

Short Communication

Technological Constraints in Mixed Farming System in Bikaner District of Rajasthan: A Case Study

Bharat Singh*, B.C. Mondal, N.D. Yadava and R.K. Beniwal

Central Arid Zone Research Institute, Regional Research Station, Bikaner 334 004, India

Frequent droughts, high radiation, severe frost, high wind velocity (30 to 40 km h⁻¹), high evaporation (150- 200 cm y⁻¹), extremes of temperature (-4° to 48.6°C) and limited water availability lead to low productivity in Bikaner district. Poor management of natural resources, non-adoption of improved package of practices, less off-farm economic activities, nomadic living, particularly with sheep owners are the main limitations in the economic development of this region.

Livestock-based farming systems involving subsidiary enterprises including dairy, sheep and goat farming have great potential, yet they need to be properly exploited. Therefore, keeping in view the above facts, Desert Development program/ Transfer of Technology (DDP/TOT) project was started in 1992 to diffuse improved technologies developed at Central Arid Zone Research Institute to farmers' field for socio-economic upliftment of the farmers.

Mixed farming comprising crops like clusterbean, pearl millet, moth bean, green gram and sesame, and the livestock enterprises, i.e., cows, sheep and goat is

followed in this region. Rainfed crops are taken only during kharif and in rabi season fields are kept fallow. Therefore, livestock enterprise is very important for income generation and to provide employment round the year. In arid zone yields of rainfed crops are low and unstable. The key to enhance agricultural production including livestock products lies in the adoption of technologies developed in the research laboratories. Based on the recent survey in DDP/TOT adopted and non-adopted villages by CAZRI, a yield gap ranging from 100-150% in the crops was recorded indicating considerable scope for yield increase through adoption of improved technologies. It is essential to have in-depth analysis of technological constraints as perceived by the farmers. The present study is an attempt to identify the constraints faced by the farmers in mixed farming system.

The program was undertaken in Lakhusar, Berju (DDP/TOT adopted) and Kalaser, Jogran (non-adopted) villages, located west of the district on Bikaner-Anoopgarh state high way. The villages, Lakhusar, Berju and Kalaser, Jogran are having 184, 156, 265 and 37 households, respectively. Livestock rearing,

* Deceased.