



WATER CONSERVATION IN SACRED GROVES



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ABSTRACT

Reserved forest patches of forests are sacred groves. These are the segmented areas containing flora and fauna. Such areas are protected by human societies and remain undisturbed with interrelationship to the divine or to nature. We have visited Shankar and Vinzayidevrai at Mulshi near Pune district. Observed flora, fauna and water bodies in the sacred groves which are helpful in maintenance of biodiversity. River, streams, lake, ponds conserve the water and maintain the groundwater table for the whole year. These are the sources of water in summer.

KEYWORDS

water conservation, sacred groves, vinzayi, Shankar devrai

RESEARCH PAPER

Introduction

Reserved forest patches of forests are sacred groves. These are the segmented areas containing flora and fauna. Such areas are protected by human societies and remain undisturbed with interrelationship to the divine or to nature (Hughes and Chandran 1998). These are the natural protected areas by indigenous and traditional people. These are the sacred places recognized by religions or faith as places for worship and remembrance. (IUCN, 2005).

Sacred grove culture in India has prevedic roots (Chandran, 2005). The pioneers of scientific studies of sacred groves in Maharashtra are Gadgil and Vartak (1973, 1975,1976, 1980, 1981). They have studied sacred groves from ecologic, biologic and socio-cultural perspectives. They have recorded 11 sacred groves from Bhortaluka. The study of sacred groves was focused on the status of plants like rare, endangered, endemic, extinct, conservation of micro and macro flora and fauna. (Vartak and Kumbhojkar, (1984), Puspanghadan et. al. (1998), Upadhaya et. al. (2003), Kumbongmayum et. al., (2005).

Sacred groves have their key role in conservation of flora and fauna. In Maharashtra, Bhor region, the contribution on natural heritage conservation of sacred groves was done by Kulkarni Et. al. (2010).

It has been observed that in recent years, tree resources in forest, sacred groves or University campus are potential environmental sources of carbon sequestration (Suryawanshi et. al. (2014).

In the sacred groves sometimes rivers, streams, ponds, springs are present. They assist micro-watersheds. The temples of deities are situated near pond, streams, rivers or springs which superbly conserve rain water and maintain the ground water table for the whole year.(Nipunage& et.al. (2016),

Materialand Methods

We have visited two sacred groves namely Vinzayidevrai and Shankar devrai atTaminhi, Mulshitaluka, Pune on 2/7/2017. Observed flora, fauna and water bodies.

Study area- Vinzayidevrai is located 65 km west of Pune. Shankar wadi is at azadwadi in Tamhinighat.

Result and Discussion

Ephemeral and perennial water bodies are present in Shankar and vinzayidevrai, In both the devrais root system of flora deeply penetrate the soil and trap the ground water and release in

the form of springs, streams, ponds or rivers. These become a source of continuous supply of water to the local people even in summer. Due to generation of luxurious amounts of nutrients and humus in sacred groves, the fertility of agro-ecosystem is very high. The parameters like pH, turbidity, total dissolved solids, electrical TDS, nitrate, phosphate, alkalinity, dissolved organic matter have their impact on flora and fauna. Phosphate is essential for planktons, maintain water table of the nearby areas. Water maintains cool and humid climatic condition in the sacred groves. (Dr. Aji. C. Panicker, Asst. Professor, Dept. Of Zoology, Mar Athanasius College, Kothamangalam, PDF

Water resources of the sacred groves-

	 <p>River at Vinzayidevrai</p>
 <p>Shankar Devrai</p>	
 <p>Ephemeral Pond at Shanardevrai</p>	 <p><i>Embelliarobusta</i> Wavding growing at Shankar devrai</p>

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