

**Summer Field School [Online] on  
MOUNTAIN ECOSYSTEMS AND RESOURCE MANAGEMENT  
19-28 September, 2021**

Name of Faculty Member (Facilitator)	Prof. Abdul Raziq Kakar
Technical Session Group No.	TECHNICAL SESSION 5.1
Technical Session Group Name	
Topic	Pastoral Livelihoods and Animal-Centric Cultures
Sub-Topics	Traditional Livestock Breeds and the IK of the Pastoralists Communities in Balochistan Pakistan
Synopsis (if any) (max. 100 words)	<p>Balochistan province comprises of arid and semi-arid lands (ASAL), makes about 44% of the total geographical area of the country. Only 5% is arable and the rest is rangelands. Livestock is one of the major important sectors, and housing about 20% of the national stock of Pakistan. Province is the cradle of many precious livestock breeds and play pivotal role in the socio-cultural and socioeconomic life of its inhabitants. Animal genetic resource provides a major source of livelihood and mean of utilization of marginal environments not suitable for cultivation. The Animal genetic resources are the building blocks for future livestock development that will enable livestock keepers to respond to changes in animal production circumstances and new consumers' preferences. The livestock genetic diversity is the product of local environmental conditions combined with the breeding strategies of traditional communities. Interspecies biodiversity is the outcome of many different communities managing livestock in many different habitats and ecological zones. The ability of livestock to survive natural calamities (droughts, climatic extremes) is necessarily more important than high productivity. Also local livestock breeds are embodied with indigenous knowledge which is an important human resource for animal breeding and precious heritage for the inhabitants. These precious and important livestock breeds, we have in hand are currently under threat and disappearing even before documentation. There are many reasons for this sad state of situation i.e. war and conflicts (some breeds are maintained on the basis of regular migration according to the season and foliage availability and the wars and conflicts minimize the herds movements), epidemic diseases, urbanization and cross breeding, changing livestock systems from subsistence (extensive) to commercial (intensive), lack of valuation of local breeds, increasing competition for natural resources, environmental degradation and</p>

	<p>global warming. Economic forces of globalization as well as political backing for crossbreeding with exotic breeds, among other factors, have already resulted in the disappearance of a large number of these breeds and many more are threatened globally. There is utmost need of time to characterize and document these breeds according to the perspectives of their own livestock keepers. Only the respective livestock keepers know the important traits of their animal genetic resources. This study was therefore, conducted to characterize and document the indigenous animal genetic resources in the livestock keepers' perspectives. A survey was conducted on the basis of the ecological zones and each zone with the relevant livestock breeds was discussed accordingly. A Performa was designed for each species and the relevant breeders were interviewed. The breeders were selected on the basis of the willingness, availability, indigenous knowledge, area of the breed and accessibility etc. Questions asked were mainly about the socioeconomic importance, breeding goals, breed features, special traits, marketing, population size and trend. The biometry was conducted with a tape meter of the mature animals of camel breed in the morning time when their bellies were empty. A color illustrated table was used as a standard for the name of the color of the breed and was further verified the color while in the group discussions with the herders in a feedback seminar. It was found that there are six ecological zones on the basis of livestock types, production systems and penology. In each zone there were camel, goat sheep but some ecological zones also have the donkey, horses and cattle. Camel is one of the important animals and is under threat in many ecological zones. The last drought had badly affected livestock production systems and some species like cattle and sheep were adversely influenced. The sheep and cattle population is again increasing in number. Livestock species have obtained high values and economic potentials as the prices of milk, meat and draft animals have increased many folds. It was concluded that value addition to livestock products, niche marketing and ecotourism can be the good tools for the livestock improvement and poverty reduction in such livestock production systems. Keywords: Indigenous livestock breeds, livestock keepers, arid and semi-arid lands, ecological zones, Balochistan, production systems and indigenous knowledge.</p>
<p>List of Learning Material (Files to be availed to us before 31 August 2021)</p>	<ul style="list-style-type: none"> <li>▪ PPT/Presentation</li> <li>▪ Handout 1</li> <li>▪ Handout 2</li> <li>▪ Handout 3</li> <li>▪ Graphic Illustration (jpeg, png file)</li> <li>▪ Published/Unpublished Article 1</li> </ul>

	<ul style="list-style-type: none"><li>▪ Published/Unpublished Article 2</li><li>▪ Bibliography (further reading)</li><li>▪ List of weblinks (further reading)</li><li>▪ Other (e.g., Notes, Software)</li></ul>
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