

*Conclusion*

The research questions are discussed in the Introduction part. Several questions are discussed there. The research questions of the present study are to find out ecological awareness of the people reflected in texts like Vedas, Upanishads, Ramayana, Mahabharata and Bhagavad Gita. The in-depth study of all the texts reveals many issues which are also important to introspect. These issues like the different forces present in the earth mentioned in *Rig Veda*, the idea of unifying principle mentioned in Upanishads, the geographical aspects of the *Ramayana*, the social perspective of the epic *Mahabharata*, and the ethical aspect of *Bhagavad Gita*. All the study of the different texts are full of the ecological awareness of the people of the brahminical period. The study is the effort to find out some directions in form of suggestions for proper understanding the environment and ecology.

In past time several civilization have come in existence on the earth. Their attitude towards the environment is almost same and difference is only mode of application. Every civilization gives nature and their components a high value and standard than anything else. Their attitude towards environment makes the environmental components like water, air, fire, etc. as the part and parcel of life and religion of human being. This indicates that they feel some sort of interconnectedness with environment. Moreover their feeling proves that they never consider that the supreme right of human beings in the nature, rather consider as one of the sentient being in the whole biotic world. In Modern science ecology is evolved to study the interactions of the living organism with the non-living materials. This study is also placed human being as one of the component in biotic world. The 'Deep Ecology' and 'Human Ecology' proclaim the interconnectedness of human being with whole environment and identification oneself with other components of the environment. First factor helps to develop the feeling of oneness with environment and second one develops the feeling that environment and its components have higher value than anything or individual. This study gives the idea that the nature or environment consciousness is same in all age or era whether it is past or present. People in every age are widely conversant with different factors of environment and its importance in the field of development and propagation of life process.

The ancient literature gives the deep insight regarding the *Pañcamahābhūtas*. The *Pañcamahābhūtas* play a vital role in the thought and ideas of ancient people and these are reflected in the ancient Indian literatures. The idea of the people of Vedic

time gradually changes and gives different dimension. They had established the unified substratum upon which all varied modifications play their roles as different material existence. In Vedas water is considered material cause of the world. It is described as the source of happiness, vigor, strength of all living beings. It has cleansing effect and it has also medicinal values as it removes the illness. In Brahmins it is described as the foundation of all beings. So people throw the body into water after death in the idea that after death gross elements goes to the source. *Agni* is described in Vedic literatures as the omnipresent being. It is all knowing of the created existence – जातवेद (who knows all beings). It is the giver of energy of all beings. It controls the ecological cycle of the matter and energy by converting the gross matter into its subtle form. So agni is the medium through the material world is connected with the energy form. The sacrificial fire in the Brahmans is sacred and it is the medium through which the subject of performing the sacrifice becomes identified with the sacrificial fire. In Vedic texts air is described as the life of all beings. It pervades the all beings and without which all being cease to exist. It has healing effect and medicinal effect. In all Vedas Ether is not mentioned as any element but in the Brahmans it is mentioned as first created element. In Sanhitas and Brahmans, Earth is considered as Mother and all being are born out of Mother Earth. Earth sustains all living beings and maintains the ecological balance. In Brahmans Earth is considered as divine Mother and she holds all *Bhutas*, animate and inanimate beings. In Upanishads Vedic deities are insignificant and the five gross elements are considered as mere elements. Here the ultimate reality is the basis of all activities of the elements. In Upanishads no one is superior or greater. All are created, guided and governed by the one Ultimate Reality which is called Brahman. In the Brihadarnyakopnishad Upanishad it is mentioned –

यः सर्वेषु भूतेषु तिष्ठन्सर्वेभ्यो भूतेभ्योऽन्तरो यगं सर्वाणि भूतानि न विदुर्यस्य  
सर्वाणि भूतानि शरीरं यः सर्वाणि भूतान्यन्तरो यमयत्येष त आत्माऽन्तर्याम्यमृत  
इत्यधिभूतमथाध्यात्मम् ॥ (Brihadarnyakopnishad Upanishad, III, 7.15)

Yajnavalkya said: "He who inhabits all beings, yet is within all beings, whom no beings know, whose body all beings are and who controls all beings from within—He is your Self, the Inner Controller, the Immortal."

So in Vedic period people are great concern about the five elements and separately they attach the importance upon each element. Gradually their understanding becomes too much introspective and tries to find a governing principle which can satisfy their mind and effort. Ultimately they have come to the conclusion of the one Supreme Principle. From the very beginning they have established the interrelated principle but this principle was confined to gross elements separately. But in Upanishadic time they have found out the unique principle of the interrelatedness where all are interrelated into the unique principle. So the important concept of interrelationship which is the basis of the Ecology is very much present in the Vedic and Upanishadic period through the continuous change of the philosophical outlook of the ancient people.

The Vedas are the oldest book in Indian civilization. Among all Vedas Rig Veda is very old. People in the vedic times feel oneness with the surrounding nature. This oneness ultimately gives the idea of interconnected principle i.e. all are connected through one principle. Their connectedness with nature is expressed by various hymns of Vedas—we solicit the happiness afforded by the hills, the rivers, the sun.... Rgveda. VIII; 31, 10. Vedic people live with nature with meditation and introspection. Ultimate they solve the doubts through their ingenious wisdom. They consciously feel to keep these treasure of knowledge intact form and develops an eco-friendly teaching-learning process. They teach their successors in two ways firstly by citing examples of the surrounding nature and secondly by chanting or repeating the mantras with correct rhythm and appropriate pronunciation. People are very clever to utilize the nature for their well beings. Use of fire and its use to extract the minerals like iron from the ore are known to them. 'By the rta the Angirasa have broken the rock and cleft it asunder'..... Rgveda. IV; 3, 11. They use the plants and animals for their needs. One example is the use of soma juice as invigorating liquor for strengthening the body and mind. They have developed the ethnological, scientific and technological knowledge from taking lesson of the surrounding nature. Vedic people know the use of fire to improve the taste and nutrition value of the food. They know the process to keep the food items for a long time. The fermentation is the process by which milk, fruit juice etc. are converted to more stable food items i.e. curds, cheese, wine, etc. Moreover people are sometime could not consume the pure food items. But the fermentation process is the digestion by the microbes makes the food items healthier for body. People know the biological cycle present on the earth in

vedic time. They know the water cycle present on the earth, Earth as the provider and holding substance of all beings, Air dynamics as the principle of life flow, fire as thermodynamic principle and latter in Atharvaveda Ether as the unified principle of all sorts of forces. People regard plants and plant world as living entity. So they can easily personify them as different deities helpful for human beings. They pay love and respect to all plants like some close relative of any human being. These give all sorts of hymns where plants are depicted as their benefactors. Concept of sacred forest is generated from this idea. Where all living kingdom are staying with cooperative, symbiosis and participative zeal. In vedic time peoples are very much feeling for the other animals in surroundings. They easily understand their useful role in human civilization. One of the timid and gentle animal is cow which is attracted to much attention to the vedic people. They understand the utilities of cow in a community living pattern. So they described cow as powerful deity which can satisfy all types of wishes of the human beings.

The Upanishads are discussing the unifying principle which unites all forces on the earth. The Upanishad indicates that the Earth is spherical in nature and it has front face and the backward face. When one part of Earth is illumined by sun rays, the other part is suffering from it. So one part is called day and other part is called night. So all living beings are interrelated to Sun and sun is also related to all beings. This is an important proposition in the Upanishad. There are ten types of directions are mentioned in the Upanishads.

Three types of atmosphere are present on the earth. First one is Fire Sphere, middle one is Lunar sphere and the last one is Solar sphere. The Upanishads describe the unifying principle under which all creation, preservation and dissolution take place. The different plants are described in the texts. The texts also describe the plants as the life-cycle of human body to indicate the presence of life in the plants. People are completely aware of the importance of the animal world. Different classification of the animals are present in the texts.

The Ecological Integrated vision is reflected in the all upanishadic texts. Ecological integrated vision is reflected through the very common symbol in the Upanishads called *om* (ॐ). The point dot in the symbol *om* represents the all Extra-solar Body in the whole universe. It is comparable with the fourth stage of the consciousness. The

curve separator which separates the dot from the main symbol is called space of the universe. It is comparable with the *maya* due to its nature of operation. Below the curved separator another curve which is slightly linked with main symbol represents the sun. It is comparable with the third stage of the consciousness. The upper part of the symbol represents the Earth portion except the directions, animal world and plant worlds. As earth is the cause of the expression of plant, animal and other living world. It is also the basis of the directions. It is comparable with second stage of the consciousness. The annular circular portion of the symbol represents the different directions. The lower portion of the symbol represents the Animal World and Plant World. These two are comparable with the first stage of the consciousness due their similar mode of operation.

The all luminaries and Extra-Solar bodies are present above the Earth surface and it is depicted as dot present top most position of the symbol. It is present in the space and also separated by the space. As other luminaries are beyond the reach of the solar system, they are comparable with the fourth stage of the above description.

The lower curve below the dot represents the space where all Extra-solar bodies, sun and earth are present. So it more-or-less touches all section of the symbol which represents different parameter of the universe. It is comparable with veil of illusion of the above description due the fact that space of the whole universe is mostly unknown to man.

The another curve which represents the Sun links slightly to the part of the symbol. We know that Sun is the nearest to the Earth and Earth is nothing but the one member of the Solar family. It is comparable with Third Stage ( *Prajna* ) of the above description. Ordinarily in sun life is not possible but it is the cause of manifestation of the life on earth.

The upper portion of the symbol is the earth devoid of the Plant world, Animal world and directions. This represents the water bodies and the solid mass having the rich source of the different minerals. In Upanishads there are ample reference of different types of the minerals. *Rakata* ( Silver ) is mentioned in Brihadaranyakopanishad and Chandagyopanishad. Gold is represented in different names i.e. *Kancana*, *Hiranya*, *Sauvarna*, *Hema*, *Kanaka*, *Svarna*, etc. in different Upanishads - Brihadaranyakopanishad, Chandagyopanishad, and other Upanishads. *Tamra* ( Copper ), *Sisa* ( Lead ), *Kansya* ( Bronze ), etc. are mentioned in Upanishads. It is comparable with Second Stage ( *Taijasa* ) of the above description. In this portion of earth expression of life is subtle and in form of

microbial world. Moreover it is the cause and basis of the expression of the plant world, animal world and direction.

The middle annular space represents the different directions. Directions give the idea of the three dimensional positioning of any body. We can relate the position of any object with the earth easily in the space through the proper knowledge of directions.

Lower half of the symbol denotes two world – Plant and Animal world. It is comparable with the First Stage (Vaishwanara) of the above description. In this portion of the earth the expression of the life is fully manifested in different forms through the plant and animal world. In waking stage mind is fully active and in this plant and animal world life is fully manifested through different species.

Through this symbol Upanishadic people want to establish an integrated ecological vision of the universe. So any disruption of link in the universe leads to utter ecological imbalance and crisis.

ओङ्कारं पादशो विद्यात्पादा मात्रा न संशयः ।

ओङ्कारं पादशो ज्ञात्वा न किञ्चिदपि चिन्तयेत् ॥

One should know *Om* ( ॐ ), quarter by quarter; there is no doubt that the quarters are the letters.

The Ramayana is epic which describes the different places with vivid description of the existing ecosystem present on those places. All events of Ramayana take place in the terrestrial ecosystem of the region. The vivid scenery in Ramayana indicates the presence of water body and its various existence. In the deep forest water present in the lake and pool are full of aquatic plants like lotus and water lilies of various colour. The water bodies in forest are frequently found with the bird like crane. The great battle in the Ramayana is the symbolic representation of the raining phenomenon which is the main cause for vegetation or life process on the earth.

From the description of the great battle in Ramayana some ecological relevance can be drawn. Sita is the symbol of earth or the Goddess of agriculture or vitality of the forest on the earth. Sita is captivated by Ravana. Ravana as described in Ramayana has ten heads. In day time and Summer season sun is so scorching that it takes all the water from the earth and sends it to all directions i.e. ten directions. Water is the vitality of the life system on the earth. when water goes out from it, the earth loses

all its vitality and it is described as the captivity of Sita by Ravana. Rakshasas are the symbol of cloud. As all rakshasas are the brain child of Ravana. So cloud comes from all directions. Rama is described as Indra and Soma. Indra, the God of fighting unites all the clouds coming from different directions through its weapon thunderbolt. This is the fighting of Rama with all rakshasas. The mountains are described as monkeys. All clouds are obstructed on the mountains and thereby condense into rain drops. In this way all monkeys i.e. the mountains help the Rama. Wind (Hanuman) is carrying the cloud from all directions. The space(Lakshmana) is vital for union of all clouds. In this way both Hanuman and Lakshmana helps the mission of Rama. Moreover, without the wind power the scattered clouds from different directions could not accumulate in a particular point. So Hanumana is described as the chief servant of Rama. Space is pervaded everywhere. In space earth, moon, sun, etc. all are present. Space is part and parcel of all the existing entities. In environment if somewhere any vacant space is generated in the air the nearby air rushes vehemently from all directions to fill up the vacant space. In course of its journey it takes all the cloud along with it and cloud ultimately unites each other at that point. All take place in the space. So Lakshmana is called the brother of Rama.

It is not directly mention about the weather and weather-forecasting system in Ramayana but from the close description of the nature, season and natural habitants in Ramayana it is clear that the people in the period of Ramayana are very much interested about this subject. Methods of weather-forecast based on the observations of speed and direction of the wind. Methods of weather-forecasting based on the observations of the changes in trees and creepers etc. Methods of weather-forecasting based on the observations of the activities of some mammals. Birds, reptiles, amphibians, fish and insects. Methods of weather-forecasting based on the observations of some physical changes in the atmosphere appearing to be around the sun and moon viz. halo etc. Methods of weather-forecasting based on the study of location, movements, conjunction etc. of the planets and stars. Methods of weather-forecasting based on the study of the cloud forms and other sky features such as lighting, hurricane, thunder, rainbow etc .

The text describes different forests with their vivid descriptions. The forests in this age are full of tropical and subtropical vegetations. So the Ramayana epic has attached a great importance upon the afforestation as these are used for earning revenue. Vegetation and plantation science give rise to many industries related to the



agricultural products, stocking and processing purpose. The texts of Ramayana reveals the many uses of the forests and its related item.

Forests are used as pasturelands. Forest dwellers and other people use the forest for their required fuels. Many tools and household items are made of woods like sala, audumbara, bamboo, tala, deodara, sandal, etc. The items are like houses, carts, chariots, cots, wooden seat, wooden sandals, combs, umbrellas, palanquins, boats, ships, various musical instruments like vina, vipanci, vallaki, mridanga, muraja, pataha, panava, dundubhi, dindima, etc. are made of wood. The trees like biva, khadira, palasa, deodara, plaksa, etc. are very important from the religious rites as these are used for the sacrifice purpose. Various powders, scents, cosmetics and unguents are prepared from forest resource. Medicinal plants and herbs are very common for besmearing the body and oraal and other medication. Honey is the important food item in the Ramayanic age. It is found abundant in forest and is also used for preparation of various kinds of liquors (madhvika). Fruits and roots are the important food items of the forest dweller and ascetics and these are plenty in the different forests. Moreover these fruits are also used for making condiments and drinks. Hermits used to put on garments like valkalavastra made of the barks of the trees.

The Ramayana mentions the origin of different kinds of animals and birds in a mythological way. The major classes of the society are engaged in preservation and rearing of the cattle. Animal husbandry is clearly indicated by several pastoral villages. The science of cattle-breeding is well developed in *Ramayanic* age.

Many ecological ideas are scattered in Mahabharata. All the rivers mentioned in Mahabharata are not possible to identify. But some major rivers are being identified. The author of the Mahabharata only mentions the name of the rivers in northern India and its vicinity region. But it has hardly mentioned the rivers in south India and the south-east Asia like Burma, Thailand, Cambodia, etc. The book gives idea that the people in the epic are aware of the knowledge of the Jambudvipa and the related continents but they have little knowledge about the geography and ecology of the southern part of the land. The description of the rivers is fully emotional rather than scientific approach. Except few cases it is treated as informative basis. All rivers originate in the northern part of India either from the glaciers or lake and throughout the year all have water. The main and historic cities and places are located on the bank of these rivers. This indicates that people develop their culture and civilization

in the river centric manner so that they can safely identify themselves with vast ecosystem through this dynamic component of the ecosystem. The river-centric civilization always loves and prefers the river for further development. The great war of Mahabharata is mainly due to get possession of the land on the bank of a great river. So the author in Mahabharata meticulously mentions all types of rivers in northern part. This may be the cause of the author of Mahabharata not to mention elaborately the rivers of southern India. As we see the rivers in southern regions could not carry ample water throughout the year. All these are not originated from the glaciers or lake which supply ample water throughout the year.

The people of the Mahabharata understand the importance of the mountains. The whole earth is fertilized by the mountains is known in Mahabharata. In Mahabharata mountains have been classified as two groups i.e. Varshaparvata and Kulparvata. The people in the age of Mahabharata are more familiar about the different mountains of the Himalaya. But little is mentioned about south region of India main land. In Mahabharata there is no mentioning of mountains in Ceylon. The classification of Varsa and Kula parvata indicates the geographical boundaries of the different main lands and the fertility of any land. This process of classification gives the idea of their topographic knowledge of different land and the characteristics. In Mahabharata we see that Pandavas have visited many mountains where the natural beauty with different flora and fauna is clearly mentioned. This description indicates that the people in Mahabharata are aware of the ecological aspect of the earth specially the importance of the mountain for maintaining the biodiversity of the earth. In Mahabharata it is mentioned that Pandavas could not proceed further the high peaks where the existence of ecosystem is possible. The description of the journey of Pandavas in Mahabharata reveals the triad model of the mountain, ecosystem and human being. Here ecosystem includes all plants, animals and natural recourse. Human being is directly related with the mountain and ecological parameter, whereas mountain and ecosystem are dependent upon each other for their existence.

In Mahabharata several forests are being described. All are full of natural resources and minerals. All are vividly described in the text but at present all names and location are changed due to change in climate and change in river flow. So identification of all forests in present context is very difficult. The Mahabharata gives a good collection of plants and trees which have botanical values and have great importance in human civilization.

In the several descriptions of the animals are mentioned with classification. In Mahabharata different types of horses and their characteristics are described clearly. In India several places are located for availability of good varieties of horses. Horses of Balhikadesa are known for their limbs. The horses of the Sindhudesa have been described as the faster than other varieties. In the Mahabharata it is mentioned that a subject is known as Aswavidya is present and the acharya or teacher is available to teach the subject is also available. One of the acharya known as Salihotra who is the author Salihotra-sastra. The teacher in this field has a good ideas about the nature and language of the horses. So they can easily understand the language of the horse and communicate with them. Nowadays we see similar thing in the horseman or trainer.

The Bhagavad Gita gives the idea of the code of living in the environment and the sustenance of ecological cycle. Through the attitude of sacrifice make a relation with different forces in the environment. Though sacrifice man not only makes all living beings as friend on earth but whole earth is his own part.

देवान् भावयतानेन ते देवा भावयन्तु वः ।

परसपरं भावयन्तः श्रेयः परम् अवाप्स्यथ ॥ (The Bhagavad Gita, 3.11)

Cherish the *Devas* with this, and may those *Devas* cherish you, thus cherishing one another, ye shall gain the highest good.

So man first serves the environment and its beings and then he thinks for himself. If he thinks only his personal being, he acts like a thief.

इष्टान् भोगान् हि वो देवा दास्यन्ते यज्ञभाविताः ।

तैर्दत्तान् अप्रदायैभ्यो यो भुङ्क्ते स्तेन एव सः ॥ (The Bhagavad Gita, 3.12)

The *Devas*, cherished by sacrifice, will give you desired-for objects. So he who enjoys objects given by the *Devas* without offering to them, is verily a thief.

Healthy life style indicates what man takes from the environment, he should at first offer to the environment and its components.

यज्ञशिष्टाशिनः सन्तो मुच्यन्ते सर्वकिल्बिषैः ।

भुञ्जते ते त्वघं पापा ये पचन्त्यात्मकारणात् ॥ (The Bhagavad Gita, 3.13)

The good, eating the remnants of sacrifice, are freed from all sins, but who cook food for themselves, those sinful ones eat sin.

Man should be aware of the relation with the environment, himself and his deed. Like any living being man takes the birth from food stuff. All food stuff is produce out of cloud and the consequent rain. The cloud is formed out of proper irradiation on the water body present in the earth surface. In the environment all do their allotted duties selflessly as an attitude of sacrifice. So man has to exert his quota in this process of sacrifice. All sacrifices originate from service attitude. This is the interrelation of man, environment and his deed.

अन्नाद्भवन्ति भूतानि पर्जन्याद् अन्न संभवः ।

यज्ञाद् भवति पर्जन्यो यज्ञः कर्मसमुद्भवः ॥ (The Bhagavad Gita, 3.14)

From food come forth beings, from rain food is produced, from Sacrifice arises rain and Sacrifice is born of Karma.

If man does not participate in the ecological cycle and only engages himself in selfish activity, he is doing the wrong deeds. So Man has to participate in the ecological cycle of nature.

एवं प्रवर्तितं चक्रं नानुवर्तयतीह यः ।

अघयुरिन्द्रियारामो मोघं पार्थ स जीवति ॥ (The Bhagavad Gita, 3.16)

He who here follows not the wheel thus set revolving, living in sin and satisfied in the senses, O Parthav – he lives in vain.

The above study depicts the six points *Honey Comb* model for understanding the ecological awareness depicted in different chapters.

The study of the ecological awareness is present in past, and present i.e. modern age. It gives the idea that same ecological awareness present in all ages in all civilization. The ecology is nothing but the study of the interaction between living beings and the environment has its relevance in all civilizations. So the ecology has a common relevance in all ages.

The study of Vedas gives the underlying forces which are responsible of different environmental phenomenon. So the study of the nature of the forces is essential for proper understanding of the ecology.

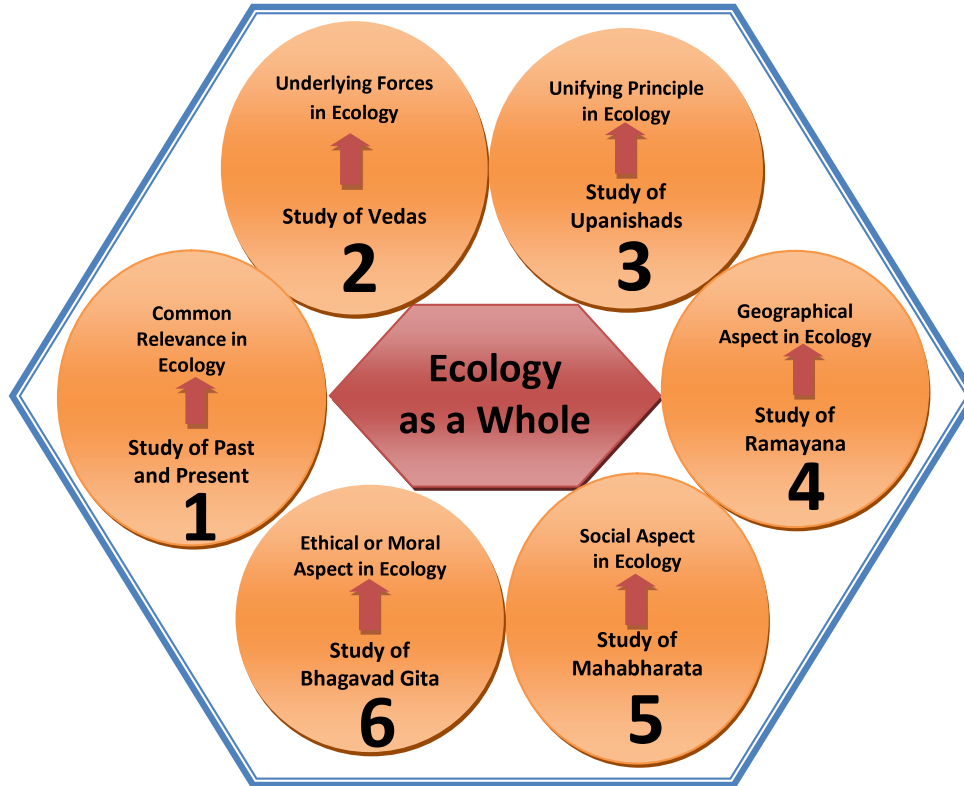
The study of the Upanishads gives the idea of the unifying principle under which the creation of all beings, sustenance and the ultimate dissolution take place. The unifying principle manifests the whole creation with proper differentiation.

The study of Ramayana gives the geographical aspects of the ecological study. The whole description of the forests, lands and habitations in the texts gives the clear geographical or positional idea of the said location.

The study of Mahabharata reveals the social importance of ecology. Mahabharata text has reference of growth and propagation of society. With growth of society the related problems which affect the ecological balance simultaneously develop. Mahabharata text describes some social and ecological problems. A number of social practices unique to Hinduism and spread across the sub-continent are first referenced in the Mahabharata and/or the Harivamsa<sup>1</sup>. In this sense Mahabharata has the social perspective of the different ecological descriptions which are happened in past time before the composition of the *Mahabharata* itself.

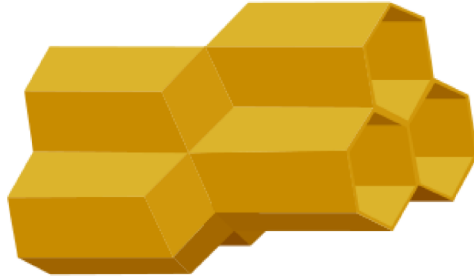
The study of *Bhagavad Gita* gives us the ethical or moral dictum regarding the ecological awareness. The whole ecosystem depends upon some ethical principles. So the ecological awareness will be complete when human being properly understand its ethical implication.

The following is the six-point *Honey Comb* model for proper understanding the ecology and the environmental phenomenon.



**Diagram-40: The six points Honey Comb model**

The diagram is an integrated model for six facet understanding of the ecology. In normal honey comb is made of hexagonal unit cells by wax. The bees produce one ounce wax after consuming eight ounce honey. So they are very economical regarding use of the wax for construction of the honey comb. The possible explanation of the hexagonal shape of the each unit cell in honey comb is due to - the hexagonal cell creates a partition with equal-sized cells, while minimizing the total perimeter of the cells. Thus, a hexagonal structure uses the least material to create a lattice of cells within a given volume. The shape of the cells is such that two opposing honeycomb layers nest into each other, with each face of the closed ends being shared by opposing cells<sup>2</sup>. The following is the picture of the three dimensional structure of the honey comb.



***Diagram-41: The three dimensional structure Honey Comb***

So the six-point *Honey Comb* model helps - a) To understand the ecology and its various implication in a better way in individual level, b) To apply the ecological awareness in collective level. If each individual conceives the six-point *Honey Comb* model idea and they form the aggregate, this aggregate will consider the ecology and the environment in more effective way.

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**Reference :**

<sup>1</sup> <http://mahabharataandecology.blogspot.in/> (Accessed on 10-03-2016 )

<sup>2</sup> <https://en.wikipedia.org/wiki/Honeycomb> (Accessed on 9-11-2015 )

# Figures

## SLIDE 19

Date of Birth of Lord Ram – 10 January 5114 BC – Positions of all Planets



Do not get baffled while looking at the slide. Just watch all the twelve zodiac constellations around the circle - the ecliptic - and see the position of the planets. Note that the time of observation is 12.30 p.m. when Cancer constellation was rising in the east. See that Mars in Capricorn was just under the horizon while Saturn was well below the horizon at that time.

23°N 81°E Jan 10, -5114 12:30 (GMT+5:30)

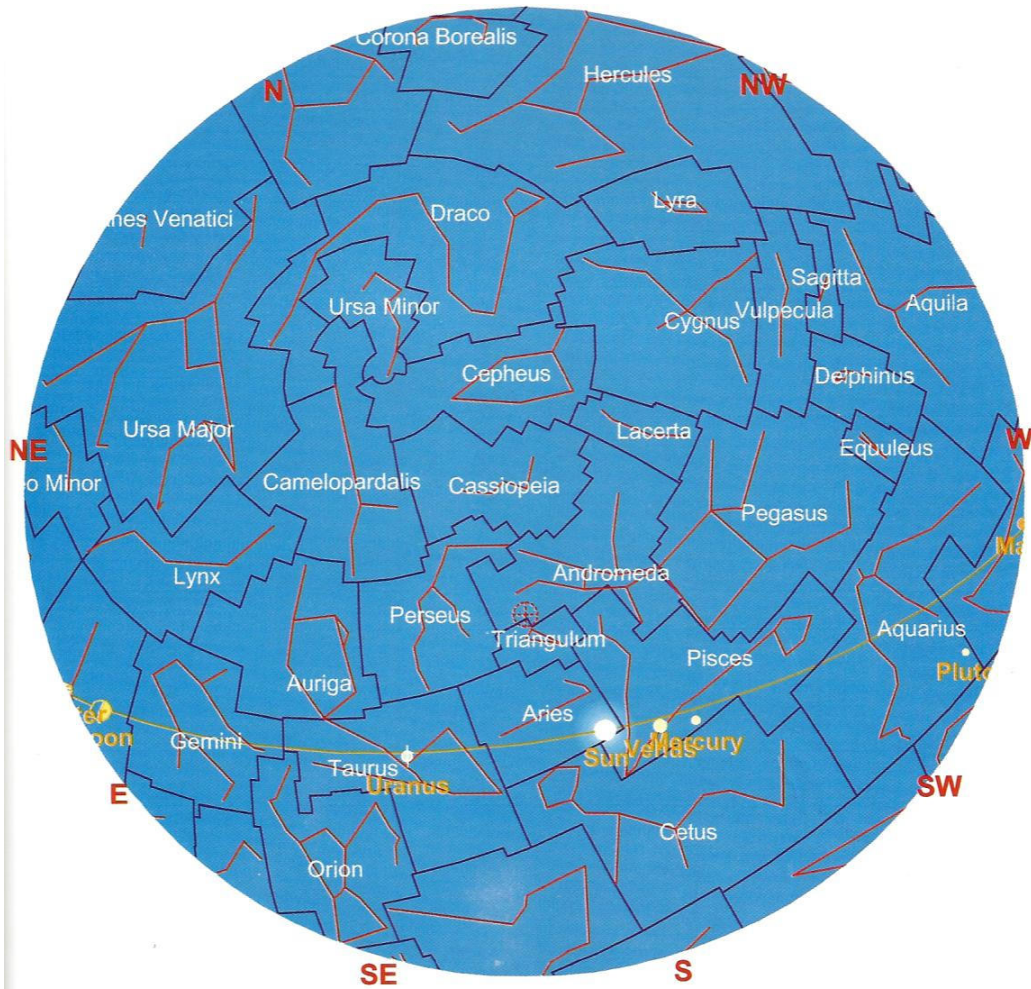
Printed by Planetarium

Figure-1



## SLIDE 21

The Time of the Birth of Lord Ram – Rising of Cancer Constellation and Jupiter in East



This slide helps in ascertaining the exact time of birth of Lord Ram. The Ramayana mentions that at the time of Lord Ram's birth, Jupiter was above horizon in Cancer zodiac. The sky view at 12.10 p.m. on the birthday of Lord Ram in this slide shows that Jupiter was not above the horizon till this time. Thus, Lord Ram should have been born after 12.10 p.m. Further, as Cancer rose only up to 1.00 p.m. that day, the time of the birth of Lord Ram cannot be beyond 1.00 p.m. Hence, we can conclude that Lord Ram was born between 12.10 p.m. and 1.00 p.m.

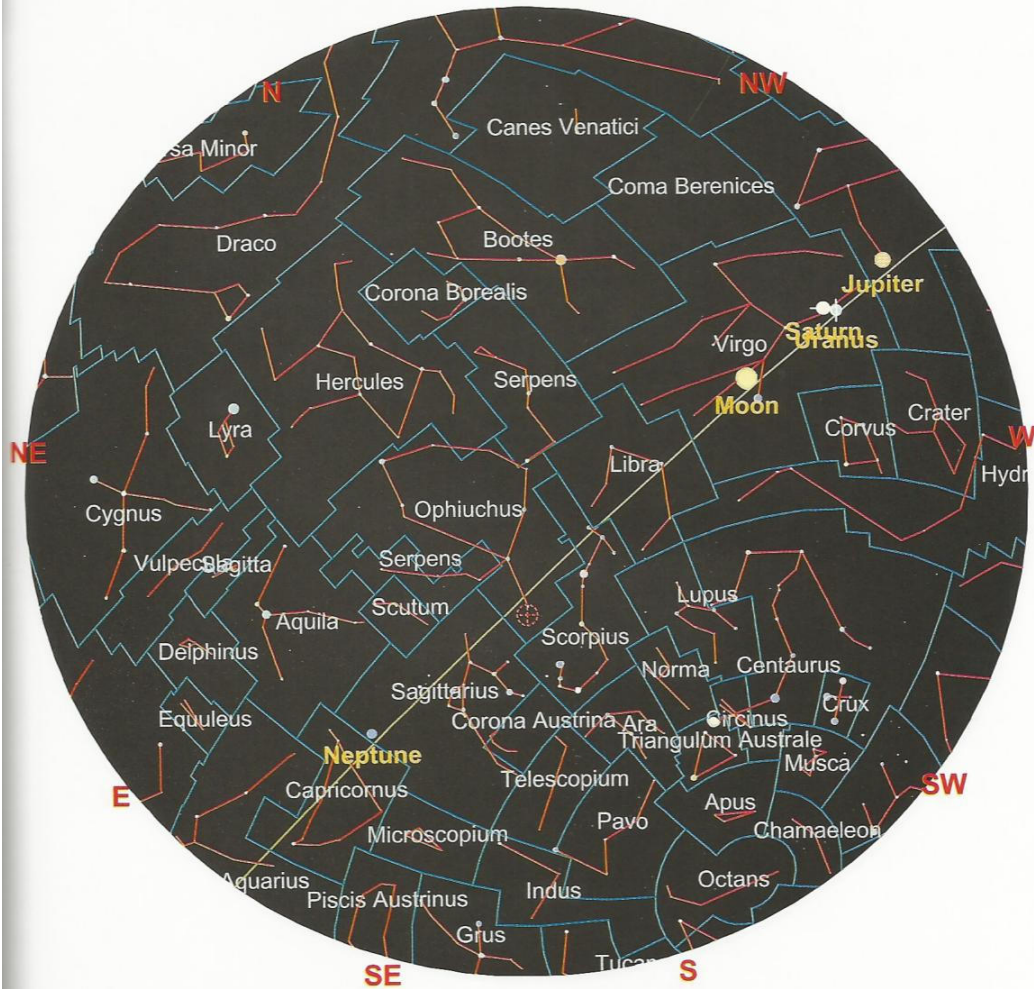
25°N 81°E Jan 10, -5114 12:10 (GMT+5:30)

Printed by Planetarium

Figure-2

## SLIDE 23

Full Moon Day after Twenty-five Years of the Birth of Lord Ram – 12<sup>th</sup> January  
5089 BC



This slide confirms that after twenty-five years of the birth of Lord Ram, the Chaitra month ended on 12 January 5089 BC. This gets illustrated from the observation that this was a full moon night and the moon was located near the Chitra nakshatra in Virgo constellation.

25°N 81°E Jan 12, -5089 03:00 (GMT+5:30)

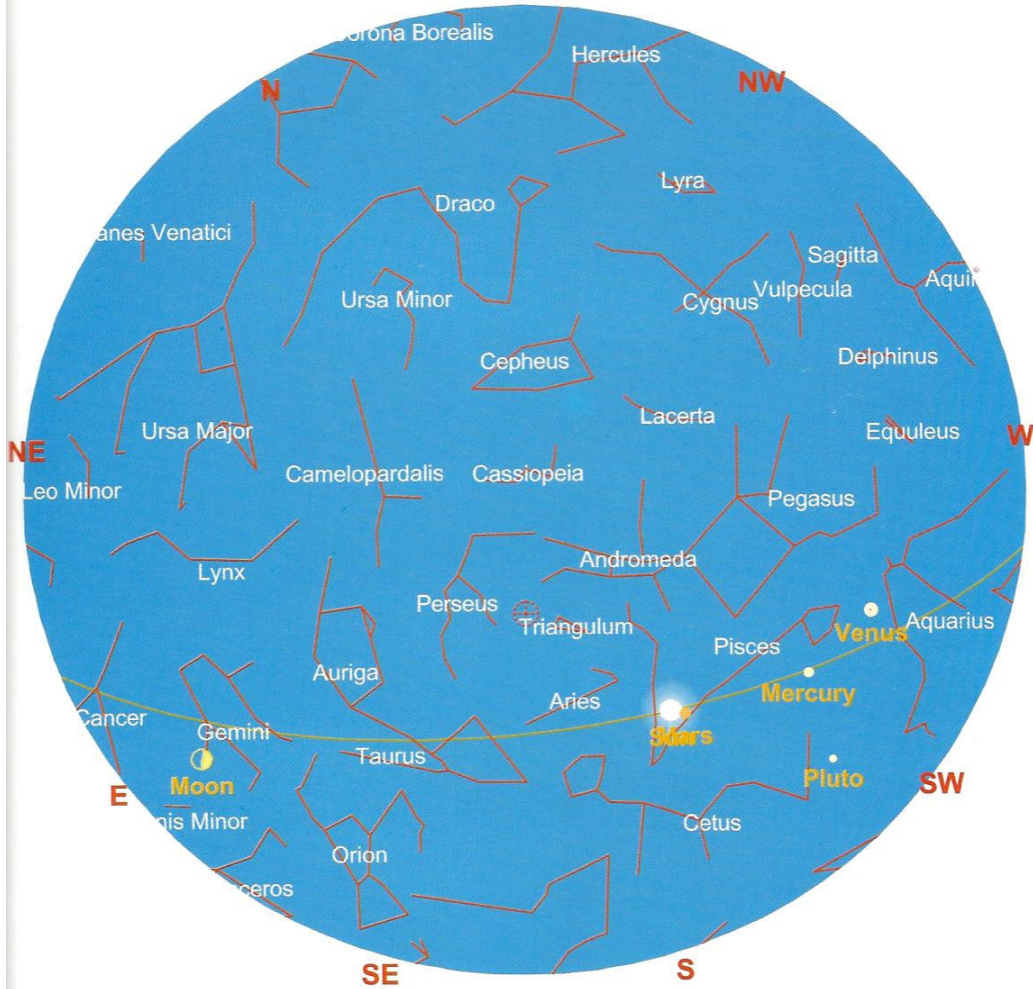
Printed by Planetarium

Figure-3



## SLIDE 25

The Position of the Sun and Mars on 4 January 5089 BC



King Dashrath mentioned to Lord Ram on 4 January 5089 BC that astrologers had told him that his own nakshatra had been surrounded by the malefic planets – sun, Mars and Rahu. This slide shows the position of the sun and Mars in the sky on 4 January 5089 BC. Note that both these planets were located together in Pisces constellation. The position of Rahu would be clear from the next slide.

25°N-81°E Jan 04, -5089 13:00 (GMT+5:30)

Printed by Planetarium

Figure-4

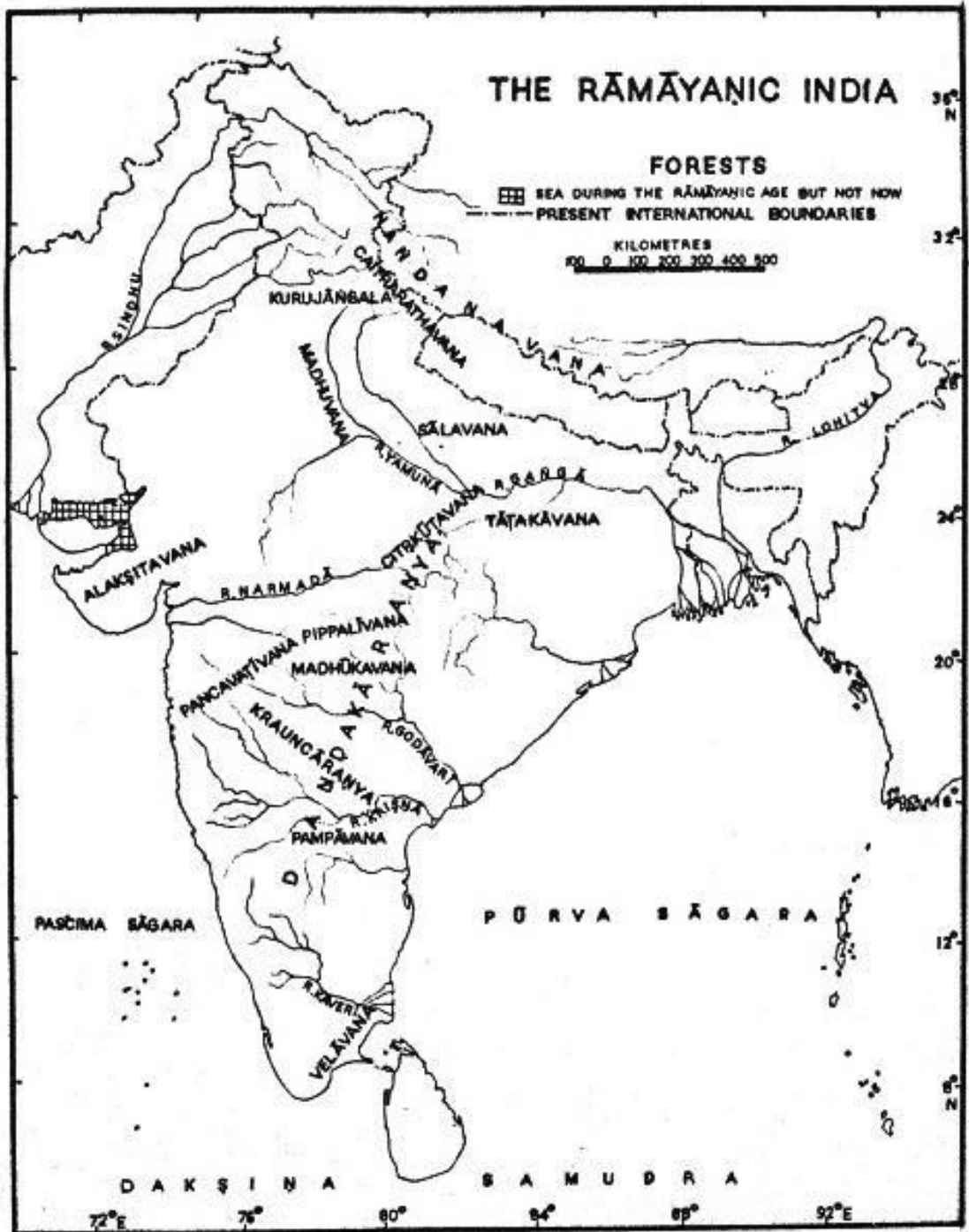


Figure-5

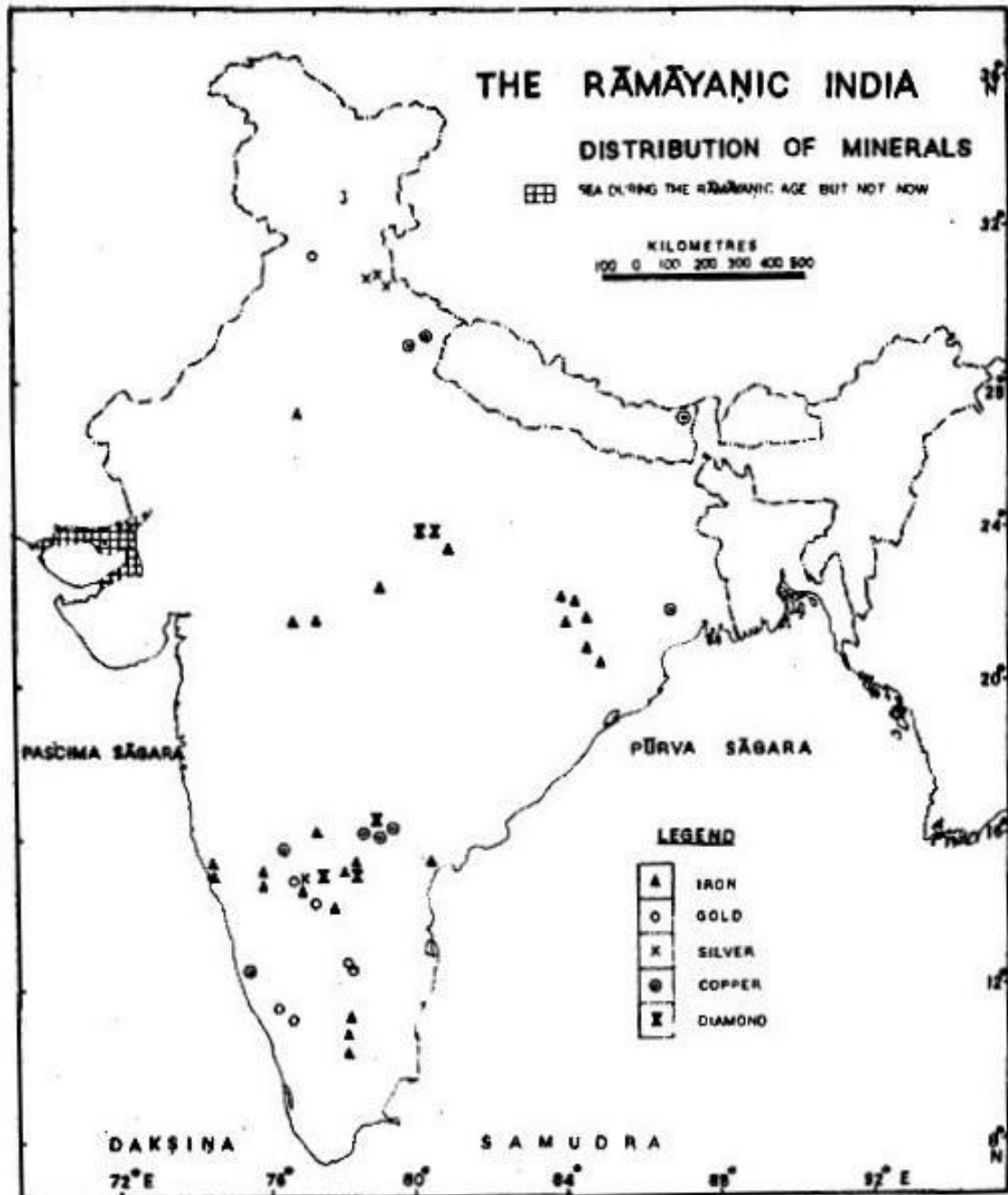


Figure-6

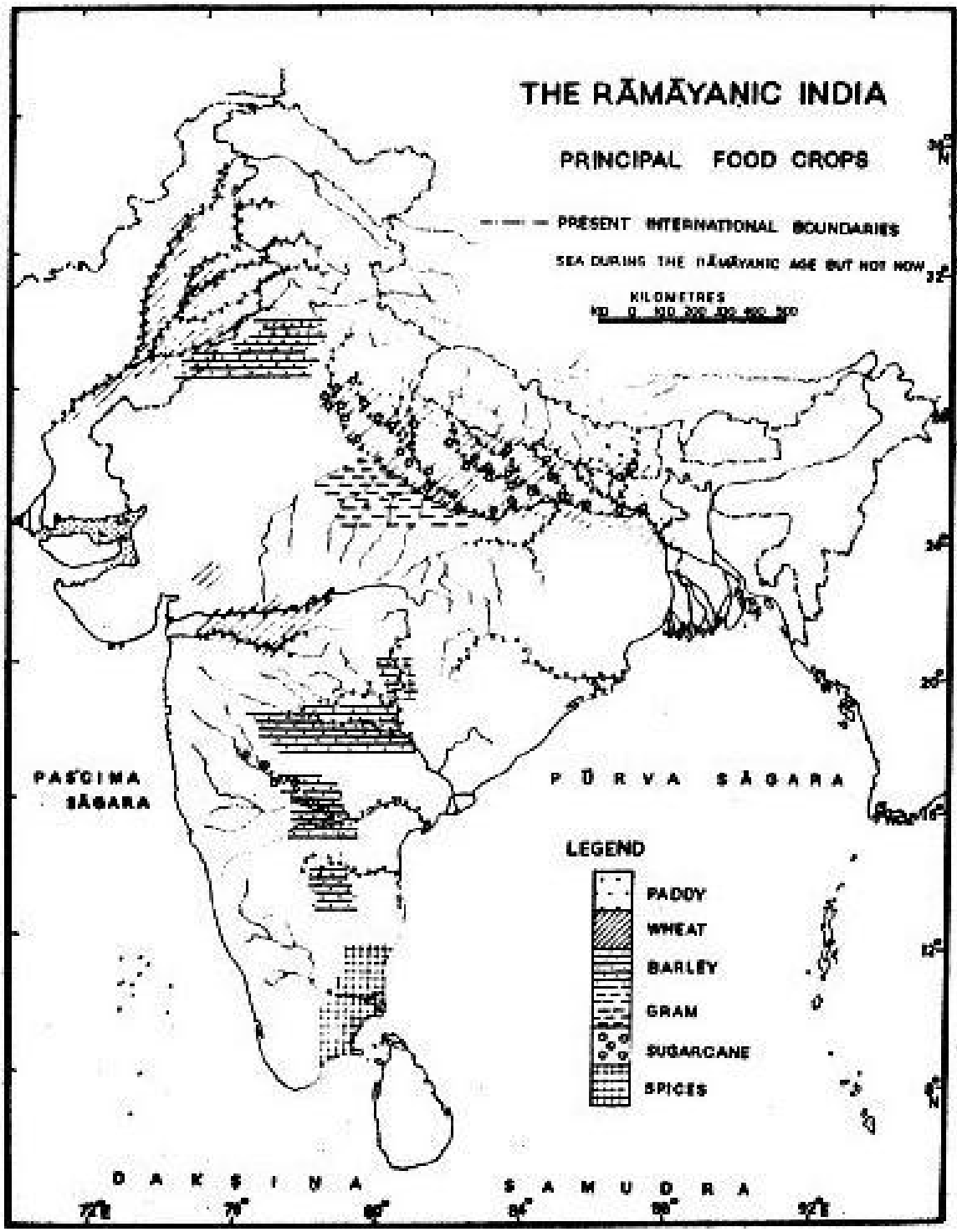


Figure-7

Table 1. Names, distributions, and uses of plants in the forest of Pañcavaṇī mentioned in this article.<sup>15</sup>

Sanskrit	Names		Uses		Sacred value	Distribution
		Scientific	Medicinal	Economic		
<i>amra</i>		<i>Mangifera indica</i>	•	•	•	Ne, cult
<i>āmraka</i>		<i>Spondias pinnata</i>	•	•		N, Pen
<i>aśoka</i>		<i>Saraca indica</i>	•	•	• Indra	Ne, Pen
<i>aśvakarṇa</i>		<i>Dipterocarpus alatus?</i>	•	•		Ne, Sw
<i>badari</i>		<i>Zizyphus mauritiana</i>	•	•		N, Pen
<i>bilva</i>		<i>Aegle marmelos</i>	•	•	•	N, Pen
<i>campaka</i>		<i>Michelia champaca</i>	•	•		N, Pen
<i>candana</i>		<i>Santalum album</i>	•	•	•	Sw
<i>dhava</i>		<i>Anogeissus latifolia</i>		•		N, Pen
<i>kakubha</i>		?				
<i>ketaka</i>		<i>Pandanus odoratissimus</i>	•	•		Cult
<i>khadira</i>		<i>Acacia catechu</i>	•	•	• Gaṇeśa	N, Pen
<i>kharjūra</i>		<i>Phoenix dactylifera</i>	•	•		Pen, cult
<i>kiṃsuka</i>		<i>Butea monosperma</i>	•	•	• Brahmā	N, Pen
<i>lakuca</i>		<i>Artocarpus lakoocha</i>	•	•		N, Sw
<i>nīpa</i>		<i>Anthocephalus chinensis</i>	•	•	• Kṛṣṇa	N, Pen
<i>nīvāra</i>		?				
<i>panasa</i>		<i>Artocarpus heterophyllus</i>		•		Sw, cult
<i>pātala</i>		<i>Stereospermum suaveolens</i>	•	•		N, Pen
<i>pumṇāga</i>		<i>Calophyllum inophyllum</i>	•	•		S, coasts
<i>sāla</i>		<i>Shorea robusta</i>	•	•		N
<i>samī</i>		<i>Prosopis cineraria</i>	•	•	•	Nw, Pen
<i>syandana</i>		?				
<i>tāla</i>		<i>Borassus flabellifer</i>		•	•	Pen, cult
<i>tamāla</i>		<i>Garcinia xanthochymus</i>	•	•		N, Sw
<i>tilaka</i>		<i>Symplocos racemosa</i>	•	•		N
<i>timisa</i>		<i>Ougeinia oojeinensis</i>	•	•		N, Pen
<i>tinduka</i>		<i>Diospyros peregrina</i>	•	•		Pen

Distributions are summarized as Ne = northeast India; Pen = peninsula; N = northern India and foothills; Sw = Western Ghats. The symbol • indicates positive.

Figure-8