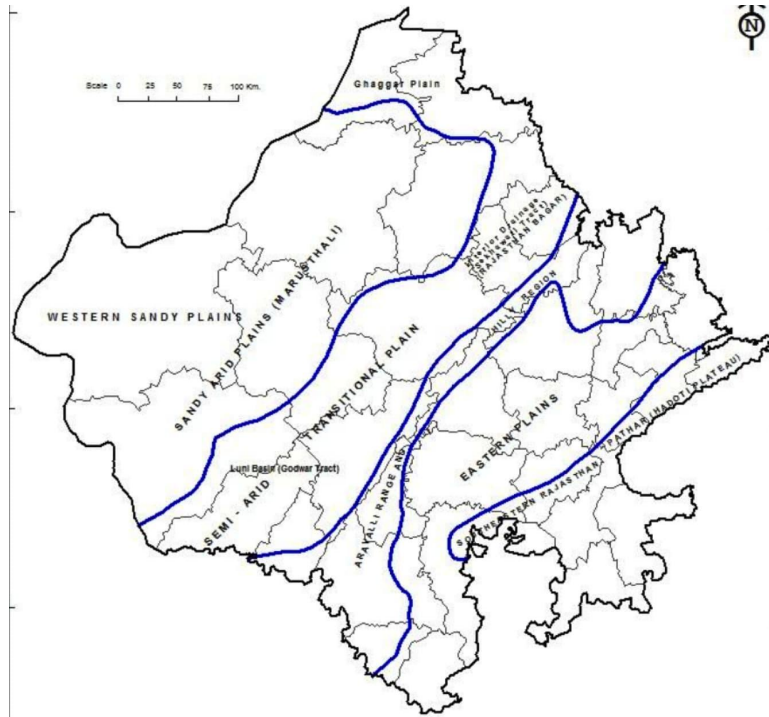


Land Use of Rajasthan

A Perspective on Animal Husbandry and its centrality to the ecology of Rajasthan¹



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Background:

Following the workshop in September highlighting the importance of the Aravallis to the Eco-tones of the Indian Sub Continent and Rajasthan in particular, how this translates historically in terms of life support systems, demography and livelihoods needs to be properly understood if we want to seriously engage in the burning questions related to sustainable livelihood and climate change.

http://ielaind.org/wp-content/uploads/2017/05/Workshop-Report_Final_SPWD_IELA_PS.pdf

To recap from the workshop. The following demographics are significant for Rajasthan

- a. Two thirds of land area lies West of the Aravallis while one third is on the East.
- b. In terms of population, it is the reverse. One third is West of the Aravallis and two thirds on the East.

Why so ? The reasons are not hard to find

- a. Rajasthan has 1.7% of India's rainfall with areas having 500mm or more lying the East and areas in the West (with the exception of South East Rajasthan: getting the benefit of the rain bearing winds from the Arabian Sea) having 400 mm or less, with the least being in Jaisalmer having 185mm of rain.
- b. The population is 5.6 % of India, more than 3 times the rainfall, the animal population is 10% and land area is all 10% of India. Clearly it is this animal population that can feed of grass and migrate that is central to the desert being colonised. Purnendu Kavoori has captured this colonisation process very effectively in his research on the relevance of pastoralism for Rajasthan in general and the dynamics of the Luni river basin in particular.

A thumb rule categorisation of Animal Husbandry in Rajasthan:

In terms of Animal Husbandry, Rajasthan can broadly be divided into three regions (There are exceptions to this thumb rule which will be taken up later).

- a. The Western region which is primarily based on pastoralism having Gujjars in the North and Raikas/ Rebaris in the South.
- b. The Southern Region which was primarily forest and tribal region, having pasture tracts in the hilly regions but also dependant on fodder from the valleys, so range of movement of the livestock not as large as the pastorals of the West.
- c. The North Eastern region which had deep ravines and subject to water logging, making grasslands and trees the dominant land use type in this region prior to the water harvesting systems put in place by the Maharaja of Bharatpur. Gujjars and Meenas dominated this landscape.

Due to formation of Pakistan, closures, allotment of pastures, common lands to landless and mining, the areas under pastureland were severely reduced/degraded causing a loss of production from sheep to the extent of 50% (as per the study done by Sunil Ray of IDS, Jaipur) and reduced importance of pastoral livestock to the economy. The green and white revolution, introduction of tractors led to the promotion buffaloes and cross bred cows for milk production requiring year round irrigation facilities as a pre-condition for survival. The degradation of the pastures led to the increase in the numbers of goats for meat production being the animal suitable for such conditions.

Impact of irrigation in general and tube well expansion to land use in Rajasthan:

This matter will be dealt with only briefly here as it relates largely to other uses the land has been put to. The aspect of transformation of livestock populations have already been dealt with above. Some issues of importance.

- a. Water logging in the desert regions due to mismanagement of the water regime for crops rather than animal husbandry resulting in conflicts related to water (tail end users denied water) on one hand and neglect of the habitats on which pastorals depend.
- b. Deepening of the water table, transformation of ground water in dark zones and increased costs of production for agriculture and animal husbandry.
- c. Neglect of the commons and their destruction. Increase in the conditions of desertification across the State. ,

Case studies related to Animal Husbandry across the State:

SPWD , Prayatana Samiti and IELA have done detailed analysis of the conditions of animal husbandry in different regions of the State as a result of the faulty policies related to land use and destruction of the forests and pasturelands in various regions of the State. Among these case studies, Jaisamand, Ajmer, Bharatpur, Sariska, Bikaner, Jaisalmer and the pastoral regions of Pali and Sirohi stand out. While the essence of these studies are highlighted above, the common thread running through these studies indicate that an ecosystem approach is required to properly understand the reasons for the destruction of the livestock habitats and its consequent impact on livelihood and cost of agricultural/ animal husbandry production.