

ANCIENT INDIAN CONSCIOUSNESS OF THE ENVIRONMENT: A HISTORICAL SCRUTINY

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ABSTRACT

Mankind has always tried to comprehend different natural occurrences and environmental features which surround them as free gifts of nature be it mountains, rivers, rainfall and vegetation. Since ancient times, these gifts of nature allowed human beings to expand their activities and develop from being primitive hunter-gatherers to pastoral nomads and then to settled agriculturists. However, the seers and thinkers of the ancient times understood the fact that while gifts of nature could be found and used aplenty, attempts to exploit nature beyond the boundaries of stability would lead to the nature's wrath. Thus, the idea of utilizing nature with due consideration to maintaining its integrity, along with other inhabitants of the environment, was the ancient Indian perception of sustainable living which was rooted in environmental consciousness.

KEYWORDS: Ancient India, Environment, Paryavarana, Panchbhutas, Conservation, Vedas, Upanishad, Kautilya's Arthashastra, Ashokan Edicts, Prayag Prashasti, Hathigumpha Inscription, Kalidasa.

INTRODUCTION

The historical analysis of mankind's interaction with the environment in India's ancient past is of great importance and potential. It is understood that ancient Indians inquired about different ways in which the nature affected them and also recorded different aspects of the environment which human beings had to protect for their own well-being. Ancient India has a lot to offer as examples in terms of precedents for environmental conservation which tend to inspire the tone, and increase the efficiency, of sustainable living in modern times. This realization suggests that the ideation of providing for a healthy world to live in germinated in ancient times, along with a keen observation of the ecological surroundings that the nature can be as unforgiving as it can be nourishing. Being conscious of this basic principle, it was important to conserve the sensitive but beneficial ties that humans enjoyed with their environment, lest the destruction of the Mother Nature result in the abolition of human beings themselves.

The Sanskrit word for the environment is *Paryavarana* which refers to an envelope covering all living things on the earth. This in itself suggests the intimate connection between man and the environment and the consciousness of the fact by the former. This has allowed the humankind to comprehend the significance of the gifts that nature has bestowed upon humanity. In India, since ancient times the human connect with the environment has been perceived in terms of the senses that human beings possess. It is believed that the human being is made up of the *Panchbhutas* or the five elements – air (*marut*), water (*apah*), ether/ space (*vyoma*), earth (*kshit*) and fire (light/energy/ heat (*tej*)). These five elements in turn are said to be connected with the five human senses – vision with fire, smell with earth, hearing with space, taste with water and touch with air, suggesting an inseparable human identity with respect to the physical nature.

The environmental connection of the humans, including the creation of other living things in the environment, is reflected in the ancient text *Brihadaranyaka* Upanishad which talks about the idea of binary fission beginning from the Man and thus delves sharply into generating awareness of the natural world. Said to have been composed around 7th to 6th century BCE and considered to be one of the oldest of the Upanishads, *Brihadaranyaka* starts with the theory of the creation of the Universe – “The cosmic energy is thought to integrate in the microcosm and the microcosms integrate the individual to the universe”. The text highlights the idea of being born of nature, both knowingly or unknowingly, which makes the human strive for peace with the environment– “when one tears out the tree from its roots, the tree can grow no more...” More deeply, the 6th *Adhyaya*/ 4th *Brahmana* of the text emphasises the inter - connectedness of the environmental phenomenon with the knowledge that all living beings have cosmic connection in the universe – “The earth is the essence of all these beings, water is the essence of the earth, plants of water, flowers of plants, fruits of flowers, man of fruits, seed of man”. Protecting nature was therefore regarded a duty, and one was made careful while using resources from the earth. For example, if a man found himself in the water, he was to recite the following verse – “May there be in me splendour, strength, glory, wealth, virtue!” Yet another very ancient text, the *Atharva* Veda, provides a remarkably fuller description of the human connection with other living beings sharing the same environment –

“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 growth in the trees! Let there be grace in all Gods! Let there be bliss in the *Brahmand*! Let there be balance in everything! Let there be peace and peace! Let such peace be with everyone of us!”

The inherent need in humans to be in balance with nature is insightful.

In ancient India, the respect and admiration for nature was defined as higher existence and various natural forces were deified as gods and goddesses. This was found to be necessary to legitimize the supremacy of nature over man. In a way, this suggests the birth of religion. However, and significantly, the response is indicative of the mankind acknowledging surrender to, or his lack of control over, natural processes which needed to be respected if human beings had to move ahead with their lives. Thus, we find different deities representing the different forces of nature– Lord Indra with rain, thunder and lightning; *Agni* with fire; *Varuna* with water; *Maruta* with storm; *Vayu* with air; *Surya* with the sun and so on. People prayed to the deities for their benevolence, hence followed the natural law or *Rta*, humbly accepting the insignificance of the human in the face of the infiniteness of the nature. This carried a sense of obedience to the

environment. Perhaps the need to closely interact with the environment made the people personify nature in order to understand it better. Such a thinking also entailed looking at the environment with greater conservation efficiency, especially because people seemed to have imbibed nature friendly activities based on the belief that human beings were under the mercy of the nature for the continuance of their lives. Thus paved the way for the evolution of the ancient Indian system of nature conservation.

Different ways in which the nature affected humans were not only inquired in to in ancient India but were recorded for protection, if only for the well - being of the mankind. This allowed the development of eco-friendly and environmentally directed practices and activities. Of the five *Mahayajnas* or great sacrifices of the Hindu householder, the *Bhutayajna* was the most significant innovation that involved daily offerings of food in a ritualistic manner to animals, birds and other living creatures – believed to be a way of reciprocating the benevolence of nature. There also emerged other expressions that conveyed how different natural forms were conceived as divine. The *Bhavishya* Purana suggests that a particular tree would give a sonless person the feeling of possessing a son, while the *Skand* Purana attaches auspiciousness to the act of planting a tree. The *Brihadarnayaka* draws a parallel between *Vanaspati* (the king of trees) and the human, reflecting how nature was as much living as the human being himself. The *Shukla Yajurveda* even deifies the tree as a god while the *Aranyani* hymn of the *Rigveda* makes it the duty of human beings to conserve forests. The *Atharva* Veda also talks about the helpful qualities of pure water, suggesting it to have healing powers against the intrusion of diseases thus stressing on the importance of preventing pollution of water. Some *Rigvedic* hymns also refer to the healing powers of the air by characterizing it as a fluid embalmment which brings health and happiness to human hearts. Similarly, *Prithvi Sukta* of the *Atharva* Veda is probably one of the most ancient invocations of the Mother Earth, stating that human beings have a mother-child relationship with the earth. The *Prithvi Sukta* instructs the humans to cultivate ideal qualities to protect the nature. This is considered a nourishing reality.

It was not just ancient Hindu scriptures or Hindu religion that helped to indoctrinate nature conservation in the minds of the people. Both Buddhism and Jainism were equally close to the idea of extending human relations over to the environment by propagating the significance of universal peace under the doctrine of *ahimsa*. Lord Buddha attained enlightenment under a Pipal tree on the banks of the Niranjana River. The Pipal tree came to be known as the *Bodhi* tree considered to help the humans achieve their fullest potential under its sanctuary. Several *Jataka* stories show Buddha in different forms of trees, alluding firstly to the concept of being one with the nature and secondly making trees objects of worship in Buddhism. The *Vanropa Sutra* in the *Sanyukta Nikaya* suggests that acts of afforestation, and gardening, increase the doer's spiritual merit. Jainism, like Buddhism, served to preach the significance of non - violence towards all living things, including plants and animals. Mahavira, along with the other Jain Tirthankaras, was vehement in conveying the message of protecting the environment and the process propagated for this was quite austere. Mahavira too attained supreme knowledge or *Kevalagyana* under a Sal tree on the banks of River Rajupalika, reiterating the nature's embrace and its mind widening capacities.

In ancient India a more enhanced form of nature conservation was seen, as several dynasties and kingdoms realised the need to consciously undertake steps for the protection of the environment. Several ancient Indian kings adopted animals as symbols in their emblems such as the Gangas of

Talkadu choosing elephants to represent themselves, the Kadambas preferring lions, the Hoysalas associating with the tiger and the Vijayanagara Empire opting to be represented with the boar. Apart from this symbolic significance of the nature, the ancient Indian kings also issued coins with animalistic images. It was however the powerful Mauryan Empire with which amazing developments in the field of conservation were seen. Kautilya's *Arthashastra* and the Ashokan edicts, particularly the Pillar Edict V, are reflections about the protection and conservation of the environment which make a discussion of the two ancient Indian sources not only exemplary but necessary. Even though considered to be prescriptive in nature, their assertions are arguably rooted in environmental conservation realities.

Kautilya's *Arthashastra* is essentially famous as a treatise containing various parts which deal with the statecraft and administration, offering insights on aspects of life in the Mauryan Empire, the first powerful centralized Empire to rise in the Indian subcontinent in ancient times. It is said that *Arthashastra* was composed and expanded between 2nd century BCE and 3rd century CE in the form of *shlokas*, and does not outright mention Kautilya's concerns for natural conservation. There is however another novel aspect about *Arthashastra* which is not that commonly known. Effective environmental and ecological concerns are so implicit to the text that these have to be inferred from multiple paragraphs spread through the work. When studied together, the underlying spirit of respecting the environment in the text becomes clear. *Arthashastra* discusses Kautilya's perceptions on the environment, spelled out as protection instincts towards natural elements based on an understanding that nature has productive potential for human development and that it is needed to be conserved. The text highlights the mutual harmony of humans as immediate companions of the nature, hence with the environment at large. As a statecraft, the *Arthashastra* instills this virtue in the minds of the general populace through various state directives and laws. It was expected that people in Kautilya's time would be reminded of their inner consciousness about shared existence with nature, having a focus on conservation.

The *Arthashastra* contains names of a wide variety of animal and plant species, mentioned along with the information about the climate and the geographical landscape of the time. A major theme in the account is of land and forests which are seen as abundant resources essential for the very survival of the human beings. Land at the time was the chief agricultural, hence economic, resource. *Arthashastra* accords full recognition to the potential and natural quality of the land. There is the mention of powerful states being one with land that is devoid of mud, stones, salty ground or uneven land. Kautilya aimed to prohibit human indulgence in land as he refers to the life - giving powers of the land to be augmented by irrigation works which in Kautilya's definition has included flower gardens, vegetable gardens, wet-crop fields and the sowing of roots. The text furthers the principle of judicious use of land by prohibiting the establishment of recreational halls or parks. There is also mention of the patterns of land use, ideal uses and penalties for violations for causing destruction of land. Kautilya's *Arthashastra* warns against reckless endeavours of humans on land as "...the worst of all".

The *Arthashastra* also suggests to develop animal sanctuaries by giving full recognition to the forest. Health of the forests was to be ensured for protecting wild life in *Abhyaranya* or *Abhyavan* where animals and trees were to be free from the fear of slaughter. *Arthashastra* also mentions penalties for committing such acts as deforestation. Forests were evidently meant to be protected even if it meant their preservation as an economic resource

yielding raw materials for the production of goods and also the use of forests essentially for the purposes of boundary demarcation, keeping the military and strategic considerations of the Empire in mind. Thus, mention is made in *Arthashastra* of rich forest flora like the Teak, Palmyra, Mimosa, Arjuna, Birch, Bamboo and Birch among other tree types as also of firewood, fodder, fruits for medicine and flowers. It is also revealed that the Mauryas designated special forests to protect the lions and tigers, also for the supplies of timber.

Beyond this Kautilya suggests the possibility of planting material forests in many tracts of land where a forest did not exist before, or on land unsuitable for agriculture, thus giving full recognition to the forest. This feature outlines the expansion of green cover by making conscious efforts through administrative support which though aimed at creating forest wealth to contribute to state treasury, can also be viewed primarily as an act of forest conservation. Such initiatives were accompanied by other actions. There was a ban on cutting shoots of flowering or fruit bearing trees. Similarly, a tree that provided shade could not be harmed. Various fines are mentioned in the text for such violations. The *Arthashastra* even cautions the Director of Agriculture in administration that in cases of a loss of fruits during his work, he will be subjected to a fine equal to the loss of the fruit. The text also suggests the ways in which even the fallen flowers, fruits and grains were to be used by the ascetics and Brahmanas for such practices as *agrayana* sacrifice. The basic principle of no harm to be done to the environmental produce was thus followed.

This may be treated as an environmental conservation dictum particularly in relation to the elephant forests (*hastivana*) which extended far and wide under the Mauryas. There are references about providing state support to the *hastivana* through forest superintendents and guards indicating beyond doubt that these forests were protected areas. The superintendent and the forest guards were supposed to protect the elephant forests by keeping track of all forest entrances and exits. The elephant keepers and border guards were to track the number of elephants, their sleeping places, foot-prints, dung and damage. This resonates with the modern-day idea of census taking of wild and domesticated animals to keep track of the fauna and its survival. While training and bravery of the elephants mattered, *Arthashastra* also stresses their numerical strength. Kautilya believed that “bravery can be imparted by training, but numerousness cannot be created at all in a brave few”. Punishment for slaying of elephants in the *hastivana* was execution.

The text contains strict laws against animal cruelty too and ensures the well-being of both the wild and the domestic animals. Animal parks were created in non-agricultural lands to shelter wild animals where all animals were welcomed as “guests” and given full protection. *Arthashastra* informs that killing or injuring animals in these parks was a punishable crime. Special officers were given responsibility for this. The village headman was responsible for domestic animals and the head shepherd for grazing animals.

Kautilya views forests as enclosures that covered more than just beasts, being a depiction of unbounded natural wealth and thus had to be protected. In what seems to be the most telling statement of the nature’s value, *Arthashastra* sees as an essential prerequisite the administrative scrutiny to restrain malpractices and wastage in protecting the forests. Indiscriminate destruction of forests is prohibited, particularly in reference to the burning of forests. Discarding this method is explicit in *Arthashastra*, “...he shall cause to be burnt in fire one who sets on fire a pasture, a

field, a threshing ground, a house, a produce, a forest or an elephant forest..."The attitude of protection applied to animals as well. For example, attendants of elephants included physicians, cooks, trainers, guards, fodder givers and so on. Ill provisioning of elephant stalls, striking them in improper places, riding them into unsuitable lands were all punishable offences. This also covered horses, since both elephants and horses were an imperative play in the battlegrounds. It's important to note that Kautilya suggests maintenance even of diseased or old age horses rendered incapable of participating in wars. The Superintendent of slaughter houses was supposed to impose the highest fines for violence inflicted on such protected animals. *Arthashastra* goes to the extent of saying that "he who himself kills or incites another to kill or steals or invites another to steal shall be executed". The calf, the bull and the milch cow was to be strictly protected against killings and torture since they were immensely important for dairy products and the labour they provided.

Arthashastra also gives details on the negative effects of the environmental resources, for example the text looks at the link between soil erosion and the subsequent fall in land productivity. Similarly, remedies against danger from locusts, birds, rats and insects include smearing of grains in milk of *snuhi*-plants or mixing them in secret mixtures or instituting tax on rats per head or performing pacificatory rites. Also, to fight such disasters, certain worship rituals, oblations, recitals of benedictions, magical rites and festivals were to be carried out. In case of danger from wild animals, carcasses of cattle were to be mixed up with a liquid or cattle intestines were to be filled up with *mandana-kodrava*, which appears to be a poisonous variety of grains. Hunters and fowlers were supposed to keep themselves busy by setting up concealed cages, pits and traps for taming wild animals. To ward off the dangers posed by serpents, experts in poison-cure were to act with charms, magic spells and medicines besides taking collective initiatives to kill the snakes.

Arthashastra also talks about vastu-shastra, or science of architecture, and lays down its own rules of designing and constructing structures in conformity to the environment. While it can be argued that vastu - shastra has no logical connection to the environment, it is important to note that it does contain a lot of rules that relate to the environmental factors. According to the *Arthashastra*, the fundamental principle behind vastu - shastra is to bestow harmony between a resident, the built structure and the nature. Kautilya describes "houses, fields, gardens, building of any kind, lakes and tanks", each as vastu. The text gives a number of suggestions regarding fastening of roofs, foundational measurements, intervening space between houses, size of windows, and the building, or unbreakable roofs to ward off "evil consequences of rain". It is also advised to "provision permanent houses with dunghills (*avaskara*), water course (*bhrama*) and a well (*udapanam*)". Kautilya's mention of vastu shastra testifies its importance in sustainable development. Extensive planning of settlements, curbing excessive consumption of natural resources, logical approach to land choices and disposal of sewage – the *Arthashastra* accords importance to all these to ensure sustainability of the environmental resources, ensuring their appropriate conservation. Besides, the text considered water as an extremely precious resource, regarded as a collective and not a private commodity. The *Arthashastra* prescribed fines for such acts that affected water bodies adversely, for example for damaging embankments or for diverting a water course or for obstructing water bodies. Thus, the *Arthashastra* prescribes efficient water management and also on how to do it.

The Mauryan ruler Ashoka's time period too shows a sense of undying fidelity to nature that focused on the acquisition and protection of the earth and its living beings, guided most vociferously by the dictum of non-violence or *ahimsa*. The emperor Ashoka's reign shows that conservation of the environment was part of a person's *dharma* in life which could determine a person's spiritual value. This reflects that the idea of moral backing of the environment carried greater weight than mere legal guarantees in safeguarding the nature. These feelings were not meant to stem from just the orders given by an impersonal higher authority but was to arise from an inner consciousness that reminded people of their shared existence with the wider world. Whatever is the motive, the Ashokan Empire covered vast tracts of environmentally rich zones and the biodiversity itself had both aesthetic as well as practical value.

It is to be understood that various faunal and floral species were presented for conservation in several Ashokan edicts which contain ideas about preserving the animal and the natural world. Explicit reference to the importance of nature and the need to conserve it is found in Rock Edicts 1, 2, 3, 4, 8, 9, 11 and 13 and in the Pillar Edicts 2, 5, and 7. The edicts were royal orders, but these also contained information about major thoughts of the king about his drive to secure the ends of an environmental mission. The Pillar Edict V is exclusively related to environmental conservation while other edicts reflect the recurrence of Ashoka's request and the environmental plea to people of his empire to conserve and protect natural wealth. The issuance of edicts shows that environmental conservation was given a legal stature in Ashoka's time given the fact that these were to convey laws of the king to the people at large. However, when viewed deeply it can be argued that the psychology behind the environmental plea combined spiritualism with statecraft. If it wasn't for the inner values of the people towards the nature, hope for the environmental reverence would have been completely lost. Ashokan Period is a reflection of careful management and more importantly it generates a sense of responsibility among the people towards the natural spheres.

Ashokan edicts continuously encourage the people to participate in the community as good neighbours and to carry out their duties as protectors of all lives, be it towards a shrub or a common facility. The edicts infallibly recognise that anarchic lifestyle, reckless waste disposal and negligence to cleanliness of one's surroundings were meant to be punished. No one was allowed to throw dirt on the road and block it with muddy water. Fines were imposed for voiding faces near a water body or a holy place or even near a royal property. Passing of urine in open was strictly prohibited, if it wasn't due to an illness, medication or fear. Similarly throwing an animal carcass inside the city was not at all allowed, even taking the carcass out from a gate other than the one meant for carrying out corpses was fined. It was the duty of the city superintendent to inspect places supplying water, roads, water – courses, covered paths, and ramparts. The attempt was meant evidently to prevent, and abate, air, land and water pollution – through perhaps the earliest of the environmental laws.

Ashoka's time period is also about depicting the balance between the man and his environment. The very fact is compelling that Ashoka was consistently thought provoking, and remained mindful of animals and their welfare, while giving out instructions through the edicts. For example, the Pillar Edict V enlightens us with a list of animals and birds that were not meant to be killed under any circumstances. There is a further list of animals which could be killed only on certain days. In addition, Ashoka states that all those creatures that are useless and inedible shall not be killed. Similarly, a lot of insects and creatures of no particular significance were

declared inviolable. People could not catch fish on certain days, they were prohibited to do so because of the interference this caused with their natural breeding cycle. Further, the calf, the bull and the milch cow were to be strictly protected against killing and torture. It fell under the duties of the superintendent to check on the conditions of animals maintained as domestics by the herdsman. Ashokan edicts also disapproved of “useless ceremonies and rituals” which dealt with spell-making or poison manufacture.

Other schemes introduced by Ashoka were efforts towards environmental conservation. His rule is particularly known for the programmes aimed to prevent forest burning for various human endeavours which destroyed living beings. Such measures, though said to have been primarily influenced by the Buddhist *ahimsa* dictum, nevertheless lessened the indiscriminate destruction of forests by burning. The Pillar Edict V furthers the theme of the nature conservation by elaborating that the animals which resided in the elephant parks must not be killed. Ashoka himself became an example when he reduced the number of animals killed daily in the royal kitchen “for the sake of curry” from “many hundred thousand to two peacocks and a deer”, and even the killing of these three was to be stopped in future. Ashoka discontinued the royal hunting expeditions with the same intention. Sacrifice of animals was also discouraged as it usually involved slaughtering of the best animal of the herd. Another major Rock Edict II, informs about the initiative to start something like what is called veterinary clinics in the modern times. The edict states about the appointment of medical men who were to treat both humans and animals. Similarly, the Rock Edict I states that particular animals which were killed for the meat would not be slaughtered in coming times. These reflections about Ashoka’s sacred geometry with *ahimsa* are usually emphasised, but, when viewed deeply the initiatives indeed signify an intrinsic connection between the universe and the individual, implying the firm dependence of the two upon each other. The animals, birds, forests were declared protected and trees were to be planted to expand the green cover. The Ashokan edicts talk about the importance of protecting the environment in a tone of direct conversation with his subjects. They also preach a tone of peace with the environment.

Ancient Indian religions other than Hinduism too helped indoctrinate nature conservation into the minds of the people. Buddhism was closely associated with the idea of universal peace which extended over human relations with the environment. Lord Buddha attained enlightenment under a Pipal tree on the banks of Niranjana River, which came to be known as the Bodhi tree. This shows how close association with the nature was considered to help human being achieve their fullest potential. In fact, several *Jataka* stories show the Buddha in the form of different trees, alluding to the concept of being one with nature and making trees objects of worship in Buddhism. The *Vanrupa Sukta* in the *Sanyukta Nikaya* suggest that acts of afforestation and gardening increase the doer’s spiritual merit.

Jainism also served to preach the significance of non-violence towards all living things, including plants and animals. Mahavira, along with the other Tirthankaras, was vehement in his message of protecting the environment, and the process of maintaining the rules was quite austere. Treated fundamentally as a religion of ecology in the first book of *Acharanga Sutra*, *ahimsa* in Jainism is much more than just not hunting others. Jainism propagated, “not intending to cause harm, physical, mental or spiritual, to any part of nature”. This intrinsically established that the nature is bound together and it indicated in practice to develop an attitude of compassion towards nature – “No waste, no overuse, no polluting” – a cardinal principle advocated today for

the preservation of nature. Mahavira's attainment of *Kevalagyana* or supreme knowledge under a Sal tree on the banks of the river Rajupalika, also reiterates the mind widening capacities of nature's embrace.

The advent of the 6th century BCE brought with it another sense of and an attitude towards nature conservation. Largely known for the onset of second urbanization with the extensive use of iron tools and weapons, improved knowledge of agriculture and irrigation, production of surplus crops, expanding trade and commerce as well as use of punch marked silver and copper coins – all features denoting the century as a turning point in the history of India. Towns, capital cities, fortified places having bureaucracies and the armies signified about the expanding economy. It was the time when forests were cleared extensively with better made iron tools as agricultural settlements expanded into the Gangetic Plains. A large - scale tradition of animal sacrifices also began with people wanting to please the gods for more and more materialistic gains. In time there grew a distance between man and the environment with indiscriminate hunting of animals, extensive fishing practices beyond the natural regenerative capacities of water and the use of iron tools in the rampant clearing of forests. Man did not fear nature any longer, rather it came to be worshipped more as a source of prosperity. Animals as a result came to be regarded as part of material wealth. Instead of praying to the gods for the safety and preservation of nature, mankind looked towards the natural environment as a source of good fortune synonymous with wealth.

As Indian society became more and more complex, the sense of intimacy with the nature assumed different forms. The environment was still recognised as integral to the survival but it was increasingly linked to the desire for increased amenities and luxuries. We are told that many dynasties realised the need to consciously undertake nature conservation in the face of increasing urban development. This included changed perceptions and significant innovations in the manner in which the rich and diverse fauna of India came to be perceived. Ancient Indian kings began to adopt animals as royal symbols in their emblems such as the Gangas of Talkadu representing themselves with the elephant, the Kadambas choosing lion in their emblem, the Hoysalas giving primacy to the tiger and the Vijaynagar Empire preferring the boar. Apart from using animals for their royal symbols and the flags, ancient Indian kings also issued coins bearing animalistic images. Similarly, many laws were enunciated in parts of India that made unnecessary exploitation or overexploitation of forests punishable by law.

The cause of the nature conservation came to be characterised more by the efforts to develop it as anthropological landscape rather than to ensure minimal damage to the natural landscape. One of the most predictive examples which reflect ancient Indian environmental consciousness of the kind is the *Hathigumpha* Inscription located in the Udaigiri Hills near to Bhubaneswar. The inscription, named after a cavern is of the great Kalinga ruler Kharavela, said to have been a great lover of nature. The inscription refers to the wonderful and rare elephants, horses and other such animals, now held important for their use in the army. Hence, they had to be specially taken care of. The inscription also refers to such trees as the *Kalpa Vriksh*, believed to be a wish fulfilling tree, and also talks about the fire sacrifice thus alluding to the idea that human existence was linked to the nature. Besides this, human efforts to give a sense of aesthetics to the surrounding nature are also part of the inscription. For instance, there is reference to the restoration of gardens, erection of lake embankments and tanks as well as cisterns. The use of natural resources is reflected in the efforts made to construct a canal, originally started from

Tanasulia to Kalinganagar by Mahapadma Nanda of the pre-Mauryan Nanda dynasty, subsequently extended by Kharavela.

In another dimension, the nature conservation in ancient India is found to be involved with cultural activities and this is evidenced from the Nanagh at and Nashik cave inscriptions. The Nanagh inscription is one of the oldest cave inscriptions, with Satvahan as in the Deccan as the makers. The inscription mentions the earth girdled by the ocean and the best of mountains. It then goes on to describe many sacrifices being performed such as *Agniyadheya*, *Rika*, and *Oraya* sacrifices among many other such activities. It is important to note that in each of these sacrifices hundreds and thousands of cows, elephants and horses were being gifted by the performers of sacrifices. This indicates that the fauna, the animal world, at the time was very rich and it had become a vital resource of *dakshina*, done to earn the spiritual merit in honour of the donor. The period was witnessing a move towards more settled agricultural life, and animals acquired the status of exchange resource. A gift of animals was regarded of value to repay the priests by those on whose behalf the priests performed the rituals. The importance of animals like the milch cows donated for use in daily life or the growing importance of elephants and horses donated for use in the army was an indication that animals of ancient India's rich eco-system had become important components to support the web of human activity like in the performance of rituals and customs, though in time such an emphasis made the ancient Indian eco - system of rich animal diversity less stable for preserving the rich fauna. In the long run, such a human ascription of importance to the animals eventually resulted in an environmental stress. As *dakshina* became a common practice, the value of wildlife as part of nature came to have different connotation. The faunal wild life began to be exploited under human influences, this eventually contributed to distancing of the people from the natural world.

The Nashik inscription of Ushavadata in cave 10, another very old cave inscription believed to have been created around 120 CE in the Deccan, also records the actual tradition of *dana* of animals to the Brahmins and the Buddhist *bhikshus*. At one place the inscription cites the charity given to the Brahmins and Buddhists of 30, 000 cows, including about 32,000 stems of coconut trees. Besides this, the environmental significance of the inscription lies in documenting the gratuitous distribution of water with reference to the wells, tanks and gardens. These are mentioned as part of the infrastructure to serve the pilgrims and the general public. While such acts do not directly reflect on enhancing the quality or conservation of the physical environment, it does ensure that the people in ancient times could enjoy the benefits of the natural world.

It is to be noted that the Shunga ruler Agnimitra has been described as a hero in Kalidasa's *Malvikagnimitram* which provides a keen description of environmental situations in Vidisha in central India during the Shunga period. The text alludes to the environmental sensibilities of the Shunga ruler. Considered as one of the greatest poets and playwright of ancient India, Kalidasa is profusely known as the immortal poet of nature. His *Malvikagnimitram* has the love story of Agnimitra and Malvika as the central theme. But, more deeply it contains the ethical knowledge and the morality of care, concern and protection towards ecological surroundings. The depiction of seasons and description of plants, creepers, trees, the Sun, the Moon, the Sky including birds are emphasised in *Malvikagnimitram* as elements which play a role in keeping and maintaining the environmental balance. Two other works of Kalidasa also need mentioning. His *Ritusamhara* describes seasons in detail and his other poetic work *Meghduta*, reflects on various aspects of the nature, and especially clouds. One of his other creations titled *Vikramorvashi* is well known for

the Act IV which describes King Vikramaditya (Chandragupta II), shown as wandering through a lovely forest with various trees and flowers.

Kalidasa flourished during the reign of Chandragupta II, one of the most powerful emperors of the Gupta period in ancient India. Similarly, the Chinese traveller Fa Hien (or Faxian) recorded his impressions of ecological aspects of the empire during the reign of Chandragupta II. He took note of very different vegetation in India from China, and, found bamboo, sugarcane and pomegranate as the only familiar plants. Fa Hien also visited Malwa region and praised its climate. Crucially Fa Hien's observation about the period that no one kills the living things shows the beliefs of the time about the sacredness attached to the nature's gifts. Apart from such descriptions, it appears that the environmental concerns had lost their epistemological importance as the records of the Gupta period acquired more importance in the form of political documents. The famous Allahabad Pillar inscription, also known as Prayag Prashasti, praising the virtues, deeds and bravery of Samudra gupta, is a very important epigraphic source of geo - political landscape of the history of the Imperial Guptas. Even so, it does talk about Samudragupta capturing the forested areas of Central India, suggesting a picture of the natural topography and vegetation that might have existed in the *Ativarajyas* or Forest States. At a metaphorical level, the Pillar inscription eulogises Samudragupta's fame going higher and higher, and, significantly compares the King's ascent as purifying the world like the white water of the Ganges (holy river) lashing forth rapidly and flowing through many paths.

However, the post-Gupta period saw a decline in the urban features of ancient India and the transition of the same to feudalism. This meant a period of self - imposed self-reliance which gave a great boost to agriculture and thus affected the environmental potential of those times. A greater understanding of human beings with regard to the forces of nature did not continue to be facilitated, though some examples do appear which describe impenetrable nature of the landscape. For instance, Harshvardhana, the ruler of *Pushyabhuti* dynasty is depicted in Banabhatta's *Harshcharita* to have ventured into the Vindhyan Mountains looking for his sister. Banabhatta also details a vivid description of rural India's natural environment. A fuller account of the time is also given by the visiting Chinese pilgrim, Hiuen Tsang (Xuanzang), who travelled through India. Hiuen Tsang crossed the rivers Yamuna, Ganges and Shrugna to reach south to Kanauj. Other than this his account seems to be impressed by the patronage of king Harsha to Buddhism and scholarship of Buddhist scriptures. Hiuen Tsang gives a detailed account of the people of India and their culture but not so much of the environmental concerns or about the richness of the environment.

Thus, a historical analysis of man's interaction with the environment in India's ancient times is of great potential and importance as ancient Indians were very much aware about the ecology and environmental sustainability. Ancient Indians inquired about the different ways in which nature affected them and recorded the different aspects of nature which human beings had to protect for their own well - being. In fact, ancient India has a lot to offer in terms of precedents for environmental conservation and examples to inspire the tone and increase the efficiency of sustainable living and development in our times. The realisation suggests that protecting nature and ecological diversity can help maintain a balanced environmental harmony in our present existing world.

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