CHAPTER - V

SUMMARY AND CONCLUSION

The research efforts in agriculture nowadays, are now being directed to improve the economic conditions of the farmers. Introduction of livestock components in raising crops can go a long way in making agriculture a profitable enterprise and generating employment opportunities for the youth. Mewat is situated in the proximity of Delhi, where market and marketing facilities are available abundantly. In view of these considerations Haryana Government is laying special emphasis for the development of this region. Accordingly a study "Animal husbandry practices in Mewat area of Haryana under different farming systems", was undertaken to study the background variable in relation to agriculture and animal husbandry practices of the farmers; to find out the feeding and management practices of livestock and the constraints in the adoption of improved animal husbandry practices along with the employment, gender participation under the farming system (rainfed and irrigated) of Mewat area of Haryana for this study. Five blocks of district Gurgaon and Hathin block of district Faridabad-irrigated farming systems, were selected. Two villages from each block, and 25 farmers from each village representing landless, marginal, small, medium and large farmers were selected. Propotionate random sampling technique was used.

Data on variables of farmers, livestock, crop production were collected of background variables. SES scale of Trivedi and Pareek was used for their measurement. Gender participation in various livestock
activities and the various constraints in adopting the animal husbandry practices were also studied. The data were analysed statistically, following result were obtained.

Thirty two percent farmers were found below the age group of 45 years, 51 percent were found illiterate and only about 12.7 per cent farmers were above matric level education. More than 83.7 percent of farmers had a family size of above 5 members and more than more than 36.7 per cent farmers belonged to general caste. It was emphasized that agricultural extension agencies should pay special attention taking into considerations the representation of age, family size and caste group and application of various extension aids should be based on the farmers education.

The average land owned and operational holdings were 4.81 and 4.67 acres respectively and it was significantly affected by category, education and caste of farmers. Average land and operational holdings increased progressively and significantly from landless to large categories and it was significantly higher in farmers having higher secondary education, above 5 members family and general caste. Almost similar results for area under main crops during Rabi and Kharif season were obtained. The average area under fodder crops per family during rabi and kharif was 14.13 and 17.98 per cent of total operational holding, respectively. Block, category, caste and education of farmers, significantly affected the area under fodder crops during both the seasons.

On an average green, dry fodder and concentrate consumption per lactating buffalo was 5.03, 6.42 and 2.98 kg respectively. Green fodder consumption was significantly higher in Punhona block, dry fodder consumption was significantly higher in Hathin block, medium category
and general caste farmers. The concentrate consumption was significantly higher in Tauru block. Large sized farmer and backward class farmer were found offering significantly, higher quantity of concentrates compare to other categories and caste. Significant association was observed between types of concentrates used and block, category, age and caste of the farmers. Home made and ready made concentrate was used by 34.0 and 66.0 per cent of the farmers respectively. Significant association was observed between methods of storing dry fodder and block, category and caste of the farmers. About 0.7, 24.7, 33.7 and 41.0 per cent farmers were found storing dry fodder in koops in fields, separate stores, near dwelling and in cattle shed itself respectively.

The average milch buffalo per family were 2.87 and number was significantly affected by block, category, caste and education. The average milk yield per buffalo was reported 5.29 kg/buffalo. The average milk yield was significantly associated with block and category of the farmers.

The average age at 1st service, first calving, calving interval, lactation length and dry period were 37.29, 47.28, 14.38, 10.55 and 5.78 months, respectively. Average age at 1st service, age at 1st calving were significantly higher in large categories of farmers. The dry period was significantly affected by block, category, age, caste and education. It was higher in Hathin block and large categories of the farmer.

The breeding practices of heat detection, method of mating, pregnancy diagnosis, treatment of anestrus and treatment of repeat breeders were found significantly associated with category of farmers. About 75, 73, 16.7, 21.3 and 20.3 per cent farmers were aware of heat detection, used natural method of AI, performed pregnancy diagnosis, gave treatment of anestrus and treatment of repeaters, respectively.
Location of cattle shed and construction of shed were significantly associated with block, category and caste of the farmers and 26.3, 42.7, 30.7 and 0.3 per cent farmers keep their cattle inside dwelling, near dwelling, separate from dwelling and in the field, respectively. About 82.3, 0.3 and 17.3 per cent farmers were having loose, conventional barn and semi-loose types of houses respectively. Types of walls were significantly affected by block and education of farmers. The number of farmers having katcha floor and thatch roof decreased with increase in land holding size and about 71.0, 10.3 and 18.7; 72.3, 11.3 and 16.3 and 68.3, 18.7 and 13.0 per cent farmers were having floor: katcha, pucca and paved; roof: Thatch and concrete and manger: Katcha, pucca and wooden, respectively. Size of family showed significant effect on types of bedding material used. It was noted that 72, 5 and 23 per cent farmers were using dry sand, crop waste and no bedding respectively. The contribution of pond, well, tap water and canal water for drinking of animals were 61.3, 9.3, 29.0 and 0.3 respectively.

Calf rearing practices were significantly affected by blocks. The category of farmers showed association with disinfection of naval cord, deworming, control of external parasite and feeding of calf after birth. It was observed 2 per cent calving was attended by females and 21, 62 and 61 per cent respondent were found cleaning calf after birth, disinfecting naval cord and feeding colostrum after fall of placenta, respectively. It was observed that 5.6, 5 and 68 percent farmers were deworming calves, control the external parasites by chemical method and start feeding young calves between 15-45 days after calving, respectively.
In disease prevention practices the treatment of sick animals showed significant association with the block. Significant association was also observed with the category and disease prevention practices of treatment of sick animals and isolation of sick animals. It was observed that 6.3, 70.3 and 23.3 per cent farmers got treated their animals by vet doctor, VLDA and village quack respectively. About 20 per cent farmers disinfect of cattle shed and isolation of sick animals. It was further observed that 78.0, 25.7 and 77.7 per cent farmers were found cleaning the manger, vaccinate their animals and prevent mosquitoes in cattle shed by making smoke respectively.

The milk sale practices adopted by families was affected significantly by caste of the farmers. It was also noticed that number of farmers not selling milk increased with increase in land holdings. It was observed that more than 50 per cent of dairy farmers sale their milk to milk vendour or local. Knowledge of animal husbandry practices viz feeding, fodder production and other management practices showed significant (P<0.01) association with the blocks. No significant association was observed with breeding practices. About 71 per cent farmers were having average knowledge of breeding and feeding practices, but poor knowledge of fodder production and other management practices was observed.

The gender's involvement in livestock activity like chaffing the fodder, preparation of feed for animal, offering water to animal and protection against lice and ticks and milking were significantly (P<0.01) associated with the block, while bringing fodder from field, chaffing the fodder and prepartion of feed for animal were significantly associated with the category of the farmer. In various livestock activities, the
females contribution was higher than male, except the mating/insamination.

It was observed that 78.3, 9.2 and 22.6 per cent decisions about important livestock activities were taken by husband, wife and both respectively. In Nuh, Firozpur Jhirka and Tauru block and in small, medium and large categories wifes contribution was more than husband in the decision of sale of milk and milk products.

The economics of wheat, gram, sarson, bajra and milk production net returns per hec/unit 2223.00, 3781.00, 3205.00, 550.00 and 5421.00 rupees, respectively. However the net returns per rupees 1000 invested was reported 135.30, 519.40, 271.00, 70.0 and 281.84 rupees in wheat, gram, sorson, bajra and buffalo keeping units, respectively. The average employment generation potential per family was 163.19 and 225.43 from mandays in arable farming and animal husbandry. While total employment potential average was 388.62 mandays. Employment potential in arable farming was more in Tauru block but the animal husbandry unit showed higher employment in Nagina block.

Poor veterinary facilities; high cost of concentrates and poor quality control; inadequate credit facilities; poor knowledge; lack of appropriate technology; small holding size and lack of irrigation facilities; lack of good quality bulls; high cost and poor quality of fodder seeds and in adequate housing space were the major constraints in livestock production in the Mewat area.