

Plant-World in Hindu Consciousness

Susheel Kumar Sharma¹

ABSTRACT

The Vedic rishis (philosophers) hold that everything (irrespective of being living or non-living) is a manifestation of Brahma. This wisdom finds a manifestation in the Upanishadic verses like: *sarvam khalvidam brahm* (“All this is Brahma”, *Chandogya Upanishad* 3.14.1), *aham brahmasmi* (“I am Divine”, *Brihadaranyaka Upanishad* 1.4.10), *tat tvam asi* (“That Thou Art”, *Chandogya Upanishad* 6.8.7) and *ayam atma brahma* (“This Self (Atman) is Brahman”, *Mandukya Upanishad* 1.2). Hence, there is no ‘other’ for a traditional Hindu – neither in the human world nor in the non-human world. The Hindu texts are full of examples where these philosophical ideas have been put into practice as a daily routine by the individuals. In the later period, several texts like *Smritis* and *Puranas* were created to enable a person evolve a code of conduct for oneself in which due respect is shown to other forms of life. Accordingly, a code of conduct for the individuals and the societies got evolved. This distinct life-style presents a sharp contrast to the way of life adopted by the practitioners of a non-Hindu way of life, like the ones adopted by the followers of Abrahamic religions. To understand the Hindu way of perceiving the surrounding environment, it is pertinent to dwell upon the Hindu consciousness that informs the social, cultural and environmental responses in Bharat. The present article focuses only on the plant-world to indicate how a Hindu treats the so-called inanimate object like a plant/ tree respectfully by keeping a focus on the Vedantic ideas. A frequent reference is made to the philosophical texts, ritualistic texts and current social and individual practices to indicate the continuity of the Vedantic tradition and its manifestation in one’s daily routine.

Keywords: *Badrivan, Chipko Andolan (movement), Panchvati, Purana, Sacred Trees, smriti, taxonomy, Veda, Vrikshayurveda, Woods.*

UNDERSTANDING HINDU CONSCIOUSNESS

The term ‘Hindu’ is used for the people of India and, like many other words, it has several connotations viz. geographical, ethnic, cultural and religious. Hind and Hindu (as mispronunciation) for Sindh and Sindhu respectively by the Arabic and the Persian scholars and invaders for the river Indus and the people around the river hint at the geographical and demographic identity. “Inscriptions of the Achaemenid empire [550 - 330 BCE] refer to the frontier of the region of the Indus or Sindhu as Hi(n)dush.”ⁱ In the *Book of Esther*ⁱⁱ (1:1 and 8:9, 2nd Century BCE) the term ‘Hodu’ appears for India. Around 4th Century BCE, in Megasthenes’ *Indica*, the term figures as a geographic name for Indians and India. Whether the term was used in the sense of territorial identity only by the foreigners is disputed by

¹ Professor of English & Head, Department of English & Modern European Languages, University of Allahabad, Prayagraj

many scholars. For example, Ramdhari Singh 'Dinkar' quotes a verse of *Brihaspati Agam* to hint at the provincial definition of Hinduⁱⁱⁱ in an Indian source. In his *Discovery of India*, Jawaharlal Nehru writes that the term refers to the ethnicity of the people:

“The first reference to [the word ‘Hindu’] in an Indian book is, I am told, in a Tantrik work of the eighth century AC, where ‘Hindu’ means a people and not the followers of a particular religion. ... the word is a very old one, as it occurs in the Avesta^{iv} and in old Persian. ... The word is clearly derived from Sindhu, the old, as well as the present, Indian name for the Indus.”^v

Nehru also refers to the Chinese tradition of the term: “The famous Chinese pilgrim I-tsing, who came to India in the seventh century AC, writes in his record of travels that the ‘northern tribes’, that is the people of Central Asia, called India ‘Hindu’ (Hsin-tu) but, he adds, ‘this is not at all a common name and the most suitable name for India is the Noble Land (Aryadesha).”^{vi}

For a foreigner, the regional positioning is of a primary concern but not so for the native. So, the word has a cultural connotation when it is used as the second morpheme of the word VIBHINDU by Rishi Medhatithi (*Rig Veda* 8.2.41)^{vii}, Rishi Kutsa (*Rig Veda* 1.103.3)^{viii} and Rishi Kakshivan (*Rig Veda* 1.116.20)^{ix}. The fourth connotation is mentioned by Yule and Burnell^x when they define the term as: “A person of Indian religion and race.” (*Hobson-Jobson* 415) They also cite a few references from different Arabic and Persian sources to give a glimpse of changing shades of meaning over a period of some centuries. Amir Khosru (c. 1290) is quoted^{xi} by them to indicate that the word was being used in the religious sense by 13th century. In his Preface Nathaniel Halhed^{xii}, the translator, explains that the terms ‘Hindustan’ and ‘Hindoo’ are not the terms by which the inhabitants originally called themselves or their religion. It was only since the era of Tartars (Muslims) the name Hindus came into use to distinguish them from the Muslim conquerors. (Halhed xxii) John Hawley^{xiii} repeats Halhed when he (Hawley) writes that Hindus also started using the term to distinguish themselves from the outsiders, especially Muslims:

“Even in the 16th century, 500 years after the Muslim conquerors had come, the term Hindu was rarely used - certainly never in Sanskrit or in any even vaguely scriptural document and when it was, its range was such that it would have embraced Buddhists and Jains as well as the people we today would call Hindus.” (Hawley 23)

The Indian Constitution does not define of the term “Hindu”^{xiv} though in most of the recruitment forms/ columns for the government posts the term is used to indicate the religious identity as it is bracketed along with religious identities like Christian, Muslim, Jew and Zoroastrian. Even in a popular slogan, “Hindu Muslim Sikh Christian, all are brethren [among themselves]^{xv}, the word, Hindu, is being used to denote the follower of a particular sect/ religion in distinction of the rest three. J B S Haldane writes: “[Hinduism] is an attitude toward the universe compatible with a variety of religious and philosophical beliefs.”^{xvi} There are also conjectures about the change of the plural nature of this attitude into a singular one by homogenising it for various ends. For example, Shashi Tharoor contests the idea of a uniform Hindu identity in several of his speeches, writings and book^{xvii}. John Hawley opines that “Hinduism - the word, and perhaps the reality too - was born in the 19th century, a

notoriously illegitimate child. The father was middle-class and British, and the mother, of course, was India.”^{xxviii}

The above discussion implies that the word ‘Hindu’ gives many identities to the land and its people based on collective, demographic, geographical and behavioural characteristics. Nonetheless, the word “Hindu” is largely considered to be an exonym and an umbrella term^{xxix}. The Hindus, however, prefer the term *Sanatana Dharma* (“the eternal way”) to describe their way of life. In this connection Vidyaniwas Mishra writes: “It is true that in the ancient texts only the word Dharma has been used, with certain adjectives as prefixes like *Manava Dharma*, *Sanatana Dharma*, and *Arya Dharma*. Buddhists have used *Arya Dharma* and *Sad-Dharma* in relation to *Ashtangic Marg* (Eight-fold path) though most of the scriptures have used only ‘Dharma’.”^{xxx} He further writes: “Dharma is essentially a way of leading one’s entire life.”^{xxxi}

Haldane writes: “Hinduism is not a religion as this term is understood by the adherents of proselytizing religions.”^{xxxi} Hinduism (*Sanatana Dharma*) defies all the narrow traditional features of any religion or creed. It has been accepted as the oldest surviving religion in the world, which unlike Abrahamic faith systems, has multiple books, prophets (*avatar*), gods, prayers and prayer rituals, rites or performances, images (*vigraha*) for worship and reverence, philosophical concepts, paths to liberation (*Moksha*) and the like. The faith has survived, developed and prospered in the Indian subcontinent despite several waves of insults, deprivations, threats, torments, oppressions and slaughters both by the internal and foreign aggressions in its history of several thousand years. The Supreme Court of India has repeatedly observed: “When we think of the Hindu religion, we find it difficult, if not impossible, to define Hindu religion or even adequately describe it. ... It may broadly be described as a way of life and nothing more.” (1966 AIR 1119, 1976 (Sup) SCR 478, 1995 AIR 2089, 1996 AIR 1113) However, the former Vice President of India, Mohammad Hamid Ansari, has questioned this by rhetorically asking: “Which religion is not a way of life? Is Judaism not a way of life? Is Islam not a way of life? Is Christianity not a way of life? Is Buddhism not a way of life?” He further says, “After all, Judges are very eminent people but they are not infallible.”^{xxxi} David Frawley too disagrees with the opinion of the Supreme Court and maintains that to describe Hinduism as “a way of life”^{xxxiv} is not only fallacious but also demeaning. He describes it as a way to live in harmony with the entire cosmos; it is a name of a behaviour and a *Sādhanā*; it is the quest of self and not some external faith.^{xxxv} (Frawley) Likewise, Maria Wirth writes: “Hinduism is an ideal way of life which is helpful in realising one’s ONENESS with the Supreme Being. This ideal way of life is not based on a dogmatic belief system, but on experiential wisdom.”^{xxxvi} (Wirth) Haldane calls Hinduism an attitude (see supra). Vidyaniwas Mishra put it differently when says: “Hindu dharma propels one to live in the present; it is a union of truth and cosmic order/ divine law (*ṛta*).”^{xxxvii} (Mishra 11) What these three scholars are saying is that Hinduism explores the relationship between *Vyashti* (the particularised thing, *अपरा प्रकृति*) and *Samashti* (the generalised and the abstract universal whole, *परा प्रकृति*). It is, therefore, imperative to identify the parameters to the Hindu ways of life.

The best description of a Hindu way of life is: “a constant engagement to shed one’s ignorance and pettiness”^{xxviii} (*Sabdakalpadruma* 537). What binds various denominations (like Shaivism, Shaktism, Smartism Vaishnavism, Saurism and others) of the Hindus and different sects of Indian origin (like Buddhism, Jainism, Sikhism, Arya Samaj, Mahima Dharma, Prarthana Samaj and others) together is the acceptance and belief in the following three doctrines: the doctrines of i) action (*Karma*) ii) rebirth (*punarjanm*) and iii) liberation (*Moksha*). To my mind these are also the necessary and sufficient conditions to identify or to describe somebody as a Hindu. There are three parameters to decide the worthiness of an act (*Karma*). The first one has been suggested by Gandhi very succinctly as: “a relentless pursuit after truth” (Gandhi: 1). Secondly, the Hindus believe that every human being is indebted to five sources for his/her existence and survival. Therefore, through his/her actions, a person should strive to repay the five ethical and spiritual debts^{xxix} (*Shatpath Brahmana*: 1.7.2.1-6) in one’ life-time. So, each action of a Hindu should be directed towards an effort to repay at least one of the following five debts: indebtedness to the sages (*rishi rin ऋषि ऋण*), indebtedness to the ancestors (*pitra rin पितृ ऋण*), indebtedness to the deities (*deva rin देव ऋण*), indebtedness to humanity (*manushya rin मनुष्य ऋण*) and indebtedness to the objects of nature like plants and animals (*bhuta rin भूत ऋण*). The third parameter to judge the value and validity of an action is that it should be performed for the fulfilment of at least one of the four proper goals/aims of life (*puruṣārtha पुरुषार्थ*): righteousness/ moral values (*Dharma धर्म*)^{xxx}, prosperity/ economic values (*Artha अर्थ*), passion/ love/ psychological values (*Kama काम*) and happiness/ spiritual value (*Moksha मोक्ष*). All these four values are independent as well as inter-dependent. Other characteristics like (non)acceptance of the all-pervasive Supreme Being who is both immanent and transcendent, (non)acceptance of the Vedas as a *Pramana* (means of valid authority) in religious and philosophic matters, (non)allegiance to a particular tenet or philosophic concept, (non)practice of multifarious rituals, (non)acceptance of great world rhythm, vast period of creation, maintenance and dissolution that follow each other in endless succession (four *Yugas* viz. *Satyuga*, *Treta*, *Dwapar* and *Kaliyuga* followed by *Pralya*) are just the examples of different stages of realization by different sages and spiritual leaders in their quest of truth. Even the evolution of the *Chaturashrama*^{xxxi} (four-age-based Monastery System) and the *Chaturvarna*^{xxxii} (four order/ class system) is to put the principle of Karma in its proper place effectively. Similarly, different kinds of rituals, surrender to God, sticking to *chaturashrama* and *chaturvarna*, *japa* (prayers) to different deities, and having qualities like contentment (*santosh*), tolerance, annihilation of ego, love of life, flexibility, humility, austerity, charity, rationalism etc are just different types of *karmas* for different occasions and purposes in consonance with the parameters specified above. From this exploration one realizes that nothing is to be wasted rather everything is to be utilised in an optimum manner. From this emerges tangential characteristic of Hinduism: it is way of living with responsibility and duty, not with authority and rights. It may be reiterated that the responsibility and duty are not confined to only human world but include all the objects in the cosmos. Similarly, authority and rights of the human beings neither override

nor interfere with the rights of the other objects in the cosmos. Griswold^{xxxiii} has pointed the following six characteristics of a Hindu:

1. "Hinduism has always had the general animistic or pantheistic tendency to deify whatever is.
2. A second general characteristic of Hinduism is the tendency to syncretism.
3. A third characteristic of Hinduism is the contrast which it accepts and justifies between "hieratic" and "popular" religion.
4. A fourth characteristic of Hinduism is the dominance of the religious point of view in all the affairs of life, or the supremacy of the religious consciousness.
5. A fifth characteristic of Hinduism is great reverence for the ideal of renunciation and great capacity for sacrifice.
6. A sixth and last characteristic of Hinduism to be mentioned is the existence in it of aspirations and anticipations still largely unfulfilled and unsatisfied." (Griswold)

However, Christians^{xxxiv} consider Hindus to be heathens and Moslems consider them to be infidels (*kafirs*)^{xxxv}; both Christians and Moslems^{xxxvi} believe that Hindus shall be burning in the fire of Hell because of their faith. Therefore, both the groups, perhaps out of compassion or because of divine proclamation^{xxxvii}, make efforts to convert Hindus to their fold. The church "deceives, threatens and lures people away from their tolerant, inclusive tradition into an arrogant, divisive mindset. Some followers of Islam ... kill [the nonbelievers]."^{xxxviii} Both these groups have therefore turned "arrogant, self-righteous and [are fully] convinced that they are meant to rule the world in the name of their god." (Wirth) They leave no opportunity to demean the Hindus. Here is one example of the arrogance of a Christian: "It is difficult to estimate Hinduism's contribution to the world. ... But perhaps, when all is said, Hinduism's greatest contribution to the religious progress of humanity will prove to be a negative one." (Griswold) That Griswold's opinion is baseless can be proved by discussing the Hindu take on the environmental issues, a crisis that has perpetrated endangered the very existence of the mankind and the planet earth.

REVERENCE FOR PLANTS

That perception plays a very major role in the protection of environment has been brought out very well by Louise Fowler-Smith in his book *Sacred Trees of India*. An Indian's perception is to be found in Hindu texts. In the *Aushidhi Sukta* of the *Rig Veda* the plants and vegetables are addressed as mother, "O mother! Hundreds are your birth places and thousands of your shoots (*Rig Veda*, 10.97.2)^{xxxix}. At another place it is mentioned that the herbs, trees and the earth are bestowed with the same divine energy as runs in the immortal souls.^{xl}

The *Skand Purana* (6.1.247.24)^{xli} tells that Ishvara resides in trees therefore Sanatani Hindus preserve all kinds of trees without harming them. In the *Rig Veda* (6:48:17)^{xlii} it has been instructed not to cut down trees for they provide shelter to many birds and insects. The verse also indicates that the Vedic rishi made a difference between a tree and a weed which is to be uprooted if agriculture is to be practiced. This becomes even more clear when one reads the following instruction in the *Matsya Purana* (227.39)^{xliii}: "One should observe milk fast for

one day if the herbs produced by ploughing and those that grow spontaneously (weeds) in the forest are cut/ rooted out without any need.” In *Vishnu Purana* (2.12.10)^{xliv} it is mentioned that anyone who cuts off a branch, or casts down a leaf, when the moon is in the trees (the day of its rising invisible), is guilty of Brahmanicide. In *Bhāgavata Purāṇa* (10.22.32-34)^{xlv} it is very clearly mentioned that trees protect us against rain, wind, heat and snow; they shower their benediction on all the living entities without making any discrimination; they offer everything one desires by providing their leaves, flowers and fruits, shade and roots, bark and wood, fragrance, sap, ashes, pulp and shoots. Rooting out of weeds from a field is an important activity in farming. The *Kurma Purana* (2.13.36-37)^{xlvi} says that one should neither defecate nor urinate under a big tree nor in a grass-land. The Rig-Vedic prayer, “To us may Herbs and Forest-Trees be gracious”^{xlvii} indicates that the Rishi was aware of the importance of trees, plants and herbal medicine. Likewise, the *Kurma Purana* (2.18.19)^{xlviii} lists certain trees that are good and bad for using as a teeth/ mouth-cleaner/ purifier.

Several Puranas like *Agni Purana*, *Bhagavata Purana*, *Padma Purana*, *Vayu Purana* and *Vishnu Purana*^{xlix} refer to the emergence of a celestial tree (mentioned as *kalpavriksha* or *kalpataru* or *kalpadruma* or *kalpapadapa* or *parijata vriksha*) from the churning of ocean. The *kalpavriksha* is the idea of the tree of life which fulfils one’s desires^l. The age-old Banyan tree in the Jagannatha temple is worshipped as Kalpa Bata for similarly held beliefs. *Kalpavriksha* also means a tree that has long life and who’s each and every part can be useful for human being^{li}, for example, a coconut tree. Its roots are used in beverages and medicine, trunk can be used in furniture work/paper industry; its leaves are used in making bags, hats and brooms, and covering roofs. The husk of coconut produces coir which is used in creating mats and mattresses. The coconut itself is an important ingredient in many Indian dishes and so is its oil. Coconut water balances the electrolytes in body and it also acts in maintaining kidney functioning. So, technically speaking coconut tree is a *kalpavriksha*. This sort of discourse is indicative of the reverence for trees in general and expresses one’s gratefulness for a tree that does something good to human life.

CLASSIFICATION OF PLANTS

The Indian scholar sages have not only shown respect to the plants, they have also studied them scientifically. For example, they also have tried to classify plants (taxonomy of plants) over the ages. For example, in the *Mahabharat* (Anushashan Parva 58:23) the plants have been classified into the following six categories: *Vriksh* (वृक्ष tree e.g. vat, peepal etc), *gulm*^{lii} (गुल्म e.g. kush, sugarcane, basil etc), *lata* (लता climber e.g. money plant, grape vine etc), *valli* (वल्ली creeper e.g. cucumber, strawberry etc), *tvaksar*^{liii} (त्वक्सर “hard bark” e.g. bamboo etc) and *tīṇa* (तृण herbage e.g. *dub*, *kush*, *sarvat* etc). A natural forest (*Mahavan* महावन) consists of all these types of plants. Almost the same idea is found in other Hindu texts. For example, *Manusmriti* (1: 46-49)^{liv} defines, classifies and characterises a plant. Manu puts plants in the category of *udbhijja* because they come into existence by splitting the

seed and breaking through the soil and become fixed in their places by means of roots and trunks and other such things. They are divided into nine groups viz. *falpakanta* (फलपाकान्त, which die at the ripening of their fruit e.g. annuals like wheat, paddy etc), and *oṣadhis* (औषधि, those abounding in flowers), *vanaspati* (वनस्पति, those that produce fruits without flowers e.g. vat, peepal, gular etc), *vṛkṣa* (वृक्ष, those that bear both flowers and fruits), *guchchh* (गुच्छ, a single shoot springing from the root and having no boughs, it has flowers), *gulm* (गुल्म, as a clump of shoots coming up from one root, the roots may come out from many parts of the plant; it has no flowers, e.g. sugarcane), various species of *tṛṇa* (तृण, grass e. g. *kuśa*, *śādbala*, *śaṅkhapusī* and so forth), *pṛtan* (प्रतान, various kinds of tendrils springing forth from seeds or their slips) and *valli* (वल्ली, creeper).

Likewise, in the *Bhagavata Purana* (3.10.18-19)^{lv} six types of plants (“immobile creatures”) have been mentioned: (i) *vanaspati* (वनस्पति; trees that bear fruit without flowering, e.g., the Banyan, the Peepal etc), (ii) *aushadhi* (औषधि; annual plants and herbs that die as soon as their fruit is ripe such as the wheat, paddy etc), (iii) *lata* (लता; creepers that grow on the support of other trees or walls etc.) (iv) *tvaksar* (त्वक्सार; plants which have a hard bark such as the bamboo), (v) *virudh* (वीरुध; creepers that creep on the ground alone, being too stiff to climb upwards such as the melon, the water-melon and so on, and (vi) plants (*drum* द्रुम) which bear fruit after blossoming. This *Purana* (3.10.19) also mentions: “All these types of plants draw their nutriment from below; they are almost wanting in sensibility, have an inward feeling of touch alone and possess some peculiarity of their own.” (19) This sort of classification in various texts over a period of time hints at the sustained concerns of Hindus about the world of plants and trees.

Maharishi Charak in his famous *Samhita* (*Sutra Sthana* 1.71-72)^{lvi} classifies plants in a different context. According to him, for medicinal purpose, the plants fall into the following four categories: a) *vanaspati* (वनस्पति, direct fruiterers, those that give directly fruits e.g. Sacred Fig, Cluster Fig, Fig etc., b) creepers (*veerudh* वीरुध), e.g. Pumpkin, Melon, Grape Vine etc, c) *vanaspati* (वनस्पति; flower-based fruiterers i.e. those that have both flowers and fruits) e.g. Mango, Cassia etc, and d) *aushadhi* (annuals; herbs that die after fruition e.g. Wheat, Paddy etc.)

RESPECT FOR LIFE IN PLANTS

The debate in the field of science, whether a tree is a living being, is credited to Jagadis Chunder Bose (1858-1937)^{lvii} but a sanatani-Hindu has never doubted the life in plants. The

following six characteristics of a living body (life) have been indicated in the Indian tradition (see Yaska's *Nirukta*): *Asti* (existence), *Jayate* (birth), *Vardhate* (growth), *Viparinamate* (change), *Apakshiyate* (decay), *Vinasyati* (death). Since a plant undergoes all the six, it is a living being. However, the plants are not able to move unlike the animals because they are largely dominated by *tamas* (तमस 'darkness') that causes inertia, (*Manusmriti* 1:49)^{lviii}. In the 184th chapter of Shanti Parva of *Mahabharata* there is a detailed dialogue between Rishi Bhardwaj and Rishi Bhrigu to prove that a tree is not only a living being but also has all the five senses and feels pain/ sorrow and happiness. Rishi Bhrigu makes the following statement based on his observation very convincingly: "When trees are cut, new shoots grow from them and they accept happiness and sorrow. From this I conclude that the trees too are living beings; they are not unconscious."^{lix} Likewise, *Manusmriti* says: "possessing inner consciousness, [the plant] are affected by pleasure and pain." (*Manusmriti* 1:49). In conformity with the above, Hindus do not disturb the plants at night for they believe that a plant has gone to sleep. Hindus also not only apologise but also pray to the plant before collecting some part from it. They have specific days to revere the plants; for example, they do not touch a Tulsi plant on Sundays and an *asvattha* tree is worshipped on Saturdays. Thus, simply planting certain trees is not sufficient for a Hindu; he is also supposed to consecrate the trees and gardens. The entire process has been described in the *Agni Purana* ("vṛkṣa-pratiṣṭhā" 70.1-8). The ceremony includes the perforation of the [tree's] ear with a golden needle, as is done in case of a human being while performing *karna-chhedan samskara*^{lx}, one of the *shodasha samskaras*.

As Hindus consider trees to be having life, they maintain the same decorum in dealing with them as we do in case of human beings. For example, one is not expected to enter a wood and cut down a tree without following the laid down protocol. Chapter 59 of Varāhamihira's *Brhat-saṃhitā* deals with the entry into the forest for the purpose of cutting wood for the idols of the Devas. It lays down the following procedure for selecting and felling of a tree:

The party has to enter the forest on an auspicious day. (Joshi 2022) The following types of trees are not to be cut at all: those that grow on cremation ground, in roads, in temples, ant-hills, flower gardens, the abodes of religious devotees, places of worship, junctions of rivers as well as trees grown by human labour; those that are covered with creepers or struck down by lightning or broken by the wind, or that have fallen of themselves or that are broken by elephants or that have dried or have been burnt or that contain the bee-hive. (2-3) The selected tree to be cut shall be adorned with flowers and duly honoured. (4) The tree shall first be worshipped with rice cooked in milk, sweet-meat balls rice, curdled milk and sweet-meats made of ground sesamum and sugar and the like, liquor, flowers, scented smoke and sandal paste. (9) Then shall be worshipped at night the *Devas*, the *Pitṛs*, the *Piśācas*, the *Rākṣasas*, the *Nāgas*, the *Asuras*, the *Gaṇadevas*, *Vināyaka* and others. The tree shall be touched by the hand and the following mantras shall be pronounced. (10-11) "O tree! You have been selected for the image of such and such a Deva. Salutation to you. I request you to accept the *pūjā* duly performed by me. The *Bhūtas* that might dwell in this tree are requested to accept the presents offered and depart and dwell in some other place. Kindly bear the troubles we

subject you to. Salutation to you.” (12) Early next morning water shall be poured over the root of the tree; the axe shall be rubbed over with honey and ghee, and the tree shall first be cut on the north-eastern side, and the other parts shall be cut round from left to right. (*Bṛhat-saṃhitā* 59: 1 - 12)^{lxi}

This procedure for procuring wood is also followed in other cases like when wood is needed for flag-pole and house building. (*Bṛhat-saṃhitā* 59.14)^{lxii} It is prohibited to cut down sacred trees; they are not axed except when wood is needed for the religious purposes like construction and repair of temple buildings or in cases like worshipping, death ceremonies and temple rituals. Sacred groves, generally associated with some temple, too are treated piously. In other cases too, there is a practice to offer Naivedya (Holy sacrament) to the tree that is to be felled and seek its forgiveness saying, “For some inevitable reason I have to fell you. Please forgive me for that. I will certainly grow a tree of your species at another appropriate spot.” A traditional wood-cutter used to plant trees accordingly. A prayer on the similar pattern is made to the medicinal plant from which leaves etc. are to be collected: “Kindly allow me to pluck a few leaves for my need and forgive me. Let these leaves do the desirable with your good wishes.” The astrologers also have come out with certain suggestions for preserving trees. For example, it is suggested that a tree should never be cut when the sun is in the *Simha* (Leo) or *Makar* (Capricorn) signs of the horoscope (1). All this must have been started to avoid senseless felling down of trees and exploitation of natural resources.

In the *Atharvaveda*, one comes across information about 300 plants and plant-based pharmacopoeia. Many of these trees have been treated as deities too. For example, there are prayers to *asvattha* (*Atharvaveda* III. 6), *kushtha* (*Atharvaveda* V.4, XIX.39), a dark plant (*Atharvaveda* I.23), *arundhatī /lâkshâ* (*Atharvaveda* IV.12), *agasringi* (*Atharvaveda* IV.37) and *prisniparnî* (*Atharvaveda* II.25) to defeat different kinds of demons. A Hindu’s practice of respect for plant life can also be gauged from the distinct way the herbs are to be collected for medicinal purposes, as finds a mention in the canonical texts like *Charak Samhita* (*Kalpa Sthana* 1: 10)^{lxiii} and *Sarangadhara Samhita* (1: 56-61)^{lxiv}. The procedure specifies that person who collects them should be benevolent and prayers need to be offered to the plant before collecting its different parts according to one’s needs; and this is an indirect prohibition on the commercialisation of the plants.

PLANTS FOR A HEALTHY LIFE

In various *Puranas* one finds issues related to woods/ trees like utility of plants, holiness of plants, sowing of plants, importance of plants in religious rituals and medicinal uses of plants besides many others. The scholars like R C Hajra^{lxv}, Vasudevsharan Agrawal^{lxvi}, S G Kantawala^{lxvii}, G Krishna Pai^{lxviii}, P Sensarma^{lxix}, V. Nithyanantha Bhat^{lxx} and Vettam Mani^{lxxi} have made detailed studies of some of the aspects in different *Puranas*. I shall, therefore, mention just a few examples to hint at the importance of plants/ trees/ woods as find a projection mainly in the *Agni Purana*.

The subject matter of one chapter (no. 282) of the *Agni Purana* is *vṛkṣāyurveda* (the science of medicine relating to trees). In the opening of the chapter, it is advised as to which plant should be planted where and how (282: 1-5), how and when to water them (282: 6-7), methods for the plant protection (282: 10-12) and for the getting good fruits (282: 12-13). The planting of trees is a sacred activity therefore “the brahmin and the moon” (282: 3) are venerated and the gods “Varuṇa, Viṣṇu and Parjanya” (282: 6) are invoked while planting them. Among the trees to be planted are mentioned: *ariṣṭa* (*Azadirachta indica*), *aśoka* (*saraca asoca*), *punnāga* (*Calophyllum inophyllum*), *śirīṣa* (*Albizia lucidior*), *priyaṅgu* (*Callicarpa macrophylla*), plantain (genus *Musa*), *jambū* (*Prosopis cineraria*), *bakula* (*Mimusops elengi*) and pomegranate (*Punica granatum*). In this *Purana*, there is one chapter devoted exclusively for the herbs used in charms. Those mentioned here are: *bhṛṅgarāja*, *sahadevī*, *mayūrasikhā*, *putrañjīva*, *kṛtāñjalī*, *adhahpuṣpā*, *rudantikā*, *kumārī*, *rudrajaṭā*, *viṣṇukrāntā*, white *arka*, *lajjālukā*, *mohalatā*, black *dhattūra*, *gorakṣa*, *karkaṭī*, *meṣaśṛṅgī* and *snuhī*. (140: 1-3). This chapter of the *Purana* spills over to another one. It describes the herbs to be used in charms, medicines etc. the following plants located in the 36 squares find a mention in the chapter: *harītaki*, *akṣi*, *dhātri*, *marīca*, *pippalī*, *śilphā*, *vahni*, *śuṅṭhī*, *pippalī*, *guḍūcī*, *vacā*, *nimba*, *vāsaka*, *śatamūli*, *saindhava*, *sindhuvāraka*, *kaṇṭakārī*, *gokṣurakā*, *bilva*, *paunarnavā*, *balā*, *eraṇḍamuṇḍī*, *rucaka*, *bhṛṅga*, *kṣāra*, *parpaṭa*, *dhanyāka*, *jīraka*, *śatapuṣpī*, *javānikā*, *viḍaṅga*, *khadira*, *kṛtamāla*, *haridrā*, and *siddhārtha* (141: 2-5). There is another chapter (no. 283) that deals with the remedial herbs for all kinds of diseases. In medical terms they are a kind of generic medicines.

There are four other tracts dedicated to the science of plant life, *Vrikshayurveda*^{lxxii}, the earliest of which is Salihotra’s *Vrikshayurveda* (around 400 BC). There are 31 verses under the heading of *vṛkṣāyurveda* (Chapter 55)^{lxxiii} in Varāhamihira’s *Bṛhat-saṃhitā* (6th C AD or or 1st C BC). The third one is: Surpal’s *Vrikshayurveda* (1000 AD). “Some scholars suggest that [Surpal’s] compilation of *Vrikshayurveda* dates back to 2nd Century BC” (MEHRA, 2022). Like any other Vedic rishi, very little is known about Salihotra today and only limited details of the work are available in the tradition. Even the manuscript/book is not available anywhere. Still, it is believed that Salihotra’s is perhaps the oldest full-length treatise describing the techniques to get fruits from plants and trees throughout the year, irrespective of the climatic conditions etc. Surapala’s *Vrikshayurveda*^{lxxiv} is a Sanskrit text but very little is known about Surapala today. It describes the cultivation of about 170 herbs, shrubs and tree species; healthy growth and preservation of the plants from the seed-stage to their maturity, water management, soil conservation, use of manure and the treatment of various diseases affecting the plants along with the protection of the environment in detail.^{lxxv} The fourth treatise of *Vrikshayurveda* is a compilation of certain verses from *Sarṅgadhara-Saṃhitā* (A Treatise on Ayurveda).^{lxxvi} Vaidyagastri J. N. Sircar Visagratna, an Ayurvedic Physician in the erstwhile princely state of Coochbehar, Bengal India discovered the manuscript, Parashara’ *Vrikshayurveda*, around 1928; the date of its composition is supposedly during first century BC and first century AD. It is a treatise dwelling upon descriptive Botany. Many scientific branches of Botany including origin of life, ecology, distribution of forests, morphology, classification, nomenclature, histology and physiology are dealt in this ancient work. The treatise has the following chapters: *Bijotpatikanda*,

Vanaspatikanda, *Vanaspatyakanda*, *Gulmaksupakanda* and *Virudhavallikanda*. The text contains 65 folios in Devanagari script. The sixth and last part, the *Chikitsitakanda* as mentioned in the content (vs. 15 Ch. 1, *Bijotpatikanda*) is not available in the present manuscript. The text ends abruptly with the *Virudhavallikanda*.

Currently, some scientists are trying to use Vedic/ indigenous techniques as a means of alternative agriculture. The scientists of Tamil Nadu Agricultural University, Madurai (Tamil Nadu), M. R. Nandhakumar and C. Swaminathan (Nandhakumar and Swaminathan2021) may be cited as an example. The book discusses crop-quality aspects like physiological parameters, food grain quality, healthy foods for happy living; crop production and management aspects viz., weed management, seed fortification and seed germination, soil fertility and nutrient management, soil microbial studies, plant extracts for pest and disease management, yield and yield parameters on the basis of traditional knowledge which are followed by the *vrikshyurvedic* farming protocols in crops.

PLANTS IN MODERN INDIAN LIFE

Indian approach to plants can be perceived through people's attitude and practice of what Indian texts say. The other day I was a part of plantation drive in my university. Once I was back home after the event, my mother asked me which plants were planted by us. I said it was mainly *savani* (bonnet flower or *Lagerstroemia indica*). My mother, who has not attended any school/ college, immediately said that a Hindu is supposed to plant at least five trees^{lxxvii}, popularly known as *Panchvati*: Banyan (*Vata*, *Ficus benghalensis*), *Ashvattha* (*Peepal*, *Ficus religiosa*), Bengal Quince (*Bilva*, *Aegle marmelos*), Indian Gooseberry (*Aonla*, *Phyllanthus emblica*) and Ashoka (*Saraca asoca*), during one's lifetime. What my mother was telling me is as a matter-of-fact Vedic knowledge. In some texts the following three are also included in the *panchvati*: Cluster Fig (*Gular*, *Ficus racemosa*), Neem (*Azadirachta indica*) and Indian Mesquite (*Shami*, *Prosopis spicigera*); in *Varah Purana* (172.36)^{lxxviii} seven types of plants have been recommended. It may be noted that only two of these are fruit-bearing trees but all these trees are medicinal in nature. For example, Indian Gooseberry is a rich source of vitamin C; Neem is good for skin diseases; *Ashvattha* (*F. religiosa*)^{lxxix} is a source of many compounds which are beneficial in treatment of many diseases like diabetes, skin diseases, respiratory disorders, central nervous system disorder, gastric problems etc; and Bengal Quince is a wonderful fruit for those suffering from stomach-ailments. *Peepal* (and all others) is good source of oxygen, without much emission of CO₂ (Carbon dioxide). One finds local variations according to the climate conditions too. For example, in Assam one comes across areca palm (*Areca catechu*) and Rudraksha (*Elaeocarpus ganitrus*) trees.

The *Panchvati* is also important for Indian environment. Banyan and *Peepal* are huge trees that provide shade and relief during the heat wave that leads to blowing of strong, dusty, gusty, hot and dry summer wind (*loo*) from the west which blows over the Indo-Gangetic Plain region of North India. Ashoka is an evergreen tree that does not shed its leaves. There are oil glands in the leaves, wood and fruits of *Bilva* which keep the atmosphere fragrant. The trees in *Panchvati* are of different shapes and sizes. Therefore, it is recommended that they

should be planted in five different directions: *Peepal* tree should be planted in the east direction, *Bel* in the north direction, *Banyan* in the west direction, *Amla* in the south direction and *Ashoka* in the southeast corner. *Panchvati* helps in conserving bio-diversity as it becomes a harbinger of various kinds of birds and small animals like squirrel, bat, cat, mongoose, monkey etc. because they get their food from the trees besides getting shelter. At other places, mango (*Mangifera indica*) and banana tree (plantains or *Musa acuminata*) are also included in the list. Both mango and banana are highly rich fruits and they greatly contribute to a healthful diet by providing essential vitamins, minerals, and fibre. They are also good sources of protective compounds with antioxidant properties and low-fat source of energy. There is a full chapter entitled “In Praise of Planting Trees” (*Padma Purana, Sr̥ṣṭi-khaṇḍa*, Chapter 58) showering praises on the one who plants especially an *Ashvattha* (*Peepal*) tree on the bank of a tank/ lake. Several benefits highlighting the conservation of nature in a sustainable manner have been counted of planting a tree.^{lxxx} In the *Mahabharata* (18.58.31)^{lxxxii} also it has been desired that good trees be planted near water tanks and they should be protected like a son.

The Rig Veda prays that forests should remain green and the trees may not be destroyed (*Rigveda*, 8.1.13)^{lxxxii}. A verse in the *Yajur Veda* (6.22)^{lxxxiii} prays to the Lord of Justice that things like water, refreshments, trees, herbs, and milk (cow) should not only be available to all but should also not be destroyed or polluted. Cutting down a part of a tree or uprooting one is a cognizable offence that attracts punishment in the *Puranas* and elsewhere. For example, *The Agni Purana*^{lxxxiv} mentions that if branches, trunks, and roots of shady trees like banyan, mango etc. are cut, the offender should be awarded corporal punishment according to the standard scale. There is no respite even for a brahmin. *The Agni Purana* (152.3)^{lxxxv} states that even if a Brahmin cuts a tree, he is to perform a special *yajna* and is to carry out certain religious rituals to get him freed from the sins. It continues that if branches, trunks, and roots of shady trees like Banyan, Mango etc. are cut; the offender should be awarded corporal punishment according to the standard scale (258.25). It (227.32)^{lxxxvi} further states that if one completely denudes a tree of its fruits, one should pay the penalty in gold. According to the *Agni Purana* (168.40)^{lxxxvii}, stealing of plants and or its parts is an immoral act. *The Agni Purana* (173.46)^{lxxxviii} prescribes that one should starve for three consecutive nights to get released from the sin of stealing any of the following -- grass, straw, wood, plant, dry cereals and molasses. In *Matsya Purana* (227.91-94)^{lxxxix} too the cutting and felling of plants without permission is a penal offence. *The Purana* prescribes degrees of punishment in commensuration with the gravity of the offence. This shows the respect for plant life in the *Purana* and the importance bestowed to it.

The importance of trees in human life can be gauged from the fact that the service of one tree to mankind is told to be equal to that of ten sons in *Matsya Purana* (154.511-512)^{xc}. The following verse from the *Yajur Veda* is generally recited while sprinkling water on a newly planted tree: “O adorable Lord, pour honey-sweet celestial waters, so that our offsprings may remain free from disease. From the place irrigated with those waters, may the herbs with nice berries grow out.”^{xxci}

VENERATION OF TREES

The following sentiment is expressed in the Chief Seattle's "Letter to All" (Letter from Chief Seattle 1885): "We know the sap which courses through the trees as we know the blood that courses through our veins. ... The perfumed flowers are our sisters."^{xcii} But Hindus go a step forward as veneration of trees is an integral part of Hinduism, which believes that Brahman, the Ultimate Reality, resides in everything. In *Yajur Veda*^{xciii} homage is paid to trees and forests. In Indian mythology and folklore, many of the trees are regarded to be sacred; many have been associated with gods and religious festivals; in this way, the importance of trees in a Hindu's life is asserted and sacredness is intertwined with utility. Indians believe certain trees to be the abode of gods and goddesses. For example, *Bilva* is considered to be the abode of Lord Shankar, *Peepal* of Lord Vishnu and *Vata* of Brahma. Some religious ceremonies have been dedicated to plants only or are to be performed in the company of trees and plants. For example, based on a story in *Brahma Vaivarta Purana*, on the *Kartika Ekadashi* (October-November) every year, Hindus perform a symbolic ceremonial wedding of Vrinda (*Tulsi*, the holy basil plant; the personification of Lakshmi) and a *shaligrama* (the personification of Vishnu). This wedding is specially solemnized by those who do not have a girl child. An *amalaka* tree (*Phyllanthus emblica*) is worshipped on Amalaka Ekadashi which falls on the 11th day (*ekadashi*) of the waxing moon in the lunar month of *Phalguna* (February–March). The tree is ritually worshipped on this day to get the grace of the deity, Vishnu, who is believed to reside in the tree. In some traditions, his wife Lakshmi, the deity of wealth, is said to dwell in the tree. It is also believed that Vishnu's avatar Krishna and his consort Radha reside near the tree. Haldu (*Kadamba/ karma करमा, Haldina cordifolia* or *Adina cordifolia*) is worshipped on the Karma festival solemnised on the full moon day of lunar Bhadra month. Neem tree is worshipped on the occasion of Sheetla Saptami (seventh day of the waning moon) in Chaitra. For a Hindu, worshipping a tree is a matter of expressing one's gratitude^{xciv} and not of some superstition as is largely believed by the followers of Abrahamic religions and others.

No Hindu religious ceremony can be solemnised without the use of flowers and plants as Hindu gods and goddesses are largely conceived as vegetarians and to whom *sattvic* food and fruits are offered. During the worship of various deities, various types of flowers, fruits and leaves are needed for offering. For example, *durva* leaves (*Cynodon Dactylon*) are offered to Lord Ganesha, *Tulsi* and yellow flowers to Lord Vishnu (or Lord Krishna or Lord Ram), and *Bilva* (*Bel Patra*) and white flowers are for Lord Shiva. *Padama Purana* (1.26.16b-17)^{xcv} enlists the following flowers to be offered to the moon: the flowers of Kadamba, Ketaka, jasmine, Champaka and blue (and other) lotuses, (other) fresh flowers, Sinduvāra-flowers, a white flower and a Karavīra-flower. Similarly, pomegranate is offered to Devi Maa and banana is offered to Lord Vishnu, goddesses Lakshmi and Durga, and Lord Hanuman, cloves and red flowers to goddess Durga, sesame seeds to the goddess Durga and Navgrah, and mustard oil and blue flowers to Lord Shani and Bhairava. In the *Chaitanya-charitamrta*, one mustard seed is calculated to be a universe itself.

The Banyan tree: Banyan tree (*Vata, Ficus Benghalensis*) is the national tree of India, remains renewable for a long time, hence it is also called *Akshayavat* (imperishable tree) and is revered by the Hindus. 'Akshayavat' is a sacred tree mentioned in the Hindu mythology. According to a legend, once the sage Markandeya asked Lord Narayana to show him a specimen of the divine power. Narayana flooded the entire world for a moment, during which only the *Akshayavat* could be seen above the water level. It is believed that three deities Brahma, Vishnu and Mahesh have their abode in this tree. Lord Brahma resides in the root of the tree, Lord Vishnu in the trunk of the tree, Lord Shiva in the branches and Savitri in the hanging branches of the tree. It has been mentioned that "One who plants a couple of banyan trees as per the prescribed mode would go to the abode of Siva". (*Vrukshayurveda* 13)

Currently, a sacred fig tree (Indian banyan) located within the Patalpuri Temple at the Allahabad Fort is worshipped as the 'Akshayavat' described in the ancient texts. It finds a mention in the Prayag Mahatmya of the *Matsya Purana* and *Padma Purana*. Rama, Lakshmana and Sita are said to have rested beneath this tree. Hindus believe in the immortality of soul and consider the body to be its garment which could be replaced any time. Therefore, some pilgrims would end their lives by offering themselves at the nearby temple. The Chinese Buddhist pilgrim Xuanzang (c. 602 – 664) mentions that the tree was surrounded with the human bones. Alexander Cunningham identified this tree with the Akshayavat at Prayagraj/ Allahabad. A Vat tree is also worshipped on *Vat Savitri* in Jyeshtha (May–June)^{xvii}. The celebration is based on the legend of Savitri and Satyavan as narrated in the epic *Mahabharata*. In some parts of India, it is a three-day festival. On this day generally a married woman marks her love for her husband by tying a ceremonial thread (*raksha sutra*) around a banyan tree. Still, all types of women, virgins, married, widows, mothers, or non-mothers etc. celebrate it and tie the ceremonial thread around the tree.

Ashvattha: Peepal (*Ficus Religiosa*) is a very large tree and therefore is a natural shelter of birds and small animals. Its importance can be understood from the fact that Lord Krishna in the *Bhagavad Gita* (10. 26) describes himself as one. It is believed that Lord Viṣṇu resides at its root, Lord Śiva stays in the middle part and Brahmā lives at the top. (*Padma Purana* 1.58.20)^{xviii} As many as twenty verses have been devoted to the glorification of this tree in *Skanda Purana* (6.1.247.25-44) and it has been told to be the abode of Lord Vishnu. It is written in the *Purana* that "If any man remains pure and grows a seedling of Aśvattha on the earth, thousands of his sins perish instantly." (*Skanda Purana* 6.1.247.38) It is also instructed neither to place one's foot on an Aśvattha tree nor to trim it nor to cut it. (*Skanda Purana* 6.1.247.40)^{xviii} No wonder that a Hindu logger (*लकड़हारा*) neither trims/ cuts a branch of the tree nor does he uproot one.

This tree is planted, as indicated in the *Agni Purana*, to the east of the house or temple. Hindus pour water to the roots of the tree every Saturday for they believe that Lord Vishnu, with his consort Lakshmi, resides on this tree on Saturdays. The *Brahma Purana* and the *Padma Purana*, relate how once, when the demons defeated the gods, Vishnu hid in a *peepal* tree. The *Skanda Purana* (6.247.41,42,44) also considers it to be a symbol of Vishnu.

Therefore, spontaneous worship to Vishnu can be offered to a *peepal* without needing his image or temple. According to the *Skanda Purana*, if one does not have a son, the *peepal* should be regarded as one. The religious texts suggest that this tree should be preferably planted near a water source (*Padam Purana* 1.58.5)^{xcix} though it can be planted anywhere (*Vrukshayurveda* 11)^c.

Peepal (*Ashvattha*) is an evergreen tree and as it never sheds all leaves at once; it is “used traditionally as antiulcer, antibacterial, antidiabetic, in the treatment of gonorrhoea and skin diseases.”^{ci} Further researches on its oxygen giving and carbon-dioxide absorption properties are being carried out as it has been reported that asthma and bronchitis patients get relief from pulmonary stress if they sleep under these trees at night.^{cii} The *peepal* tree is used extensively in Ayurveda. It is also worshipped to escape from contagious diseases and enemies. Also, it is believed that by worshipping a *peepal* tree, one can please one’s ancestors. If their religious rites are performed under this holy tree, they can attain moksha. The tree is important in Indian astrology also; it is astrologically believed that if a person has *manglik dosh* in one’s horoscope, marrying a Peepal Tree, removes the *dosh* and a person can marry a non-manglik person. In some areas this marriage is performed with a mango tree in case of the groom and a *Mahua* tree (*Madhuca longifolia*) in case of a bride^{ciii}. On the Saturday morning, before sunrise, worshipping the peepal tree and lighting a lamp can remove all the hurdles of one’s life. If two highly revered trees, such as the Peepal and the Banyan are planted next to each other and encouraged to intertwine in their growth, this is equivalent, metaphorically, to marrying the trees. Their union creates another entity, to which people pray. S M Edwardes^{civ} has documented many such practices in his article with a view to debunk Indians as primitive.

Banana: Modern science considers banana or plantain a herb, not a tree but Hindus consider it to be a tree due to its appearance, size and structure and worship it every Thursday. Everything related with the plant viz. leaves, trunk, and fruits is sacred in *Sanatan Dharma*. The abode of Lord Shri Hari (Vishnu) lies in the wide spread banana leaf while that of Mahadeva (Mula Shankar) in its roots. A pair of banana trees with flowering branches is placed on either side of the entrance to a home or venue during weddings, religious festivals and other special occasions. During the Durga Puja festival, *Kola Bou* (“banana lady”) figurine, symbolising goddess Durga, is made with a banana plant, draped in a yellow saree with a red border. The banana is considered a remedy for all ills, physical and spiritual. As the legend goes, the plant sprang up from the ashes of Rishi Durvasa’s wife, Kandali. Durvasa blessed it with the boon of being an essential part of every worship and religious ceremony; the fruit is distributed as *prasadam* (divine offering) after religious ceremonies even today.

Mango Tree: Hindus revere a mango tree as the *Kalpavriksha*, or the Tree of Life; and mango fruit too is sacred for Hindus. Lord Shiva is said to have meditated beneath the shade of a mango tree, while the goddess Lakshmi is believed to have emerged from its bountiful branches. The fruit is also associated with Kamadeva, the god of love, who used a mango-wood-bow to ignite desire. No decoration of a Hindu house is complete without mango leaves which are used as *toran* or *bandanvaar*. These torans are then elegantly displayed at

the entrance of the wedding venue, symbolizing blessings of happiness and prosperity for the newlyweds. The leaves are also placed below the holy *mangal kalash* (pitcher vase) or below the coconut fruit in the religious rituals and ceremonies. A Hindu does not cut down or uproot a mango tree. Rather, its naturally fallen wood is collected from the garden and used as *samidha* to perform a *yajna*. Offering mangoes to deities is a common act of devotion and worship. Since mangoes are also regarded as emblems of abundance and fertility, often incorporated into rituals focused on promoting fertility it has been proclaimed that “One who plants five or six mango trees attains the abode of Garuda and lives happily forever like gods.” (*Vrukshayurveda* 16). I am tempted to quote my own poem on the fruit:

A mango stone
Carries the whole civilization in it.
One can begin one' day
With mango leaves at one' door
And offer mango samidha to god havan.
A mango leaf is needed to pour water
On every sacred occasion.
Even death and the dead
Can't ignore a mango.
The mango stone
Doesn't cry foul
Unlike the cracking bomb.
It puts the stomach disorders
In order.
It is ready to
Lie buried
Till a new plant grows into a tree
And under the shade
A cow rests
And yields milk
Not only to its calf
But also to the new born baby
Of the cowherd. (Sharma 2012)

Neem (*Azadirachta indica*): The importance of this tree can be gauged from the fact that the Nimbarak Vaishnavanites draw their name from this tree for they worship ‘under the Neem Tree’ and that India fought with the USA for nearly fifteen years for the patent rights for neem tree and won at last. This tree is worshipped by Hindu devotees during Chaitra Maas after Amavasya because it is considered to be an abode of Durga and Maha Kali. The neem tree is also connected with the godlings of disease who are supposed to reside in it. In particular, it is occupied by Shitala, the small-pox deity, and her six sisters. Hence during the rainy season when epidemics attack, women bathe, dress themselves in clean clothes, and offer rice, sandalwood, flowers etc. with incense at the foot of this tree. Some Indians consider the tree herself is a goddess called *Neenari / Neemari Devi*. The tree is largely

worshipped in South India to welcome the Hindu New Year on Ugadi or Yugadi (a derivation from the Sanskrit *yuga* (age) and *di* (beginning), or ‘the beginning of a new age’). Neem flowers are an essential ingredient of *Ugadi pachadi*, eaten to celebrate the New Year. The neem leaves are an essential item of the special *gudi dhvaja* carried out in the street processions in Maharashtra during the springtime festival, Gudi Padwa. Neem tree occurs in various amulets found in ancient India. Its importance has been codified as: “After planting neem trees a person well-versed in dharma attains the abode of Sun.” (*Vrukshayurveda* 14)

If in the Buddhist Jataka Tales, Neem tree is praised as nature’s bitter boon, in *Sai Mahima Stotra*, Neem tree is told to be surpassing the ‘Kalpa Vriksha’ and showering Ambrosia of Baba’s grace. The neem tree is also valued for its medicinal properties. In India there is a common belief that chewing fresh leaves of neem daily purifies the blood and strengthens the defence mechanism of human body. Because of its pharmacological properties the Neem tree virtually plays the role of a dispensary in an Indian village. Neem also finds a mention in *Charak Samhita*. Almost every part of the tree is used in one way or other. The tree-leaves, bark and seeds are used to treat various ailments such as fever, malaria, wounds, sores and skin infections. Neem is also known for its germicidal, insecticidal and anti-septic properties, and its oil is used in various cosmetic and pharmaceutical products. As it has curative properties its leaves mixed with pepper and sugar are eaten. The neem is also connected with snake worship, as one gets immunity from snake poison and scorpion poison. It is used by the Hindu mourners; its twigs are used as a means of avoiding death pollution, or as a mode of driving off the evil spirit which accompanies the mourners from the cremation ground. After the cremation of a dead body, people in the funeral procession chew the Neem leaves and some water is sprinkled over them with a branch of the tree. At child birth a branch of a neem tree is often set at the door of the young mother’s chamber. The neem twig is very largely used as a tooth-brush and mouth-freshener not only by a Hindu but also by a naturist. The power of neem was acknowledged in 1958 when the neem trees survived the devastating locust attack in Nigeria that wiped out every other tree in the area and again in 1984 when it was noted that the neem trees remained unaffected by the lethal methyl isocyanate gas, the leakage of which caused disastrous Bhopal gas tragedy in 1984. Some interesting stories about Neem trees were compiled by Rev Osborn Martin^{cv}.

Tulsi: Tulsi plant (Basil, *Ocimum Tenuiflorum*) is an integral part of the religious and cultural fabric of India. Though it is small in appearance, its importance for a Sanatani is far larger than its size for it is believed that every part of a Tulsi plant be it leaves, flowers, fruits, roots, twigs, skin, or stem is holy, sacred and pure (*paavan*) and so is even the soil around her. (*Padma Purana* 6.23.2)^{cv} It is perhaps the only plant that has been eulogized in the seven chapters^{cvii} in the *Padam Purana*. The Tulsi plant is regarded the holiest of all plants; it is believed that Brahma resides in its branches, and all Hindu pilgrimages reside in the roots. According to *Skanda Purana* (6.247.21)^{cviii} goddess Lakṣmī is present in Tulasī. The Vaishnava devotees also use its wood to make the neck beads and wear two or three strands of them around their necks signifying their devotion to the Lord. They also make their *japa mala* or chanting beads from wood of the Tulsi plant. No wonder that a Tulsi plant is a must in the courtyard of every Hindu family and is worshiped by them in the mornings and

evenings throughout India. Many families have the Tulsi planted in a specially built structure, which has images of deities installed on all four sides, and an alcove for a small earthen oil lamp. Some households can even have up to a dozen Tulsi plants on the veranda or in the garden forming a “Tulsi-van” - a miniature basil forest.^{cix} “A person is honored in Vaikuntha for as many thousand years as the days they reside in a house where Tulsi is grown.” (*Vrukshayurveda*, 9) The elders pour water on it so that it grows every day.

Tulsi leaves are not only offered to Lord Ram, Lord Vishnu, Lord Krishna but are also distributed as prasad with *Ganga Jal*. A few leaves are put in the mouth of the dying man with a few drops of *Ganga Jal*. *Tulsi Pujan Diwas*, also recognised as *Tulsi Vivah Day*, is celebrated on the eleventh day of the bright fortnight of Kartik month (also known as Dev Uthani Ekadashi). It is a significant Hindu festival honouring the Holy Basil. This propitious day signifies the ceremonial union of Lord Vishnu with Tulsi, symbolising the amalgamation of divine masculine and feminine energies. On this day, a ghee lamp is lit in front of the Tulsi plant, Ganga water is sprinkled with flowers on Tulsi and Shaligram, Roli is applied to Tulsi Mata and sandalwood tilak is applied to Shaligramji. The Tulsi plant is covered with a red *chunari* and bangles and other make-up materials are offered as is done while decorating a bride.

Tulsi has been used in India for around 5000 years and is acclaimed for its healing properties of the mind, body and spirit. The following four types of Tulsi find a mention in the Ayurvedic texts though eighteen varieties of the plant exist: 1) Rama / Sri / Lakshmi (Green Leaf) Tulsi, 2) Krishna/ Shyama (Purple Leaf) Tulsi, 3) Vana (Wild Leaf) Tulsi, and 4) Kapoor Tulsi (Heavy Flowered). In Indian households, it is the most commonly used stimulant-aromatic herbal remedy for mild infections as well as for common cold as it effectively reduces fever and stress. Its anti-microbial, anti-cancer, cardiovascular-circulatory system boosting, anti-inflammatory, hepatoprotective and muscular and nervous system strengthening properties have also been reported.

Bilva: Tall and imposing Bilva tree is quite unlike a Tulsi plant in shape and size but is no less sacred for a Hindu. The importance of the tree can be gauged from the fact that Jagaduguru Sri Adi Shankaracharya composed a powerful chant, *Sri Shiva Bilvashtakam*, that speaks of the power and glory of offering *bilva* leaves to Lord Shiva. According to *Sri Bilvashtakam*, bel tree grew from the breast of Lakshmi^{cx}. Its ternate leaves, “Tripatra” (known as “Shiva Dhruma”), signify the holy Trinity: Brahma, Vishnu and Mahesh. It also signifies the three eyes of Shiva. The *Shiva Purana* (1.22.22)^{cx} considers Bilva to be the symbol of Lord Śiva. The *Purana* further says all the places of pilgrimage dwell at the base of Bilva tree. Hindus are known to offer these leaves in prayers to Lord Shiva and Parvati, with the tree typically growing close to the temple. The importance of Bilva can be understood from the following image of Bilva in the *Atharvaveda* (20.136.15)^{cxii}: A great person is good and benevolent like Bilva tree to all. This tree is also found in many Devi temples, where it is treated with great veneration and respect. According to *Skanda Purana* (6.247.21) Pārvaṭī is stationed in a Bilva tree. In another chapter dedicated to creation of Bilva Tree, in the same *Purana* (*Skanda Purana* 6.1.250.1-19) it is mentioned that this tree

has originated from Bhavānī's own body, from a drop of her sweat. Hence, it is believed that the Goddess resides in this tree in all Her forms. She resides as Girija in the roots of the tree, as Maheshwari in its trunk, as Dakshayani in its branches, Parvati in its leaves, Katyayani in its fruit and as Gauri in its flowers. Therefore, as Parvati resides in her various forms in this tree. The tree is not only holy but it also has a great medicinal value. Its root, bark, leaves and fruits are hypoglycaemic, astringent and febrifuge; the root, stem and bark are antidiarrhoeal and antivenin and its seeds are anthelmintic and antimicrobial. The leaves of the tree are anti-inflammatory, expectorant, anticatarrhal, antiasthmatic, antiulcerous and ophthalmic; its flowers are emetic. If the unripe fruit is stomachic and demulcent, the ripe fruit is antigonorrhoeal, cardiogenic, restorative, laxative, antitubercular, antidysenteric and antiscorbutic. Because of its antimicrobial, anti-mutagenic, and hepatoprotective properties, and anti-diarrheal and anti-inflammatory effects, Bael has been used in the Ayurveda as a part of various formulations since ancient times. The fruit contains not only the essential amino acids but is also rich in alkaloids, flavonoids and tannins. It is, therefore, quite appropriately, said in Surpala's *Vriksha Ayurveda*: "If one properly grows bilva, which pleases Lord Shiva, the goddess of riches resides permanently passed on to the sons and grandsons." (1:10)^{cxiii} To overcome their financial problems, some devotees chant the powerful "Shree Venkateswara Mahishi Mahalakshmi Stotram" while offering Bilva leaves. In *Sri Venkateshwara Ashtottara Sathanaamaavali*, Lord Venkateswara has been referred to as *Bilvapatraarchana priyaaya nama*. It is believed that by planting Bel tree and white madar (*Calotropis gigantea*) in pair, one gets the grace of goddess Lakshmi.

Woods: *Atharva Veda* (12.1.11)^{cxiv} explicitly mentions that the earth was covered by forests (*aranya*). The *Skanda Purana* (6.1.247.21-22)^{cxv} also says that formerly the entire universe was full of trees and that "all these trees were great and excellent. All of them originated from the parts of the Lord. One is liberated from all sins by the very touch of these." It has been mentioned in the *Shiva Gita*^{cxvi} that Lord Shiva likes the fruits, flowers and leaves etc from the plants that grow in the forests more than those obtained from a village. According to the age-based Ashrama system of human life, *Chaturashrama*^{cxvii}, in the third phase of one's life, *Vanaprastha*^{cxviii}, a Hindu is a forest-dweller. The epics like *Ramayana* and *Mahabharata* have one of their parts named after forest, *Aranya Kand* and *Van Parva* respectively. Even one part of the *Vedas* is known as *Aranya*^{cxix}. A *sukta* (hymn) in the *Rig Veda* (10.146)^{cxx} has been devoted to Aranyani, the goddess of the forests and the animals there; in it the deity has been praised for her charm and for her gifts to the mankind. She animates and protects the forest, and provides food for humankind. She is worshipped as the chief expression of life and fertility. Aranyani is described as elusive, preferring quiet glades in the deep jungle and fearless of remote places. She keeps to the fringes of civilization without becoming lonely. She is described as wearing anklets with little bells, and one can hear her moving through the forest by the tinkling of her anklets though she remains invisible. She also enjoys dancing amongst the trees. The hymn may be read as a metaphor for the healthy and holistic relationship among animals, trees (individual as well as a forest) and human beings. *The Devi Mahatmyam* (90:43:44) describes Aranyani as the sacred tree serving as an image of the cosmos, a symbol of the inexhaustible source of cosmic fertility.

In *Varah Purana* (161: 4-11)^{cxxi} one is impelled to mindfully walk through the following twelve forests located in Mathura: Madhavana, Talavana, Kundavana, Kamyakavana, Bahuvana, Bhadravana, Khadiravana, Mahavana, Lohargalavana, Bilvavana, Bhandiravana and Vrindavana. In Sanskrit there are two words: *van* (वन forest) and *upavan* (उपवन, grove).

The synonyms of the latter are: *ārāma* (आराम), *vāṭikā* (वाटिका), *udyāna* (उद्यान). One finds a mention of three types of *van*/woods in the Hindu texts: *Mahavan*, *Shrivan* and *Tapovan*. *Mahavan* is a large sacred natural forest reserved for the gods and natural wildlife, in which ordinary humans are prohibited from entering, although saints and sages are not required to follow the normal rules. *Mahavan* in today's terminology may be termed as 'the great natural forest' where all species can coexist. King Prithu is credited to have started the concept of a settled village and agriculture which needed the clearance of forests. However, timber for human beings and fodder for the animals too were needed for a well-settled village. So, a sort of agro-forest, known as *Shrivan*, was cultivated. Its location is near a village. Limited quantities of dry wood, leaves, and forest produce (like medicinal plants, edible fruits, honey) can be collected by the human beings. Specific species of trees and other useful things like edible fruits and spices can be also be cultivated without disturbing the natural ecosystem.

Hunting is prohibited in *Shrivan*. The following verse from *Harivansh Purana*: वनवनचरा गोपाः सदा गोधन जीवितः। गावोऽस्माद्दुःखं विद्धि, गिरयश्च वनानि च। कर्षकाजां कृषिर्वृयेति, पण्यं विपणि जीविनाम्। गावोऽस्माकं परावृत्ति रेतत्त्वेविद्यामृच्यते ॥ (हरिवंश पुराण, विष्णु पर्व, अ.

७) indicates the importance of a *vana* and a mountain in the life of a farmer and a cattle-raiser and the consequently considering them to be *devta*. Some forest for all those who had renounced the world (largely *vanprasthis*, the people embracing the fourth stage of *Ashram*) was also needed. Since all such people performed penance over there along with sages, this forest is known as *Tapovan* (a forest for religious penance). So *Tapovan* is the sacred forest associated with the asceticism or intense spiritual practice (*tapas*) of saints and sages. In keeping with the sacredness of the forest, no animal or tree is harmed in these forests so they become a sanctuary for plants and animals. Generally, this kind of forest was natural and untended. A gurukul could be largely set-up in any of these forests but a *Tapovan* was the first choice. All these types of forest areas have presiding deities, and many nature spirits and protectors. Their names are different but they have a similar function – to protect the forests. Many of these forest gods (and a goddess like Aranyani) are spirits such as Yaksha and Naga, who often reside in shrines. At several places their small temples have also been created and the locals go to worship them and sometimes ask for boons.

All this indicates the importance of forests/wilderness in a Hindu's life. No wonder we in India have a person like Jadav Payeng^{cxxii}, who plants an entire Molai Kathoni forest on the Majuli Island all by himself and a movement like Chipko Andolan^{cxxiii}, for forest conservation, by rural women under the leadership of Gaura Devi. In the *Padama Purana* (1.58.33b-35)^{cxxiv} all those who plant trees have been glorified because not only human beings get fruits, shelter and shadow under a tree but also the smaller creatures like birds, insects, or moths get sustenance from one. So, it is not necessary to arrange individually for

birds or squirrels or rabbits or bees etc.; just by planting a tree all these will come on their own to get sustenance from the tree. *The Purana* also mentions the immovables like rice, barley, and wheat, aṇu, sesamum, long pepper, kovidāra (trees), kodrava (grains) with grams, beans, masūra (pulse), niṣpāva, kulutthaka (pulse), aḍhaka (grains), grams, hemp, rice, barley, beans, wheat, aṇu, sesamum, priyaṅgu, kulutthaka (pulse), śyāmāka grain, wild rice, peas, gavedhu (grass), bamboo-seeds and markataka grain (*Padma Purana* 1.3.145-150). It is also mentioned that some of these plants grow in the wild. There are nine crops (*Navadhanya*^{cxv}) that are associated with nine planets (*grihas*).^{cxvi} Vandana Shiva has documented how and where in India these crops are still grown (the geographical areas “thankfully” remain untouched by modern universities)^{cxvii}. In Ayurveda, these planets are associated with nine herbal plants that may be grown in a garden. The combination of these plants, validated for their various types of pharmacological activities, has potential to treat various types of diseases. All this indicates the close association of human beings with plants and planets (nature in different forms).

REFORESTATION

Individuals, environmental groups (communities) and the state governments have been trying to plant trees in their efforts to create forests. One example of reforestation by an individual, the Forest Man of India, Jadav Payeng, has already been alluded to above. Badrivan (around Badrinath), the forest of lord Badrinath, is another example of reforestation by a community. A team of the forest Department, Govt of Assam, planted 9,21,730 saplings on Sept 14, 2023 at Udalgiri, Assam within 24 hours. More than 60,000 people from different walks of life assembled in Indore on July 14, 2024 to participate in plantation drive. They planted 1.1 million saplings in a single day at Revati Range. On June 5, 2024, the “Ek Ped Maa Ke Naam” (one tree in the name of my mother) campaign has been launched by Prime Minister Narendra Modi to mark the World Environment Day. Under this drive, approximately 1.4 billion trees will be planted across the country.

Let me give details about the Badrivan project. Badrinath Temple (located in the Garhwal Hills) dedicated to Lord Vishnu is one of the four pilgrim places for Hindus. The legend associated with the temple goes like this: In the early days of creation, oblivious of the scorching sun, Lord Vishnu was meditating and doing penance on a sacred spot between the Nar and Narayan mountain ranges. Mata Lakshmi saw this from *Vaikunth*. She came down and took the form of a giant Badri tree to protect the Lord from the heat of the sun. This gave birth to the name – Badri Vishal. Pleased with Her devotion, Lord Vishnu named the area Badrika Ashram. Adi Guru Shankaracharya, during his visit to Badrinath shrine, around year 815 AD, is said to have named the forests around Badrinath as ‘Badrivan’ because of the predominance of trees like Badri Tree (*Juniperus Macropoda*), Bhojpatra (*Betula Utilis*), Badriphal (*Hippophae Salicifolia*) etc.

Since the area was denuded of late, there is an effort to develop a sacred forest patch called *Badrivan*. Four sacred plant species associated with Lord Badri, the deity enshrined at Badrinath, viz. Badri Tree, Bhojpatra, Badriphal and Badri Tulsi (*Origanum Vulgare*), have been planted there. Badri Tree has a characteristic aroma; Bhojpatra, is an important

ethnobotanical species of Badrinath area, outer bark of which has been used historically for writing as well as for making medicines; Lord Vishnu survived on Badriphal while doing penance and Badri Tulsi is Lord Badrinath's favourite plant and garlands made from its fresh leaves and twigs are offered to the Lord at the Badrinath shrine. The parties involved in this project are: G.B. Pant National Institute of Himalayan Environment, Kosi-Katarmal, Almora, Uttarakhand Forest Department, temple priests, locally stationed ascetics, villagers and temple beggars. A green Ramayana Park, where 30 plant species mentioned in Valmiki's Ramayana and associated with lord Rama have been grown, has also been developed in the area.

FESTIVALS

In different parts of the country several festivals are celebrated to connect one with the trees. For example, *Haryali* or *Harela* festival is celebrated in the Kumaun region of Uttarakhand. It is called Hariyali/ Rihyali in Kangra, Shimla and Sirmour regions, and Dakhrain in Jubbal and Kinnaur regions of Himachal Pradesh. This festival is celebrated on the first day of Shravan-Maas (Shravan-Sankranti/ Kark-Sankranti), as per the Hindu Lunar calendar. Harela means "Day of Green", and Agriculture-based communities in the region consider it highly auspicious, as it marks the beginning of the sowing cycle in their fields. This symbolizes a new harvest and the rainy season. It has become a common practice to attribute the slogan of – "Save the Environment" to Harela. Ten days before the due date, 5 or 7 types of seeds are sown in buckets by the head of every family. Water is then sprinkled over them. After the due time, but before the actual celebration, a mock wedding is done by the young ones. This is followed by people worshipping the statues of Lord Shiva and Goddess Parvati. The harvested herbs (also called by the same name, Harela) are taken as God's blessings. Elders of the home put Harela on the heads of others, touching the Harela from their head to feet. A blessing verse is also chanted while putting Harela. People also eat the seeds of the new harvest after heating them.

In Chhattisgarh a festival called *Hareli* (हरेली) is celebrated on the no-moon day of Shrawan (*Hariyali Amavasya*). The agricultural implements are cleaned on this day. In this season, there is a risk of different types of diseases in the crops. The farmers, therefore, pray that their crops should not suffer from any disease and the environment should also remain safe. On the day, the farmers worship their fields and crops with incense, lamps and *Akshat* (unhusked rice). In the puja, leaves, twigs and Dashmool (a type of thorny plant) of the Bhilwa tree are especially planted in the standing crop and worshipped. Farmers believe that this protects them from many types of harmful insects and diseases occurring in their crops. I have already discussed how a specific tree is revered on a certain festival. In his book *Sacred Trees of India* Louise Fowler-Smith (Louise Fowler-Smith 2020) rightfully shows that contemporary Indian tree-worship presents a powerful alternative to the Western capitalist commodification of nature that has contributed to the current ecological crisis.

It may safely be concluded that if the Indian way of life and veneration of trees is adopted by the world, one may get rid of the ecological crisis the world has been facing. One has also to

realize that the lethal combination of the Abrahamic mythology and commercial exploitation of nature has created unprecedented ecological crises before humanity. Human beings no doubt create problems but they also solve problems. As an Indian, I believe, human beings have to control their greed, have to shun anthropocentrism and adopt anthropomorphism to give due respect to other forms of life if the world has to survive.

MODERN INDIAN LAW ON ECOLOGY: AN EXTENSION OF VEDIC THINKING

While Ecology as a science in the Western world is a product of the 20th century, the Indian sages have contemplated not only on the importance of the relationship of the biotic and the abiotic but have also highlighted the relevance and utility of the non-living elements like land, air, water, property since the Vedic times. The Western countries (largely Christian in their demography) have started talking of the need of governance from a bioregional governance point of view in the last decade of this century but Indians have always practiced it. Nay in contrast to the Western approach Indians consider the plants/trees/ rivers/ oceans etc to be the living beings even today. For example, on May 07, 2014 the Supreme Court of India (Right to Life 2014) recognized that every species, including the animals, has a right to life under Article 21. The Court upheld that the animals have also a right against the human beings not to be tortured and against infliction of unnecessary pain or suffering. The court directed the parliament “to elevate rights of animals to that of constitutional rights as to protect the dignity and honour of the animals.”^{cxxviii} Likewise, the Uttaranchal High Court on March 30, 2017 (Uttarakhand High Court 2017) significantly observed: “Rivers are grasping for breath. We must recognize and bestow the Constitutional legal rights to the ‘Mother Earth’. ... The past generations have handed over the ‘Mother Earth’ to us in its pristine glory and we are morally bound to hand over the same Mother Earth to the next generation.” (Lalit Miglani, court order 2017) The court by invoking their *parens patriae* jurisdiction, has declared the Glaciers (including Gangotri and Yamunotri), rivers, streams, rivulets, lakes, air, meadows, dales, jungles, forests wetlands, grasslands, springs and waterfalls, and legal entities having the status of a legal person in order to preserve and conserve them. The court has also accorded them (glaciers etc.) the fundamental rights and legal rights as given to a citizen in the Constitution of India. Consequently, any person causing any injury and harm, intentionally or unintentionally to them is liable to be proceeded against under the common law, penal laws, environmental laws and other statutory enactments governing the field (Lalit Miglani, court order 2017). In March 2020, the Punjab-Haryana High Court too evoked their *parens patriae* jurisdiction to declare the Sukhna Lake in Chandigarh city a living entity, with rights equivalent to that of a person.^{cxxix} Similarly, using the above-cited judgement of the Uttaranchal High Court, in April 2022, (Lalit Miglani, court order 2017) Hon’ble Mrs. Justice S. Srimathy declared the ‘Mother Nature’ to be

“a ‘Living Being’ having legal entity / legal person / juristic person / juridical person / moral person / artificial person having the status of a legal person, with all corresponding rights, duties and liabilities of a living person, in order to preserve and conserve them. They are also accorded the rights akin to fundamental rights / legal rights / constitutional rights for their survival, safety, sustenance and resurgence in order to maintain its status and also to promote their health and wellbeing.”^{cxxx}

The Hon'ble Justice Srimathy further directed the state government and the central government "to protect the 'Mother Nature' and take appropriate steps to protect Mother Nature in all possible ways."^{xxxix}

It may be noted that none of the different judges has evoked Indian wisdom/texts in his/her judgment mentioned above. They have largely referred to the Western reports and books mainly because in the modern education system in India (including that of law), Indian wisdom rarely finds a mention. Still such landmark judgments to preserve nature have been delivered. The Western Courts (in the largely Christian dominated states) have not been able to go this extent though most of the modern ecological studies are a result of the Western academia. The reason for this different understanding basically lies in the respect for all forms of life in consonance with the Vedic belief that everything is a manifestation of God (See supra *ekoham bahusyamh* etc).

ⁱ Romila Thapar. "Imagined Religious Communities? Ancient History and the Modern Search for a Hindu Identity". *Modern Asian Studies*, vol. 23, no. 2, 1989, pp. 209–31. JSTOR, <http://www.jstor.org/stable/312738>.

ⁱⁱ It is a part of the Jewish *Tanakh* (the foundational text of Judaism) and Christian Old Testament.

ⁱⁱⁱ "हिमालयं समारभ्य यावत् इदं सरोवरम् । तं देवनिर्मितं देशं हिंदुस्थानं प्रचक्षते ॥ *Himālayam Samārabhya Yāvat Indu Sarovaram. Tam Devanirmitam Deśam Hindusthānam Prachakṣate*" Ramdhari Singh Dinkar, *Sanskriti Ke Char Adhyay*. Hindi. Patna: Udyachal, 1962, p. 94. Its English rendering is: **Spreading from the great Himalayas in the north to the majestic Indu Sarovaram (Indian Ocean) in the south is the sacred land of Hindusthanam (India)**

^{iv} Sometime between c. 1500-1000 BCE.

^v Nehru, Jawaharlal. *The Discovery of India*, Introduction by Khilnani, Sunil, New Delhi: Penguin Books, 2010. Np.

^{vi} Ibid.

^{vii} शिक्षा विभिन्दो अस्मै चत्वार्ययुता ददत् । अष्टा परः सहस्रा ॥ *śikṣā vibhindo asmai catvāry ayutā dadat | aṣṭā paraḥ sahasrā ||* "Liberal Vibhindu, you have given to me four times ten thousand, and afterwards eight thousand."

<https://www.wisdomlib.org/hinduism/book/rig-veda-english-translation/d/doc835542.html>

^{viii} स जातूभर्मा श्रद्धधान ओजः पुरो विभिन्दन्नचरद्वि दासीः । विद्वान्वज्रिन्दस्यवे हेतिमस्यार्य सहो वर्धया द्युम्नमिन्द्र ॥ *sa jātūbharmā śraddadhāna ojaḥ puro vibhindann acarad vi dāsīḥ | vidvān vajrin dasyave hetim asyāryam saho vardhayā dyumnam indra ||* "Armed with the thunderbolt, and confident in his strength, he has gone on destroying the cities of the Dasyus. Thunderer, acknowledging (the praises of your worshipper) cast, for his sake, your shaft against the Dasyu, and augment the strength and glory of the Ārya." <https://www.wisdomlib.org/hinduism/book/rig-veda-english-translation/d/doc830099.html>

^{ix} परिविष्टं जाहुषं विश्वतः सीं सुगेभिर्नक्तमूहथू रजोभिः । विभिन्दुना नासत्या रथेन वि पर्वताँ अजरयू अयातम् ॥ *pariṣṭam jāhuṣam viśvataḥ sīm sugebhīr naktam ūhathū rajobhīḥ | vibhindunā nāsatyā rathena vi parvatāṃ ajarayū ayātam ||* "Undecaying Nāsatyas, you bore away by night, in your foe-overwhelming car, Jāhuṣa, surrounded on every side by (enemies), through practicable roads, and went to (inaccessible) mountains." <https://www.wisdomlib.org/hinduism/book/rig-veda-english-translation/d/doc830272.html>

^x Yule, Henry and A C Burnell. *Hobson-Jobson: A Glossary of Colloquial Anglo-Indian Words and Phrases and of Kindred Terms, Etymological, Historical, Geographical and Discursive*. New Edition; London: John Murray, 1903. p. 415.

^{xi} "Whatever live Hindu fell into the King's hands was pounded into bits under the feet of elephants. The Musalmans, who were Hindis (country born), had their lives spared." (*Hobson-Jobson* 415)

^{xii} Halhed, Nathaniel Brassey, *A Code of Gentoo Laws or Ordinations of the Pundits from a Persian Translation Made from the Original Written in the Shanscrit Language*. London: Printed in the year MDCCLXXVI. <https://archive.org/details/codeofgentoolaws00halh/mode/2up>.

^{xiii} John Stratton Hawley. "Naming Hinduism" *The Wilson Quarterly* (1976-), Summer, 1991, Vol. 15, No. 3 (Summer, 1991), pp. 20-34. www.jstor.org/stable/40258117.

^{xiv} There are five references to indicate the limits of the term "Hindu" regarding applicability of the law. One reference is there in the *Constitution of India* where it is "construed as including a reference to persons professing the Sikh, Jaina or Buddhist religion" (25.2.b.Explanation II). The others are there regarding the applicability of The Hindu Marriage Act, 1955 (Clause 2.1.a, b, c), Hindu Adoption and Maintenance Act, 1956 (Clause 2.1.a, b, c), Hindu Minority and Guardianship Act, 1956 (Clause 3.1.a, b, c) and Hindu Succession Act, 1956 (Clause 2.1.a, b, c) to all Hindus "in any of its forms or

developments, including a Virashaiva, a Lingayat or a follower of the Brahmo, Prarthana or Arya Samaj, ... Buddhist, Jaina or Sikh ... any other person domiciled in the territories to which this Act extends who is not a Muslim, Christian, Parsi or Jew by religion... ." (Constitution of India: 13) Government of India, Ministry of Law and Justice. *Constitution of India*, 2020, <https://legislative.gov.in/constitution-of-india>.

^{xv} हिन्दू मुस्लिम सिख ईसाई. आपस में सब भाई-भाई। Hindu Muslim Sikh Isai, Aapas Sab Bhai-Bhai.

^{xvi} J B S Haldane, "An Indian Perspective of Darwin", *The Centennial Review of Arts & Science*, Fall 1959, Vol. 3, No. 4, p. 357. <https://www.jstor.org/stable/23737640>.

^{xvii} Shashi Tharoor, *Why I am a Hindu*. Brunswick: Scribe Publications, 2018.

^{xviii} Hawley, John Stratton, "Naming Hinduism", *The Wilson Quarterly*, Summer, 1991, Vol. 15, No. 3 (Summer, 1991), pp. 20-34. www.jstor.org/stable/40258117.

^{xix} "The very word Hinduism is misleading. The word was coined by the British as an umbrella term, referring to any and all forms of religion in India, many of which share few if any common features. It was used to describe all sorts of beliefs and practices, from simple nature worship to the most highly sophisticated ritual and philosophical systems. Hinduism is a vast religious tradition, encompassing various and contradictory strands and ideas. It has usually defied all the usual strategies for categorization and classification. There is no founder, no definitive scripture, no centralized authority, no single supreme god, no creed of essential beliefs, and no heresy. Thus, it would be more accurate to think of the religion as Hinduisms rather than Hinduism, since this would reflect the rich diversity one encounters." James G. Lochtefeld, *The Illustrated Encyclopedia of Hinduism*, New York: The Rosen Publishing Group, Inc., 2002, p. vii.

^{xx} Vidyaniwas Mishra. "Hindu Dharma: samanya lakshan", *Hindu Dharma: Jeevan mein sanatan ki khoj* (Hindi). Bikaner, Vagdevi Prakashan, 2016, p. 25.

^{xxi} Vidyaniwas Mishra, Ibid.

^{xxii} J B S Haldane, "An Indian Perspective of Darwin", p. 357.

^{xxiii} Aman Chopra. "Hamid Ansari Exclusive Interview | Former VP Hamid Ansari का धर्मनिरपेक्ष साक्षात्कार", Zee News, Jan 30, 2021, www.youtube.com/watch?v=7uU6xzuntoE.

^{xxiv} "Hinduism is first and foremost a way of life. This means that Hinduism has tended to be orthoprax (stressing correct behavior) rather than orthodox (stressing correct belief). It tends to be woven through the differing elements of everyday life, rather than only performed as practices or rituals for certain days and times. Hindu religious expression is conveyed through every facet of society: music, dance, art and architecture, philosophy, politics, literature, and social life." James G. Lochtefeld, *The Illustrated Encyclopedia of Hinduism*, New York: The Rosen Publishing Group, Inc., 2002, p. viii.

^{xxv} Frawley, David & Archana Sharma. "Secularism is Means to Control Religion: A Long Conversation", <https://epaper.navbharattimes.com/Mumbai/2023-4-1/16/page-10.html>

^{xxvi} Wirth, Maria. "Is Hinduism a religion or a way of life?". October 16, 2023. <https://mariawirth.com/is-hinduism-a-religion-or-a-way-of-life-by-maria-wirth/>

^{xxvii} "हिन्दू धर्म वर्तमानजीवी धर्म है, वह सत्य और ऋत का गठबन्धन है." Vidyaniwas Mishra. "Bhumika", *Hindu Dharma: Jeevan mein sanatan ki khoj* (Hindi). Bikaner, Vagdevi Prakashan, 2016, p. 11.

^{xxviii} "हीनं दुष्यति इति हिन्दू" *hinam dushyati iti hindu*

^{xxix} ऋणं ह वै जायते यो ह्यस्ति। स जायमानस एव देवेभ्यः स ऋषिभ्यः पितृभ्यो मनुष्येभ्यः। Verily, whoever exists, he, in being born, is born as (owing) a debt to the gods, to the Rishis, to the fathers, and to men. (*Shatapath Brahmana*: 1.7.2.1)

^{xxx} धारयति इति धर्मः Dharayati iti Dharmaha "That which upholds, sustains and even uplifts is Dharma". विद्वद्भिः सेवितः

सद्भिर्नित्यमद्वेषरागिभिः। हृदयेनाभ्यनुजातो यो धर्मस्तं निबोधत ॥ १ ॥ *vidvadbhiḥ sevitaḥ sadbhirnityamadveṣarāgibhiḥ | hrdayenābhyanuñāto yo dharmastam nibodhata || 1 || Manusmriti 2.1* || Learn that Dharma, which has been ever followed

by, and sanctioned by the heart of, the learned and the good, who are free from love and hate. (*Manusmriti* 2.1)

"Vaśiṣṭha, *Dharmaśāstra*—'Dharma is that which is enjoined in Śruti and Smṛti.'

Jaimini, *Mīmāṃsā-Sūtra*, 1.1.2.—'Dharma is that which is described in the Veda as conducive to good.'

Kaṇāda, *Vaiśeṣika-Sūtra*, 1.2.2.—'That is Dharma which brings about prosperity and the highest good.'

Āpastamba, *Dharma-Sūtra*, 1.20.7.—'That the doing whereof gentlemen praise is Dharma, and that which they deprecate is Adharma.'

Kumārila, *Ślokavārtika*, 2.14.—'The fact of these acts being conducive to good is, in every case, learnt from the Veda; and in this sense are they regarded as Dharma; and for this reason Dharma is not perceptible by the senses.'

Viśvāmītra (quoted in *Parāśaramādhyaya*, p. 80).—'That the doing of which men learned in the scriptures praise is Dharma; that which they deprecate is called Adharma.'

Under all these definitions 'Dharma' is the name of the 'meritorious act'; but the term has also been used in the sense of the merit acquired by the doing of the act.

Nyāya view (quoted in *Vīramitrodāya-Paribhāṣā*, p. 29).—'Dharma is that quality of man which is brought about by the performance of the enjoined act: Adharma is that quality of man which is brought about by the performance of the forbidden act.'

<https://www.wisdomlib.org/hinduism/book/manusmriti-with-the-commentary-of-medhatithi/d/doc145572.html>

^{xxx} *Chaturashrama: Brahmacharya, Grihastha, Vanaprastha and Sannyasa, चतुराश्रमः ब्रह्मचर्यं, गार्हस्थ्यं, वानप्रस्थ और संन्यास*. The four Ashramas consist of *Brahmacharya* up to 25 years for learning and grooming for life; *Grihastha* from 26 to 50 years for marriage and worldly activities; *Vanaprastha* from 51 to 75 when one retires from active family/social life to be a forest-dweller and devote one's time in religious, philosophical pursuit. In *Sannyasa*, one lives, from 75 till end of one's life, the life of an ascetic, contemplating on supernatural, pure philosophy, accepting whatever is available for sustaining the life. One helps the society in whatever manner possible, giving benefit of long experience and knowledge accumulated during the lifetime.

^{xxxii} *Chaturvarna: Brahmana, Kshatriya, Vaishya and Shudra, चतुर्वर्णः ब्राह्मण, क्षत्रिय, वैश्य और शूद्र*

^{xxxiii} Hervey D. Griswold. "Some Characteristics of Hinduism as a Religion". *The Biblical World*, Sep., 1912, Vol. 40, No. 3 (Sep., 1912), pp. 163-172. www.jstor.org/stable/3141428.

^{xxxiv} Matthew 13: 49-50.

^{xxxv} Quran 22:19-22.

^{xxxvi} Quran 4:51-56, 9:74.

^{xxxvii} Matthew 28:19-20, Quran 9.5.

^{xxxviii} Maria Wirth, "Of Course, Hindus Won't Be Thrown Into Hell". February 18, 2018.

<https://www.hvk.org/2018/0218/89.html>

^{xxxix} शतं वो अम्ब धामानि सहस्रमुत वो रुहः । अधा शतक्रत्वो यूयमिमं मे अगदं कृत ॥ śataṃ vo amba dhāmāni sahasram uta vo ruhaḥ | adhā śatakratvo yūyam imam me agadam kṛta || Tr.: "O mother herb, hundreds are the places where you arise and work, thousands your varieties and extensions, and hundreds your gifts and efficacies. Pray make this life free from affliction and disease." (*Rigveda*, 10.97.2) <https://vedicscriptures.in/rigveda/10/97/2>

^{xl} तमोषधीश्च वनिनश्च गर्भं भूमिश्च विश्वधायसं बिभर्ति ॥ tam oṣadhīś ca vaninaś ca garbham bhūmiś ca viśvadhāyasam bibharti || "The herbs, and the trees, and the earth, contain as a germ that all-supporting Agni, who occupies a place provided by the gods, that by his functions he may convey (the offerings) to the immortals." (*Rig Veda* 7.4.5)

^{xli} ईश्वरः सर्वभूतानां कृपया वृक्षमाश्रितः ॥ २४ ॥ īśvaraḥ sarvabhūtānāṃ kṛpayā vṛkṣamāśritaḥ || 24 || *Skanda Purana* 6.1.247.24 an ethereal voice spoke to the Devas truthfully. "Out of compassion for all the living beings, Īśvara has stationed himself on trees. (*Skand Purana* 6.1.247.24)

^{xlii} म काकम्बीरमुद्वृहो वनस्पतिमशस्तीर्वि हि नीनशः । ॥ १७ ॥ mā kākambīram ud vrho vanaspatim aśastīr vi hi nīnaśaḥ | mota sūro aha evā cana grīvā ādadhate veḥ || *Rig Veda*, 6:48:17. (Tr. Do not uproot the trees such as the banyan which provide shelter to the poor innocent birds, but do remove the revilers and deplorables. The strong must not hurt the weak and their supports like the hunters who catch birds by the neck. <https://vedicscriptures.in/rigveda/6/48/17>)

^{xliii} कृष्टानामोषधीनां च जातानां च स्वयं वने । वृथाच्छेदेन गच्छेत दिनमेकं पयोव्रती ॥ ३९ ॥ (*Matsya Purana* 227.39)

<https://archive.org/details/matsya-puran-gita-press-gorakhpur/page/n901/mode/2up>

^{xliv} छिनत्ति वीरुधो यस्तु वीरुत्संस्थे निशाकरे । पत्रं वा पातयत्येकं ब्रह्महत्यां स विन्दति १० ।

https://sa.wikisource.org/wiki/विष्णुपुराणम्/द्वितीयांशः/अध्यायः_१२ This idea is also present in the *Mahabharata* (13.127.3 & 12.282.41)

^{xlv} पश्यतैतान् महाभागान् परार्थैकान्तजीवितान् । वातवर्षातपहिमान् सहन्तो वारयन्ति नः ॥ ३२ ॥ paśyataitān mahā-bhāgān parārthaikānta-jīvitān vāta-varṣātapa-himān saḥanto vārayanti naḥ अहो एषां वरं जन्म सर्वप्राण्युपजीवनम् । सृजनस्येव येषां वै विमुखा यान्ति नार्थिनः ॥ ३३ ॥ aho eṣāṃ varam janma sarva-prāṇy-upajīvanam su-janasyeva yeṣāṃ vai vimukhā yānti nārthinaḥ पत्रपुष्पफलच्छायामूलवल्कलदारुभिः । गन्धनिर्यासभस्मास्थितोक्तैः कामान्वितन्वते ॥ ३४ ॥ (*Bhāgavata Purāṇa* 10.22.32-34)

^{xlvi} प्रावृत्य च शिरः कुर्याद् विण्मूत्रस्य विसर्जनम् । छायाकूपनदीगोष्ठचैत्याम्भः पथि भस्मसु ॥ १३.३६ अग्नौ चैव श्मशाने च विण्मूत्रे न समाचरेत् ॥ न गोमये न कृष्टे वा महावृक्षे न शाड्वले ॥ १३.३७ <https://sa.wikisource.org/wiki/कूर्मपुराणम्-उत्तरभागः/त्रयोदशोऽध्यायः> This sentiment also finds an expression in *Narad Purana* (1.27-5-7) and *Brahmavaivarta Purana* (1.26.19-24).

^{xlvii} शं नो दयावाप्स्यिवी पूर्वहूतौ शमन्तरिक्षं दर्शयेनो अस्तु । शं न ओषधीर्वनिनो भवन्तु शं नो रजसस पतिरस्तु जिष्णुः ॥ (*Rig Veda* VII. 35.5) "Early invoked, may Heaven and Earth be friendly, and Air's mid-region good for us to look on. To us may Herbs and Forest-Trees be gracious, gracious the Lord Victorious of the region."

^{xlviii} सत्वचं दन्तकाष्ठं स्यात् तदद्येण तु धावयेत् । क्षीरवृक्षसमुद्भूतं मालतीसंभवं शुभम् । अपामार्गं च बिल्वं च करवीरं विशेषतः ॥ १८.१९

<https://sa.wikisource.org/wiki/कूर्मपुराणम्-उत्तरभागः/अष्टादशोऽध्यायः>

^{xlix} *The Vishnu Purana*, Chapter IX - Legend of Lakshmi, Book I, <https://www.wisdomlib.org/hinduism/book/vishnu-purana-wilson/d/doc115945.html>

^l नाबुद्ध कल्पदुमतां विहाय जातं तमात्मन्यसिपत्रवृक्षम् nābuddha kalpadumatām vihāya jātam tamātmanyasipatravrṣam, *Raghuvansh* 14.48; मृषां न चक्रैः लिप्तकल्पपादपः प्रणीय दारिद्र्यदरिद्रतां नृपः ॥ १५ ॥ mṛṣāṃ na cakre'lipitakalpāpādapaḥ praṇīya dāridryadaridratām nṛpaḥ || 15 || *Naishadhacharita* 1.15.

^{li} any productive or bountiful source; *निगमकल्पतरुर्गलितं फलम् nigamakalpatarorgalitam phalam, Bhāgavata Purana 1.1.3, <https://www.wisdomlib.org/hinduism/book/naishadha-charita-sanskrit/d/doc371845.html>*

^{lii} A plant which has many roots emerging from one root and which does not have hard wood or stalk, like, sugarcane, reed, shar etc. In *Arka Prakash*, plants like Bariyara, Patha, Tulsi, Kakjangha, Chirchira etc. have been taken under Gulm Gana.

^{liii} *Tvaksāra* ("hard bark"): One the classifications of plants according to their stature; *Tvaksāras* are those that have a hard bark (*tvak*), such as Bamboo; the term is used throughout Ayurvedic literature such as the *Suśruta-saṃhitā* and the *Caraka-saṃhitā*.

^{liv} *उदभिज्जाः स्थावराः सर्वे बीजकाण्डप्ररोहिणः । ओषधयः फलपाकान्ता बहुपुष्पफलोपगाः ॥ ४६ ॥ udbhijjāḥ sthāvarāḥ sarve bījakāṇḍaprarohiṇaḥ | ośadhyaḥ phalapākāntā bahupuṣpaphalopagāḥ || 46 || अपुष्पाः फलवन्तो ये ते वनस्पतयः स्मृताः । पुष्पिणः फलिनश्चैव वृक्षास्तूभयतः स्मृताः ॥ ४७ ॥ apuṣpāḥ phalavanto ye te vanaspatayaḥ smṛtāḥ | puṣpiṇaḥ phalinaścaiva vṛkṣāstūbhayataḥ smṛtāḥ || 47 || गुच्छगुल्मं तु विविधं तथैव तृणजातयः । बीजकाण्डरूपाण्येव प्रताना वल्ल्य एव च ॥ ४८ ॥ guccagulmaṃ tu vividhaṃ tathaiva tṛṇajātayaḥ | bījakāṇḍarūpāṇyeva pratānā vallya eva ca || 48 || तमसा बहुरूपेण वेष्टिताः कर्महेतुना । अन्तस्सञ्ज्ञा भवन्त्येते सुखदुःखसमन्विताः ॥ ४९ ॥ tamasā bahurūpeṇa veṣṭitāḥ karmahetunā | antassañjñā bhavantye te sukhaduḥkhasamanvitāḥ || 49 ||*

^{lv} *सप्तमो मुख्यसर्गस्तु षड्विधस्तस्थुषां च यः ॥ १८ ॥ वनस्पत्योषधिलतात्वक्सारा वीरुधो द्रुमाः । उत्स्रोतसस्तमः प्राया अन्तःस्पर्शा विशेषिणः ॥ १९ ॥ saptamo mukhya-sargas tu ṣaḍ-vidhas tasthuṣāṃ ca yaḥ || १८ || vanaspaty-ośadhi-latā-tvaksārā vīrudho drumāḥ | utsrotasas tamaḥ-prāyā antaḥ-sparśā viśeṣiṇaḥ || १९ ||*
<https://archive.org/details/bhagavatapurāṇagitaḥ/page/n239/mode/2up>

^{lvi} *वनस्पतिस्तथा वीरुद्वानस्पत्यस्तथोषधिः ॥ ७१ ॥ फलैर्वनस्पतिः पुष्पैर्वनस्पत्यः फलैरपि ओषधयः फलपाकान्ताः प्रतानैर्वीरुधः स्मृताः ॥ ७२ ॥ vanaspatistatha vīrudvānaspatyastathauśadhiḥ || 71 || phalairvanaspatih pushpairvanaspatyah phalairapi ośadhyaḥ phalapakantah pratanairvirudhah smṛtāḥ || 72 ||* Tr. Plant origin drugs are of four types viz. direct fruiters, creepers, flower-based fruiters and herbs. [71] The plants which bear fruit without visible flowers are known as *vanaspati* (*Gymnospermia*). The plants bearing both flowers and fruits are known as *vanaspatya* (*angio-spermia*). The plants which die out after flowering are known as *auśadhi* (annuals). The plants which creep or twine are known as *virudha* (creepers). [72] (*Charak Saṃhitā, Sūtra Sthāna 1.71-72*).

^{lvii} Kindly see Jagadis Chunder Bose's books *Response in the Living and Non-Living* (1902) and *The Nervous Mechanism of Plants* (1926)

^{lviii} *तमसा बहुरूपेण वेष्टिताः कर्महेतुना । अन्तस्सञ्ज्ञा भवन्त्येते सुखदुःखसमन्विताः ॥ ४९ ॥ tamasā bahurūpeṇa veṣṭitāḥ karmahetunā | antassañjñā bhavantye te sukhaduḥkhasamanvitāḥ || 49 ||* Tr. All these (vegetable beings) are invested by manifold 'darkness' (inertia), the result of their acts; and possessing inner consciousness, they are affected by pleasure and pain. (*Manusmṛiti 1:49*) <https://www.wisdomlib.org/hinduism/book/manusmṛiti-with-the-commentary-of-medhatithi/d/doc145465.html>

^{lix} *सुखदुःखयोश्च ग्रहणाच्छिन्नस्य च विरोहणात् । जीवं पश्यामि वृक्षाणामचैतन्यं न विद्यते ॥ 17 ॥ Sukhadukhayoscha Grahanaśchinnasya cha virohānaat. Jeevaṃ paśyāmi vṛkṣāṇāmaśchaitanyam na vidyate. .17. (Mahābhārata, Shānti Parva, 184: 17)*

^{lk} It is usually performed in the sixth or seventh month after birth, consists of the piercing of the baby's ear lobes, so earrings may be worn.

^{lxi} *अर्चार्थममुक्तस्य त्वं देवस्य परिकल्पितः । नमस्ते वृक्ष पूजेयं विधिवत्सम्प्रग्रहयताम् ॥ १० ॥ यानीह भूतानि वसन्ति तानि बलिं गृहीत्वा विधिवत्प्रयुक्तम् । अन्यत्र वासं परिकल्पयन्तु क्षमन्तु तान्यदय नमोऽस्तु तेभ्यः ॥ ११ ॥ वृक्षं प्रभाते सलिलेन सिक्त्वा पूर्वोत्तरस्यां दिशि सन्निकृत्य । मध्वाज्यदिग्धेन कुठारकेण प्रदक्षिणं शेषमतो निहन्यात् ॥ १२ ॥ arcārthamamukasya tvam devasya parikalpitaḥ | namaste vṛkṣa pūjeyaṃ vidhivatśampragrhyatām || 10 || yāniha bhūtāni vasanti tāni balim grhītvā vidhivatprayuktam | anyatra vāsaṃ parikalpyantu kṣamantu tānyadya namo'stu tebhyaḥ || 11 || vṛkṣaṃ prabhāte salilena siktva pūrvottarasyāṃ diśi sannikṛtya | madhvājyadigdhena kuṭhārakeṇa pradakṣiṇaṃ śeṣamato nihanyāt || 12 ||*
<https://www.wisdomlib.org/hinduism/book/brihat-saṃhitā-sanskrit/d/doc1218091.html>

^{lxii} *यन्नोक्तमस्मिन्वनसम्प्रवेशे निपातविच्छेदनवृक्षगर्भाः । इन्द्रध्वजे वास्तुनि च प्रदिष्टाः । पूर्व मया तेऽत्र तथैव योज्याः ॥ १४ ॥ yannoktamasmīnvanasampraveśe nipātavicchedanavṛkṣagarbhāḥ | indradhvaje vāstuni ca pradiṣṭāḥ | pūrvam mayā te'tra tathaiva yojyāḥ || 14 ||* Matters connected with the fall of the tree, the cutting of it, and with what might be inside the tree have been treated of by me in the chapter on Indra Dhvaja and on House-building. They apply here also. (*Brihat-saṃhitā 59.14*) www.wisdomlib.org/hinduism/book/brihat-saṃhitā/d/doc229304.html Also see *Brihat-saṃhitā* (42. 11-19, 52.118-121)

^{lxiii} *मङ्गलाचारः कल्याणवृत्तः शुचिः शुक्लवासाः सम्पूज्य देवता अश्विनौ गोब्राह्मणांश्च कृतोपवासः प्राङ्मुख उदङ्मुखो वा गृहणीयात् ॥ १० ॥ maṅgalācāraḥ kalyāṇavṛttaḥ śuciḥ śuklavāsāḥ sampūjya dēvatā aśvinau gōbrāhmaṇāṃśca kṛtōpavāsaḥprāṇmukha udānmukhō vā grhṇīyāt || 10 ||* These should be collected by one with auspicious behavior, benevolent conduct, cleanliness and white dress after worshipping, observing fast and facing toward east or north. (*Charak Saṃhitā, Kalpa Sthāna 1: 10 10*) https://www.carakasamhitainline.com/index.php?title=Madanakalpa_Adhyaya

^{lxiv} गृहणीयातानि सुमनाः शुचिः प्रातः सुवासरे ५६ आदित्यसंमुखो मौनी नमस्कृत्य शिवं हृदि साधारणधराद् व्यं गृहणीयादुतराश्रितम् ५७
(<https://sa.wikisource.org/s/iii>) English tr.: The plants growing in ordinary land, in the north direction should be collected in the morning, on an auspicious day by one with a healthy mind, after praying to the sun in a standing posture, observing silence, keeping Lord Shiva in one's heart.

^{lxv} Hajra, R C. *Studies in the Puranic Records on Hindu Rites and Customs*. Dacca: The University of Dacca, 1940.

^{lxvi} Agrawal, Vasudevsharan. *Markandeya Purana: A Cultural Study* (Hindi). Allahabad: Hindustani Academy, 1961.

^{lxvii} Kantawala, S G. *Cultural History from the Matsya Purana*. Baroda: The Maharaja Sayajirao University of Baroda, 1964.

^{lxviii} Pai, G Krishna. *Cultural History from the Kurma Purana*. Pune: Bhandarkar Oriental Research Institute, 1964.

^{lxix} Sensarma, V. *Plants in the Indian Purāṇas: An Ethnobotanical Investigation*. Calcutta: Naya Prokash, 1989.

^{lxx} Nithyanantha Bhat V. *Ecological Awareness in the Vedas and Its Relevance Today*. Kochi: Sukrtindra Oriental Research Institute, 2021.

^{lxxi} Mani, Vettam. *Puranic Encyclopaedia: A Comprehensive work with Special Reference to the Epic and Puranic Literature*. Varanasi: Motilal Banarasidas, 2021.

^{lxxii} Vrikshayurveda means the science of longevity and the health of plants.

^{lxxiii} <https://www.wisdomlib.org/hinduism/book/brihat-samhita/d/doc229299.html>

^{lxxiv} After procuring a microfiche copy of the palm-leaf manuscript of Surapala's *Vrikshayurveda* (in Sanskrit) in 1994, from the Bodleian Library (Oxford, UK), Y L Nene, Chairman, Asian Agri-History Foundation (AAF) has published it with a translation in English along with notes and three commentaries.

https://archive.org/details/vrikshaayurvedaofsurapalanalinisadhale1996_387_V.

^{lxxv} https://www.infinityfoundation.com/mandala/t_es/t_es_agraw_surapala_frameset.htm

^{lxxvi} <https://archive.org/details/vrkshayurvedas/mode/2up>

^{lxxvii} What my mother was telling me was Vedic/Puranic knowledge. "अश्वत्थमेकं पिचुमन्दमेकं न्ययोधमेकं दश चिञ्चिणीकाः। कपित्थविल्वामलकत्रयं च पञ्चाम्नानी नरकं न पश्येत्॥" By planting one peepul (ficus religiosa), one neem (Azadiracht indica), one bargad (ficus bengalensis), ten Imli (Tamarindus indica), three Kaith (Limonia acidissima), three vilva (aegle marmalos), three aonla (Indian gooseberry- Phyllanthus embilica), and five mango (mangifera indica), one never goes to hell." (*Skanda Purana* 6.252.49); "By planting all kinds of other trees, useful for fruits and flowers, a person gets a reward of thousand cows adorned with jewels. By planting one asvattha, one picumanda, one nyagrodha, ten tamarind trees, the group of three, viz., kapittha, bilva, and amalaka, and five mango trees, one never visits hell." (*Vrukshayurveda* 22-23)

^{lxxviii} अश्वत्थमेकं पिचुमन्दमेकं न्ययोधमेकं दशपुष्पजातिः। द्वे द्वे तथा दाडिममातुलिंगे पंचाम्रोपी नरकं न याति॥ ३६ "One who plants one peepal (ficus religiosa), one margosa (azadiracht indica), one banyan (Ficus bengalensis), ten flowering plants/ creepers, two pomegranates, two oranges, and five mango trees never goes to hell." (*Varah Purana* 172.36)

https://archive.org/details/varaha_purana/page/n493/mode/2up

^{lxxix} B. Vinutha et al. "Screening of selected Indian medicinal plants for acetylcholinesterase inhibitory activity", *Journal of Ethnopharmacology*, 109(2), 19 January 2007, pp. 359-363, <https://doi.org/10.1016/j.jep.2006.06.014>.

^{lxxx} Kindly see Verses 1-43. <https://www.wisdomlib.org/hinduism/book/the-padma-purana/d/doc364181.html>

^{lxxxi} तस्मात् तडागे सद्वृक्षा रोप्याः श्रेयोऽर्थिना सदा । पुत्रवत् परिपाल्याश्च पुत्रास्ते धर्मतः स्मृताः ॥ ३१ ॥ *tasmāt tadage sadvraksha ropyah shreyoarthina sada । putravat paripalyashcha putraste dharmatah smratah ॥31॥* Tr. Those who want better future should plant good trees around tanks, and raise them like sons, as the trees are considered like sons in our religion. (*Mahabharat, Anushashan Parva* 58.31)

^{lxxxii} मा भूम निष्ट्या इवेन्द्र त्वदरणा इव । वनानि न प्रजहितान्यद्रिवो दुरोषासो अमन्महि ॥ mā bhūma niṣṭyā ivendra tvad arañā iva । vanāni na prajahitāny adrivo durośāso amanmahi ॥ (*Rigveda*, 8.1.13)

^{lxxxiii} मापो मौषधीर्हिंसीः धाम्नोधाम्नो राजस्ततो वरुण नो मुञ्च । यदाहुरध्न्याऽइति वरुणोति शपामहे ततो वरुण नो मुञ्च । सुमित्रिया नऽआप ओषधयः सन्तु दुर्मित्रियासस्तस्मै सन्तु योस्मान्द्वेष्टि यञ्च वयन्द्विष्मः ॥ २२ ॥ (यजुर्वेद 6.22) Tr. "Head of the republic, pollute not the waters, destroy not herbs and trees: From this, from any other place, leave us not out, except no one from this. Let things like water and refreshment be available anywhere, everywhere. Lord of justice, water, herbs and trees, cows are sacred, they are not to be destroyed: This you vouchsafe, we too take the oath. Back not out. We too will not back out. Under your governance, may waters and herbs be like friends to us. And they would be unfriendly to those elements which injure us and our sanctity, and to those ailments which we oppose, they would be enemies." (*Yajur Veda* 6.22 <https://vedicscriptures.in/yajurveda/6/22>)

^{lxxxiv} प्ररोहिशाखिनां शाखास्कन्धसर्वविदारणे । उपजीव्यदुमान्तु विशतेर्द्विगुणा दमाः३ ॥ २५ ॥ *prarohisākhinām śākhāskandhasaravidāraṇe । upajīvyadumāntu viṣaterdviguṇā damāḥ3 ॥ 25 ॥* (*Agni Purana* 258.25) The fine is forty (paṇas) for lopping the branches, trunk of the tree or the whole tree that is growing and providing sustenance.

^{lxxxv} भूमिं भित्वाषधीश्छत्वा हुत्वा कोटपिपीलिकान् । पुनन्ति खलु यजेन कर्षका देवपूजनात् ॥ ३ ॥ *bhūmiṃ bhitvauśadhīśchitvā hutvā koṭapīlīkān । punanti khalu yajēna karṣakā devapūjanāt ॥ 3 ॥* One gets purified from the sin accruing from ploughing the earth and cutting the plants and killing insects and ants by doing a sacrifice. The cultivator (gets free from the sin) by worshipping the god. (*Agni Purana* 152.3)

^{lxxxvi} वृक्षन्तु विफलं कृत्वा सुवर्णं दण्डमर्हति ॥ ३२ ॥ *vṛkṣantu viphalam kṛtvā suvarṇa daṇḍamarhati* || 32 || 32. One who would make a tree barren deserves the fine of a suvarṇa.

^{lxxxvii} अपात्रीकरणं ज्ञेयमसत्यस्य च भाषणं ॥ कृमिकीटवयोहत्या मद्यानुगतभोजनं ॥ ४० ॥ *apātrikaraṇam jñeyamasatyasya ca bhāṣaṇam* | / *gṛmikiṭavayohatyā madyānugatabhojanam* || 40 || (Agni Purana 168.40)

^{lxxxviii} *trṇakāṣṭhadrumāñāñca śuṣkānāsya guḍasya ca | celacarmāmiṣāñāñca trirātram syādabhojanam* || 46 || (Agni Purana 173.46) One should not take food for three nights (for having stolen) the grass, wood, tree, dry food, jaggery, dress, hide and flesh.

^{lxxxix} वृक्षं तु सफलं छित्वा सुवर्णं दण्डमर्हति। द्विगुणं दण्डयेच्चेनं पथि सीम्नि जलाशये ॥ ९९ छेदनादफलस्यापि मध्यमं साहसं स्मृतम्। गुल्मवल्लीलतानां च सुवर्णस्य च माषकम् ॥ ९२ वृथाच्छेदी तृणस्यापि दण्ड्यः कार्षापणं भवेत्। ... ॥ ९३ देशकालानुरूपेण मूल्यं राजा दुमादिषु तत्स्वामिनस्तथा दण्ड्या दण्डमुक्तस्तु पार्थिव ॥ ९४ Tr. It is appropriate to punish the culprit with gold for cutting a fruit-bearing tree. For cutting a tree near some borderline, road or water body, the cutter should be punished doubly. Moderate punishment is to given for cutting down even a fruitless tree. A punishment of one *masha* (0.972 grams) of gold should be given for cutting down a clump of shoots (*gulm* गुल्म), climber, vines and creepers. A person who destroys even a straw unnecessarily is liable to be punished by one *Karshapan* (ancient Indian silver coin stamped with one to five or six rūpas on one side and the legitimate seal on the other). On cutting down of a tree, the king should impose appropriate (to the time and place) monetary penalty, which should be handed over to the tree-owner as a compensation. <https://archive.org/details/matsya-puran-gita-press-gorakhpur/page/n905/mode/2up>

^{xc} दशकूपसमावापी दशवापी समो हृदः। दशहृदसमः पुत्रो दशपुत्रसमो दुमः ॥ [The service rendered by] ten wells equals to that of one stepwell, of ten stepwells to one pond, of ten ponds to one son, and of ten sons to one tree.

<https://archive.org/details/matsya-puran-gita-press-gorakhpur/page/n653/mode/2up>

^{xc} अपो देवीरूपसृज मधुमतीरयक्षमाय प्रजाभ्यः । तासामास्थानादुज्जिहतामोषधयः सुपिप्पलाः ॥ <https://vedicscriptures.in/yajurveda/11/38>

^{xcii} Chief Seattle's "Letter to All", www.csun.edu/~vcpsy00h/seattle.htm.

^{xciii} नमो वृक्षेभ्यो हरिकेशेभ्यः *namo vrikshebhyo namah* tr. Our homage be to the trees having green hair (*Yajur Veda* 16.17); सूतायाहन्त्यै वनानां पतये नमो *vananam patye namo* tr. To the lord of the forests our homage be (*Yajur Veda* 16: 18); वृक्षाणाम्पतये नमो *vrikshanam patye namo* tr. To the lord of plants our homage be (*Yajur Veda* 16: 19); औषधीनाम्पतये नमो *aushidhi nampatye namo* tr. To the lord of bushes our homage be (*Yajur Veda* 16. 19); अरण्यानाम्पतये नमो *aryanyanampatye namo* tr. To the lord of forests our homage (*Yajur Veda* 16: 20)

^{xciv} इन्धनार्थं यदानीतमग्निहोत्रं तदुच्यते । छायाविश्राम पथिकैः पक्षिणां निलयेन च ॥ ३८ ॥ पत्रमूलत्वगादिश्च औषधार्थं तु देहिनाम् उपकुर्वन्ति वृक्षस्य पञ्चयज्ञः स उच्यते ३९ ॥ गृहकृत्यानि काष्ठानि क्षुद्रजन्तु गृहास्तथा ॥ यत्र निर्वृत्तं प्रोक्तं भिक्षा पत्रैः समीकृता ॥ ४० ॥ फलन्ति वत्सरे मध्ये द्विवारं शकुनादयः ॥ ४१ ॥ सांवत्सरं पितृमार्तुरुपकारं फलैः कृतम् । एवं पुत्र समारोपा एवं तत्त्वविदो विदुः ॥ ४२ ॥ Tr. The service of the trees in providing firewood, sticks for sacrifices like Agnihotra, shade for the travellers to rest, nests for birds and medicine for men through the leaves, root and bark is said to be its five sacrifices (*panchyajna*). The learned people declare a tree to be like a son because it provides materials for domestic life, provides shelter for small animals, twice in a year birds breed in it and it provides fruits to the originator throughout the year. (*Varah Purana* 172.38-42) https://archive.org/details/varaha_purana/page/n493/mode/2up

^{xcv} कदंबनीलोत्पलकेतकानि जातिःसरोजं शतपत्रिका च ॥ १६ ॥ *kadambanīlotpalaketakāni jātiḥsarojaṃ śatapatrikā ca* || 16 || *amḷānapuṣpānyatha siṃduvāraṃ puṣpaṃ punarbhāratamallikāyāḥ* | *śuklaṃ ca puṣpaṃ karavīrapuṣpaṃ śrīcāmpakaṃ caṃdrāmase pradeyam* || 17 || tr. He should offer the flowers of Kadamba and blue lotuses and Ketaka-flowers, jasmine flowers, lotuses, (other) fresh flowers, Sinduvāra-flowers and the flowers of jasmine to the Moon, O you descendent of Bharata. He should also offer to the Moon a white flower, a Karavīra-flower and a Campaka-flower. (*Padama Purana* 1.26.16b-17) <https://www.wisdomlib.org/hinduism/book/padma-purana-sanskrit/d/doc433196.html>

^{xcvi} In some parts of the country, it is celebrated on the Full Moon Day (*Purnima*) of Jyeshtha (May–June) while in some others on the No Moon Day (*Amavasya*) of Jyeshtha. In the latter case it is known as *bad-amavasa* (बड़ अमावसा).

^{xcvii} यस्य मूले स्थितो विष्णुर्मध्ये तिष्ठति शंकरः । अग्रभागे स्थितो ब्रह्मा कस्तं जगति नार्चयेत् ॥ २० ॥ *yasya mūle sthito viṣṇurmadye tiṣṭhati śaṅkaraḥ* | *agrabhāge sthito brahmā kastaṃ jagati nārcayet* || 20 || Tr. Who in the world would not worship it at whose root resides Viṣṇu, in whose middle part stays Śiva, and at whose top lives Brahmā? (*Padma Purana* 1.58.20)

^{xcviii} अश्वत्थे चरणं दत्त्वा ब्रह्महत्या प्रजायते । निष्कारणं संकुथित्वा नरके पच्यते ध्रुवम् ॥ ४० ॥ *aśvatthe caraṇam dattvā brahmahatyā prajāyate* | *niṣkāraṇam saṅkuthitvā narake pacyate dhruvam* || 40 || 40. If anyone places his foot on an Aśvattha, he incurs the sin of Brāhmaṇa-slaughter. If, without any reason, it is cut or trimmed, one is certainly cooked (tortured) in Naraka. (*Skanda Purana* 6.1.247.40)

^{xcix} अश्वत्थरोपणं कृत्वा जलाशयसमीपतः । यत्फलं लभते मर्त्यो न तत्क्रतुशतैरपि ॥ ५ ॥ *asvattharopanam kṛtvā jalāśayasamīpataḥ | yatphalam labhate martyo na tatkratuśatairapi || 5 ||* Tr. A man does not obtain that fruit even by hundreds of sacrifices which he gets by planting an Asvattha (fig) tree on the bank of a pond. (*Padam Purana* 1.58.5)

^c “One who plants even a single asvattha, wherever it may be, as per the prescribed mode, goes to the abode of Hari.” (*Vrukshayurveda* 11).

^{ci} Chandrasekar SB, Bhanumathy M, Pawar AT, Somasundaram T. “Phytopharmacology of *Ficus religiosa*”. *Pharmacogn Rev.* 2010 Jul;4(8):195-9. doi: 10.4103/0973-7847.70918. PMID: 22228961; PMCID: PMC3249921

^{cii} “According to reports, at least half a dozen people were seen sleeping under a ‘peepal’ tree at Tilahar area in the district on Friday night.” Sanjay Pandey, “Desperate for Oxygen, People with Breathing Difficulties Sleep under Peepal Tree in UP’s Shahjahanpur”, *Deccan Herald*, 1 May 2021 <https://www.deccanherald.com/india/desperate-for-oxygen-people-with-breathing-difficulties-sleep-under-peepal-tree-in-ups-shahjahanpur-981262.html>. Also please see: <https://nelda.org.in/15-indian-trees-that-produce-the-most-oxygen/>.

^{ciii} “The bride will be married to the Mahua tree/ The groom will be married to the Mango/ How happy will the wedding be / The groom’s name on the mango leaf/ The bride’s name on the mahua leaf / How happy will the wedding be.” (Mahasveta Devi, *Etoa Munda Won the Battle*, Tr. Meenakshi Mukherjee. New Delhi: National Book Trust, p. 42)

^{civ} S. M. Edwardes, “Tree-Worship in India”, *Empire Forestry Journal*, Vol. 1, No. 1 (March 1922), pp. 78-86. www.jstor.org/stable/42594479.

^{cv} Martin, E. Osborn. *The Gods of India: A Brief Description of their History, Character & Worship*. London: M. Dent & Sons, Ltd., 1914.

^{cvi} पत्रं पुष्पं फलं मूलं शाखा त्वक्स्कंधसंज्ञितम् । तुलसी संभवं सर्वं पावनं मृत्तिकादिकम् ॥ २ ॥ *patraṃ puṣpaṃ phalaṃ mūlaṃ śākhā tvakṣkaṃdhasamjñitam | Tulsi sambhavaṃ sarvaṃ pāvanaṃ mṛttikādikam || 2 ||* Everything of Tulsi including leaves, flowers, fruits, roots, branches, skin, and stem is purifying, so also the clay (where) Tulsi-plant grows. (*Padam Purana* 6.23.2)

^{cvi} a) “In Praise of Tulsi”, *Padma Purana* (1.60.105-140), b) “Glorification of Tulsi”, *Padma Purana* (1.61.5-43), c) “The Greatness of Tulsi”, *Padma Purana* (4.22.2-42), d) “The Importance of Tulsi”, *Padma Purana* (6.23.1-46), e) “A Three-night Tulsi Vow”, *Padma Purana* (6.25.1-29), f) “The Greatness of Dhātṛī and Tulsi”, *Padma Purana* (6.105.1-29), g) “The Greatness of Tulsi and Dhātṛī”, *Padma Purana* (7.24.1-45).

^{cvi} लक्ष्मीं च तुलसीगताम् । *lakṣmīṃ ca tulasīgatām*

^{cix} तुलस्याः परिसरे यस्य काननं तिष्ठति द्विज । गृहस्य तीर्थरूपत्वान्नायाति यमकिंकराः ॥ २ ॥ *tulasyaḥ parisare yasya kānaṇaṃ tiṣṭhati dvija | grhasya tīrtharūpatvānnyāyānti yamakīṅkaraḥ || 2 ||* tulasyāḥ parisare yasya kānaṇaṃ tiṣṭhati dvija | grhasya tīrtharūpatvānnyāyānti yamakīṅkaraḥ || 2 || tulasyāḥ kānaṇaṃ vipra sarvapāpaharaṃ śubham | ropayānti narāḥ śreṣṭhāste na paśyānti bhāskarim || 3 || The servants of Yama do not come to his house in the vicinity of which there is a grove of Tulasī, due to the house having the nature of a holy place, O brāhmaṇa. O brāhmaṇa, the Tulasī-grove is auspicious and removes all sins. Those excellent men who plant it do not see the Sun’s son (i.e. Yama). (*Padma Purana* 4.22.2-3) तुलसीकाननं राजन्गृहे यस्यावतिष्ठते । तद्गृहं तीर्थरूपं तु नायाति यमकिंकराः ॥ ९ ॥ *tulasīkānaṇaṃ rājāngrhe yasyāvatiṣṭhate | tadgrhaṃ tīrtharūpaṃ tu nāyānti yamakīṅkaraḥ || 9 ||* O king, the house of him in whose house stands a Tulasī-grove, is of the nature of a holy place. Yama’s servants do not come (there). (*Padma Purana* 6.105.9)

^{cx} लक्ष्म्याः स्तनम् उत्पन्नं महादेवस्य च प्रियम् । बिल्ववृक्षं प्रयच्छमि एकबिल्वं शिवार्पणम् ॥ १६ ॥ (*Sri Bilva Shtakam* 6)

^{cx} महादेवस्वरूपोयं बिल्वो देवैरपि स्तुतिः । यथाकथंचिदेतस्य महिमा जायते कथम् २२ । *mahādevasvarūpoyaṃ bilvo devairapi stutiḥ | yathākathāṃcidetasya mahimā jāyate katham || 22 ||* This Bilva is the symbol of Śiva. It is adored even by the Gods. It is difficult to understand its greatness. It can only be known to a certain extent. (*The Shiva Purana* 1.22.22)

^{cxii} महान्वै भद्रो बिल्वो महान्भद्र उदुम्बरः । *Mahan-vai bhadro bilvo. Mahanbhadrā udumbarah (Atharvaveda* 20.136.15) The great one is good and kind for the social order, beneficent like a bilva tree, abundant and generous like the udumbara tree.

^{cxiii} *yastu samropayedbilvam sankara pritikarakam tatkuleapi sada laksmih samtis-etputrapautriki (Vrikshayurveda* 1.10)

^{cxiv} *Girayas-Te Parvataa Himavanto-[A]rannyam Te Prthivi Syonam-Astu |*

^{cxv} आदौ सर्वं वृक्षमयं पूर्वं विश्वमजायत ॥ २१ ॥ एते वृक्षा महाश्रेष्ठाः सर्वे देवांशसंभवाः । एतेषां स्पर्शनादेव सर्वपापैः प्रमुच्यते ॥ २२ ॥ *ādau sarvaṃ vṛkṣamayam pūrvaṃ viśvamajāyata || 21 || ete vṛkṣā mahāśreṣṭhāḥ sarve devāṃśasambhavāḥ | eteṣāṃ sparśanādeva sarvapāpaiḥ pramucyate || 22 || (Skanda Purana* 6.1.247.21-22)

^{cxvi} वन्येषु यादृशी प्रीतिवर्तते परमेशितुः ॥ उत्तमेष्वपि नास्येव तादृशे ग्रामजेष्वपि ॥ २९ ॥ (*Shiva Gita* 1:29)

<https://www.transliterator.org/pages/z80218205957/view>

^{cxvii} Four stages of human life based on natural human needs and drives.

^{cxviii} *vānaprasthayatīnāṅca dharmam vakṣye’dhunā śṛṇu |/jaṭitvamagnihotritvaṃ bhūsayājīnadhāraṇam || 1 ||/ vane vāsaḥ payomūlanivāraphalavṛttitā |/pratigrahanivṛttiśca trihṣnānaṃ brahmacāritā || 2 ||*The one in vānaprastha stage should have matted hair, worship fire, sleep on the ground and wear the hide of an antelope. He should live in the forest. He should maintain his life with milk, roots, nivāra (rice growing uncultivated) and fruits. He should not take alms. He

should bathe thrice a day. He should observe celibacy. (*Agni Purana* 160: 1-2)
<https://www.wisdomlib.org/hinduism/book/the-agni-purana/d/doc1083390.html>

^{cxix} अरण्ये भवम् आरण्यकम् | arenya bhavam aranyakam That which happens in a forest is aranyakm. Sayana in the *Taittiriya Aranyaka* explains: *Aranyadhyayanad-etad –aranyakam-itiryate*: the *Aranyaka* texts are so-called because ‘they were works to be read in the forest’ in contradistinction to the regular *Brahmanas*, which were to be read in the village.

^{cxix} आञ्जनगन्धिं सुरभिं बहवन्नामकृषीवलाम् । प्राहं मृगाणां मातरमरण्यानिमशंसिषम् ॥ āñjanagandhiṃ surabhiṃ bahvannām akṛṣīvalām | prāham mṛgāṇām mātaram aranyānim aśamsiṣam || Tr.: “I praise the musk-scented, fragrant, fertile, uncultivated *Aranyāni*, the mother of wild animals.” (*Rig Veda* 10.146) www.wisdomlib.org/hinduism/book/rig-veda-english-translation/d/doc840214.html

^{cxix} *The Varaha Purana*, Part 2, English Tr. Delhi: Motilal Banarasi Das, 1960, p. 472.

^{cxix} <https://www.oneearth.org/reforestation-hero-jadav-payeng/>

^{cxix} <https://www.britannica.com/topic/Chipko-movement>

^{cxix} भुङ्क्ते भुक्त्वा पुनः कुर्यान्नृपो वाथ सदीश्वरः । स्वर्गं भोग्यं ततो राज्यं कल्याणं मंगलं शुभम् ॥ ३३ ॥ bhukṣte bhuktvā punaḥ kuryānṛpo vātha sadīśvaraḥ | svargaṃ bhogyam tato rājyam kalyāṇam maṅgalaṃ śubham || 33 || आरोग्यं शौर्यसंपन्नमारामादेव जायते । फलानि यस्य खादन्ति जंतवोथ सहस्रशः ॥ ३४ ॥ ārogyam śauryasampannamāramādeva jāyate | phalāni yasya khādanti jantavotha sahasraśaḥ || 34 || आश्रिता विहगाः कीटाः पतगाः शलभादयः । छायाश्रिताश्च ये सत्वास्तत्संख्याताः पृथग्जनाः ॥ ३५ ॥ āśritā vihagāḥ kītāḥ patagāḥ śalabhādayaḥ | chāyāśritāśca ye satvāstatsamkhyātāḥ pṛthagjanāḥ || 35 || Tr. 33b-35. Enjoyable heaven, happy, lucky, auspicious kingdom, good health endowed with heroism come from (the construction of) a garden, the fruit (of the trees) of which are eaten by thousands of beings, birds, insects, or moths etc. that resort to them, or beings resorting to their shadows and other persons equalling that number. (*Padma Purana* 1.58.33b-35). www.wisdomlib.org/hinduism/book/the-padma-purana/d/doc364181.html.

^{cxix} *Navadhanya* is a healthy mix of cereals, lentils, oilseeds that are rich in vitamins, minerals, protein, fats, and carbohydrates; they enhance digestion process and improve immunity besides having spiritual and religious importance. The following is the list of *Navadhanya* related with different *grihas*: Wheat: offered to Sun, Rice: offered to Moon, Toor dal: offered to Mars, Chickpeas: offered to Jupiter, Moong beans: offered to Mercury, White beans: offered to Venus, Black sesame: offered to Saturn, Indian black lentil: offered to Rahu, and Horse gram: offered to Ketu.

^{cxix} The English word planet gives a different connotation as in the Vedic astrology the following nine are the planets, many of which are not planets in terms of modern geography: Surya, Chandra, Mangala, Budha, Brihaspati, Shukra, Shani, Rahu, and Ketu. The last two are considered to be the demon-planets and the rest seven god-planets.

^{cxix} <https://www.youtube.com/shorts/POzOBxz2x5w>.

^{cxix} Justice K.S. Radhakrishnan and Justice Pinaki Chandra Ghose, Civil Appeal No. 5387 of 2014, Animal Welfare Board of India v. A. Nagaraj and Ors. (@ Special Leave Petition (Civil) No.11686 of 2007), <https://indiankanoon.org/doc/88304811/>.

^{cxix} Hon’ble Mr. Justice Rajiv Sharma Hon’ble Mr. Justice Harinder Singh Sidhu CWP No.18253 of 2009 & other connected petitions in the High Court of Punjab and Haryana at Chandigarh, 02.03.2020 ordered: “We, by invoking our parens patriae jurisdiction, declare Sukhna Lake as legal entity/legal person/juristic person/ juridicial person/moral person/artificial person for its survival, preservation and conservation having distinct persona with corresponding rights, duties and liabilities of a living person. All the citizens of U.T, Chandigarh are hereby declared as loco parentis as the human face to save Sukhna Lake from extinction.” (<https://indiankanoon.org/doc/87436538/>)

^{cxix} Judgment dated 19.4.2022 in the case of A Periyakaruppan v The Principal Secretary & Anr (Writ Petition (Mandamus) Case No. 18636 of 2013) and connected petitions (Writ Petition (Mandamus) Case No. 3070 of 2020) of the Madurai Bench of the High Court of Madras. (www.casemine.com/judgement/in/625ef382b50db9cc5192cd20)

^{cxix} Ibid.

REFERENCES

Joshi, P. (2022) How to plant trees? *Sanatan sanstha-path to happiness* <https://www.sanatan.org/en/a/128454.html>.

Mehra, G. (2022) *Vrikshayurveda – The Ancient Indian Science of Plant Life*, (<https://www.news18.com/news/opinion/vrikshayurveda-the-ancient-indian-science-of-plant-life-5061877.html>)

Swaminathan,C. and Nandhakumar M.R.(2021) *Vrikshayurvedic Farming: The Traditional Indian Agriculture*, Daya Publishing House, New Delhi.

Letter from Chief Seattle to President Pierce, (1885)
<https://www.csun.edu/~vcpsy00h/seattle.htm>

Susheel Kumar Sharma's The Door Is Half Open. New Delhi: Adhyayan Publishers & Distributors. (2012) pp. 141,
https://www.academia.edu/1476813/THE_DOOR_IS_HALF_OPEN

Louise Fowler-Smith, Sacred Trees of India: Adornment and Adoration as an Alternative to the Commodification of Nature, (2020) <https://www.cambridgescholars.com/product/978-1-5275-8833-2>

Right to Life (Article 21) – the constitution of India, (2014, May) the Supreme Court of India,
<https://rshrc.rajasthan.gov.in/writereaddata/Publications/202208290143461701052HUMAN-RIGHTS-ARTICLE-21.pdf>

Order of the Uttarakhand High Court regarding glaciers, rivers, streams, forests, grasslands having the status of a legal person (living entity) in the State of Uttarakhand, (2017, Mar)
<https://highcourtofuttarakhand.gov.in/contents/view/1/515/>

Lalit Miglani vs State Of Uttarakhand And Others (2017,Mar)
<https://indiankanoon.org/doc/92201770/>