

Abstract

Livestock plays an important role in the sustainable livelihood of poor people of rain-fed agro-ecosystem, because of inherent risk involved in the crop farming due to uncertainty of rainfall and occurrence of recurrent droughts. They provide income and increased economic stability, and often the most important "cash crops" in small-scale mixed farming systems. Small stock acts as cash buffer and large ruminants as a capital reserve. The objectives of the present investigation were to characterize the traditional livestock production systems, identify major constraints and suggest livestock production strategies based on participatory action research. *Salaha Samithi* (farmer advisory committee) facilitated implementation and monitoring of various interventions, mostly in the form of observation trials-cum-demonstrations.

Inadequate availability and poor quality of feed and fodder; high incidence of diseases; and inadequate knowledge on appropriate management of livestock were identified as the major problems facing smallholder farmers. To enable the rain-fed farmers for livestock development, a favorable policy environment in terms of access to micro-credit, assured market and veterinary services will have to be provided and socio-economic and technical constraints needs to be addressed. The study suggested that the participation of farmers is essential for developing and promoting the livestock interventions. Animal health camps created awareness among farmers regarding the adoption of better livestock practices like supplementation of mineral mixture in the concentrate ration and hopping of crop-residues.

Through exposure visits and farmer-to-farmer interaction, many farmers realized that integration of livestock and fodder production within their limited land and water resources provides a better livelihood option in dry lands.

Key words: Livestock development, livelihood, rain-fed agro-ecosystem, India