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The spirit of the sanctuary

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Sacred groves - tracts of virgin forests - are vestiges of an ancient practice in which people protected a forest to avoid the wrath of its resident god. Though sacred groves exist in various parts of the country and are unique examples of ecological understanding and management, very few studies have been done on them. Today, most of the groves have disappeared and those that exist are vulnerable to pressures of development. A special report on the state of sacred groves in the country today.

The annual festival dedicated< (Credit: Anand Kapoor)The annual festival dedicated< (Credit: Anand Kapoor)*FIVE YEARS ago, the social forestry department in Ratnagiri district of Maharashtra cleared several trees from a forest near Nandivse village to plant acacia trees. It did not know that the 4-ha patch was a sacred grove surrounding the temple of a powerful local deity, Kal Bhairon. The villagers, too, joined in because they were paid for the felling and planting. They were told it was taking place in all the villages and that it was for their good. Today, the stream that flows from the grove is losing water. And, the Great Pied Hornbill, which nested in the hollows of the old mango trees that were chopped, has disappeared from the forest.*
The villagers believe they are suffering the wrath of their deity. The villagers recall how their ancestors forbade them to cut the trees in the grove and now fear their crops will fail. The village youth scoff at the notion that Kal Bhairon is angry and elders lament the loss of traditional cultural values.

TreasureTroves

Sacred groves range in size from a few trees to dense, virgin forests of hundreds of hectares. They are found even now in many parts of India -- from Meghalaya in the northeast to Rajasthan in the west and the states along the Western Ghats -- and show that intricate regulations are not the only instruments by which the environment can be protected.

The guiding principle behind all these people's forests is the supremacy and control of the community, not only over the forests and the environment, but also over the individual. The community designates a forest area as protected and to enforce the protection, declares it sacred, usually by dedicating it to a deity. In such groves, all forms of vegetation, including shrubs and climbers, belong to the deity. Grazing and hunting are prohibited and only the removal of dead wood is allowed.

Says Madhav Gadgil of the Indian Institute of Science in Bangalore, who has studied sacred groves in Maharashtra for two decades, "The stronger and more malevolent a deity, the greater its protection."

Unfortunately, many of these groves have been destroyed and others are on the verge of ruin.

Big power projects apart, apathetic bureaucracies, ignorant forest officials and -- more than all that -- a decline of faith in local deities, have led to this state of affairs. Sometimes, even the promotion of a deity from a local spirit in the form of a stone or two to a universal divinity has caused the destruction of a sacred forest. Such divinities need temples, which are often built with timber from the grove. Timber is also sold to get the money needed to buy the images.

India is not the only country in which sacred groves are found. They exist in such countries as Ghana, Nigeria, Syria and Turkey. James Frazer, in The Golden Bough written in 1935, narrated how people, right from Palaeolithic times, preserved forests by worshipping them. In these forests, no tree could be axed, no branch broken, no firewood gathered, no grass burnt and no animals sheltered there could be harmed.

In ancient Greece and Rome, these special forests were usually enclosed by stonewalls. Initially, these groves were open-air temples, but even later, when temples with monumental columns were built, the forests continued to be protected.

Many of the sacred groves contained springs, streams and lakes. Polluting these springs and lakes was forbidden and only the priests were allowed to fish in them.

Social fencing

Sacred groves reflect what ecologists call social fencing. Sociologists say that in the absence of written laws, religion played an important role in enforcing social norms and codes. The best way to protect something was to make it sacred and then attribute what is required to the wishes of the god.

Says Pune-based botanist M D Vartak, who pioneered studies of sacred groves in the country in the early 1970s, "These groves are important today because they are the sanctum sanctorum of rare and endangered plant species, many of which may have disappeared from the region outside the grove. Besides being indicators of forests that might have flourished in the region, these groves are a laboratory for botanists, a bank of plant diversity and germplasm for geneticists and a community's medicine chest."

Vartak points to the abundance of the Ghanera (*Mappia foetia*), a plant used in the treatment of leukaemia, in many groves of Maharashtra. He says these groves are veritable Noah's Arks and biosphere reserves that can also be a rich source of history and archaeology. In fact, like a true medicine chest that is opened during emergencies, the groves provide fuel, fodder and minor forest products, especially during times of scarcity.

Ancient Indian texts abound with references to sacred groves. Poet Kalidas wrote in *Vikramorvasiyam* (c 300 AD), "Then ignoring the pleadings of the king, she wandered into the sacred grove of Kumara. Her mind bewildered by the curse of her Guru, she failed to notice this transgression into an area forbidden to women. No sooner did she enter than she was transformed into vine clinging to a tree at the boundary of the grove."

However, no comprehensive mapping and cataloguing of species in each grove exists in any state, except in Maharashtra, where Vartak and Gadgil have listed the sacred groves in the western part of the state and studied some of them.

In Kerala, the Centre For Earth Science Studies (CESS) published an inventory of sacred groves in the state in 1990. But as such, a very hazy picture emerges of the size and condition of these groves. In some areas, like Chotanagpur in Bihar or Kodagu district in Karnataka, getting detailed

information about these groves is just not possible because no studies have been done on them.

Meghalaya
According to P S Ramakrishnan, a professor at Jawaharlal Nehru University in New Delhi who has spent a lifetime studying ecosystems of northeastern India, in the olden days, almost every village in the Khasi Hills of Meghalaya had its sacred groves, or Law Kyntangs. It was prohibited to touch any leaf or tree in these groves. Today, such groves are well preserved only in Mawphlong and Mawsmai.

The local tribals practice *jhum* cultivation (growing mixed crops for a year or two on a plot of burnt-down forest land and leaving it fallow to restore fertility). The long-term success of this practice depends mainly on the recovery and maintenance of soil fertility. During recent years, according to Ramakrishnan, the jhum cycle has shortened considerably because of population pressure and the sacred groves are the only forest patches that preserve the rich local fauna.

The *Imperial Gazetteer of India* (1908) describes these groves: "...the indigenous pine (*Pinus kesiya*) predominates other vegetation and forms almost pure pine forests. The highest peaks are clothed with clumps of oak, chestnut, magnolia, beech and other trees which superstition has preserved from the axe of the woodcutter."

According to A S Chauhan, senior scientist of the Botanical Survey of India in Shillong, "The sacred groves of Meghalaya, totalling about 1,000 sq km of undisturbed natural vegetation, are found scattered in small pockets all over the Khasi and Jaintia Hills." Chauhan says these groves are a reservoir of rare plant species, some not found anywhere else in the world.

The sacred grove at Shillong Peak (Lum Shillong) was a subtropical, evergreen, humid forest even as late as 1982, according to a paper by Ramakrishnan and Ram Boojh, former assistant director of environment and ecology in the UP government. It is said to be the abode of a benevolent spirit, Lei Shillong, the greatest of the Khasi spirits and "according to local tradition, this grove has been preserved from time immemorial". But despite its religious importance, this grove lies completely deforested now.

Another famous sacred grove called Law Lyngdoh exists at Mawphlong, 25 km from Shillong. The belief here is that anyone who damages the grove is penalised to death by the forest spirit. All forms of wildlife, especially snakes, are protected and it is believed that if one snake is killed, many snakes would be born to kill the culprit.

More than a century ago, English botanist J D Hooker commented on the richness of the vegetation in the Mawphlang grove. Much later, another English botanist and forest officer N L Bor studied the forest (along with two other sacred groves including the Lum Shillong) and pleaded then for the preservation of this treasure house of plants in "all its primeval grandeur". Mawphlang is still undisturbed and according to officials of the Botanical Survey of India, "there is no change in this forest since Bor's record".

The Mawsmai grove near Cherrapunji, too, is inhabited by a powerful and malicious spirit who prescribes death for those who destroy or damage the forest. The spirit can be appeased only with the sacrifice of a male goat.

According to Chauhan,"With more than 700 of the known plant species on the verge of extinction, these sacred forests are now even more precious as the pressure of population on land and forest bears down uncontrollably." Apart from Meghalaya, Chauhan says sacred groves

don't exist in other regions in the northeast.

Scholars say the advent of Christianity in the northeast swept away old beliefs and ritualistic traditions of most of tribes in the region. Sanctified forests existed among the Angami tribe in Nagaland and the Rongmei tribe in Manipur. But except for the Khasis, the other tribes have abandoned their beliefs.

Bihar

The sacred groves of Bihar are found mainly in the Chotanagpur area in the southern part of the state. Known as *sarnas* , the groves are still thickly covered with huge deciduous trees from a bygone era. But it is quite likely that they were much larger.

The groves into existence about 600 BC, when the Munda tribals from Rohtasgarh settled there. The tribals believed that *bongas* (spirits) were the earliest settlers of the land and left aside patches of primeval forest for them in every village they set up. The agreement was that the bongas would protect the area and in return for this service and for the forest surrendered, the villagers would offer regular sacrifices.

Other tribes that followed the Mundas to the plateau also followed this method of propitiating the spirits. Today, most villages in the region still have sarnas, also known as *jaheras or jahera thans.*

Big sarnas are rare and they normally consist of about 20 trees or even just a single tree. Some villages appear to have large, thickly covered sarnas, but these are actually a combination of sarnas existing side by side.

It is quite likely the sacred groves of the past were much larger. John Hoffman, who studied the Mundas in the first decade of this century, writes in *Encyclopedia Mundarica*, "Originally, there were many and there may still be several sacred groves in a village...A tree in a sarna may not be damaged or felled without the leave of the *pahan* (priest) who, however, would first offer a sacrifice in the sarna where the tree stands. But it is a fact that by giving such leave too easily, whole sarnas have disappeared and some villages have none at all."

The groves are usually full of creepers, shrubs and grasses -- some of which have high toxicological and nutritional value -- because no undergrowth is cleared even during periodical worships and feasts.

Rajasthan

The *vanis* of Mewar, the *kenkris* of Ajmer, the *oraans* of Jodhpur, Jaisalmer and Bikaner and the *shamlat dehs* of Alwar constitute the sacred groves of Rajasthan. According to S M Mohnot, director of the School for Desert Sciences in Jodhpur, oraans account for 8 to 9 per cent of the desert area, which is significantly high in a desert ecosystem. The oraans consist of endemic species like *khejri (Prosopis cineraria)*. Says R S Merthia of the Central Arid Zone Research Institute (CAZRI) in Jaisalmer, "There is very little biodiversity in the oraans of western Rajasthan. Most of the oraans have plants belonging to four or five species."

However, Mohnot contends the oraans contain more than 100 species and sub-species. The dominant plant is the khejri. But west of Bikaner, the proportion of khejri goes down. In the oraans of Jaisalmer district, the dominant tree is *kaer*, with stray species of babul. Jaisalmer district receives minimum rainfall, which is not conducive for the khejri. The oraans of Jaisalmer have less khejri than the oraans of Jodhpur district.

However, Dina Ram, the sarpanch of Bhadaria village near Jaisalmer, says,"The lack of khejri has less to do with climatic factors than with pilferage and felling in the oraans. A khejri tree fetches as much as Rs 4,000 and has been the worst victim of pilferage in western Rajasthan."

There are large numbers of bushes as well in the oraans. Calotropis (*Calatropis procera*) is abundant in Jaisalmer district and ber (*Zizyphus mauritiana*) is common in Jodhpur and Jaisalmer, but less in Bikaner. Ber is a good soil binder.

According to Merthia, "Oraans in Jaisalmer have little grass owing to lack of water." The situation, as this reporter observed, was not correct. However, *sewan (Lasiurus seirdicus)* and *dhaman (Cenchrus ciliaris)* grass was more abundant in the oraans of Jodhpur and Bikaner than in Jaisalmer. All species provide some kind of support, whether it is fodder, firewood, thatching material, raw material for house building or fencing.

Lack of biodiversity is a problem with oraans in Jodhpur district, but this isn't quite the case in Jaisalmer district. Says Mohnot. "What is unfortunate is that no research institute has done any systematic work to regenerate the sacred groves. The desert ethos was not understood by scientists in CAZRI and they overemphasise imported models."

Maharashtra
In Maharashtra, scholars like Vartak and Gadgil have recorded about 250 groves, mostly along the Western Ghats in Pune, Raigad, Ratnagiri and Kolhapur districts. They range in size from a clump of trees to 60 ha, though most of them are about 1.5 ha. The area of the recorded sacred groves adds up to about 3,750 ha, but Vartak and Gadgil estimate the total area of sacred groves could be 10,000 ha.

Gadgil and Vartak first warned about deforestation in the state's groves about 20 years ago. And, the deforestation has accelerated. Sometimes, the forest department alone can't be blamed -- times are changing and so are village customs. For instance, in Kurne near Ratnagiri, the villagers cut down many big trees, with the *tehsildar's* permission, to construct a temple.

Maharashtra's *deorais* (sacred groves) abound in many rare species. The hitherto unreported 1.5-ha sacred grove of Tivri village in Ratnagiri district alone shelters at least 25 species that have become almost extinct elsewhere in the district (See box). This includes the white dammar (*Vateria indica*), the upas-tree (*Antiaris toxicaria*), wild nutmeg (*Krema attenuata*).

Kerala
In 1827, 15,000 sacred groves (*kavus*) were reported in the Travancore region of Kerala. The 1891 census report of Travancore, citing this, mentioned that the figure had multiplied since then. Even a few decades ago, villages with sacred groves were very common.

A study by C Mohanan and his colleagues at CESS found 240 sacred groves in the state (See map). The biggest of these, known as Iringole Kavu, was in Ernakulam district, spread over 20 ha. Two others in Kannur district occupied 18 ha and 16 ha.

Many endemic species are found in these kavus -- in fact, most of the nearly 4,000 species found in the Western Ghats occur in these groves and nearly 150 of them are valuable medicinal plants. *Zyzygium travancorium,* a tree once abundant in the forests of the Western Ghats off Kulathupuzha, was found in the kavus of Andalloor in Tellicherry and in south Kerala. The National Chemical Laboratory in Pune is now trying to culture the tissue of this tree.

Many animals unusual to the region like, Common Palm Civet and the Small Indian Civet, are found in the groves. Some kavus are dedicated to snakes, but these are vanishing (See box).

According to Mohanan, there is disrespect being shown to the sacred groves and people misuse them. The decline of the belief systems that supported the kavus is leading to their disappearance.

community conservation
In the term sacred grove, the word sacred is important. There are temple lands, there are plants and there are religious perceptions. The use of these groves is well regulated and divine sanction has to be obtained before mortals can satisfy their needs.

Says Komal Kothari, director of Rupayan, a Jodhpur-based NGO, "It's a whole series of complex equations between conservation, consumption patterns and biodiversity. It would be erroneous to comment that religiosity has taken a back seat or for that matter that religion is incidental to oraan conservation."

Religion seems to have pushed the principle of conservation and this is where the word sacred becomes significant. The gods, or rather the communities, don't tolerate transgressions of sacredness or violations of their sanctuaries. The mediators between the ordinary and the divine are the priests, who interpret the punishments. The priests are fed and respected by the community.

Stories of exemplary punishments meted out have become legends over time, deterring potential violators. Jana Harku Asavale of Kondhre village in Pune district believes his mother began losing her eyesight because he cut a jamun (*Syzygium cumini*) tree from the sacred grove 15 years ago and sold it. Says Asavale, "The pujari (priest) pointed out that I had offended the devta (deity). Everyone told me to ask his pardon. I went and offered coconuts and chicken and the deity was appeased. My mother's eyesight became better."

However, the gods do allow the forest to be used for collective good. Says Sashingan Shankar Asavale, 35, who says he nearly lost his eyesight because his mother failed to keep a promise she made to have the steps of the temple paved if she had a son, "We can't cut a single tree for personal use. But every year, the devta lets us cut dead wood for the holi festival. He has permitted us to cut a dead tree for building the temple and a school building. These things are for everyone's good. He doesn't say no to such things."

Genuine personal needs, too, are granted. In the sacred grove of Sakeri village in Pune district, the deity allows every household in need to cut one bamboo stem for personal use during her festival.

The gods can be very malevolent, but such hostility is reserved for outsiders who challenge the deity's authority. Says Moghaji Mahadu Langhe, the pujari of a 2-ha deoria of Ahupe village in the Bhimashankar Wildlife Sanctuary near Pune, "Bhimaji Shedke of Rajawadi came here once five years ago and challenged the authority of the devta. He broke a leaf, but on the way back he suffered an attack of severe itching and began to vomit blood. He was told to ask for the devta's forgiveness. He rushed back and did penance and was saved."

Says Anand Kapoor, a social worker associated with the Maharashtra Arogya Mandal's (MAM) Bhimashankar Project, "A general rule in these groves is that you can't sell products or cut trees. But you are allowed to meet minimum domestic requirements."

Possessive gods

The gods can be possessive too, Kapoor found. "We wanted to propagate fish tail palm saplings. These saplings are difficult to grow and we found nearly 500 of them in the deorai of Pimpri village. The devta told the villagers that since the plants are so difficult to grow, it would be better not to disturb them in their natural habitat."

There are interesting variations connected with questions of management and ownership rights of sacred groves. Such groves can be owned by the forest department, the revenue department, villagers as a community or even individuals. To whom does an oraan in Rajasthan belong? What is the legal standing of a deity?

Says Kothari, "The deity in an oraan is a perpetual minority, which means a committee is required to govern it." Over the years, the management of oraans has passed into the hands of temple committees.

But even today, ownership and areas of oraans are not clear. According to Kothari, "The forest department has not been able to tell us even the location of oraan lands. After coming to know of the existence of *aands* (See box), questions on the extent of oraans and grazing matters have become complex."

Wherever villagers understood the mechanism of perpetual minority, they formed a committee registering themselves as *devasthan* because all Hindu deities are governed by the Devasthan Act. But the committees were more interested in social affairs than in protecting the groves. Wherever committees have come up, oraans have at least been identified.

Political concerns

For a brief period after Independence, the oraans were unclaimed. Though religious organisations have been actively reviving the oraan tradition for the past 25 years, their concerns are mainly political. Says Kothari, "Popular all India organisations (Shiv Dal and Ram Dal) have been active in drawing the local deities into the macrofold. On the other hand, committees looking after the welfare of local temples are seeking national recognition."

In the process, a lot of land, including oraans, is being acquired by religious groups. The price of land has gone up significantly in recent years and so has the price of wood. By some estimates, the price of oraans in Jodhpur district has gone up 100 times during the past 30 years and dealings by temple committees in the name of social work have turned out to be good business. The local-level operation of oraans has now been replaced by macrolevel operations. Consequently, the villagers are not sure about who manages the land -- the local committees or the national religious groups?

"Today, local gods are victims of political parties. Or so it seems," says Prem Jagani, a journalist from Bikaner. "A 100 years ago, people had the economic stability to appreciate the value of traditional institutions. Today, this is sadly lacking."

In Maharashtra, many groves are common property resources, recorded in revenue records as devasthan lands. Some, like the one at Baneshwar, near Nasrapur on the Pune-Satara highway, belong to the forest department. The Baneshwar grove was converted into children's park after felling most of the old trees and planting exotic species. The irrigation and public works departments, too, own sacred groves. Generally speaking, however, it is the private groves, followed by the village groves that are in the best state of preservation.

No easy answers

But how does a community decide which groves are to be dedicated to a particular deity or the area of a grove in a jungle? A straightforward answer to this is not easy and would require substantial research. Most groves are hundreds of years old and the locals only say that the groves have always been there.

Many groves often contain water sources, indicating that the need to protect such resources may have led to the protection of some areas more than others.

The best example of this comes perhaps from Kodagu district in Karnataka. Most of the groves in Kodagu are privately owned, extending from a few hectares to 600 ha. The *devara kadus*, as the sacred groves are known, are a part of an intricate ecosystem of paddy wetlands, grasslands and groves.

G Richter's *Gazetteer of Coorg* (as Kodagu district was known earlier), written in 1870, described the system: "*Bane* is the highland adjoining the rice fields and gradually clothed with forest from which each farm obtains its firewood, manure and grass. *Barike* is the low, swampy portion of land adjacent to or below the paddy fields, it remains uncultivated and is used for grazing purposes. Each bane has a presiding divinity, to which an animal sacrifice of pork and (rice) cakes is offered. If this sacrifice is not made, or not properly performed, the *Kadevaru*< (the tending god who watches over the cattle) will withdraw his favour and sickness and death among cattle will ensue. Besides the many groves set apart in each nad (*taluk*) for some object of worship, but chiefly for lord Ayappa, there are some extensive forests, which are untrodden by human foot and superstitiously reserved for the abodes or hunting grounds of the deified heroic ancestors."

The small groves were privately owned but many of them have been felled to plant coffee in the past 100 years. The Irulibane forest, about 600 ha, is revenue land and still remains so. Explains M A Kushalappa, a 65-year-old farmer, "It is dedicated to three deities - Pakathamme, Podamme and Balaga - all associates of Lord Ayappa and belongs to three villages. The deities are fearsome and can destroy even those who think of going there. No one goes anywhere near the grove."

Many stories abound in the region about the vengeance of these deities and Ayappa. Interestingly, Irulibane is the ridge of a rather big watershed and a stream flows from it. The soil in the region is rather loose and heavy erosion occurs during the monsoons. The watershed of Irulibane is well protected even now.

Decline of the deity

As in Kodagu, many of the sacred groves in the rest of the country have disappeared. One of the most important reason for this is the forest department, which, according to Utkarsh Ghate, a third-year botany student in Pune's Ferguson College, has hacked down many groves to meet the timber demand of urban areas, including the demand for charcoal in the cities and had wrong perceptions. Ghate points out that the social forestry wing in Ratnagiri district, "to show that it has been doing some work, removed all saplings, shrubs and climbers from the groves in the name of cleaning and weeding as a pre-plantation exercise, risking the future growth of the forest. Underplanting of Australian acacia has been undertaken on a large scale and many big indigenous trees have been felled for this."

However, Vartak feels the people are more to be blamed for the sorry state of many sacred

groves in Maharashtra. The decline of faith and the break down of the community following greater individualisation, urban penetration in the rural areas and rising population pressures have been major factors leading to the decline of the groves.

For instance, in Chotanagpur, though the sarnas were closed to human beings, they were open to cattle. There was no physical protection and maintenance of the groves as such, though the groves were protected by law (in addition to tribal customs) both before and after Independence. T S Macpherson, the British settlement officer in Singhbhum district's Porahat *pargana* (a sub-division of a district) around the beginning of this century, recorded in one of his reports the fact that several landlords were convicted for felling trees in sarnas. Even today, sarnas are covered by the Indian Penal Code under the section that deals with injury or defilement caused to places of worship, because sarnas have been recognised as such and as part of forests or national property.

The sarnas are under community ownership, indisputably properties of the villages to which they belong. No forest law is applicable to them and their consumption and maintenance patterns are decided solely by the tribe's and village's customs. However, the privilege has more often than not given in to pressures of development projects, industrialisation and urbanisation. Most urban centres in the Chotanagpur plateau have come up as much at the cost of sarnas as forests.

For instance, the steel city of Jamshedpur was set up on 8,900 ha of rich forest that has 100 villages. Most of the sarnas of these villages vanished as quickly as their forests. Officials at the Tata Steel's Tribal and Harijan Welfare Cell claim the sarnas have been protected or are being protected. However, Xavier Dias of the Jharkhandis Organisation for Human Rights (JOHAR) challenges this claim: "Are there then 100 protected sacred groves in Jamshedpur?"

In many places, sarnas have covertly been converted from village property to government property and then cleared for all sorts of projects. The sarnas that survived the first axes of urbanisation now face grave threats from non-tribals as well as the government. As Sanjay Basu Mallick of JOHAR points out, "Instead of protecting the tribals, the government invariably sides with encroachers. So the tribals lose."

Influences of Christianity are also eroding the sarna institution. About 10 per cent of Chotanagpur's tribal population, most of them among the Mundas and the Oraons, have converted to Christianity. As a result of the erosion in traditional values, sarnas in the urbanised areas are often reduced to nothing more than symbols. In cities like Jamshedpur and Ranchi and in smaller towns, it is common to see sarnas -- often just a tree or two -- "protected" by concrete walls. While the absurdity of such protection is obvious, at many places even this much protection is absent and the public, unmindful or ignorant of its significance, uses it as anything from a urinal to a market place.

Complex problems

Rajasthan's oraans, too, face complex problems and rejuvenating them will be a rather difficult task because of economic compulsions (See box). Says Dev Meena of Ramdeora villagein Bikaner district, which has one of the largest oraans, "In the past, there was enough economic flexibility to restrict cutting of trees in oraans, but today the socioeconomic pressures make any kind of conservation meaningless." Dev recounts how when his daughter died, he was penalised for pulling down a khejri tree in one of the oraans because he could not afford firewood for the cremation. Asks Meena, "What is the purpose of groves that remain outside the reach of the common people?"

In Pondicherry, Pia Sethi studied the sacred grove tradition in Puthupet for her master's degree and found that with the "onslaught of modernism and the pressures of city life, these forests start losing their significance and they no longer form an integral part of the lives of the people. Already this is happening in Puthupet. Though the temple is still an important place of worship, the grove surrounding it has become relatively unimportant and the people indiscriminately cut wood, clear large patches and litter the whole area. No strong taboos against the cutting exists today and the people no longer fear the wrath of the gods. As a result, the grove has now become an easy source of fuelwood and many of the trees, particularly *Memecylon umbellatum* (anjani) and Garcinia spicata, are heavily eroded."

Indifferent people

Sacred groves are being increasingly seen as *sarkari* (government) trees. Says Mohnot, "When the government has been authorised to allot non-agricultural land upto 5 bighas, we cannot expect the poor people to protect and regenerate their oraans. As it is, the oraans lack biodiversity and on top of that, people are indifferent to their forests."

Adds Mohnot, "Today the people of western Rajasthan are being encouraged to grow three crops in a year. But the desert soil cannot take this pressure. Land use has gone up by 60 per cent. Such a manifold increase in agriculture is affecting the peripheral areas of *gochars* (pastures) and oraans."

Says Shankar Devrai, a panchayat member of Osian village in Jodhpur district, "Apart from cattle-breeders who ignore the sanctity of oraans, there are cases where the villages are forced to legalise encroachments. Such has been the dominant trend in Pabu ka Oraan in Jodhpur, where oraan land has gone down by 10 per cent in the past 20 years."

According to Devrai, "Sheep are dangerous for the desert. After ruining the oraans and gochars, they will destroy the rootstock of the pastures. Once the rootstock is destroyed, the grass can never grow again. Cows, on the other hand, help to dig up the soil and aid regeneration. Grazing areas are shrinking fast. And this only means increasing pressure on the oraans. Though villagers are far more careful in their attitude towards oraans than gochars, cattle-breeders of Rajasthan are being crushed by socio-economic pressures."

In Bhadaria village, 20 km from Jaisalmer, the ex-sarpanch Harbans Singh Nirmal has been fighting a legal battle for four years against illegal encroachment on oraan land. In this case, the villagers were divided about leasing out this nonagricultural land for grazing. While some respected the sanctity of oraans, others thought it was a waste of land. The problem is people aren't sure about the social role of oraans.

The oraans in Jaisalmer district have suffered because of drought. Firewood requirements have resulted in encroachments. For example in Dhaniagaon village, surrounded by huge sand dunes, the people have ignored the sanctity of the oraans and have ravaged them for fuel requirements. As one of the villagers put it, "Where do we get our fuelwood otherwise? Ours is a completely barren land."

Even though the problem of sacred groves has been recognised, opinions differ on how to save these treasured forests. Says Vartak, "The solution lies in handing over all the groves to the (forest) department's care, with provisions for community control and supervision."

But others disagree with this approach. Says Kapoor, "Given the department's poor record and the inhuman way in which officials look at villagers, the last thing one should do is hand over the

groves to the department. That would be the end of these forests. The people can maintain them well enough, as they have been doing for centuries, maybe with a little external help."

Kapoor and MAM have been encouraging villagers in Bhimashankar Sanctuary to rejuvenate their deorai by digging soil and water conservation trenches around the groves and the people, especially the youth, have responded well, contributing upto 25 per cent of the labour voluntarily.

The biggest enemy

Gadgil says, "The forest department is considered the biggest enemy of forests nowadays. We certainly need community institutions, but carrying the idea out in practice itself is difficult. The sense of the community has broken down in many places."

Discussing the problem, Mohnot says, "For ages, the commons and community resources have been managed by the communities at large. Today, the government feels it owns the non-agricultural community resources."

Indeed, the community cannot be dissociated from these groves, nor is it always divided. The sanctity of these groves has played a crucial role in saving the environment from development projects.

The villagers of Raghunathpur proudly display the 14-ha sarna they saved from the axe of a landlord. In recent times, the villagers have revived their community institution, the baisi, which now not only looks after the forest and regulates its use, but also governs other aspects of village life (See box).

Perhaps what is needed is a national-level sacred groves act, which formalises the governance of all sacred groves by community institutions, together with a programme that encourages the community to protect and use the groves sustainably. The formulation of such an act would require discussions with the communities involved. This might be a way to empower the communities to treat the sacred groves as their own resource and exercise the ecological understanding that they have had in the past.