

# Spirituality and ecology of sacred groves in Tamil Nadu, India

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*The ancient Tamils worshipped nature and set apart sanctified land to propitiate the tree spirits; such sacred groves persist today, although the beliefs that ensured their protection are less steadfastly observed than in the past.*



**The setting aside of sanctified groves is an ancient Indian tradition that persists to the present day (god images old and new)**

Nature worship was an ancient tradition in India and all forms of life were considered sacred. There was a general conception among the early people that the godly element was actively at work in places of natural beauty. Hence trees were sacred to the ancient Tamils. They considered trees the abode of spirits and gods and believed that the sacredness of living beings and inanimate objects ensured their safety and persistence. Many villages set apart sanctified land to propitiate the *vanadevatas*, i.e. tree spirits. In certain groves the entire vegetation was considered sacred and worshipped.

Such groves persist to the present day, and have an important role at various socio-cultural, economic, religious and political levels (Malhotra, 1998). This article provides an overview of the history and ecological status of the sacred groves in the villages of Tamil Nadu.

## HISTORY AND NATURE OF SACRED GROVES

Historical records, legends and folk songs all throw light on the sacred groves of Tamil Nadu. The first authentic report of the sacred groves is in the memoirs of Ward and Conner (1827), cited in the 1891 census of Travancore state (Census Commissioner's Office,

India, 1894). Brandis (1897), the first Inspector General of Forests in India, reported on the sacred groves in the hill ranges of the Salem district in the Madras Presidency.

The custom of establishing sacred groves originated in the remote past. Several inscriptions on stone slabs and copper plates record that rulers granted land to maintain temple gardens, which were called *thirunandavana*. A great variety of flowering plants were cultivated in these gardens and flowers from them were offered to the deity to perform pujas (Hindu prayers). Even after the introduction and proliferation of Christianity and Islam, the sacred groves remained as cradles of ancient rural civilization not only in Tamil Nadu, but also in many other states of India. Sacred groves occur in almost every part of Tamil Nadu. Many villages have more than one. Their area ranges from a few trees to hundreds of hectares. Most of the sacred groves represent the natural climax vegetation of their geographical location (Table 1).

There is little evidence about the exact number and area of sacred groves, since no comprehensive surveys have been carried out. A 1995 assessment documented 13 270 sacred groves in all of India. Of these, 79 ranged in size from

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*Granite statues of male and female snake gods in a traditional sacred grove dedicated to snake gods*

*The earliest sacred groves may have been temple gardens in which flowering plants were cultivated for offerings to the deity*



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0.01 to 900 ha and together embraced 10 511 ha of vegetation cover. Of this area, only 138 ha comprised totally undisturbed vegetation, and 3 188 ha had an open canopy. Most of these groves (66 of 79), covering an area of 10 251 ha, were located in the catchment areas of major rivers and rivulets; 58 (9 621 ha) were at the origin of perennial streams and 38 (6 454 ha) were on hillsides (Rao, 1996). Of the 13 270 groves, 448 were in Tamil Nadu. Another estimate, however, suggests that the number of groves in

the country may be as high as 100 000 to 150 000 (Vajpeyi, 2000).

Each sacred grove has a residing deity and folklore associated with it. Generally they are dedicated to one of the following:

- village gods and/or ancient spirits;
- snake gods and/or an incarnation of Vishnu, variously known in different locations as Ayyappan, Sasthana or Ayyanar, a Hindu god who unites spiritually both shaivite and vaishnavite followers;

- shaivite gods (located in dense forests);
- vaishnavite gods (located in dense forests).

The village sacred groves are generally dedicated to Amman, the goddess of fertility and good health. The next most worshipped deity is Ayyanar, worshipped daily and also offered special prayers on full moon and new moon days.

#### **BELIEFS, TABOOS, RITUALS AND FOLKLORE ASSOCIATED WITH SACRED GROVES**

The taboos, rituals and beliefs associated with the groves, supported by mystic folklore, have been the prime motivating factors for preserving the sacred groves in as pristine a condition as possible.

Trees such as banyan, peepal, neem and tamarind are considered to be the abode of spirits. When a child is desired or born, people propitiate the spirits by tying toy cradles to the branches. Similarly, they tie on a black cloth with salt in it to ward off the evil eye. Yellow, white or sometimes red pieces of cloth and bangles are tied to the trees; people ask for material, moral and social well-being in exchange for these gifts to the spiritual realm.

In certain sacred groves, people fulfil

**TABLE 1. Characteristics of the vegetation of some of the sacred groves in Tamil Nadu**

Sacred grove	Size (ha)	Number of plant species	Tree density <sup>a</sup> (No./ha)	Tree basal area (m <sup>2</sup> /ha)	Tree juvenile population <sup>b</sup> (No./ha)
Kandanur	33	50	875	53.9	19 400
Solai-Andavar kovil	12	39	1 000	43.90	138 400
Alagar hills	4 500	53	910	14.31	11 913
Nambikoil	Not known	73	570	27.56	21 600
Ayaanar kovil	10	53	444	54.2	8 842

<sup>a</sup> Refers to individuals with diameter at breast height (DBH) greater than 10 cm.

<sup>b</sup> Refers to seedlings and saplings of 3 to 10 cm DBH.

their vows by tonsuring (shaving the head to make a ceremonial offer of hair to the god) or by placing granite statues of snake gods in the grove's temples. In many places offerings of terracotta horses of various sizes are lined up in one corner of the sacred grove in the hope of a good harvest.

Ritual activities are carried out in the sacred grove as part of annual week-long village celebrations dedicated to local deities, held in the spring or summer. In certain sacred groves food is cooked using the dead wood collected from the grove. The preparations are offered to the goddess and other deities, and the food is distributed to all those who take part in the festival. Folk tales and epics are enacted at night. On the last day of the festival, animals such as fowl and goats are sacrificed to the goddess. Groves dedicated to snake gods (*Nagara kavus*) are highly respected by the believers. In most of the *Nagara kavus*, daily pujas are performed and special prayers are offered during full moon days.

The people believe that any damage to the sacred grove, harm to the fauna residing in it or felling of any tree from it may invite the wrath of the local deity, causing diseases and failure of agricultural crops. Even taking a dry twig is forbidden, and any violation of the taboo, people say, will incur the wrath of the snake gods. Therefore, many people will not even take dead wood out of the sacred groves.

#### ECOLOGICAL SIGNIFICANCE OF SACRED GROVES

##### Water associations

Most of the sacred groves in Tamil Nadu are associated with reservoirs, ponds, springs or streams. Many sacred groves are located in catchments near the origins of springs or streams. Therefore, the groves act as local-area microwatersheds which help to meet the water needs of

local communities. In drier climates, reservoirs associated with the large sacred groves provide irrigation for agriculture. The trees prevent surface runoff and thus topsoil erosion and siltation.

##### Conservation of biodiversity

Sacred groves protect several plant and animal species valuable for food, medicinal and other uses (Ramakrishnan, 1998). Despite increased pressures, sacred groves shelter many plant and animal species which might have vanished elsewhere in the surrounding environment, often including wild crop relatives and endemic and endangered species (Swamy, 1997). In general, sacred groves in southern Tamil Nadu harbour many varieties of mango, jamun (*Eugenia jambolana*) and fig. The Allinagaram grove in the Theni district was found to support four wild varieties of mango. The tree *Terminalia arjuna* found in this sacred grove, with a girth of about 10 m, may be one of the oldest living trees. Similarly, the Kandapur sacred grove in Sivagangai district supports a rare rattan species (*Calamus* sp.) which might otherwise have vanished from the local landscape. Sacred groves in Kanyakumari district support numerous rare endemic orchid species on the *Hopea parviflora* trees.

The sacred groves in the Kanyakumari district harbour many of the rare endemic plants of the Western Ghats such as *Antiaris toxicaria*, *Diospyros malabarica*, *Diospyros ebenum*, *Feronia elephantum*, *Butea frondosa*, *Garcinia cambogia*, *Sterculia foetida*, *Gnetum ula* and *Cycas circinalis* (Sukumaran and Raj, 1999).

The sacred groves shelter several medicinal plants of great value not only for the primary health care of the village communities, but also in the modern pharmacopoeia (Table 2). The literature of the Nayaks (erstwhile rulers or kings of the state) mentioned that the Alagar hills, venerated through the centuries because of the vast sacred grove there, harbour a wealth of medicinal plants. These hills became an important source of raw materials for Ayurvedic and Siddha medicines. In some sacred groves of Kanyakumari district, medicinal plants are raised around the temple by the priest, who generally takes care of the health and well-being of humans and cattle.

The ground flora in the sacred groves often includes wild turmeric (*Curcuma* spp.), wild ginger (*Zingiber* spp.) and cardamom (*Elettaria cardamomum*). Water reservoirs and ponds close to sacred groves support varied flora and fauna.

**Except for use in cooking for special festivals, even dead wood is not to be disturbed, and is left in the grove to decompose**



## Sacred groves in Europe

*Sacred groves also  
existed widely in western  
Europe in ancient times.*

Sacred groves seem to have existed widely throughout western Europe in prehistoric times. They included natural or planted groves in which a local deity was believed to reside; temple groves, in which a temple was surrounded by planted trees; and groves surrounding or covering burial grounds. A trait common to these areas was their inviolability; only priests or those concerned with a ceremony could enter them. In some traditions, cutting down a tree in a sacred grove could mean death to the offender. There are still traces of sacred Druidic groves today in areas of France, the United Kingdom and Ireland.

The ancient sacred grove at Nemi near Rome, Italy was consecrated to the goddess Diana (Artemis in Greek), the divinity of the hunt (Brosse, 1989). The name Nemi comes from the Greek and Latin *nemos/nemus*, which meant a forest enclosing pastures, groves and a group of trees considered to be sacred. Within a *nemus* clearings were cut in order to put animals to pasture.

Nearly every tribe in ancient Gaul seems to have possessed a *nemeton* or sacred meeting place surrounded and protected by trees. These were centres of religious ritual, and their destruction was seen with the same horror that would attend the burning of a temple or church today. According to Matthews and Matthews (2002), "... many settlements [in Europe] were built beside, or derived their names from, the sites of ancient groves. Once Christianity began to move across the Western world, the *nemeton* were destroyed and Christian churches built on their ashes...". Still today in Celtic countries offerings of ribbons can be seen hanging in the bushes around sacred wells, an ancient custom venerating nature as a feminine divinity or an "earth mother" principle.

Politically speaking, one group's "sacred grove" could be perceived as a threat by another group, and conquerors often destroyed these places as a way of wielding power over local peoples. As recorded by Lucanus, for

example, Caesar destroyed one of the Gauls' sacred groves in the first century in order to abolish what were considered by the Romans to be pagan practices. During the Middle Ages, the Christian church destroyed Celtic and Druidic sacred groves throughout Europe with a similar purpose; the church's prohibition of tree worship and of all rites having to do with tree veneration probably related to the fact that early tree guardians not only possessed knowledge (generally in the form of planting calendars, medicinal properties of plants including trees, and other types of knowledge) but carried on their practices and teachings in secrecy and could have constituted a political threat; destroying their "library", so to speak, disempowered the magicians.

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TABLE 2. Important medicinal plants recorded in sacred groves and their use

Species	Part used	Diseases treated
<i>Abutilon indicum</i>	Seed, root	Black patches, ulcers
<i>Achyranthus aspera</i>	Leaf, root	Scorpion bite, scabies
<i>Alangium salvifolium</i>	Leaf, root	Poisoning, fever
<i>Andrographis paniculata</i>	Leaf decoction	Scorpion and snake bite, dysentery
<i>Calotropis gigantea</i>	Latex, flower, root	Wound healing, fever, cough
<i>Canthium parviflorum</i>	Leaves	Dysentery
<i>Cassia auriculata</i>	Flowers in cooking	Diabetes
<i>Chloroxylon swietenia</i>	Rootbark in milk	Impotency
<i>Cleome gynandra</i>	Seeds	Expels worms in stomach
<i>Cleome viscosa</i>	Leaf juice	Ear pain, itching
<i>Commelina benghalensis</i>	Plant paste	Bed sores, pimples
<i>Croton bonplandianus</i>	Leaf extract	Fever
<i>Dichrostachys cinerea</i>	Root paste	Rheumatism
<i>Euphorbia hirta</i>	Leaves, latex	Venereal disease
<i>Evolvulus alsinoides</i>	Leaf decoction	Prolonged fever
<i>Ficus benghalensis</i>	Latex, fruit, aerial root	Whitish discharge, tooth trouble
<i>Gisekia pharnaceoides</i>	Plant juice	Expels tapeworms from stomach
<i>Jatropha curcas</i>	Crushed bark, latex	Cholera, pain relief
<i>Leucas aspera</i>	Leaf, root flower	Scorpion bite, rheumatism,
<i>Madhuca longifolia</i>	Gum, bark, seed, leaf	Rheumatism, eczema, constipation
<i>Pavetta indica</i>	Stem extract	Rheumatism
<i>Pedaliium murex</i>	Plant mucilage	Stomach pain, ulcers
<i>Phyla nodiflora</i>	Plant extract	Piles
<i>Phyllanthus amarus</i>	Root	Jaundice
<i>Pongamia pinnata</i>	Flowers, seed	Whitish discharge, skin diseases
<i>Sarcostemma intermedium</i>	Stem powder	Induces vomiting
<i>Solanum trilobatum</i>	Leaf, flower	Cough, ear trouble
<i>Streblus asper</i>	Latex	Gum diseases, stops bleeding
<i>Strychnos nux-vomica</i>	Seed poultice	Wounds
<i>Syzygium cumini</i>	Seed	Diabetes
<i>Trianthema decandra</i>	Leaf extract	Jaundice
<i>Tribulus terrestris</i>	Plant ash	Rheumatism
<i>Wrightia tinctoria</i>	Bark decoction	Piles

Isolated sacred groves do not usually shelter major mammalian wildlife species. However, sacred groves that form part of a continuous stretch of reserved forest, as in the Alagar and Suruli hills, harbour bison. Apart from

primates and minor mammals, sacred groves also have numerous bird, butterfly and bat species. However, there are as yet no detailed accounts or inventories of biodiversity in the sacred groves.

### Management of sacred groves in Tamil Nadu

Most of the *Nagara kavus* and *Sasthan kavus* (sacred groves dedicated to the god Ayyappan) in Kanyakumari district are owned by a few families or groups of families as a trust. Traditionally these communities allot a small portion (about one-seventh) of the available landholding for the purpose of maintaining sacred groves.

Some groves are under the custody and management of local communities or tribes. Some are owned and managed by the village communities under hereditary trusteeship. All management decisions are taken collectively at a gathering of the entire village during the annual rituals in the sacred grove.

Sacred groves associated with large Hindu temples are managed by local trustees of the temple governing board under the supervision of State-run institutions.

### Threats to ecology and to sociocultural traditions of sacred groves

Today the traditional belief systems which were fundamental to the concept of sacred grove conservation are considered mere superstitions. The rituals are now known to very few people, mostly belonging to the older generation. In a recent study it was observed that in the larger sacred groves traditional rituals are still performed in accordance with the customary beliefs, but in smaller groves the traditional rituals are no longer performed (Swamy, 1997). The traditional values appear to be gradually disappearing with the recent advent of modernization, urbanization and people's changing aspirations. As a result, the violation of cultural norms and taboos no longer carries heavy consequences, and the sacred groves are becoming degraded.

Human activities that were previously taboo, such as dead wood collection,



*In the larger sacred groves traditional rituals are still performed in accordance with the customary beliefs, but the traditional values appear to be gradually disappearing*



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biomass gathering, lopping of tender branches and green leaves for goats, creation of footpaths, cattle grazing, mining of sand and clay, brick-making and collection of wild fruits, vegetables, medicinal plants, fruit-eating bats and fireflies, are affecting the ecology of the sacred groves.

Invasion of exotic weeds has become a serious problem in the ecology of some sacred groves; the domination of alien species such as *Eupatorium odoratum*, *Lantana camara*, *Prosopis juliflora* and *Hyptis suaveolens* often threatens and depletes local species in these groves.

Conflicts among the sacred grove managers have also resulted in loss of biodiversity in certain sacred groves, when policy decisions have been made to benefit certain minority sections of the village society, against the traditions of the sacred grove.

### CONCLUSIONS

Sacred groves harbour many woody plant species as well as fauna. These groves function as genetic reservoirs of wild species. As religious beliefs and taboos weaken, the pressure on these forests increases. The temples within the groves are still used as places of worship, but the forest surrounding them has become relatively unimportant. In

many places strong taboos against biomass extraction no longer exist, while in other places natural resources are removed from the forest under cover of darkness. The rationale behind the reverence for nature and the protective taboo seems to have been forgotten, sometimes even where religious rituals continue to be observed.

It is important that people recognize the values of these remaining patches of forest and that levels of resource extraction be kept low and regulated; this would facilitate sustainable resource use. Identifying the socio-economically important species of the sacred grove and raising them in buffer zones might be a viable strategy for their conservation and sustainable use. This would not, however, address the social changes that have contributed to the sacred groves' decline. Where spiritual and ethical traditions no longer ensure the conservation of these forests, the public may need to be educated and informed about other reasons – environmental, social and economic – for conserving the forest and using it sustainably. ♦