SSN No. 2349-9435 Periodic Research A Study of Sacred Groves Existing in Different Religious Patches of Poonch District

Abstract

The practice of dedicating groves to local deities has a long history. They are the ancient natural sanctuaries where all forms of living creatures are given protection by deity. These sacred groves have been traditional means of biodiversity are the patches of forest that support forest-dwelling species within non-forest matrix. 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, our forefathers have been cherishing since olden days. Many of these pristine ecosystems have either vanished or are disturbed to a great extent. But those still existing are living instances of Carbon pools and nature's preserved uniqueness.

Poonch district is the land of saints, sages, great philosophers and mystics. There are several sacred groves having rich diverse flora and their documentation did not get any attention so far. The present piece of work comprises study of 9 such most popular sacred groves in which woody flora belonging to 24 families was observed with dominance of the family Rosaceae.

Keywords: Biodiversity, Documentation, Flora, Sacred Groves, Socio-Ecological Philosophy, Wood.

Introduction

Sacred groves are the excellent traditional concept to maintain environment at village or regional level. The sacred groves consist of a Shrine for the God / Goddess with a pond tank surrounded by a small forest or dense trees. Within these groves are locked ancient sacred herbs and traditional medicinal plants, primitive practices of sorcery and magic. These groves are conserved and preserved on religious grounds and exist in several parts of the world.

Sacred groves are symbolic of single genetic resources and play an important role in conservation and management of a bio-diversity. The socio- economical, medicinal and environmental importance of these plants was recognized and sacred trees evolved as a means of conserving lands rich genetic plant diversity. Sacred plants provide food, shelter and nesting beside substratum for several species of birds and squirrels. Some species are totally protected. Banyan (Ficus benghalensis), Pipal (Ficus religiosa) and Indian Fig (Ficus glomerata) are afforded total protection. Ficus is considered as key stone resource playing a significant role in conservation of many insects, birds and mammals. It is also an important species providing site for beehive to honey bees. The five most sacred leaves of Pipal, Cluster of white Fig, Ficus lacor, Banyan and Mangoes are employed in making prayers and offerings. On auspicious occasions, mango leaves are tied to a string and hung on the doors as a welcome banner and leaves of Plash and Banyan make workable plates and bowls during community feasts.

In Jammu and Kashmir 150 sacred groves are reported ranging from 0.4 to 1374 acres which are managed by religious bodies. The Shankaracharya sacred grove is a reserve forest being maintained by Govt. for aesthetic and recreational purposes, (Kumar *et al.* 2011) reported among angiosperms and gymnosperms 60 families and 229 genera. Asteraceae was the largest with 45 species and other important families were Poaceae, Rosaceae, Paplionaceae, Lamiaceae, Ranunculaceae and Apiaceae.Small groves are highly protected and any removal is a taboo (Dar *et al.*, 2002).

Study Area

Poonch one of the floral diversitic district of Jammu & Kashmir is located at between 33°25' to 34°01' North latitude and between 73°58' to

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74°35' East longitude. The range of mountains separates Poonch Valley from the Kashmir Valley. On the other hand it is separated from Rajouri District with two small passes Bhimber Gali and Dera Gali. The climate of Poonch is some what cooler than the



Identification

The plant species were identified with the help of experts and published literature in the flora of [Hooker, 1872-97; Stewart, 1972; Singh and Kirn, 1981; Sharma and Kachroo, 1981-82; Kirn, 1992; Singh ,1992; Vir Jee et al.,1984; Dar *et al.*, 2009; Malik *et al.*, 2010; Dar *et al.*, 2014].

Sacred Groves in Religious Patches of Poonch District (J&K)

In PirPanjal region of Jammu and Kashmir people don't maintain sacred groves on large scale as is done in Rajasthan, Tamil Nadu, Kerala and other states perhaps because there are dense forests being managed by Govt. through Forest Deptt. Time is not far when people will sure to feel the necessity of maintaining sacred groves when the existing forests will vanish in near future. Nevertheless there are sacred groves at a very small scale on religious grounds out of reverence, fear, sentiments and respect for trees growing in holy shrines from times immemorial (Kumar *et al.* 2011; Dar et al., 2002).In Poonch district such 9 sacred groves were surveyed with a focus on existing woody flora.

Chhote Shah Badshah Mendhar sacred grove, afew giant wild olive trees (*Olea ferruginea*) growing from centuries with association of Chinar (*Platanus orientalis*) trees and Poplar (*Populas nigra*) trees make an umbrella within the compound walls of the shrine area. The locals including visiting devotees can never think of cutting even a twig from sacred grove. Among the ground flora the common species of the plants are small shrubs like *Berberis lycium*, *Ziziphus jujube and Carrisaopaca*. As all the ground of the shrine is cemented except the few patches where the plants are growing.

Dharian Sacred Grove situated 18 km. from Poonch city on the Poonch Jammu road between main road and river bed of Suran Nallah in Dharian hemlet in village Madana, Tehsil Surankote (Plate 1.1 & 1.2).It is believed and narrated that famous spiritual Sain Baba Ghulam Shah Badshah while travelling from Punjab to Shahdara Sharif halted at this place for 22 years. He stayed on a rock in river bed and worshipped during this period of his stay at

Periodic Research

rest of the Duggardesh plains. Summers are short and usually pleasant. The summer temperature generally does not rise above 31°C. Winters are cool and characterized by rainfall due to western disturbances.



SuranNallah was terribly swollen but did not hit the place of worship and splitted in two parts. The grove has occupied about 10 ha. area. The devotees travelling on this route in Buses, Trucks and light vehicles halt at this place, pay homage, donate money by putting it in locked box on the road side building.

The maintenance of Shrine and sacred grove besides a double storey Mosque and Madarsa including stairs from road side to the Central located worship place of shrine is done by a local Committee. A langer (Free food) is also run for visiting devotees in this cool, clean and peaceful grove under the thick shade consisting of trees, shrubs and herbs (Table 1). The ground flora of the sacred grove is predominantly covered by a lot of herbs, grasses, and ferns. The entire land under sacred grove is shady and cool and as such there is no possibility of height demanding species such as Chir pine or Cedar pine.



1.1: Aerial view of Dharian Sacred Grove Plate

P: ISSN No. 2231-0045

E: ISSN No. 2349-9435



1.2: Frontal view of Dharian Sacred Grove Plate Table 1: Flora of Dharian Sacred Grove (Lassana Surankote)

Local Name	Botanical name	Family			
The upper sto	er storey is predominated by the trees				
Mannu	Ulmus villosa Bradis ex Gamble	Ulmaceae			
Khirak/Betkair	Celtis australis L.	Ulmaceae			
Eucalyptus	Eucalyptus citridora Hook	Myrtaceae			
Poplar	Populas nigra L.	Salicaceae			
Walnut	Juglans regia L.	Juglandaceae			
Champ/Sarol	<i>Alnus nitida</i> (Spach) Endl.	Betulaceae			
Oak (Rein)	Quercus incana Roxb.	Fagaceae			
Breen	Quercus glaucaThunb.	Fagaceae			
The trees grow	wing in second storey				
Cypress	<i>Cupressus torulosa</i> D. Don	Cupressaceae			
Batangi	<i>Pyrus pashia</i> Buch. Ham. ex D.Don	Rosaceae			
Drek	Melia azedarach L.	Meliaceae			
Amlok	Diospyros lotus L.	Ebenaceae			
Black locust	Robinia pseudoacacia L.	Paplionaceae			
Beesa	Salix alba L.	Salicaceae			
Drava	Cedrella serrata Royle.	Meliaceae			
Kikar	Acacia Senegal (Linn.) Willd.	Mimosaceae			
Tarkanna	<i>Acer caesium</i> Wall ex Brandis	Aceraceae			
Bottle brush	<i>Callistemon citrinus</i> (Curtis) Stapf.	Myrtaceae			
Kankoli	<i>Elaeagnus umbellate</i> Thunb.	Elaeagnaceae			
Anardana	Punica granatum L.	Punicaceae			
Timmer	Zanthoxylum armatum DC.	Rutaceae			
Predominant woody ground flora					
Simlu	Berberis lycium Royle.	Berberidaceae			
Tarnari	Rosa moschata Mill.	Rosaceae			
Pakran	Prinsepia utilis Royle.	Rosaceae			
Aakhrey	Rubus ellipticus Smith.	Rosaceae			
Ghulab	Rosa indica L.	Rosaceae			
Khokhri	<i>Randia tetrasperma</i> (Roxb) Bth. & Hkf	Rubiaceae			

Periodic Research Banwat Hissab

A sacred grove consisting of giant sized evergreen olive trees (Olea ferruginea) is existing in the heart of the village. In the center of grove there is shrine of Baba Mosa Ghazi (Plate 2). Local inhabitants have been protecting the grove from centuries and believe that who even cut a branch of any tree of sacred grove will turn blind.



Plate 2:A View of Sacred Grove at Banwat Hissab. Sultan Shah Ghazi sacred grove is situated in Mohalla Saiyaddan of village Shiendara, Tehsil Surankote on link road from Shiendara to Kalaban Mendhar (Plate 3.1 & 3.2). The grove of different tree species has occupied about 2 ha. area. This holy grove of Sultan Shah Ghazi and Akbar Shah Ghazi are honored under one beautiful tomb.



Plate 3.1: An Outer View of Sultan Shah Ghazi Sacred Grove



Plate3.2: A Frontal View of Sultan Shah Ghazi Sacred Grove.

RNI No. UPBIL/2012/55438

E: ISSN No. 2349-9435

Table 2: The Main Species of Trees and Shrubs ofSultan Shah Ghazi Sacred Grove.

Local Name	Botanical name	Family
Batkair/ Khirak	Celtisaustralis L.	Ulmaceae
Mannu	<i>Ulmus villosa</i> Brandis ex Gamble.	Ulmaceae
Drava	Cedrella serrata Royle	Meliaceae
Hari	Prunus armeniaca L.	Rosaceae
Karoon/Toot	Morus alba L.	Moraceae
Breen	Quercus glauca Thunb.	Fagaceae
Amlook	Diospyrus lotus L.	Ebenaceae
Ailanthus	<i>Ailanthus altissima</i> (Mill) Swingle	Simarubaceae
Kandar	Cornus macrophylla Wall.	Cornaceae
Anardana / Daruna	Punica granatum L.	Punicaceae
Aakhrey	Rubus ellipticus Smith.	Rosaceae
Simlu	Berberis lycium Royle.	Beriberidaceae
Pakran	Prinsepia utilis Royle.	Rosaceae
Sandhoori	<i>Debregeasia salicifolia</i> (D.Don) Rendle	Urticaceae

Shiendara grove is situated near the other grove of Sultan Shah Ghazi below the link road Shiendara to Kalaban and known by the name Ziarat of Akbar Shah Ghazi (Plate 4). Chinar trees (*Platanus orientalis*) planted by Sain Akbar Shah Ghazi have grown giant with other associate species (Table 3). The maintenance of this grove is also in the hands of local Committee.



Plate 4:A View of the Shiendara Sacred Grove Table 3: Woody Plant Species at Shiendara Sacred Grove

Local Name	Botanical name	Family
Chinar	Platanus orientalis L.	Platanaceae
Cypruss	Cupressus torulosa	Cupressaceae
	D.Don	
Pipal	Ficus religiosa L.	Moraceae
Breen	<i>Quercus glauca</i> Thunb.	Fagaceae
Amlook	Diospyrus lotus L.	Ebenaceae
Ban Oak	Quercus incana Roxb.	Fagaceae
Kikar	Acacia Senegal	Mimosaceae
	(Linn.) Willd.	
Timmer	Zanthoxylum armatum	Rutaceae
	DC.	
Simlu	Berberis lycium Royle.	Berberidaceae
Tarnari	Rosa moschata Mill.	Rosaceae
Pakran	Prinsepia utilis Royle.	Rosaceae

Aakhrey Rubus

Rubus ellipticus Smith. Rosaceae

Pir Mithey Shah sacred grove over about two *kanal* land is situated in hamlet Dalera of village Bhainchh between Jhullas river and Rawalpindi road (Plate 5). The candles are burnt 24 hours and a locked box called *Bughni* has been kept by local Committee for donation.

Periodic Research

Plate 5:A View of the Pir Mithey Shah Sacred Grove Dalera

The entire area has been fenced and floor cemented. The main giant tree standing over centre of the grove is that of Batkair (*Celtis australis*) with strange looking branches (Table 4).

Table 4:	Woo	ody	sp	ecie	es Gro	wing at	PirN	lithey
Shah Sacred Grove Dalera								
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Local name	Botanical name	Family
Khirak/Batkair	Celtis australis L.	Ulmaceae
Kohu	Olea ferruginea Royle.	Oleaceae
Dhamman	Grewia optiva	Tiliaceae
	Drummond ex Burret	
Drek	Melia azedarach L.	Meliaceae
Ailanthus	Ailanthus altissima	Simarubaceae
	(Mill) Swingle	
Kankoli	Elaeagnus umbellata	Elaeagnaceae
	Thunb.	
Ber	Zizyphus jujube Mill.	Rhamnaceae
Simlu	Berberis lycium Royle.	Berberidaceae

Baba Bhairo-Nath Temple situated in village Bhainchh on the main road of Poonch Jammu just 5 km. away from Poonch city (Plate 6). A small area underneath a giant tree of (Khirak) *Celtis australis* with main associated (Toot) *Morus alba*. As the whole of the floor of sacred grove around temple is cemented only a few patches remain vacant where small shrubs of *Berberis lycium* are growing along the giant tree.



Plate 6:A View of Baba Bhairo Nath Sacred Grove Bhainchh

Central Eidgah sacred grove is situated in proper city near Bgd. Pritam Singh Chowk is on about 2 ha. area has been fenced with its compound walls in cemented masonry. Namaz-e-Eid and Friday prayers are offered here. There are several rows of Chinar trees (*Platanus orientalis*) planted by Saint Darvaish Ghulam Qadir (Table 5).

Table 5: Species of Trees in Central Eidgah, Poonch City

Local Name	Botanical Name	Family
Chinar	Platanus orientalis L.	Platanaceae
Mannu	<i>Ulmus villosa</i> Brandis ex Gamble	Ulmaceae
Poplar	Populus nigra L.	Salicaceae
Cyperus	<i>Cupressus torulosa</i> D.Don	Cupressaceae
Drek	Melia azadarach L.	Meliaceae
Silky Oak	<i>Grevilia robusta</i> A. Cunn.ex R.Br.	Proteaceae
Bottle brush	Callistemon lanceolatus DC.	Myrtaceae

Danna Shah Sitar sacred grove is a holy shrine of Shah Sitar situated on the top of water parting ridge between Mendhar Tehsil and Suran kote having commanding view of vast area including Pak Administration Kashmir and snow laden peaks of Pir Panjal ridge (Plate 7). The tree species that are preserved are Oak (*Quercus incana*) and Chir (*Pinus roxburghii*). The other species include Simlu (*Berberis lycium*) which have been conserved and preserved by local inhabitants with religious sentiments, reverence and respect. People also believe that the knee impression of a divine body was pressed in a rock adjoining historical small stone Mosque.



Plate 7: A View of Sacred Grove at Danna Shah Sitar Mendhar

Discussions

Many Indian communities are still preserving specific small forests with high diversity of species called "Sacred groves". At least 13,720 sacred groves have been reported in various regions of the country, experts estimate that the actual number is likely 100,000 to 150,000 (Pushpangadan et al., 1998; Ramakrishnan, 1998, 2001). Prominent groves are mainly distributed in the states of Andhra Pradesh (WWF, 1996), Bihar, Jharkhand, Orissa, Maharashtra (Vartak and Gadgil, 1981; Deshmukh et.al., 1998), in Rajasthan the area exceeds thousands of acres (Khiewtan and Ramaskrishana, 1989; Tripathi et al. 1995; Malhotra et al., 1999; Jamir and Pandey, 2002), Uttar Pradesh (Sinha and Maikhuri, 1998), Tamil Nadu, Kerala, Pondichery, Gujrat, Goa, West Bengal, and some northeastern states such as Meghalaya (Tiwari et.al., 1998).

Sacred groves reflect ancient Indian traditions of conservation, preservation and

Periodic Research

management by local communities out of reverence, fear and sentiments and described as museum of giant trees, treasure houses of threatening species, dispensaries of medicinal plants, regulators of watersheds, recreation centers for urban citizenry, variable gardens for Botanists, gene banks of economic species like Sandal tree (*Santalum album*), Agar tree (*Aquilaria malaccensis*), Rubber tree (*Ficus elastica*), Deodar (*Cedrus deodara*), Teak tree (*Tactona grandis*) and paradise for lovers of nature and laboratories of environmentalists.

In some states in India people have taboos that violation of preservation result in failure of crop, sickness in family and diseases to live stocks. In some groves people are permitted by priests in charge of sacred groves to use roots, leaves and twigs of certain medicinal plants. Sheep, hen and goats are sacrificed for health of groves in Tamil Nadu and some other southern states of India. Groves in Raiasthan are called ORANS managed by a local tribe "Bish-Noi" they put complete ban on cutting of tree or killing of an animal. In Jaisalmer the worshippers have prepared a garden having good qualities Ber trees (Zizyphus jujuba) so that animals and birds do not starve without food. In Ladakh and Sikkim sacred groves are called GUMPHAS and are managed by Buddhists. In Kerala more than 750 sacred groves are managed and maintained by 'KUVAS'. In Manipur and Meghalya such sacred groves are maintained by 'NAGAM' tribes who go for meditation and worship in the said groves.

In Hoshiarpur district of Punjab sacred grove named 'Shiv Bari' people believe that whosoever will cut down even a twig of trees will die at once. This is an excellent typical grove where Research Scholars can study the succession of plants and find that in due course of evolution of new species and conclude that mixed deciduous trees of various species have been replaced by evergreen species in post climax stage.

In Kili- aal- Amman Tamilnadu sacred grove (Ramanujam and Praveen, 2003) 45 plant species belonging to 33 families are found in this sacred grove among them few important are Callophylumi nuphylum (Clusiaceae), Ficus hispida (Moraceae), Ficus amplissima (Moraceae), Ficus racemosa (Moraceae), Acacia sp. (Mimosaceae), Azadirachta indica (Meliaceae), Lepisanthes tetraphylla pinnata (Sapindaceae), Pongamia (Fabaceae), Paramignya monophylla (Rutaceae), Syzygium cumini (Myrtaceae), Dioscorea oppositifolia (Dioscoreaceae), Phoenix pusilla (Arecaceae), Ecbolium viridi Calamus (Acanthaceae). rotang (Arecaceae), Tinospora cordifolia (Menispermaceae), Coccinia (Cucurbitaceae), indica Aristolochia indica (Aristolochiaceae), Asparagus racemosus (Asparagaceae), Combretum albidum (Phytoseidae) etc.

Kodi ManglamTamilnadu Sacred grove does not practice sacrifice of animals. Some of the species of grove are *Terminalia arjuna* (Combretaceae), *Crataeva religiosa* (Capparaceae), *Azadirachta indica* (Meliaceae), *Prosopis juliflora* (Fabaceae), *Dellenia indica* (Dilleniaceae), *Atlantia monophylla* (*Rutaceae*), *Achyranthes aspera* (Amaranthaceae), *Zizyphus jujuba* (Rhamnaceae), *Borassus* flabellifer

(Arecaceae), Acacia nilotica (Fabaceae) etc. Lianas are present in this groves which act as an indicators of forests. Besides there is also faunal diversity Indian Cobra (Najanaja), Ratal snake (Rtyas mucosus), Bronze black tree snake (Dendse laphistrislin), Dragon fly, Domsel fly, Ground beetle, Rhinoceros beetle, Jewal beetle and common Butterflies. Peacocks and monkeys are dominant species besides Koel and common Crow (Arulananthan, 2006).

Conservation Measures

Attention should be paid for proper documentation of the resources of these sacred groves. Continued conservation of these sacred groves is obviously desirable both for a practical and aesthetic point of view by properly educating the people.

In the settlement areas, fencing the groves would help in reducing grazing and other human intervention, especially, encroaching the grove area. Exploitation of sacred groves can be prevented by making stringent laws. Reforestation of groves by planting native plant species or species similar to that in the nearby groves, may help the survival and growth of many species. Water resources and vegetation should be maintained and all these areas should be made no polythene zone.

Conclusion

Whereas 951sq. Km. of demarcated forests of district Poonch are being managed by Government through Forest and Social Forestry departments and Forest Protection Force with hundreds of field and ministerial staff fully equipped with powers of awarding punishment and fine for violation of Forest Act, Kuth Act, Grazing Act, Tress-pass Act, and Forest conservation Act of 1997, even then the land Mafia and Timber Mafia escape un-punished. Thousands of hectares of forest land have been encroached causing irreparable loss of fast deteriorating environment and collapsing ecological equilibrium. Forest area is shrinking every now and then. According to IUCN 2000 Red list data, India contributes nearly 3% of world's total number of threatened species. This includes 86 species of mammals, 70 species of birds, 25 species of reptiles and 3 species of amphibians. Among plants, 19 species are extinct, 44 are critically endangered, 113 are endangered and 87 are vulnerable (Khoshoo, 1986, 1994; Khurana, 1998; Kotwal and Banerjee, 2000).

What is required is that massive awareness campaign with people's participation, cooperation and coordination to save and preserve the fast polluting environment should be launched among farmers, women folk and student community at school, college and university level including people residing in urban and rural area through public meetings, seminars, public rallies, green march and farmers camps so as to create awareness and inculcate the sense of protection of green heritage for onward transmission to next generation.

Time has arrived when we should follow footsteps towards principles of Bish-nois of Rajasthan, Buddhists of Ladakh and Sikkim, Kuvas of Kerala and devotees of Tamil Nadu who have preserved the

Periodic Research

diversity of flora and fauna by maintaining large scale traditional sacred groves. People should also follow the principle of Chipko movement launched by S.L. Bahugona from the hills of Garhwal region.

It is suggested that the devotees who visit Shrines, Temples, Gurudawaras and Church should be blessed with bag-saplings of commercial species like Jatropha, Chandan, Agar, Teak, Deodar, Chir, and ornamental plants for planting in pots, back yards, kitchen gardens and agricultural farms rather than distribution of sweet (Laddo, Phullian, Halwa and Makhana etc.)

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