

Ethnobiological Studies From '*Manusmruti*': 1. Blackbuck, An Ecological Indicator*

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ABSTRACT Facts and contents in '*Manusmruti*' reveals that locality invaded by blackbuck as their free natural habitat, should be considered as environment of sacredness, suitable for human shelter.

The deliberations of the great Indian saint '*Maharshi Manu*' on human life pertaining to its existence socially, culturally and ecologically are compiled in the epic '*Manusmruti*' (Sastri, 1989). *Manu* was the pioneer and highest authority for the formulation of human ethics and his sayings date back to vedic period (Gold Stucker, 1977). The concept of creation and classification of plants and animals, their ecology and conservation are neatly dealt in this legendary volume. On examining the efficacy of its facts and contents keeping pace with modern scientific introspection and ethnoecological analysis (Jain, 1987), the present piece of work reflects on a conducive environmental state for human habitation using blackbuck as an ecological indicator.

The stanzas 23 and 24 from chapter two of '*Manusmruti*' (Buhler, 1886, Roy, 1968a), states :

*Krushnasarastu charati mrugo yatra
swabhabatah
Sagneeyo yagniyiyo desho mlechhade
shastatahparah/ 23
Yetan dwijatayo deshan sanshrayeran
prayatnatah*

*Sudrastru yasmin kasmin ba nibasedbrut-
tikarsitah/24*

On analysis it is found that due emphasis has been laid to an environment as sacred and suitable for performance of '*Yagnya*' (sacrifice) and human habitation, where blackbuck naturally abode and move freely. Such a fact is also described in "*Bhagabata Mahapurana*" (*Maharshi Vedavyasa*, ?). The concept of *yagnya* is a basic theme in vedic literature which reflects on the best deeds performed for all concerned (Das, 1976).

Blackbuck (*Antelope cervicapra* L.) is an indigenous Indian species, which is commonly known as "**Krushnasara Mruga**" in sanskrit. This animal with long spiraled horns of 70 cm long, are found with attractive shining darkbrown coat. An adult measures upto 120 cm long, 75 cm height upto shoulder level and 35 kg by weight. They are seen in herds of 50 or more with an adult as leader. They have an average life span of 15 years. They gallop very fast upto a speed of 80 km per hour (Burton and Burton, 1974).

The animal is very sensitive and prone to minute fluctuation of environmental parameters. Any biotic interference or sound of automobile gas horns or bursting of crackers makes the animal panic which even questions to its survival. They are extremely sensitive to taming. The free movement of this innocent animal in any locality reveals least danger from its carnivore trophic level. Their natural habitat in an environment ensures a perfect ecological homoeostasis. Infact the sensitivity of the animal to environmental fluctuations has recognised it since the vedic period as an

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ecological indicator for a balanced ecosystem suitable for human habitation.

Further it has been emphasized that the people inhabiting in the above mentioned area to leave carefully "*Prayatnatah*" (Roy, 1968a). It means an indirect caution is being uttered for human beings since long to use the area for their habitation without hampering the well-being of the animal. Conversely it is the dictum from *Manu* not to disturb the ecological balance and incidentally this is the first step towards conservation of the nature.

Ayurvedic literature throws light on medicinal usage of blackbuck *i.e.* its flesh is sweet, light, energetic, appetiser, vitalizer and beneficial in diseases like tuberculosis, unhealing ulcers, anaemia, asthma and fever (Tripathy, 1953). The direct influence of the plants and animals in an environment, on the health of human beings is natural. It is observed as folklore in Orissa, that inhaling air in an environment of enriched *Tamarindus indica* Linn. vegetation is unhealthy; while that of *Azadirachta indica* A. Juss. cures many skin diseases and living among herd of goats and consuming their milk regularly cures tuberculosis. The scientific basis of the above lore need to be evaluated, even if they are supported by medico-folk literatures (*see* Tripathy, 1953 and Satapathy ?). Taking such similies into account, blackbuck is equally suggested for their presence as highly conducive for human habitation.

It is worthy to note here that elsewhere in *Manusmriti*, it is advised to use skin of blackbuck as an apron to cover the upper part of the body (Roy, 1968b). Pharmacological introspection may equate its medicinal efficacy to get rid of related chest diseases.

This Indian black antelope has been enlisted as an endangered mammal as declared (Anonymous, 1982) in the Indian Wild Life Protection Act, 1972. At present they are seen in Orissa, Tamil Nadu (Vaidya Narayan), Gujarat (Gir forest), Rajasthan (Sawai Madapur) and Kanha National Park of Madhya Pradesh.

In Orissa (Anonymous, 1994), they are protected in national park and sanctuary of Bhitara Kanika (367 sq. km) and Balukhonda (72 sq. km) of Cuttack and Puri districts, respectively. But in Ganjam district of South Orissa, the blackbuck has its natural habitat where they are found amidst the human settlement and agricultural fields. The areas (Bhetanoi and Ramanda) are recently declared as the Blackbuck game reserve (Anonymous, 1994) which is of its own kind. These animals are protected in this area naturally by local people from aesthetic point of view (Pattnaik, 1984). As a matter of coincidence to vedic literature these three districts Ganjam, Puri and Cuttack are the densely populated area of human habitation in Orissa state.

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