

Ecosystem Preservation Through Faith and Tradition in India

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ABSTRACT The paper discusses how Indian tradition and faith has helped in the conservation of natural ecosystem. Primitive man lived in forest, on the bank of rivers and had great reverence for nature's creations. Their faith in conservation of trees and other biological resources has survived several virgin forests on earth in its pristine glory. The tribes who are descendents of early men have also retained many of their ancestral traditions and faith with regard to Nature. In India these aboriginal people have greatly helped in the protection and preservation of natural ecosystems. The tribes of Meghalaya prohibits human interference into their "Sacred Groves" which are "Biosphere Reserves" of today. The Gonds of Central India prohibits the cutting of a tree. Only the fallen branch can be used. The Bishnois of Rajasthan have reverence for the Khejri tree (*Prosopis cineraria*) for centuries. The Mundas and Santals of Bihar worship Mahua tree (*Bassia latifolia*) and would not cut it. In Indian tradition many trees are sacred e.g. Peepal (*Ficus religiosa*), Banyan (*F. bengalensis*) etc. Many tribes cultivate traditional crop plants or their wild relatives, thereby conserving their germplasm and maintaining biological diversity. The traditional Indian culture was conservative and the modern exploitative.

Man has been the product of nature ever since he arrived on earth as a part of evolution. He learnt to live with five elements of nature "the earth", "the water", "the air", "the light" and "the Cosmos". The organic link that inextricably binds the nature and the man has remained unchanged even today. The strides in the field of Science and Technology has only reinforced the view and calls for better understanding between Man and Nature. Communion with nature has been article of faith with man and has been an integral part of his life since time immemorial. This has been both a phenomenon and legacy which has been handed down from one generation to another.

In course of living man began to see nature with reverence. His sense of gratefulness went to the extent of investing godhood in all forces of nature. As a part of this process he began identifying several flora with particular personalities of the Hindu pantheon and started worshipping them. Peepal tree (*Ficus religiosa*) became symbolical for Lord Krishna and Tulsi (*Ocimum sanctum*) for Rama. The elements of Prithvi" (Earth) was identified with Lord Ganesh and the plants Shami (*Acacia ferruginea*) and Decob grass (*Cyanodon dactylon*) were considered

sacred for its worship. The element of water was identified with goddess Bhavani with the plants Ashoka (*Saraca indica*) and Vishnukranta (*Evolvulus alsinoides*) being sacred for its worship. For the "air" Lord Vishnu was identified and the plants Peepal (*Ficus religiosa*) and Tulsi (*Ocimum sanctum*) were considered sacred. With "cosmos" and "light" were identified Ishawara and Surya respectively and accordingly Bel (*Aegle marmelos*) and Drona (*Leucas cephalotus*) for the former and Kaner (*Nerium odorum*) for the latter were held sacred. The list is endless with similar favourite plants being prescribed for other members forming part of the religious and spiritual milieu and in the worship began an odyssey of harmonious links between Man and Nature to commence a journey into the realm of eternity.

But what is astonishing and interesting is that the early dwellers on this planet conceived the idea of close interdependence between man and nature, more of the former than the latter and nurtured this idea throughout their existence. The concept is very much relevant even today and as we now look upon, it is pregnant with strong environmental and ecological overtones and one which is vital for survival of mankind itself. In

the search for the ultimate the primitive folks were asked to discover the nuances and richness of the heritage of nature and appreciate it. In simple words of today, it was a message to protect and preserve the flora and fauna through the discovery of God. One has to marvel at the manner in which the traditional people of India without the benefit of modern education but mainly on account of their faith and beliefs and deeper understanding about nature thought about its preservation and devised their own plans in a myriad ways to bring home the message.

INDIAN PEOPLE: THEIR FAITH AND BELIEFS IN NATURE

Animism, naturalism, reverence and respect for nature and its creations such as plants, animals, rivers and mountains were all part of the cultural life and tradition, of the Indian people and this belief and practices have continued in one or other form even to the present in certain sections of the Indian society particularly the primitive tribal societies and the rural folks of India. The belief systems of the traditional people of India extended their relationship from social to the natural environment treating rivers as mother goddess, forests as gods, totemic animals as brethren, pey species as mutualists. Many elements of the nature were offered protection from harm at human hands. In the terms of religion such practices might then have helped territorial hunters and food gatherers to safeguard the health of their resource base in order to promote long term persistence of the scarce natural resources. Many such traditional environmental conservation practices have continued on the Indian Sub-continent to the present times and help protect a wide diversity of the physical and biological resources and the ecosystem.

The traditional people of India believed that a blessing or curse could be caused by some trees or rivers. If a baby was born it was thought to be gift of nature through these objects. In Rajasthan women worship Peepal (*Ficus religiosa*) to ward off widowhood. In Bihar women worship Amla (*Emblica officinalis*) and Tulsi (*Osci-*

mum sanctum) to get heaven after death. In Maharashtra, Andhra, Kerala and Karnataka people break coconut fruits (*Cocos nucifera*) before entering into a temple. Coconut is believed to be a symbol of fecundity and so the women who nurse the desire to get a son are given coconut as Prasad (*Divine gift*).

People in India believe that trees can bring peace and consolation to mankind if protected and worshipped. Cutting of a green tree is considered to be a sin and sacrilege which could spell disaster for the family and even for the entire village. A father of a son was specially guided by the moral restriction of destroying a green tree. It was believed that even the cutting of branches could make the son invalid.

Common beliefs and superstitions regarding trees, herbs, flowers, fruits and vegetables are prevalent among the people of both rural and urban India. Interestingly these superstitions are not only confined to India but to several other parts of world particularly in Asia, Africa and Australia. The Wanika of East Africa believe that forest trees are animate and would not even allow incision on the bark lest cutting its branches. The aboriginals of Canada have reverence for the Maple Leaf trees and the Red Indians of United States of America consider the Red Wood tree as sacred and protect it. The Buddhist in China and Bhutan have reverence for Peepal tree (*Ficus religiosa*) and the Maiden-hair tree (*Ginkgo biloba*). The latter is on the verge of extinction. They have protected them by planting in their monasteries.

FAITH AND TRADITION OF THE PRIMITIVE SOCIETIES OF INDIA IN NATURE'S CONSERVATION

The tribal societies of India have still retained the age old tradition and culture of India. Nature worship is a form of belief which is prevalent among them. They believe that nature's creations have to be protected and destruction of any of them would be met with punishment. The faith of these aboriginal people of India in plants, animals, rivers and mountains have greatly helped

in the preservation and protection of many natural ecosystems in India. Such tribal beliefs have survived several forests in India in its pristine glory. They have been termed as "Sacred Groves" or "Deovan" (*Forests of God*). They are patch of forest or part of large forests left untouched by the local people and all interference into it was a taboo. It is usually dedicated to a deity of mother goddess who is supposed to protect and preside over the grove and the intruders will be punished. Such sacred groves are found all over India in the tribal zones. At present there are about 400 groves in Maharashtra (Gadgil and Vartak, 1976). There are several in the North Eastern States of India, Assam and Meghalaya and in the Andamans and the Nilgiris of South India. The Mawflong near Shillong in Meghalaya; the Mangaoon and Ghol in western mountain ranges and the ghats of peninsular India (Vartak and Gadgil, 1981) are some example of these virgin forests. The sacred groves of these primitive human societies have become part of the "Biosphere Reserves" of modern India preserving some of the rare and threatened species of plants and animals which are on the extinction list. These biosphere reserves with 54 National Parks in about 21003 sq. km. and 372 wildlife sanctuaries in about 88649 sq. km. constitute the major part of the terrestrial forest ecosystem of India and is largely the legacy of the tribal communities.

Many of these tribal societies in India have reverence for a particular tree also. The Mundas and Santals of Bihar, worship Mahua tree (*Bassia latifolia*); the Bhuyias and Gonds of Madhya Pradesh consider Palash (*Butea monosperma*) as sacred; the Bhils of Rajasthan (and also the Bishnoi communities) have reverence for Khejri tree (*Prosopis cineraria*). They would never allow the destruction of those trees.

Many tribals of India and also traditional cultivators have not adopted the cultivation of the improved high yielding varieties of crop plants which require heavy inputs of chemical fertilizers and pesticides to maintain productivity even at the cost of the environmental degradation. They grow the traditional varieties of crops and

the wild relatives of commonly cultivated crops which are less susceptible to diseases and usually using compost as fertilizer but no pesticides. It has great significance in terms of genetics, environmental safety and ecological conservation. They have helped in the maintainance of valuable gene pool of specific characters of hardiness, disease and adaptability to adverse climatic conditions like waterlogging, extreme drought or cold etc. The plant breeders can use them in future for evolution of better varieties of crop plants.

THE MYTHOLOGICAL PLANTS OF INDIA AND THEIR SIGNIFICANCE IN ECOSYSTEM PRESERVATION

Several tree species in India which constitute important part of the terrestrial ecosystem of the peninsula have important historical antecedents for their growth and past happenings. Many of them occupy a significant position in the Hindu mythology, relating to right and wrong acts of human beings. Others have hygienic stress from the viewpoint of purifying the atmosphere and curing certain human diseases. Several trees, herbs, bushes, grasses and creepers enjoy importance as an object of divinity and sacredness. They symbolise god and goddess to the rural folklore.

The trees like Peepal (*Ficus religiosa*), Bargad (*F. bengalensis*), Mango (*Mangifera indica*), Sandalwood (*Santalum album*), Bel (*Aegle marmelos*), Coconut (*Cocos nucifera*), Ashoka (*Saraca indica*), Arjuna (*Terminalia arjuna*), Kadamba (*Anthocephalus cadamba*), Jamun (*Syzygium cumini*) Amla (*Emblica officinalis*), Neem (*Azadirachta indica*), Agastya (*Sesbania grandiflora*) and Imli (*Tamarindus indica*) etc.; the shrubs like Shoflower (*Hubiscus rosasinesis*), Pili Kaner (*Thevetia nerifolia*), Dhatura (*Datura alba*), Marigold (*Tagetes erecta*), Rosa (*Rosa indica*), Sadabahar (*Vinca rosea*) etc.; grasses like Doob (*Cyanodon dactylon*) and Bamboos (*Bambusa spp.*) are considered sacred in Indian mythology and their destruction is sacriligious. Their leaves, fruits and flowers

are required at several religious and social functions marriage, death, child birth, various worships and festivals. They are widely grown and protected for their religious, economic and ornamental values. They have considerably helped in the operation of the terrestrial ecosystem in India and also in the maintenance of the ecological balance of country particularly in the urban and the rural ecosystems.

There are some mythological trees in India called "Kalpabriksha" (Tree of eternity) which is of multipurpose use (as food, fodder, fuel, timber etc.) to the people where it grows. People have great reverence for such trees. One such tree is Khejri (*Prosopis cineraria*) grown in large numbers in the deserts of Rajasthan in India. The Bishnoi communities of Rajasthan have great reverence for Khejri for centuries. Khejri's have played significant role in the operation and preservation of the Desert Ecosystems in the arid zones of Rajasthan.

CONCLUSIONS

Beliefs, faith and tradition has undoubtedly played significant role in the conservation of environment and preservation of ecosystems not only in India but in other parts of world too. But the question remains how long it would continue to play this protective role? So long as the total demand on the natural resources remained limited the human population would tend to come to equilibrium with nature. But as the population increases and demands overtake supply, the equilibrium will be lost and question of "survival" would become primary and religion secondary. The stage seems to be approaching fast in India. The religious overtones and moral bindings with regard to protection of sacred trees is fast vanishing in India.

In one of our field studies made at Jaipur in Rajasthan we came across a sensational discovery that the sacred trees Peepal and Bargad were being frequently cut for fuelwood by the rural poor and sold to the market. Interestingly, to escape the wrath of sin and fear of sacrilege the Hindus employ Muslim tree cutters for the job (Shekhawat and Sinha, 1990). Similar situation

exists in the tribal belts and other rural areas of India. In order to survive, the tribals and the rural people have started interfering into those forest areas which was held sacred for centuries. When survival is at stake, morality and religion becomes secondary.

Nevertheless, human faith, beliefs, traditions and superstitions have played significant role in the ecological conservation in India for centuries and will continue to have its conservative impact for times to come. Significantly several of those trees and shrubs which were held sacred and protected for one or other reasons by the traditional people have found to be environmentally very useful. National Botanical Research Institute (NBRI) Lucknow has identified some of those plants e.g. Peepal, Bargad, Mango, Neem, Kaner etc. as a "natural pollutant sink" which intercepts dusts and noxious gases of the atmosphere. It will be highly desirable to undertake mass scale plantation of these sacred plants in the afforestation drive and declare them as "Sacred forests" to put moral bindings upon the people for their conservation and protection.

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