

Biodiversity Conservation Through Traditional Practices in Western Rajasthan

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ABSTRACT

All life forms present on our planet are known as biodiversity. It provides ecological, economic as well as cultural values to the world's community. It plays a major role in providing human needs thus maintains ecological processes upon which our survival depends. Rapid loss of biodiversity increases within recent century. Now-a-days mostly people are self-centric thus ignore the importance of biodiversity. In recent time we should connect with indigenous communities who have traditional knowledge from generations through specific cultural and traditional mechanism and mostly in oral forms. Survey work was carried out in the year 2020-2021 in Barmer district of Rajasthan. Information was collected through direct observations as well as through open ended questionnaire. It was found that through folk lore, folk songs and many religious practices people aware the next generation to conserve the biodiversity. Bishnoi community in many villages of the district follows 29 rules and almost of them are for nature conservation. In the time of increasing value of physical wealth, new generations are going to ignore these practices up to some level.

Key words: Biodiversity, traditional practices for biodiversity conservation, recent status of biodiversity and importance of biodiversity conservation.

INTRODUCTION

All life forms present on our planet are known as biodiversity. Biodiversity is present in three forms namely- genetic, species and ecosystem diversity thus biodiversity or biological diversity is the relationship between the life forms and their habitats (Ravishankar, 2003). Living planet report 2022 of WWF shows that after 1970, life forms of mammals, birds, reptiles, amphibians and fishes has been decline up to 69%. According to FAO from biodiversity the whole world gets its food. A research of Bostan Consulting Group (BCG) shows that biodiversity provides us water, act as air filter, carbon storage of economic rate 150 trillion per year which is double than the whole world's GDP. Traditional knowledge plays a vital role for sustainability of natural resources including forests, water, and agro-eco systems across landscape (Pandey, 2004). Traditional knowledge can make a significant contribution to sustainable development. Local communities have cultivated and used biological diversity in a sustainable way for thousands of years. The association of religion with ecosystem management is inherent tendency in traditional community of Himalayan Mountain. Without religion we cannot think about ecological system in that region (Negi, 2010). Tribal

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communities in Southern India have vast knowledge and use of plants for sustainable livelihood (Ravishankar, 2003), the same was found in South Western Ethiopia by Woldu, 2015. The skills and techniques of local communities provide valuable information to the global community and a useful model for biodiversity policies (Singh *et al* 2012). Besides enforcement of laws and regulations, participation of local communities should involve to protect and conserve biodiversity (Kannaiyan).

OBJECTIVES

The study was carried out for knowing the population of antelopes like Indian gazelle, blackbuck and nilgai which are present in Barmer district with the following objectives:-

- Recent status of biodiversity.
- Traditional practices to conserve biodiversity.
- Reasons for biodiversity loss.

METHODOLOGY

Study area:- Barmer district is situated in the Western part of Rajasthan and forming a part of the Thar Desert.

Methods: Survey work was carried out in the year 2020-21

- (1). Road transect method for recent status of biodiversity.
- (2). Open ended questionnaire using funnel technique with probe.
- (3). Data collected from forest office, Barmer.

OBSERVATIONS AND RESULT

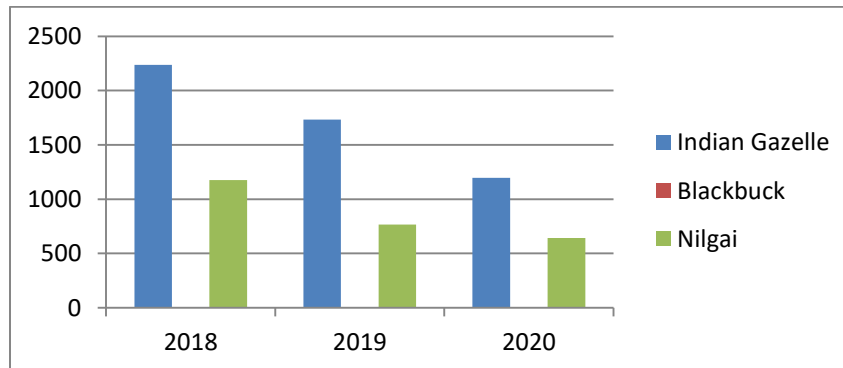


Figure-1. Wild Antelope (Indian Gazelle, Blackbuck and Nilgai) census data of Barmer district of year 2018 to 2020.

(Source: Forest Dept, Barmer)

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Figure-1 shows that Blackbuck are absent in Barmer district but in road side survey Blackbuck population was found in Doli-Dhawa village which is on the border of Barmer-Jodhpur district and Bishnoi residing village. One pocket of Blackbuck population was found on Barmer-Jalore border which is also Bishnoi residing village. It clearly shows that Bishnoi community in many villages of the district follows 29 rules and almost of them are for nature conservation.

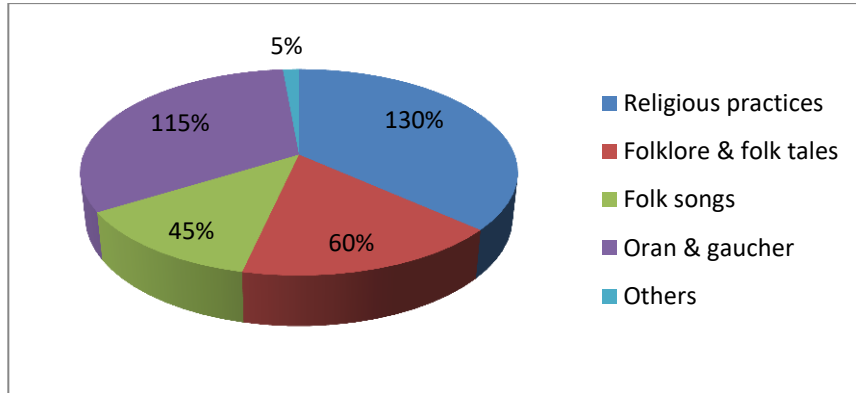


Figure-2. Traditional practices for biodiversity conservation in Western Rajasthan.
(Results of Open ended questionnaire)

It was found that through folk lore and folk tales, folk songs and many religious practices people aware the next generation to conserve the biodiversity (Figure-2). Oran also known as sacred grove is the land left for biodiversity conservation and gaucher land managed by gram panchayat for grazing of wild and domestic animals (Plate-1).



Figure-1. Interaction of Indian gazelle with shepherd and his cattles.

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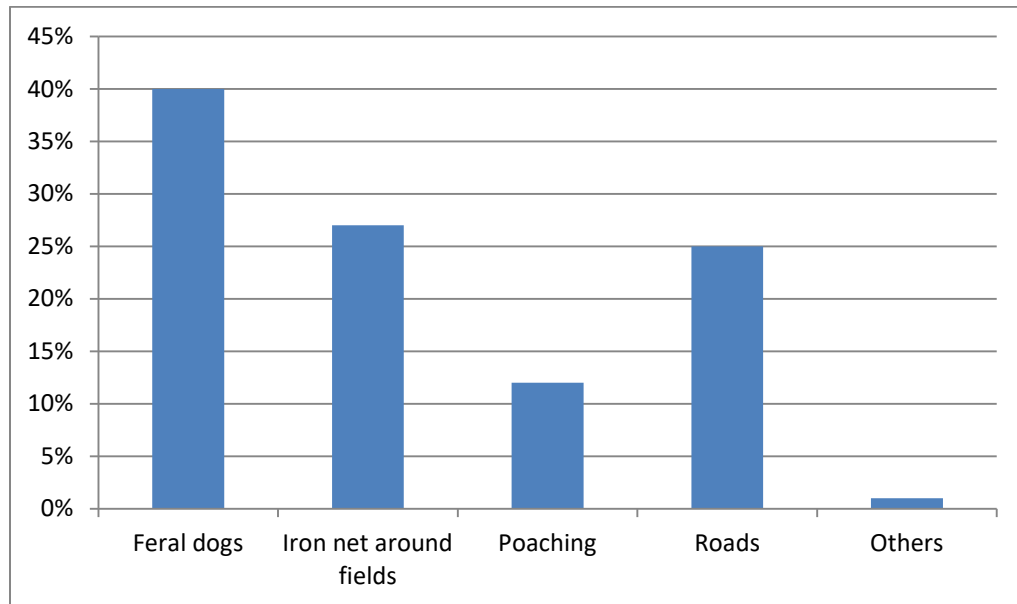


Figure-3. Reasons of biodiversity loss in recent times.

(Result of survey and questionnaire)

In the time of increasing value of physical wealth, new generations are going to ignore the religious practices up to some level. Figure-3 clearly shows that feral dogs are the most responsible for destroying wild animals (40%). Iron nets around fields, roads and poaching are the other reasons for biodiversity loss.

CONCLUSION

Biodiversity provides ecological, economic as well as cultural values to the world's community. It plays a major role in providing human needs thus maintains ecological processes upon which our survival depends. In recent time we should connect with indigenous communities (Negi,2010) who have traditional knowledge from generations through specific cultural and traditional mechanism. The local communities act as natural resource managers in conservation and sustainable use of biological diversity. Now-a-days cultural morals and practices, education, modernization and political dispensations threaten biodiversity (Sinthumule, 2023). Our education should include indigenous knowledge based formal curricula from primary to university level students (Ruddle, 1991; Ruddle

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and Ray, 1977; Warren, 1992). Conserving this knowledge would be most appropriately accomplished through promoting the community-based resource-management systems of indigenous peoples. (Gadgil *et al* 1993)

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6 reasons why biodiversity conservation is important- University of Minnes.

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