asian and pacific countries are difficulty in heat detection and poor conception rate. (Herath and Mohammad, 2009). Further, breeding practices of livestock owners are influenced by multiple objectives of enhancing milk, utilisation of local feed, diseases as well as accessibility and effectiveness of breeding services in terms of successful conception.(Murage et al., 2011)

Constraints associated with breeding practices in cattle and buffalo

The major contraints associated with AI were in order of poor conceprion rate followed by poor accessibility, higher inputs and resources needed for progeny, less awareness about heat symtoms and lastly non availibilty of holidays whereas the constraint in natural service were poor progany (87%), non availibilty of improved germ plasma (83%), higher service charge by bull owner (61%), poor conception rate (59%) and lastly poor accessibilty (35%).

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REFERENCES

FAO. (2007). Sub regional report on animal genetic resources: South Asia. Annex to The State of the World's Animal Genetic Resources for Food and Agriculture. Rome.

GOI.(2005).Himachal Pradesh development report by Planning Commission, Academic Foundations, New Delhi. pp 225-230.

Herath, P. S. M. H. and Mohammad, S. (2009).The current status of cattle breeding programmes in Asia. Chapter in Manual, Selection and breeding of cattle in Asia: Strategies and criteria for improved breeding IAEA, Vienna.

Murage, A. W. and Evans, D. H. (2011). Factors that determine use of breeding services by smallholder dairy farmers in Central India, Tropical Animal Health Production **43:**199-207.

Tulachan, P. and Neupane, A. (1999). Livestock in Mixed Farming Systems of the Hindu Kush Himalayas, International Centre for Integrated Mountain Development (ICIMOD) Kathmandu, Nepal. pp 9-12

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