Editorial

Sacred groves are small groves that vary in size from a few hectares to a few kilometers protected by local communities as being the sacred residences of local deities and sites for religious-cultural rituals, have served as valuable storehouses of biodiversity. There are about 14,000 sacred groves known and reported in the country that harbor and act as repositories of rare fauna and flora.

This issue mainly contains the information on sacred groves of Eastern Ghats region their conservation and management aspects. Threats to existing sacred groves due to developmental activities are also given. Few selected abstracts and bibliography on the sacred groves have been provided. Observation of National / international days has been presented. ENVIS activities, query form will help the readers to know the various activities carried out by the Centre and also to float queries on environmental issues of Eastern Ghats.

ENVIS Coordinator

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Environmental Information System (ENVIS) Newsletter on Ecology of Eastern Ghats is a quarterly publication that publishes articles related to the thematic area of the ENVIS Centre. Authors are requested to send their articles and write-ups on the themes pertaining to Biological, Physical, Socio-Economic Environments, Programmes & Policies and Information Systems.

Readers are requested to kindly visit the website: http://envis-eptri.ap.nic.in. The subject experts on the themes mentioned above are requested to send their details, by downloading “Expert database form” from the website. Information seekers on various themes mentioned above are requested to fill the “Query - Response form” available on the last page of this issue. The filled in forms may kindly be sent by e-mail to eptri@envis.nic.in / envirorazia@gmail.com or by fax / post to the ENVIS Centre, EPTRI. (Address given in page1).

The views expressed in the Article/s are of Authors.

Source: http://www.ecoheritage.cpreec.org
Introduction

Sacred groves (SGs) are small groves that vary in size from a few hectares to a few kilometers protected by local communities as being the sacred residences of local deities and sites for religious-cultural rituals. They serve as valuable storehouses of biodiversity. They are part of biological heritage and systems that has helped to preserve the representative genetic resources existing in the surrounding regions for generations. Sacred groves are the important places in which biodiversity is preserved in mostly undisturbed condition because of certain taboos and religious beliefs. They are ancient natural sanctuaries that have supported the growth of several interesting and rare species of flora and fauna. The sacred groves harbor genotypes of future importance that may be very vital for breeding programmes. The institution of sacred groves dates back to the pre-agrarian hunting-gathering phase of human civilization, and is known to thrive in most parts of India (Kosambi, 1962). Sacred groves were a feature of the mythological landscape and the cult practice of Old Europe, of the most ancient levels of Germanic paganism, Greek mythology, Slavic mythology, Roman mythology, and in Druidic practice. They also feature prominently in many Asian and African mythologies and cultures, most notably in India, Japan, West Africa, and Anatolia. In India, the sacred groves are spread over the country and most of them remain unprotected today from lack of federal legislation. Each grove is represented by a deity and referred by different names in different parts of India. They are maintained by local communities wherein poaching and smuggling is prohibited.

Sacred groves in India

There are about 14,000 sacred groves known and reported in the country that harbor and act as repositories of rare fauna and flora. Abundant sacred groves are present along the Western Ghats in the states of Kerala and Karnataka. These are mainly distributed in the states of Andhra Pradesh (WWF 1996), Bihar, Jharkhand, Orissa, Maharashtra (Gadgil and Vartak 1981; Deshmukh et al. 1998), Rajasthan, Uttar Pradesh (Sinha and Maikhuri 1998), Tamil Nadu, Kerala, Pondicherry, Gujrat, Goa, West Bengal, and some northeastern states such as Meghalaya (Tiwari et al. 1998) etc. There are no records of existence of sacred groves in central part of India, except in some parts of Madhya Pradesh. Further, these sacred groves vary in size from a few trees to dense forests covering vast tracts of land.

Sacred groves in the Eastern Ghats

In the state of Andhra Pradesh, there are more than 750 sacred groves in 23 districts most of them situated in Chittoor, Adilabad, Kurnool, Kadapa, Ananthapur and Nellore districts (WWF, 1996). However, there is a scarcity of information on the extent of sacred groves precisely distributed in the eastern ghat region of the state. The state of Tamil Nadu is a home to 448 Sacred Groves covering an area of 556.58 ha. In total the Eastern Ghats region of both the states possess more than 1100 Sacred Groves in varying habitats. Some groves contain only trees, overlap with forest areas while others present in open lands spread over few to hundreds of acres. Largely the flora coupled with the sacred groves is categorized as threatened status according to International Union for Conservation of Nature (IUCN). Some sacred groves have representative taxa that are known by the location such as Hildegardia populifolia is present in the Chendrayunikona sacred grove of Anantapur district; Chrysopogon aucheri is present in the Nityapoojajakona of Kadapa district; Pterocarpus santalinus, Shorea tumbaggaia and Cycas beddomei are some threatened taxa in the sacred groves of Chittoor district; Aeginetia indica, Chrysopogon aucheri, Decalepis hamiltonii. Heteropogon fischerianus, Indigofera barberi, Kaempferia rotunda, Parahyparrhenia bellariensis, Zingiber roseum, and

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Osmunda regalis are threatened taxa recorded from Kurnool district.

The WWF - A. P. (1996) report states that the Andhra Pradesh has more than 750 SGs in 23 districts as follows - Adilabad (2), Anantapur (73), Chittoor (133), Cuddapah (76), East Godavari (10), Guntur (17), Hyderabad (13), Karimnagar (4), Khammam (4), Krishna (12), Kurnool (115), Mahabubnagar (9), Medak (4), Nalgonda (9), Nellore (87), Nizamabad (7), Prakasam (59), Ranga Reddy (10), Srikakulam (30), Visakhapatnam (30), Vizianagaram (32), Warangal (3), West Godavari (17). Several groves can be found in the habitation area or economic zone and the common land of the village. Often the sacred groves harbor threatened flora which are of prime importance to the local communities because of the byproducts and the aesthetic value.

### Sacred groves flora

A study in the Eastern Ghats of Andhra Pradesh indicated the following species commonly found in the Sacred Groves such as neredu (Syzygium jambolanum), chintha (Tamarindus indica), mamidi (Mangifera indica), panasa (Artocarpus integrifolia), vepa (Azadirachta indica), gummidi (Gmelina arborea), ganuga (Pongamia glabra), sampange (Michelia cham paka), teku (Tectona grandis), Juvvi (Ficus retusa), medi (Ficus glomerata), raavi (Ficus religiosa) and marri (Ficus benghalensis). A large number of distinct local art forms and folk traditions are associated with the deities of sacred groves, and are an important cultural aspect closely associated with sacred traditions. The importance of such locations arises from the existence of sacred trees/shrubs in the vicinity of sacred groves. Some of the sacred trees/shrubs associated with sacred groves include Butea monosperma (flame of the forest), Ficus religiosa (peepul), Saraca indica (ashoka), Ficus benghalensis (banyan), Aegle marmelos (Bael), Cannabis sativa (Bhang), Pterocarpus santalinus (sandalwood), Mangifera indica (mango), Azadirachta indica (neem), Ocimum sanctum (tulsi), Cynodon sp. (bermuda), Achyranthes aspera (prickly chaff) etc.

### Importance of sacred groves

Sacred groves are not only the sacred ecosystems functioning as a rich repository of nature’s unique biodiversity, but also a product of the socio-ecological philosophy that our forefathers have been cherishing since olden days. Sacred groves have well developed forest ecosystems and high degrees of species richness and a rich biodiversity in general. This, however, depends on the extent of preservation of the grove. Many, rather most, of these ecosystems have either vanished or are disturbed to a great extent. These groves provide multifunctional roles to the local communities such as religious, secular, political, cultural, health, economic and psychological effects. Sacred groves, in general act as a nursery and storehouse of many of the ayurvedic, tribal and folk medicines prevailing in wild habitats. Species not under any immediate risk of extinction, if preserved in Sacred Groves, may have great potential of diverse use in the future. Sacred groves are asylum for endemic and endangered plant and animal species; store houses of medicinal plants and wild plants that help the gene pool of cultivated varieties. Most of the sacred groves are associated with water bodies such as ponds, streams and rivers. The trees help in retaining the soil fertility, preventing erosion of topsoil and absorb most of the rainwater from the runoff.

### Ecological significance:

The sacred groves offer manifold ecological benefits in conservation of biodiversity. The groves are often present in the vicinity of ponds, streams and springs which help in the meeting the water requirement of the local communities. The vegetative cover also facilitates recharging of aquifers. The sacred groves improve the soil stability of the area thus preventing erosion. Further the habitats maintain micro-climate, enhance nutrient cycling and can be used as unique source of insitu conservation. Modern times, the sacred groves have become biodiversity hotspots inhabiting plant and animal species that are on the verge of extinction in neighboring areas, acting as abode of genetic diversity. These sacred groves in urban landscapes provide vegetation cover and nesting sites for avian fauna and other dependent organisms.

### Threats to the sacred groves

Today the sacred groves remain exposed and are devoid of any major protection from the rapid urbanization and over exploitation of resources. Whilst many of the groves are abodes of Hindu Gods, in the recent past quite a number of them are partially
cleared for the construction of shrines and temples. The threats vary from one region to the other and even from one grove to the other. But the most profound threats include disappearance of traditional beliefs, rapid urbanization, developmental interventions, commercial forestry, pilgrimage and tourism, removal of biomass, encroachment, modernization of market forces, fragmentation and perforation, invasion by exotic weeds, land pressures from increasing livestock and fuel wood collection. Of late, the decline in the traditional beliefs, economic development and socio-economic factors have destabilized the status of sacred groves across the country. The Eastern Ghats sacred groves are put to pressure from large scale mining projects, road construction, tourism, river valley projects and other small scale intensive programmes. These are some of the perils the groves are facing today.

Need for conservation of sacred groves

Sacred groves have been an embodiment of an act of faith, fear as well as eco-philosophical outlook of the people living amidst the bounty of nature. Protection of the biodiversity and the life forms through sacred groves is an obligatory expense on the society. As a result of the high conservation and biodiversity values held in sacred groves, increasing attention is being paid to their potential as a tool and model for biodiversity conservation. These groves are important today as they are banks of genetic diversity that have to be preserved and sustained. Growth of tourism industry is also deteriorating the faith towards deity and groves. Sacred groves are the victims of this grim tragedy. The groves located near the settlements are disappearing at a faster rate. Only few sacred groves are in their pristine condition.

The value of sacred groves is colossal; they are imminent sources of non-timber products, fatty oils, medicinal plants, etc. The crucial role played by the sacred groves deserves attention in future from their function in water conservation and their effect on micro-climate of the region. All of these factors indicate that the conservation of sacred groves is essential for maintaining local/regional biodiversity, the comprehensive health of a landscape and preserving the socio-cultural integrity of local communities. Scientific understanding of the sacred grove habitats is vital in framing and designing strategies for the rehabilitation of degraded landscapes in association with the local communities and their participation. There is an utmost necessity in preserving, restoring and proper management of the existing groves in consideration of the ecological values delivered by the sacred groves.

References


Sanctity of the grove, several intriguing taboos and customs laid down way back in the past are still existing. In all 448 groves were studied from 28 district of the state in order to understand size, cultural practices and vegetation of the groves.


The sacred trees or sthalavrikshas form an important part of the ecological traditions of Tamilnadu. They have played a significant role in the protection and preservation of the environment. Each sacred tree is associated with a deity and a temple.


Sacred groves play a major role in environmental protection. They control air pollution, cool the atmosphere, increase soil fertility, harbours various organisms and are also an integral part of social, religious, ecological and environmental traditions.


The tradition of associating trees with Gods and Goddesses in Tamilnadu can be traced back to ‘sangam’ literature, which is full of references to more than hundred plants. In Tamilnadu, 265 temples were visited and 60 stalavrikshas recorded.


Devarakadu or sacred groves in Kodagu district are of special nature as they have remained, more often than to in near virgin state and in the climax form and probably constitute the only representation of the type of forest that existed earlier in the region. A study was undertaken to document the tree diversity, regeneration status in 25 Devarakadu of Kodagu.


World Environment Day:

The World Environment Day (WED) is observed annually on 5 June as an opportunity to raise awareness and promote action on environmental issues. WED was established by the United Nations General Assembly in 1972 to mark the opening of the Stockholm Conference on the Human Environment held in Sweden.

Every year, UNEP announces a theme for the WED to highlight and bring people’s attention to issues and concerns surrounding the theme. The WED slogan and theme for the year 2008 is “Kick the Habit! Towards a Low Carbon Economy”. The theme and slogan highlight that Climate Change is the defining issue of our times and the challenge needs to be addressed by all of us.

ENVIS at EPTRI observed WED on 5th June, 2008 and conducted seminars on “Kick the Habit! Towards a Low Carbon Economy”. Ms. Gayathri Ramachandran, IAS., Director General EPTRI and EO Special Chief Secretary, has inaugurated the programme. Dr. S.N. Hasan, Department of Astronomy, Osmania University, Hyderabad has made a presentation on “Impact of Astronomy on Environment”. Students, NGO’s and Research scholars participated in this event. A documentary has been played on Ozone depletion.

Vanamahotsawam Day:

Van Mahotsava is celebrated throughout the country in the first week (1st to 7th) of July every year. Every year lakhs of saplings of different tree species are planted with active involvement of government agencies like the Forest Department.

Sri. K.S. Rao, I.F.S, Prl. Chief Conservator of Forests, Sri. S.Vijayarama Raju, Ho’ble Minister for Environment and Forests, Govt. of Andhra Pradesh and Sri. N. Srikanth, I.A.S. Collector, Srikakulam district have participated in 59th Vanamahotsavam at Srikakulam and conducted public awareness programme. They explained about the conservation of nature and ozone layer depletion.

ENVIS Activities

ENVIS Centre organised a National Seminar on Conservation of Eastern Ghats on December 28th-29th, 2007. The event was co-sponsored by

- Ministry of Environment and Forests, Government of India;
- Department of Environment, Government of Tamil Nadu;
- Forestry & Ecology Division, National Remote Sensing Agency [NRSA];
- National Biodiversity Authority [NBA] and
- C.P. Ramaswamy Environmental Education Centre [CPREEC].

ENVIS team compiled the proceedings on "Conservation of Eastern Ghats" which was released by Sri. R. H. Khwaja, IAS, Addl. Secretary, MoEF, GoI on 14.07.2008.
Dear information seeker,

ENVIS Centre on Ecology of Eastern Ghats facilitates the services of collecting and disseminating information related to Ecological / Environmental issues of Eastern Ghats, more specifically on Biological, Physical, Socio-Economic environments, Information systems, Programs and Policies. To share or enquire on any of these topics, you are kindly requested to fill up the form given below in the prescribed proforma by e-mail to eptri@envis.nic.in or envirorazia@gmail.com or or post to ENVIS Coordinator, EPTRI, Hyderabad, the address cited hereunder.

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