



Environmental Protection Studies in Ancient India

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Abstract: *In the early periods of human history, environment strongly determined the lives and activities of the people. Ancient Indian texts like Arthashastra, Sathapatha Brahmanas, Vedas, Manusmriti, Brhat Samhita, Ramayana, Mahabharata, Raj Tarangini reflected the concepts of forest ecology and conservations in a sustainable manner. In the Indus Valley Civilization, several characteristics of the city planning and social structure showed environmental awareness. The object of this study is to highlight the greatness of ancient Indian literature, culture and society and to make the present society aware about the environment by the idea of ancient Indian environmental thoughts.*

Key Words: environment, strongly determined, activities, Arthashastra, Sathapatha Brahmanas, Vedas.

The ancient people though did not study environmental or ecological science in its present form, but were very much conscious of its basic principles. They know that destruction of Mother Nature would revert back to the gradual abolition of their own. Thus they felt it essential to preserve the nature as far as possible at least they never agreed to sacrifice the whole natural environment in exchange of satisfaction of their needs.

In Sanskrit, the equivalent word for environment is 'Paryavarana.' This word is constituted as pari+a+ vr-anat in which the earlier prefix means 'fully', the second means 'completely' and the root have the sense of 'covering'. Thus it refers to the environment which entirely surrounds the living creatures, especially the human beings, whose existence depends upon it. Environment strongly determined the lives and activities of the people. The ancient people developed many effective measures to safeguard our ecosystems and environment, which reflect sustainable development in true sense. In this study, I shall try to highlight some texts and archaeological evidences of ancient India which can eminently reflect the perspectives of environment, forest and biodiversity conservation of our forefathers.

Environmental Issues and Indus Valley Civilization- The Indus Valley Civilization was a Bronze Age Civilization extending from what today
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is north-east Afganistan to Pakistan and north west India. It flourished in the basins of the Indus River and the Ghaggar - Hakra River. In many seals and sealings of Harappan Culture, there were a variety of animals including elephants, rhinoceroses and tigers. But at present, there is no forest area in Harappa and Mohenjo-daro, which can indicate the changes in climatic conditions. Ficus religiosa, which has perhaps the longest continuity of a sacred tree in India, occurs on the seals from the Indus civilization, it is associated with Buddhism and is depicted in sculpture from Buddhist places of worship and is continued to be venerated in association with religious shrines of Hindus and Muslims. An Icon, which had both the characteristics of human and other animals and the image of tree god in the seals, reflects their closeness with nature. In the seal of 'Pashupati', a man was encircled with animals proved that they often went to the forest to spend a part of their life.

Reduction of forests in that area was due to use of huge amount of timber-wood for burning bricks. So an rainfall reduced and soil erosion caused deposition of silt in the Indus river which had choked off Mohenjo-daro from the sea, causing a rise in the water table that must have been a prime factor in the destruction of Mohenjo-daro. Causes of erosion was also because of intensive agriculture, depletion of soil nutrients by inadequate crop rotation,



disturbance of the natural pattern of drainage by the slow rise of river bed and banks as a result of silting and overgrazing because of the insufficient food of the cattle. Inadequate maintenance of dams and irrigation channels hastened the downfall of the civilization.

Conservation of forests and biodiversity and Vedas- Vedas are the sacred Sanskrit texts of Hinduism. According to some scholars, the great sage Ved Vyasa codified and put the Vedas into writing at the beginning of Kali Yuga (3102 B.C.). These are Shruti vedas, which include : Rig Veda (wisdom of the verses), Sama Veda (Wisdom of the chants, Yazur Veda (Wisdom of the sacrificial formulas) and Atharva Veda (wisdom of the Atharvan Priests). Initially, the Shruti vedas consisted of four collections of mantras (Samhitas), each associated with a particular priest or aspect of ritual.

Over centuries, three kinds of additional literature were attached to each of the Samhitas; the Brahmanas (discussions of the rituals, Aranyakas (books studied in the forest), and Upanishads or the philosophical writings. 4 of these, Aranyakas or the 'forest' works and the Upanishad 'Bṛhadaranyaka (translated as "Great Forest Text") are particularly important from the perspective of forestry traditions. Although Aranyakas provide the theological foundations of early Hinduism, which is outside the realm of forestry, some of these descriptions are relevant to indigenous ecological knowledge, on which there is considerable attention now.

The Vedas specified four types of living beings, namely andaja (born of eggs), jivaja (born of womb), svedaja (born of moisture) and udbhija (born of earth) and declared that these are impelled by prajnanam (consciousness). The Vedas described the diversified range of flora and fauna and urge the human beings to protect, pressure, nurture and nourish the environment and natural world.

For the benefit of the humans and other living organisms they prescribed a pleasant environment consisting of sweet breeze, sweet flowing rivers, beneficial herbs, sweet day and

night, sweetness of earth particles, sweet fruit bearing trees, beneficial sun and healthy cows. Importance was given on the habitats which should be protected. For the protection and development of forests, concept of afforestation was developed. Plants were compared with mother, friends and deities.

Water was considered as a symbol of purity which should be free from pollution. With a social objective, they emphasized that water is a common resource to be used by all. Rg Veda contains many notes on irrigated agriculture, river courses, dykes, water reservoirs, wells and water lifting structures. Water was compared with living beings, creator, edible crops, truth, desires which in totality signifies the ecological and environmental dimensions. Prayers were offered for the welfare of animals. Plants were classified into trees, shrubs with spreading branches, herbs, spreading or deliquescent plants, busy plants, climbers, creepers etc. Herbs were considered to have remedial powers. Rg Veda mentioned that plants had preceded animals, particularly man, in the process of evolution. In Upanishad, the idea of evolution was expressed as "from that very Atman other come to be, from other air, from air fire, from fire water, from water the earth, from the earth herbs from herbs food and food the person came into existence.

The oral tradition and the Veda would have to be among the earliest record of ruminations on nature and environment in India. In the Vedic literatures mother Earth was personified as a goddess Bhumi or Prithivi. Her beauty and profession were vividly portrayed in the Atharva Veda: "O mother, with your oceans rivers and others bodies of water, you give us land to grow grains, on which our survival depends. Please give us as much milk, fruits, water and cereals as we need to eat and drink." The Chandogya Upanishad pointed out: "The rivers..... all discharge their waters into the sea. They lead from sea to sea, the clouds raise them to the sky as vapour and release them in the form of rain....." This is probably the oldest reference of hydrological



cycle. In Ishopanishad, the concepts of sustainable development and conservation were established: "All in this manifested world consisting of moving and non-moving are covered by the lord. Use its resources with restraint. Do not grab the property of others - distant and yet to come."

The fundamentals of conservation ethics were brilliantly formulated in Isha Upanishad - "The whole universe together with its creatures belongs to nature. Let no one species encroach over the rights and privilege of other species, one can enjoy the bounties of nature, by giving up agreed." If nature is over exploited because of our greed, we stand to lose all its benefits.

The Pali Buddhist Text and Environment: One of the main pillars of Buddhism is Ahimsa (Non-Violence), which is as well an essential principle to keep environmental balance. The Buddha, in a discourse in the Anguthara Nikaya²⁰, even hints at the ecological divastation of the natural resources when lust, greed and wrong values grip the heart of humans. Buddha realizing the importance of greeneries in our life, specially advised not to cut the branches or even plunk a leaf, as the shadow of a tree is extremely beneficial to us. In a nutshell, one should not cut a tree, not even cut its branches or tear the leaves as the tree soothes us, comforts us and thus it is a great friend and to harm a friend is a grave him.

The Atharveda XIX.9.14 is indeed astounding - "Let there be balance in the space! Let there be balance in the sky! Let there be peace in the earth! Let there be calmness in waters! Let there be growth in the plants! Let there be the growth in the trees! Let there be grace in all Gods! Let there be bliss in the Brahman! Let there be balance in everything!, Let there be peace and peace! Let such peace be with every one of us!

The Ayurveda demonstrate profound knowledge of biodiversity. The inter-relationship between living species and the environment was established. It described the need to maintain natural dynamism, the right ways of handling plants and

trees, native flora and fauna and the price one should pay for going against the ecological principles. Medicinal plants such as palash, arjun, yava, laksha, haritaki, haridra, etc. were widely used for treatment. Hindu tradition describes three basic categories of forests. One is Shrivana, the forest which provided prosperity. Tapovan where one could contemplate as the sages did and seek after truth. The third is Mahavana, the great natural forests where all species of like find shelter.'

In Vedic Age, each village was responsible through its panchayat, or committee of five elders, for maintaining the forests in its own locality. No village was complete without its corresponding wood lands in and around its houses. "The Hindu Idea is that this whole world is a forest. To keep this world as it is we have to keep the world forests intact." This gave rise to the concept of cultural landscapes such as sacred forests and groves, sacred corridors and a variety of ethno-forestry practices that reflect the ecosystem-like concepts in traditional societies. In the post-vedic period, this tradition continued; in addition to considering a landscape as such valuable and sacred, individual species and micro-units were also treated as sacred.

Bhagvad Gita and Environmental Awareness- In the Bhagavad Gita, Krishna compared the world to a single banyan tree with unlimited branches in which all the species of animals, humans and demigods wander, which reflects the concept of community ecology. The trees like banyan and peepal were often referred in historical background are keystone resources. The worship of trees as a part of fertility cult remained a constant feature of the religion, pastoralists, peasants and those of lesser status among urbanites. Krishna said that all creatures are born, die and get pleasure and pains by the force of Karma: so there is no necessity to worship Indra as everyone could control its own destiny. He also said, "your environment is your concern, it is your duty." Krishna taught that it was better to worship the hills, forests and cows than to perform a ritual for the demigods. Krishna defeated



the serpent Kalya and purified the Yamuna River. He swallowed the forest fire to protect the forest. He looked after the cows. He spoke to the birds in their own language. He was always protecting nature.

The gradual clearing of forests over the centuries has changed the ecology of certain regions sacred grooves are small pockets of forests dedicated to local deities. They are a common phenomenon in many parts of the country particularly in the north-eastern regions and the western ghats. These dark evergreen forest patches are believed to be sacred to the village god or goddess and have been preserved from time immemorial. Many of them contain climax level vegetation and harbour rare and little known species of plants.

Kautilya's Arthashastra and Environment-

In the book 'Arthashastra' written by Kautilya, importance was given on the protection and management of forests, gardens, orchards as these all were considered as sources of revenue. The Arthashastra divided the country between the Himalayas and the oceans into various kinds of regions - forests (arnya), village areas (gramya), mountains (parvata), wet or humid areas (audaka), drylands (bhauma), plains (sama).

Arthashastra demonstrates Kautilya's perception and concern about the living creatures - domestic and wild animals, plants and vegetations. penalties and punishments were specified for injuring living creatures. Special positions were occupied by directors of forests, supervisor of animal slaughter.

These officials used to protect wildlife, ensured proper rations for pet animals regulated grazing, prevented peaching of wild animals, ensured proper care of domestic animals etc. Individuals were supposed to follow norms about their dealing with the domestic animals. Village headman was made responsible for preventing cruelty to animals in village communities. Details of care, training, and treatment of horses, elephants and cows had been indicated. The king is supposed to protect forests, elephants forests, irrigation works and mines that were made in ancient times and also should start

new ones. Forests were considered as a valuable sources, forest products should be used in a sustainable manner. For cutting any part of a tree, fines of variable amounts were imposed on the offender depending on the types of injury. Emphasis was given particularly on those which bear fruits, flowers or provide shades.¹⁹ The environmental issues described in Arthashastra are very much relevant in modern society. In 1972, the conference on human environment in stockholm mentioned about some principles which were very much similar to the edicts of Arthashastra. Even in India, some of the environmental laws like water (Prevention and Control of Pollution) Act 1974. The Forest Conservation Act 1980 and the Wildlife (Protection) Act 1972 show amazing similarity with forms and contents of Arthashastra.

Conclusions- So, we have seen how the ancient Indian scholars were concerned about the balance of the environment - though, then there were no questions of global warming - or chemical or nuclear pollutions like those of today. The Sanskrit and Pali literatures reassert that : The general attitude of ancient Indians, towards environment was one of love and togetherness. This attitude was echoed through the message of the Vedanta - 'Vasudhaiva Kutumbakam' i.e. "all living beings in this universe are relatives." The very basic idea behind the need for conserving our environment is captivated in Suttapitaka by the Buddha, which is equally true for our contemporary ages, for all times and places - Easy living being whether it is small or large or medium tall or short visible or invisible, living near or far, born already or to be born, let live in happiness.

It is a need of the hour to secure the right to save food, water, air and all other natural ingredients in particular and environment in general. To get rid of the emerging environmental and ecological problems of modern civilized societies, there is an increasing trend of consciousness growing among us. There are many policies in many countries for environmental protection, but they are all directly or indirectly dependent on the traditional knowledge



developed in ancient age which teaches us the concept of the value of a simple life, we can follow the simple policies of our forefathers, who probably had much better understanding of the environment than we currently have.

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