CHAPTER 3
MAN AND ENVIRONMENT

3.1. MAN AND NATURE

With increasing concern for the environment, that is the natural surrounding around us, we can discover laymen as well as the intellectuals are contemplating on the necessity to stem its further destruction and scrutinizing the possibility of bringing in and re-inducting the ethical interpretation to the relation of man with his surrounding. We may also find out that even with meticulous analysis, it is not possible to disintegrate nature and its influence from man’s mental set up and his existence.

From time immemorial, man has been depending upon nature for all the developmental activities for mankind. While human civilisation has developed on the lap of mother nature, man has always been trying to strike a balance with her, never outdoing or utilising beyond his necessities whereas nature has never completely mutilated or destroyed his monumental achievements with her proverbial fury, and man has always looked up at her i.e. his environment with awe and reverence that survived the test of time.

However, this is not the case anymore. The age old bond of mutual understanding and reverence between man and his surroundings seems to have fragmented. Man’s outlook has changed and his conception of conventional ‘social good’ has taken to a beating and being taken over by the utilitarian one. Man has
started using nature for his own benefit so much so that he had forgotten the existence of other animals and creatures on earth. He had explored deep into the air, the ground, the water i.e. the ocean and into the forest also, as a result of which there is wide-spread destruction of forest and animals. The whole of the eco-system being upset to cause inclement weather, erratic rainfall, global warming, greenhouse effects, ozone hole, etc...... It means man's material gains has put into jeopardy the existence of all other animals along with that of human kind. The man and the Environment's equilibrium is in great jeopardy as the former is trying to take over the reign of rule on the earth from the latter.

*Intrinsic Value of Nature*

Apart from influencing human mind to great extent psychologically, nature has benefited man materialistically too. Therefore it has retained great objective value for mankind in terms of materialistic gain and utility. However, there are many scholars who explains that nature owns qualities, which are not in need to be realized by human being and be utilized for his benefit. The qualities are so intrinsic by nature that they are part of greater realities and designs of the universe and are not necessarily depended on human to be assessed and utilized. They are more inherent in themselves. However, different scholars define intrinsic value in different way. Again there are those who believe intrinsic value of nature can be defined in both subjective and objective manner. Ecological Balance of Nature
However, in the ever increasing effort to outdo nature in the latest phase of development of human civilization and experiencing the repercussion of it in form of degradation of our surrounding as a result of it, man is trying to desecrate its own follies and is trying to set right his attitude towards nature and is trying to reestablish the strained relationship with nature. A number of environmental Philosophers believe that amidst the various aspects of environment, an equilibrium exist which should not be disturbed or destructed so as not to bring imbalance among its aspects and thereby bring in imparity to the intrinsic relation among them. One of the theories that took precedence over others in importance is Gaiaism which emphasizes in maintaining ecological balance in nature. According to it, the imbalance caused can result into grievous destruction to the ecological relations on earth, that in future may lead to the destruction of the earth.

Nature as an epitome of wonder and therefore being a matter for discussion has eluded all with its treasure troves of wonder in one hand and arousing curiosity and therefore quest for an philosophical or scientific answer to its manifold characteristics and its multitude. Therefore the study of nature i.e. our environment has been defined in twofold manner, i.e. both of objective and subjective description:- its physiological characteristic i.e. objective as well as its subjective analysis. They are as follows:-

Σ Gaiaism was first established by James Lovelock in 1969. However, keeping it at basic core of the conception, different scholars interprete it in their different ways.
3.1.1. THE ECO SYSTEM

Different temperatures, different types of soils and different geographical positions have created different or individual groups of species on earth, although some of them may be available all over the world of these species. Within the group itself or with another group are dependent on one another. They have to interact with each other or one another or among themselves for their existence. For example, a bird makes a nest on a tree to live in it, whereas the bird eats its fruits and helps it in dispersing its seeds elsewhere so that another tree of its kind grow there.

Different types of insects grow on its bark; a woodpecker eats the insects; earthworms living underneath the ground lives on the rotten leaves of the tree and help the tree-roots by making tunnels to it in the ground. Thus every single species in this world is dependent on another species in this world a group of them for its own or their collective existence. Thus, these groups of species functioning together to create an individual system of dependency is called an 'Eco System:

Overall, interaction between living beings (that is the biotic community and the non-living i.e. a biotic or non-biotic) substances is considered as the functioning of the eco system. For example, a small rotten piece of wood can be considered as an small eco-System. Ferns and mushrooms will be growing on it, wood lice roaming under its barks, earthworm and insects like millipedes and centipedes will be nesting under its barks etc. With close observation we may find most of the insects and the parasatm1 plants are largely dependent on that piece of wood for their survival, whereas the wood is in the process of decomposition in which substances is turning into mineral or other elementary components on earth with help of
variety small micro-organism. A small piece of wood can provide for whole lot of living creatures and its surrounding too. Thus the whole of the world can be called a big ‘Eco System’.

In the world of living beings, all the movable or mobile creatures, that is, the animate objects are called as Fauna, whereas the other ones such as trees, plants etc., that is the inanimate or immobile things are called Flora. Therefore, all the living things of nature, inclusive of mammals, birds, insects, marine creatures, trees plants falls into the category of Flora and Fauna. Besides, flora categorises the species that produce their own food. Usually, they are inherent with chlorophyll, the green substance which allows them to produce their own food called starch from sunshine and which they usually store in the leaves. Therefore the flora species are called as Autotroph. On the other hand, there are many fauna species, that is mammals, birds or even aquatic species such as fish, mollusce etc. which depend on plants, or its seed or miniscule aquatic plants called plankton respectively for their existence, which are called as Heterotroph. Besides them there are other animals which live on the heterotrophs for their survival. Those creatures living on plants, seeds or planktons are called Herbivores. There are those animals which live on other herbivorous animals and they are called as Carnivores. Animals like elephant, cow, deer, rabbit etc. are herbivorous whereas tiger, lion, etc. are the carnivorous animals. There is another category of animals eating both plants and other animals which are called as Omnivores.
If we consider the number of the autotrophs— that is the trees, plants, planktons etc., then we find them covering the land areas most extensively; then comes the number of Heterotrophs which depend on the autotrophs for food; it also include the insect community. Even fewer are the numbers of the carnivores which live on the herbivores. Now ,if we imagine all these three categories of living organism into three layers- structured one upon another ,we find that from numbers point of view, the autotrophs will form the biggest layer, whereas the Herbivores will form a comparatively smaller layer. The layer of carnivores will be smallest, as the their numbers are even fewer. A German scientist named Odum had discovered an imaginary pyramid with these three layers one upon another, with the layer of carnivores at the top, on that of herbivores which rested on that of autotrophs. This imagined pyramid is known as 'Ecological Pyramid.' The line of 'dependency of food'- that is for example, a rabbit living on grass, a carnivore animal such as or lion or even human living on it as food-or a frog living on the grass eating insects, a snake may eat it as food -is called as 'Food Chain.' Thus we find that in the eco-system it is either self production of food or dependency on others- excepting the m plants and trees everyone has to depend on others for food and survive. Thus we find that the whole world is a big Eco-System.

3.1.2. THE RAIN FOREST

As we all know, that due to the position of the earth towards the Sun, apart from the polar regions (arctic and the Antarctic) other regions have different temperature zones. While the polar regions are the coldest, it is more and more
hotter towards south from the north pole. So it is the same way opposite from the south pole to the north pole. Areas falling in the imaginary line going through the middle of earth and called the Equator are the hottest through out the year, the areas adjacent to its own are called ‘tropical’ region and passed through by the imaginary lines of Tropic of Capricorn and Tropic of Cancer to the north and to the south respectively (lying at 0 degree in each case). The areas falling in these lines are usually quite hot in summer, and cool in winter, but usually poured with incessant rain during the hot season. Unlike the deciduous forest of the temperate zones which lie between tropical and polar regions, the tropical forests areas are green through out the year thick and almost unpenetrable to common human and light cannot penetrate through the leaves to reach the ground. The top of the trees with thick leaves and branches together form this impenetrable natural shade, which is called as Canopy. Due to lack of sunshine under the canopy, fewer plants grow underneath it, but it itself provide as the abode of innumerable kinds of species, as it is a very hot humid and rainy, which helps in their growth. Besides, usually these forest areas extend over vast areas of land which helps the species in growing their numbers. Due to the fact that these forests are the habitat of maximum number of species on the earth, it is called as the most Bio-diverse region. There are twelve such most Bio-diverse regions on earth. Amazon river basin in the continent of South America is the biggest rain forest area on earth, which is followed by those in the country of Indonesia. The North-East region of India and Sahyadri, i.e. the Paschimghat region of West off Arabian Sea coast also are two such bio-diverse regions situated in India. However, the importance of
these areas is not barely due to being the habitat of numerous species- but due to the role it plays in keeping the balance of atmosphere on earth. This vast forest region exhales huge amount of oxygen in the nature's way of maintaining ecological balance on earth. As we know, oxygen is the most vital element on earth for not only the animal kingdom, but whole of living organism on earth. Therefore it is very important that it is available in atmosphere with due amount. The Rain forest helps in maintaining this balance on earth. However, unfortunately for mankind and whole of living kingdom, these rain forest areas are being cut down at a rapid speed where they are found to quench the thirst of human greed, who use the wood of it for many utility purposes., thereby putting the whole of living world under threat. We shall discuss about it with other environment related problems.

3.2. BIO DIVERSITY

When a species of a particular family order of living organism use to have many more sub-species, then it is caused due to Bio-diversity. It is a complicated biological process which is dependent on various circumstances, but then we can discuss about why it happens, or about its importance and how it can benefit living beings. Authors U.Kumar and Mahendera Jeet Asija, have defined bio diversity in the following way: “Variation is the law of nature. It occurs everywhere and every moment. The variation take place at micro levels at short space and big time gap. The variations may be linear or cyclic. The variety and variability of organisms and eco systems is referred to as biological diversity or biodiversity. Similarly, the biological
variations initiate at the micro level (bio molecular level or genes) and apparently at species and ecological level. The biological variations in nature over time and space form the basis of evolutionary process.¹

Nowadays, we are all aware of the miniscule molecule existing in the body of a living being which bear in its individual physical and mental characteristics along with that of its own species. These molecules are called DNA(de oxi nuclic Acid) or as 'gene', and they help individual species to survive with its own characteristics intact. These genes have the unique capability to adapt and change over a period of time in accordance to its necessity. Often in suitable conditions these genes helps individual species to develop into sub-species with newer characteristics added to it. This process of having additional or more diversified species is called as 'Bio-Diversity'. It is believed that species with more sub species has more chances of survival in face of oddities and of calamities due to its manifold characteristics, than a certain species with uniform characteristics unable to withstand or survive in front of attacking micro-organism(viruses, bacterias etc.) and other calamities. Therefore, scientists believe that bio-diversity will help animal kingdom to survive in face of all oddities on earth. Besides, we find that varieties of flowers, birds, trees and animals bring in not only colour to earth, but also make it beautiful. Therefore author Mark Rowland expresses in the following way, "The preservation of endangered species of flora and fauna is a major practical environmental concern. Similarly, many environmentalists argue that biodiversity is a fundamentally valuable feature of the environment. And one of the constituents here- the concept of diversity is also
reducibly relational. Finally, being naturally evolved, as opposed to artificial, is a property, for most environmentalists, confers value on those things that have it."

(A) Aquatic Kingdom

Besides the world of birds, animals, trees on and above the ground, we also find another such world down under inside water in a river or a lake or a sea. The animals belonging in water. These animals are generally called aquatic species, although the one living in a river may differ from the one in a sea and the number of species and their sub-species may be very limited in comparison to those living in a sea. Besides seas and oceans have species of aquatic animals that are entirely their own. Those living in a river can be called 'riverine', whereas those living in a sea or a ocean is called a 'marine' animal. Besides these animals may largely vary in shape and size in comparison to those living on ground. There are some plants too which grow under the water.

Like animals on earth, aquatic creatures range from very minute ones to larger varieties. The small ones consist of invertibrates, i.e. the ones without bones—such as sessile- or larvae of insects, clamps, nymphs, barnacles, arthropods, etc. whereas even smaller micro-organisms consist of the periphyton, or aufwuchs. which includes clumped and filamentous blue and green algae. Phytoplankton includes diatoms, blue and blue-green algae whereas zoo-plankton includes protozoans, microroarpods etc. Planktons in water is like the leaves of plants and trees as they can produce their own food with help of chlorophyll, and thereby to
be considered as the autotroph of aquatic world, on which many other bigger animals live. Nektons includes the bigger organisms of the river or sea, which contains fish, larger insects and amphibians and reptiles.

Again, fresh water bodies can be divided into two categories- Lotic and Lentic; Flowing water bodies are called as Lotic and Closed or stagnant ones such as the lake or a pond is called as Lentic. Periphyton, and sessile invertebrates, cray fish etc are found in these water bodies and when catfish, carp, trout etc are found in the oxygen rich upper reaches, nutrient rich down stream of a river may contain external eco-system such as locthanous and other varieties of fish, amphibians etc.

Lentic water eco-systems may be divided into three zones ,in terms of light penetration to it, although they may vary in physical, chemical and biological characteristics. The Littoral Zone extending from shoreline to the innermost location of the rooted plant .This zone includes flora species of floating leaves such as water lilies to other submerges rooted species and nectons such as fish,snakes, snails ,other adult larval insects. The limnetic zone, following it contain Phyto and Zoo-planktons besides the nekton, inclusive of fish, amphibian ,and other larger insects which do not float in water but swim. The profundal zone lies even below the limnetic .and which contain fishes like pike,pickerel, perch etc. as it is a nutrient poor zone and consists of detritus and decomposed substances.

The Marine eco-System , on the other hand, can be, divided into three zones, called Neritic ,Aphrotic and the Benthic. In the Neritic zone, which is usually lined with the Bit rocky shore inundated by tides and waves and conditional to extreme
of changing temperature, moisture and light, is the habitat of sessile organisms, clamps, crustacea, coral reefs formed by coelenterates besides all other burrowing organisms such as crabs; sand dollars, polychaets etc.

The Neritic zone, which constists 7% of the total sea area, and continues from sea shore upto around 200 meter into the sea, is usually rich in species and high in productivity due to the presence of planktons in high numbers, as result of adequate light penetration. It is full of extensive algae communities of giant kelps as well as of clamps, snails, worms and echiderms. It is full of fishes so much so that it is known as fishing ground. The Pelagic zone, consisting eaphotic and Aphotic zone forms 90 percent of the sea surface. The plankton diatoms and dinoflaga1lates are the causes of the occurrence of the Photosynthesis. In these zones, besides, shrimps, jellyfish, ctenophoes are its inhabitators. Carnivorous copepodes and crustaceae are also abundant here. The Benthic zone, extending from edge of the continental shelf to the deepest ocean trenches nurtures the heterotrophic organisms, which are rooted lilies, sea fans, sponges, brachiopodes, snails, nails etc.

The world of the sea and the ocean, along with its animal world comprises three forth of the areas on the earth, therefore no less important than the world on the ground, although most of it still remains unknown to human kind. However, the necessity to safeguard the sea and its animal kingdom remain a responsibility for humankind before it is destructed by human greed.
The flora and fauna in the wilderness, where man does not have assess easily or regularly, is usually considered as the Wildlife. Many of the species, specially of the flora has still remain unknown to us. However, it is mainly the fauna species which get more importance as the wildlife, mammals, birds, insects etc., all the heterotrophic organisms are included in the fauna category of living organism.

Now a days there are many variety of living beings big or small whose in numbers are decreasing day by day. Many mammals, which used to be very ferocious and strong are getting fewer in number, as man has been destructing them both for the reason to getting rid of his fear from them and also to appease his greed for the skin, teeth, meat for commercial reasons and also for various superstitious medical uses. Thus man has, by dint of his superior strength and cunning hood has been killing these animals systematically to reduce the number day by day, or to eliminate them completely from the earth.

1. The Estuary (Delta) and the Mangrove

The estuaries are the regions where a, river joins that is falls into the sea; therefore it can be called as the confluence of a river and a sea. Such a confluence has got ecological importance as this area is usually replete with triangular shaped islands and they are usually very rich in flora and fauna. Besides, since it is inundated by tidal waves and it is the confluence of pure-water and the salt water of the river and the sea respectively, it easily becomes a breeding ground of various kind of riverine and marine species. Many types of fishes spawn in here and usually it is a favourable ground for species such as prawns and squids etc.
Commercially these areas are considered as valuable by countries endowed with such confluences, although repeated exploitation by such countries have rendered such regions as devoid of many species of important organisms, besides the destruction of the eco-systems or systems existing there. Often the affluents carried by the rivers from the industries flourishing on their shores also contribute to the destruction of the fragile ecology in these regions. The primary species of organisms, inhabiting in these areas, with the ability to withstand the tide and the constant admixture of river and sea water are- crabs, shellfish, annelid annelids, jellyfish, echiribderms( starfish, sea cucumbers and sea urchins) besides being the breeding ground of marlin, codfish etc.

Redheaded grass, eelgrass, widegreen grass etc. are some of the flora abundantly growing in here. Mangrove are particular variety of plants which grow primarily in esturine regions. It belongs to Rhizophora' family and it has got long water- resistant branches and twigs that firmly implants in the ground conditioned to the constant exchange of tidal water level. Areas covered by these plant is a suitable canopy for the breeding by organisms such as prawn, squids annelids etc. and therefore it is very important from ecological point of view. However as in case of an estuary, these plants, also useful commercially as dye, glue, rayon and tannin are being constantly exploited and destructed by human kind.
The deciduous forests, are usually found in the temperate zones, that is the region that lives above and below the lines of solstices i.e. the Line of and the line of Capricorn respectively. In these regions, flora and fauna of the forest is not as rich as that of the rain forests as we find number of species of both flora and fauna are limited. Some of the trees in here shed their leaves during winter times as coldness during that time is severe and hence the name 'deciduous' comes into existence. The predominant flora of these forests are maples (acer) and beech (fagus) growing on moist soil, whereas Oak (quercus) and Hickory (Carya) are found on drier soil. Basswood (tilia), chestnut (castanea), cottonwood (populous) sycamore (platanus) elms (U1umus) and willow (salix) are some other species of it. The largest herbivore and carnivore respectively are whitetail deer and black bear. Other mammals of importance are red and grey fox, bobcat, weasel, opossum, raccoon, voles, mice, squirrels, chipmunks etc. Oven birds T' ruff, titmouse, turkey, woodpecker etc. among the birds and amphibians, insects. reptiles of various kinds are also found in these region of brown forest soil.

The northern coniferous forest lying even to further north or south of temperate zones and reaching the arctic zones are much colder than it, (between 50* and 60*latitude) primarily consists of the flora species of spruces, pines, hemlocks etc., whereas the ground cover is of the species of mosses, grasses, sedges, condition-adepted herbs. The fauna consists of snowshoe hare, lynx, squirrel,
marten, mink, fisher, wolverine, wolf, woodland caribou, deer etc. These zones are primarily in existence in Siberia in Russia and in the northern part North America and in Canada.

The grassland B community covers vast stretches in middle part of North America, whereas Savannas are grassland growing in such tropical regions as are Australia, south America and Asia. Great varieties of grass, such as little bluestem, switch grass and Indian grass (falling into tall grass variety) feather grass, brome grass (medium), and buffalo grass, blue grass, blue grama or mosquito (short grass), are found in the prairie region of North America, besides variety of legumes, lupine and trefoil etc. The regular rainfall in these regions is about 10 to 30 inches per year, unlike that of the savanna, which has average rainfall of more than 180 cm. per year. The mostly laterite soil of this region produces variety of fauna indigenous to the type of soil. Regarding the importance of grassland on earth, authors U. Kumar and Mahendera Jeet Asija express in the following way: The significant of grassland has been well realized for the productive capacity. Grassland ecosystems are also expected to play crucial role in the biospheric responses to climatic change and in augmenting vegetation in forests facing plunder.3

3.3. Subjective Approach to Environment

NATURE'S IMPACT ON HUMAN MIND

Man and his civilization has grown up in the cradle of nature. Nature with its symmetry, co ordination of its various elements and their alignment has influenced man much aesthetically besides arousing sentiments of reverence for it usually expressed towards motherhood, the sentient of love and, care. However, man's feelings for it beside its aesthetical impression on his mind has been manifested in
his day to day activities besides in the expression of his artistic interpretation. In a way it is the primary motivating force in his expression of imitation and portrayal of its various aspects as a mark of his admiration for it. The reason for the same has been explained by W.R. Sorley in the following manner, "But man is himself a part of nature, an instrument in the hands of providence."*4

3.4. Old bond of mutual understanding and reverence between man and Nature

We have come to learn about our surroundings as Nature since our childhood days and we have been identifying the trees, animals, birds and all other creatures as part of the same nature. Nature being man's first encounter with outside world, therefore has deeply influenced man's psyche, and therefore has expressed his own interpretation of it (i.e. Nature) mutely in manifold ways in all his cultural and artistic works. It has been happening since the beginning of human civilization, and it is true of all the tribal and non tribal, small and big racial groups in the world. Since the beginning of scientific i.e. modern era beginning from around middle of sixteenth century, man has also started studying nature on scientific basis and such scientific study of it has been called as Ecology. Besides, in the modern era it study has become much more extensive and it is called as Environment as a whole. Also, there had come out many philosophers in the modern era who had brought out many philosophical theories about environment too. So we shall be discussing about the philosophical theories including the ethics being related to it. First Nature's impact on human mind is going to be focused as
part of analyzing nature's influence on human psychology only. To explain nature's impact on human mind author Stephan Budiansky says, 'Over time this (of perfectness) conception of nature has answered a variety of aesthetic, spiritual, ideological and even nationalistic Urges.'*5 Also, authors Maarten Hajer and Frank Fischer have expressed their view on bonding between man and nature in the following manner, "In so far, as mutual help and solidarity have been basic prerequisite of human existence for ten of thousands of years, a rediscovery of respect for and care of the particularities of both nature and cultures can provide us with a way to learn together with nature in particular circumstances."*6 Again they express - "Through archaeological evidence of prehistoric hunter gathering societies that depicts long eras in which human kind lived relatively harmonious with nature..."*7

3.5. The Manifestation of Nature through Culture, Art and Literature

The Immensity of Nature's opulence has always been influencing man's mind since the beginning of human civilization. In his finer way, man has been trying to express his adulation of nature in his creative ways - whether through picturisation and by painting them, or through poetry or literature, or even by song, dance and music.

* Literature has always been a very powerful medium of aesthetic expression and eulogy for nature. We find all the great literatteurs of the world were never beyond the bond of nature, although they also wrote the elucidation on the
intricate values of the capricious human mind. We find the great poet and dramatist of English language, Shakespeare the great eluding nature in the following way in one of his sonnets:

"Under the green wood tree,
Who loves to lie with me?"

Again, in the great Literature of Sanskrit, written by the great dramatist Kalidas, in one of his renown books ‘Abhigyanam Sakuntalam’, he had described how painful it was for Sakuntala, who was on her way to meet her beloved Dusmantya to leave behind the trees, the peafowls, the little deer and many more things of nature, while they also felt deprived of her love at her departure.

Art too have been a very mutative way of expressing Besides literature, we find nature portrayed in songs, drama music, dance and in particularly in arts of painting and drawing as well. Most Indian Classical dances describe nature in manifold ways. Many of The Indian classical songs too are named after different stages of daytime. While in the west classical belle dance portrays nature or natural objects, and many of the artistes have been drawing and painting pictures of nature in up teem manners. Even the renown picture of lady Gioconda, called as Monalisa by one of the greatest artist Leonardo da Vinci could not escape the portrayal of nature as it was on its backdrop.

3.6. Emancipation of Nature in Spirituality and Religion

when these are acts of creative mind, there have been other muter ways to express the hilarious functions of nature as well. Perhaps there is no culture in the
world, whether tribal or non tribal, whether known ones or the established and
developed ones or simply that of relatively or remotely known groups of them,
which do not have their own ways of expressing their adulation and fancy for
nature in manifold manners in objects of and actions in day to day activities. In
precise it is their individualistic cultural expression of portraying and personifying
nature of each individual groups in their individual ways.

Nature has also highly been focused in religions, specially in ancient ones
like Hinduism of India or Taoism of China. Even in ancient times, nature took
very important place in the mind of primitive people. Considered now a days as
‘fetish’ kind of worshipping, in such practice primitive people would revere and
start worshipping objects of nature that may look like a human being believing it
to be a kind of demi god or that it brings luck or fortune for some individuals.
However, in modern era we still find ‘forest festival’ being celebrated in many
places in the world in different forms since ancient time. While some
communities in Europe celebrate ‘forest festival’, a form of nature worshipping
usually observed by consecrating the trees. Similar festivities are also celebrated
in almost all the places in the world by different communities in the world - some
celebrate as spring festival as in India, so some do for other four seasons in the
world.

However, nature’s influence is also noteworthy in cases of some of the most
ancient and prominent religions in the world. We find nature taking a very
important role in the context of Hinduism. We find that Nature has been an
aspect of Hinduism, which has almost pervaded every context of it. We find that in Veda, the earliest scripture of Hinduism, it has been dictated that the day should be initiated with prayer for Usha, the Goddess of morning.

Thus, we find that Hinduism, in its expression of pluralistic view, has associated all of its Gods and Goddesses with nature or natural objects, each one being accompanied by a particular one or more than one species of nature. Surya, or Sun is represented by seven horses, whereas Saraswati or goddess of learning is accompanied by a swan, Laksmi accompanied by an owl etc. We can even witness the culturalistic expression of religious influence on various activities or work of art. The traditional religious symbols of a pot, adorned with mango leaves considered sacred, atoped with the design of a fruit also considered sacred can be seen as the mandatory pattern in most of the pillars of architecture of temples. Banana leaves, kinds of grass, flowers, basil (tulsi) and oregano (drona) leaves, sesame seeds, rice etc. are objects believed to be conduits of objective world on earth and the abstract world of heaven and therefore used for worshipping purposes. Thus we find many other symbolic representations of nature in Hinduism deifying nature and thereby giving it a reverential position. We can also discover similar influence of nature on Chinese religions although in different form. However, both Taoism or Confucianism of China emphasize on nature somewhat differently than Hinduism. Not only they define nature in terms of different forces they also believe them to be implied with goodness or otherwise the well being of those who believe in them.
Regarding the close association of oriental religions with nature, author Carolyn Egri reiterates that, "even so, there are many ways that nature-centered spiritual traditions, Asian religions and philosophies and monotheistic religions have informed and influenced socio-religious relationships." Again on overall view and assessment of prominent world religions and their primary motives, she expresses, "While not totally abandoning their anthropocentric worldview, mainstream religions are endeavouring to create a theology which advances the 'integrity of creation' for both environmental and social justice."


1. With the change of time many factors in man's life do change and culture is one of them. Man adapts his cultural views in accordance with the necessity of time. However, nature is another factor which is otherwise an eternal genre for mankind, but susceptible to the peculiar ethical and other socio-psychological derivatives from which man draws his inspiration. However, influence of nature on the mind of a man is directly related to his culture and it is conspicuous by its absence or presence by the expression of culture itself. Therefore, although Culture and nature, two different genres in man's life, they are interrelated and according to some scholars, culture is related to the 'disorder' of nature that occurs time and on to help 'creation'. Believing that 'disorder is a force to be utilized, the raw material for creativity', "The study of the nature and the role disorder in biology and in cultural evolution would do much to help interpret the supposed conflict..."
between 'humanism' and 'science'....." so says Mr. Potter*10. However, 'disorder occur due to the necessity of creation, as some philosophers believe in and it is the 'fortuitous' occasions that allows such creation to take place, brings in the possibility of survival. Again, adaptation is another process by which living organism has to survive on earth. The organism has to adapt to the natural surrounding by adjusting to not only the natural condition but also by becoming more morphologically conditioned to such a situation.

However, in the long route of evolution, we can witness the same pattern happening in various other areas related to mankind. It may be found that all activities of man are conditioned to change and his culture is equally conditioned to change and therefore, over a period of time to evolution of it as well. Therefore we can witness change in cultural modes reflecting the social modes or contemporary beliefs and influence of the thinking and psychology.

While discussing cultural evolution in the light of 'adaptation', we have to keep in mind that the present cultural condition also reflect the present day mental set up and influence of our surrounding. From our observation, with regular and the opulent usage of materials like plastic and presence of other chemicals and artificial commodities in our day to day life, we can surmise the increasing influence of technology and less of nature in overall lives of ours. Besides lack of any 'natural' interpretation in the cultural expression in present day society affirms such prevailing conditions only.
The question is - is it also a disorderly condition of cultural evolution as in cases of other areas of human evolution? Even if it is so, it can be hoped that newer cultural creations depicting nature and reflecting 'natural values' will come to prevail in man's life indicating nature's reinduction in man's life.

3.8. Nature in philosophical Definition

It is not surprising that scholars since the early civilization days were wonderstruck at the diversity of 'Nature' and the manifold activities of it that use to be going on at the same time. For example, Nature would feed its inhabitants with its aplenty and then again destruct them with her crude hand in time. Abundance of flora and fauna and exuberance of life in forest or dazzling crops may be destroyed with flurry of flood in the next moment. Again small animals like birds or bates will be fed by the fruits of trees. Yet again they would be devoured by some bigger animals at the next opportune moment they get to survive in the wilderness. Such 'wonderfulness of nature has not only been inspiring people to relate their emotions with nature, but also to find deeper meaning existing in the objects of it. Besides ascribing natural objects with imaginary ideas, different groups of people in different time have been trying to derive spiritualistic ideas from them too. Some of them over a period of time got defined in philosophical annotations.
When a lot of studies has been carried out on basis of Nature and Nature’s ways since time immemorial, it was only at the end of medieval era and prior to the advent of modern time that philosophers started emphasizing on finding a method in what seems to be mayhem order in ‘nature’- its mayhem ness resulting into a saggy and distorted picture in which common people fail to find any order. Even in ancient Greece, when Stoic philosophers emphasized on following nature’s ways—that is live a simple life within the bound of nature rather than by destructing it for one’s own comfort, they dictated it more out of reverence for nature than to look for any integrity in its occurrences. However, as scientific inventions started taking roots in medieval Europe, philosophers started looking for certain order in it, more of scientific in nature than being spiritualistic in candour. Some philosophers tried to define it in terms of ‘Noumenon’ and ‘Phenomenon’, but it hardly was separated or defined in spiritualistic nature.

However, Naturalism as a subject seems to be void of any subjective approach—that is, any metaphysical or spiritualistic approach and is rather based on materialistic desecration for which it is quite often either equated or confused with materialism.

Therefore although it may be studied theoretically of its various characteristics, it primarily relates to various materialistic characteristics rather than with any spiritualistic contents.
However, such nature loving scholars were not without competition or counter agencies who tried to deign their ‘love of nature’ and put it as substances of subsidiary importance to human life. They would not try to find a ‘soul’ in nature and explain it in terms of human utility only. There are many scholars who vouchafed their opinion opposing the importance of nature or our environment. The great scholar G. E. Moore is one of them. However, the irony lies in the fact that it is G.E. Moore himself is the scholar who brought the ‘coined’ word of Naturalism into practice and who brought in the discussion of Ethics in its limelight. However, his views and opinions remain a matter of controversial debate among the contemporary and of later period philosophers.

**G. E. Moore’s definition of Nature and Material Universe**

We may learn about his opinion in the following passages:

_WHAT IS MEANT BY “NATURE”?_

What is meant by Nature; & what has philosophy to do with it - what kind of questions about Nature are philosophical, as opposed to scientific, questions.

This term “Nature”, with a capital “N”, is constantly used in philosophy, as elsewhere, as if we all understood what it meant; but I think it’s important for philosophy to attempt to define it.

Again he says in the following ways:

“What do we mean by “the material universe”?

Let’s consider the matter in this way:
There are two prima facie different types of entity, which we certainly consider as forming part of, or included in, the material universe. I mean: physical things & physical events. I mean by "things" what Johnson calls "continuants" & whitehead physical objects. The sun, the earth & planets, the stars nebulae etc. certainly form part of the material universe.

Can we then say that by the material universe we mean the sum of all physical continuants past, present & future, & all physical; events past, present & future? All these are included in it: can we say it is their sum, or the class of which they're all members?

The first thing I want to say is that though, in a sense, I think we can, yet another sense, & perhaps the most obvious one, I think we certainly cannot.

Both by physical things & by physical events, one thing we mean, is th things and events of a certain character or quality: & the first thing I want to emphasise is that, if we mean this, we can't say that the material universe means the sum of all such things, because there may be parts of such things which don't belong to the physical universe at all.

This is a point which I'm afraid some philosophers might deny, but which seems to me quite clear, & a point that certainly should be considered in philosophy.

Why I say it is this.

When we talk of the material universe, I think it's quite plain we always really mean this material universe: the material universe, for instance, to which the sun & the earth belong. And this material universe does not include necessarily all
material things, but only those which have or had or will have a certain positive real relation - not merely a relation in respect of resemblance - to the sun, or any other object belonging to it which we pick out. You may say the material universe is a unity constituted by the fact that not merely all the things within it are of a certain sort, but that there's a certain real relation which holds between any 2 of them.

Now there may be, so far as I can see, ever so many continuants which resemble physical continuants, & are in that sense physical continuants, & yet haven't got this relation to the sun say. I think we certainly don't know that there are any; but it is logically possible that there should be; & to say this is to say we can't define the material universe simply as the sum of all physical things & events; but only as the sum of all those which have a certain relation to this physical event. This is one reason why Nature certainly isn't identical with the whole Universe.*11

From the above paragraphs alluded from G.E. Moore's views on nature and his other write up on 'Nature and naturalism' give us the notion of the Natural fallacy he propagated against the former. However, as we can already derive upon his antipathy towards the views of Naturalism, which he coined only as a form and looked at as an alternative of Utilitarianism, his views are often looked at critically in the present day context of natural travesties. His contravening attitude towards Nature can be well coined as 'Natural Fallacy' rather than any appreciation of Nature and Natural ways.
In the process it is also very important to take into account the views of Mr. Moore's as it seems to fill up, even in his proverbial critical manner, the gap between ethical values and nature's ways. We may encounter his views in the following manner:-

It is undoubtedly a question of time when the impact of environmental degradation leading to destruction of it will be evident in all spheres of our life. However more than anything else what would be the most revealing facets of our life is the failure of man's ethical values. Man's moral values in particular and ethical outlook have experienced a great beating at the hand of the degraded environmental conditions around us, which had since the time immemorial been consistent with each other in their mutual relationship. Ethics has shown great respects for the rules of Nature, although all the postulates, views and values followed and propounded by Ethics necessarily do not confine to the natural values only. Still the bond between the two had been unique in the history of mankind as man's values i.e. ethics has till the advent of modern days has struck balance with nature's influence on man, so as never to outdo or outperform the latter's unseen bound on man's values and capabilities. However, reviewing the current trend of values man has been following (as ethics in general reflects the contemporary views and values of common people only, and not vice versa, rather than direct and predestine it in most cases, although certain cultures still insist on following the hardbound age old rules of ethics that were set long time back and safeguarded by themselves) it seems the Ethics of modern days man nurture and
espouse has out stepped its bound of respect for Nature and had shown inclination for its destruction for man’s own benefits.

However, as it has been mentioned earlier, man’s relationship with Nature had not been as relegating as has been witnessed in the twentieth century and early twenty first. In fact as has been already discussed, man has even derived the basic tenets of its ethics from nature, which had directed him not only to revere it but also to derive inspiration and moral ground to establish the progress of his civilization from the lessons he learns from nature only. However, while walking on the path of civilization, something had gone awry, as man seems to have forgotten his chosen ways and taken to shorter routes to appease his thirst for quicker and faster comforts to achieve the glory of his ‘achievement’, forgetting in the process the eternal companionship of nature which has uplifted him to reach the podium of success in the path of glorious civilisation.

In fact, since time immemorial, Nature has not only helped mankind, but it has been so much of an integral part of life and being indispensable in every sphere of life that it has dominated the human psyche in every possible way of expression. The art and culture of many a human races, the epitome of refinement of a developed and progressive human mind directly or indirectly expresses the influence of Nature of its manifold expression on human mind only. Literature, the apostle of human knowledge and the earmark for the development of human psychology, has been practically littered with description of Nature. In fact it has
been considered also in many developed society as the yardstick of a developed culture and literature. Even many a religions, if not all of them and especially Hinduism has been so much inclusive of nature that it include almost every characteristics genre and facets of nature in its reverential podium. In fact even spirituality, which is believed to beyond the reach of nature or to transcend it, has also been defined in terms of nature in many a lineages of it only. Therefore Nature’s impact on the philosophical ideas of human mind has been carried in the following manner-

We had always been wonder-struck at the diversity of ‘Nature’ and the manifold influences it has exerted on human mind. It has also inspired many to discover the intricacy of such ‘wonder’. Nature’ lovers seems to have discovered some pattern in such activities of nature. Many of them believed there must exist certain invisible force that are per forcing its rule to keep nature in particular and the earth in general in moving. Even at ancient time primitive people also believed the invincible forces of nature as wrath of super-natural forces some even believing them to be God or demigods whom they needed to appease with whatever they could afford. However, in relatively modern era, some scholars have tried to put some scientific effort in explaining in the pattern of nature occurring at random and will and letting it continue at the same time. They have discovered many theories in trying to discover and establish explanation that may hold consistent with its ‘nature’ and ways.
However, such nature loving scholars were not without competition or counter agencies who tried to deign their 'love of nature' and put it as substance of secondary importance to human life. They would not try to find a 'soul' in nature and explain it in terms of human utility only. There are many scholars who vouchsafed their opinion opposing the importance of nature or our environment. Time and on, thus the intellectualism of man has been trying to belittle the importance of the nature or its role in our lives, whereas some others, due to their vigil on moral ethics of man have realized the follies of mankind and has tried to reestablish nature's importance by redefining the nature around them. Some of such theories are as per below:-

1. Helizoism

Helizoism is believed to be the first attempt on part of Greek philosophers to bring forth the Nature's position in human civilization to the podium of philosophy, so that it can assert its position of roosting the rule of the material world outside our mind. However, it seemed to lack the Abstractism that dominates such implied metaphysicality of any such theories that are believed to be the primary cause of the inner mental forces of the universe. It is unlike the views of stoic which spiritualised the presence of nature in human life and tried to follow nature's ways rather than utilizing nature for fulfilling one's own necessities.
2. Natural Philosophy:— It is an even stringently view of nature if it is considered from subjective point of view. It studies and analyses nature in terms of 'physical' laws and relations and analyses its effect and repercussions on various natural objects. It lacks in any abstract qualifications and therefore is without any idealism. It can be called a form of materialism. Natural Philosophy has been defined by author Peter Simpson in the following way: "The concern of Natural Philosophy is the world of immediate perception, and the things that directly confront such perception." *12 That perception is basis of the verificational methods based on scientific enquiries, we can conjecture Natural Philosophy to be more of a scientific approach to the question 'What is Nature' than to be any spiritual explanation. Again we find the author to opinionate in the following way: "The study of natural things is consequently a study of things that are marked in their being by a certain more or less distinctive dynamism- it is a study of dynamic things. In a way we can say that it explanation amounts to finding the law of change or motion in matter or natural objects." *13

3. Naturology:— Naturology emphasizes on various natural qualities and therefore it also Emphasizes on natural laws. It is more of a normative study of philosophy as it professes the 'good' of nature. However, it also fails to metamorphose to any kind philosophical ideas, as it does not relate to any kind of metaphysical explanation.

4. Meliorism:— "Meliorism, stated in most general terms, means that doctrine which believes in the betterment of life and universe in their ethical, social and religious
aspects."*14. Thus has been said about the ideology by the author H. P. Bhattacharya on its view and values on life. It is also believed to be associated with value factor, which is realized more and more ‘progressively’ which actually lies heed in the mind of an individual. Also normative in nature, meliorism is a way of life based on certain idealistic conceptions related to nature, rather than being any lineage of philosophy. It is founded by a french person by the namesake i.e. Melior. Mohandas Karamchand Gandhi, reverently called Mahatma Gandhi and considered the father of Indian nation as he guided the country to attain independence and also propounder of non violence as an application method of politics, was a stount follower of Meliorism.

Meliorism also emphasizes on pragmatic approach to life. Meliorism supports the usage of natural objects or live in natural ways without using any artificial or chemical materials.

Precisely we can call Meliorism as spiritual enlightenment, which upholds the values of our life in a higher podium, believing in its higher application with higher status quo of mind attained through stringent practice of restraint, compounded with simplicity.

**Materialism, Evolutionism and Natural Selection**

A gamut of new conceptions to define nature took root among philosophical ideas of late eighteenth century in western world, as they tried to establish new ideas based on materialistic identities against the overall metaphysical entity of earlier and contemporary philosophy. Attempts were made to base such
conceptions on materialistically verified notions, in which natural objects are made representatives of realism in a world void of any metaphysical reality.

(A) Materialism: Materialism is a philosophical trend taking root in the late eighteenth century, as western philosophers had turned to finding realistic explanations to the causes of events on earth, rather than the conventional metaphysical ones. Naturalism, a prelude to materialism, though believes in natural forces, or even unseen order manipulating the forces, it does not profess any metaphysical power at the helm of it. Materialism can be called even more of a stringent view of it.

(B) Evolutionism And Natural Selection

One of the latest theories relating to natural laws is the Theory of Evolution professed by Charles Darwin in the middle of nineteenth century. However, Darwin was not the first scholar to define 'Evolution', since there were quite a few of them defining it from different perspectives. Besides his theory of evolution projected from the point of origin of species, there are others who look at from other point of views—Spencer and Lamarck defined it from mechanical and biological point of views respectively, whereas Martineau defined it in teleological perspective, which advocates 'intelligent' adaptation of organism emphasising on adaptation to means to the needs of 'ends'. There was also another definition called 'Emergent evolution', which emphasizes that the world constitutes of the constant emergents of newer on species.
In the perspective of creation or origin of species, the theory of origin of species dates back to the 'Abeogenesis' of testament, where it is defined that species including human beings and each one individually are believed to be created by God himself. It does not believe in the process of evolution. There had been other theories following since then. Hegel in the early modern era, was one of the earliest to do so, although he looked at it from metaphorical point of views. Again, there are others who touches upon the evolution of different genres of philosophies. For example, some of the scholars had defined the evolution of ethics, whereas some others have even talked about cultural evolution they believe to be connected with human development. Lamarck, Spencer etc are some such scholars relating to it in different ways. However, Darwin's theory defining human evolution in terms of 'Origin of species' is believed to be most authentic, as it is not only based on scientific verifications, but also most 'conceivable' in its approach to reality. According to Darwin, who wrote two books of immense anthropological importance, first 'Origin of Species' and then 'Descent of Man', species on earth are the result of the natural process of evolution and it produces varieties of species with the process of Fortuitous (incidental) or Spontaneous variations. In such variations, species 'by chance' due to metabolic reasons of their protoplasmic cells cause changes or variations of themselves, some of which are favourable to their natural surroundings whereas others are not. When the favourable ones succeed in surviving in harsh conditions, the other ones fails to do so. It is the process which is called Natural selection and thus
species survive on earth to further the cause of evolution. Their metabolism again help them in adapting to the natural surrounding with physical variations.

While explaining the various earmarks of the 'evolution' theory, Darwin emphasized on the fact that the metamorphosis taking place among the species that caused 'fortuious'ly, does occur from 'within' them, i.e. genetically, rather than the 'without',i.e. outside influence of nature. Such a process is called 'mutation' which helps in causing disorder in the orderly process so that newer kind of creation may occur for the development of better species to achieve the goal of perfect 'order'.

The process happened per chance per species, which again is an inherited factor and may occur at an opportune moment over a period of time.

However, philosophers like Lamark's views differs from Darwin in such respect and believes that metamorphological change in species happens more due to the 'outside' influence than due to inherited factors.

**Critical Analysis of the Theory of Evolution from naturalistic Point of View.**

Some scholars name it as 'Chaos'. However, why is there a 'disorder' or 'chaos' condition of nature? Scholar potter define it in the following way "The survival of the fittest was a brutal process for using the raw material or disorder to achieve order, but it served a noble purpose in selecting new and better species, which were widely understood to arise on a continuing basis."*15
However ‘Chaos’ as a form of disorder has been prevalent in Western philosophy since pre Socratic days of the Greek Civilisation. Philosopher like Heraclitus explained that the universe, an orderly system did originated from ‘chaos’ i.e. disorder. The philosophy of Christian religion followed the same belief, believing it is the personalized form of God who created the universe and its inhabitants, including mankind one by one created the universe from the state of ‘chaos’ to an orderly system.

From the various theories it can be surmised that the general belief that the process of ‘disorder’ or ‘chaos’ must is part and parcel of the ‘evolutionary process’ and it is in fact beneficiary to the organic kingdom in spite of the initial confusion or destruction it causes. But to find out the purpose of it or what is it’s justification of its occurrence can best be explained in the following words of the Indian scholar Jadunath sinha from the point of view of ‘determination’ doctrine:

"What then is the differentiating mark of evolution as distinguished from dissolution? We must add the further characteristics of determination, which distinguishes evolution from dissolution. Evolution is an advance from confusion to order- from an indefinite and indeterminate arrangement to a definite and determinate arrangement, from an incoherent to an coherent condition. Evolution is a transition from a chaos to a cosmos, while dissolution is, from cosmos to chaos. Evolution is an onward movement of progress, while dissolution is a downward movement of regress."\*16
The 'Natural context' of Indian Philosophy, with or without the context of ethical conformity, is very vast and influential besides being an integral part of it. In certain trait of philosophy even its metaphysical ideas are derived from and depends upon nature and nature's intricacy and characteristics too. There are quite a few lineages of Indian Philosophy that purport the Nature's delineation over human life. While equating such trend and comparing them with their parallels in western philosophy, it may range right from materialism to relativity of physical science to metaphysical origins of nature in similitude. However, in Indian philosophy, in whatever manner nature is approached, it certainly personifies the quest for the metaphysical truth behind them all. Even in Vedantic philosophy, which is a metaphysical based trait of philosophy only, it has described nature as the primary illusion on earth, which contributes to the ignorance of human mind from knowing the eternal reality. Even then it fails to escape the bond of nature when it calls the universe to be part of nihilism - an indirect admission to the existence of Nature. In reality, mind or soul transcends natural existence or 'reality' only - it believes. Thus we find that nature is always an integral part of Indian philosophy that propagates subjectivity of reality or the ultimate truth only.

However, what we are emphasizing regarding Indian Philosophy vis a vis nature is the ubiquitous presence of the latter in all the spheres of its reckoning. Even, it seems nature's Flora and Fauna are an integral part of Indian religion and
heritage. We find many an animals deified either as God or as the companion of any of Gods and Goddesses of Indian heritage. We find a swan to be the companion of Goddess Saraswati, whereas Lord Ganesh is an incarnated form of an elephant God. An owl is Goddess Lakshmi's 'natural' vehicle, whereas a lion considered as Goddess Durga's carrier. The animals whether as the incarnated form of God or as the celestial vehicles of the immortal ones, they were invariably also prayed.

However, the approach to nature in the philosophical lineages is far more pragmatic, trying to define it in certain qualifying manner. But each lineage had followed its own course of its individual version and defines it accordingly to which we can view from different perspectives.

Among the different lineages of Indian philosophy, the ones which have mostly personified nature into the criteria of its standard and judgment, mainly are Sankhya system of Sankhya-Yoga, Vaisesika of Nyaya- vaisesika and to some extent the Vedanta Philosophy. However, Veda the combination of four books of Hindu religiosity of highest order, also portrays nature with optimum amount of reverence for its multitudinousity and has set the trend of making nature into an indispensably integral part of Hindu thinking.

The Vedas

The Vedas are the original scriptures of Hinduism and dates back to it's the period of early Aryan time. Although without the complexity of philosophical ideas of later Hinduistic period, it has personified nature in a very reverential position. The
religio-ethical script has identified most of its protagonist gods with various elements of nature and dictate greater devotion to them to its followers for prosperity and posterity of the society. According to the explanation given in its hymns, man should give away various sacred objects to the various elements in a symbolic manner, so that the sacrifices of the great ancestor of mankind come to be fruitful in manner. In reverence, a devotee should pray all the elements of nature in high esteem right from morning till the end of the day. A person should adulate Usha, or dawn, who breaks the day for the living beings on earth. Then one must pray and worship the Sun, one of the most reverential God in Veda) as he gives us sunlight to live on earth. There are certain other smaller objects of nature which are considered sacred, such as certain types of fruits, flowers, leaves etc.

**Sankhya Philosophy**

In Sankhya philosophy, all the conceptions and the subjective conclusions have been brought out on basis of Nature only. It believes in two primary characters or forebearers of nature, which perforce the latter’s activities and ensures that ‘system’ or the ‘process’ of it would continue forever in an undeterred manner. However, it has also scribed qualities to certain abstract aspects of it which the philosophy believe dictates nature’s ways. In Sankhya Philosophy, we find the emphasis put on both the subjectivity and objectivity of nature - Purusha representing manhood and therefore subjectivity, whereas Prakriti or womanhood represents objectivity or Nature itself. Purusha is born out of Aham or ‘Self’. According to it, our mind has three states that are the roots
of its equilibrium _ Satta, that is purity of mind and speaks for simplified way and life consummated with higher ideals of life, Rajah- a thinking mode that perforces the ideas of living opulently, indulging in good food or high living style with less concentration on high ideals or value but within a limit , whereas Tamah is the state of mind that encourages all the negative approaches of life, to indulge or be influenced by wrongful activities.

On the other hand , Prakriti is or Nature is the ‘illusion which time and on allure the mind for the purpose of procreation. After its goal achieved, Prakriti goes back to its day to day activities. Thus the whole of nature keep moving on its eternal process of ‘Recreation and Pause.’

**Vaisesika**

Baisesika is also another lineage of Indian philosophy, which explains the various characteristics of nature as its forte to arrive at its metaphysical conclusion. Vaisesika philosophy believes that the different phenomena of nature define our existence and phenomena like earth, water, air, fire and the sky represent various senses of feeling, smelling, tasting seeing and that of sixth sense. Nature is driven by a force which derives strength from the anu—that is atom of each material on earth. However, Vaisesika’s interpretation of nature in overall manner, with its attempt of making of scientific approach, can be attributed as its objective perspective only.

**Advaita Vedanta**
As in Sankhya philosophy, in Advaita Vedanta also we can find nature playing a relative role to arrive at the ultimate truth of metaphysical reality. However, unlike in Sankhya philosophy, nature does not portray a protagonistic role, but a relative one in which it is relegated as a tool to the attainment for the ultimate reality in form of the greater soul (Paramatma). Unlike in Sankhya Philosophy, Prakriti, i.e., nature would not entice purusha to keep the creation on earth in continuation, but it is known as ‘Maya’, and representative of ignorance, in its illusory form and power keeps the mind away from the ultimate reality. Here in Advaita Vedanta, metaphysical entity has taken over the nature’s novelty to make it a very conditional existence to greater truth.

According to its definition, Prakriti is Maya, i.e., illusion and its keeps human mind with its mesmerizing power from true knowledge of his own identity, which is in reality a part of a greater reality or truth.

From the given role of nature in the Advaita philosophy, we may surmise that while pursuing the metaphysical truth of reality, nature seems to have relative role which is rather much insignificant in nature, and held in disdain than in esteem and which is unlike many other lineages or the ethico religious perceptions of Indian philosophy. The reason can be attributed to the emphasis given on the subjective nature of the ‘pursue’ and not on the ‘natural’ characteristics of the ‘reality’. However, it may reasonably concluded that Advaita Vedanta remains a philosophy which is void of any definition of nature at all because it has defined universe from subjective point of view nature has got a ‘relative’ role in it...
5. **Gita**

MadBhagawat Gita, the Ultimate book of Hinduism on man's morality, attitude and the ideal relationship with God has also related to nature, although somewhat in a 'relative' role same as can be found in Advaita Vedanta, if not in the same negating perspective. However, the words, written in hymns conjured in the way of the supreme being, has expressed elements of nature as integral to its theme. The supreme god, as in the words of its author, has identified itself with the various elements of nature. However, he had identified them as perceptions of various facets of him only. The God, in the form of ultimate truth transcends in its various forms and ultimately is unified in the abstract reality of the universe.

In most of the religions in the world we can witness nature playing significant roles. However, it varies from religion to religion and one philosophy to another for what importance is attributed to the role of nature. In the Indian philosophy, we find nature and the natural elements being intermingled with religious ethical thinking. We find that almost every element in nature is worshipped in Hindu religion and thus has made it integral to its spiritual thinking. The Karma Vada of Indian thinking is closely connected to various layers of nature with separate ethical implications.

We can also witness nature's influence on Chinese philosophies too, although in different perspectives. Various natural forces are attributed with ethical qualities to purport benevolent atmosphere for the animal kingdom.
However, nature’s role in the perspectives of western philosophy is different from the ones portrayed in oriental philosophies, particularly in the Indian philosophy. Here nature is spoken about in a singular perspective, when the creation of universe comes to the fore. In western philosophy, i.e. Byzantine philosophy, with which the various western religions relate to their origin, God is a personalized emancipation and nature and natural objects are his creation only and which are individual entities, not related to one another. The nature or natural objects are not attributed with any spiritual qualities unlike in most of the Indian or other oriental philosophies. Therefore, when it comes for comparison of eastern versus western philosophies on the ground of the nature’s importance in each of them, Indian philosophy scores far ahead of its counterpart, as the presence of nature is ubiquitous in every aspect of it, whether in respect of spirituality or in the mere terms of defining it.

Like in other respect, nature and its various objects are attributed with spirituality as they are symbolic of certain level of sacredness. However, when it comes to its comparative study with western philosophy, certain characteristic of Indian philosophy in relation to nature strikes similarity with unique keenness. For example, western philosophers of Naturalism believes in the ‘relation’ of natural objects, which asserts a ‘natural law’ existing bind them all by such ‘relation’. Even in Mad Bagawat Gita of Hinduism, we can find similar definition in the word of Lord Krishna, the believed emancipation of God, who says that the
world of different objects is bound to him 'like the pearl in a string' (Sutre Manigana Iba).

Again we find that nature has been given variant emphasis on its role in different Indian philosophies. However, in both Indian and western philosophies we find nature being used to define universe or its aspects. For example, when in Vaisesika philosophy we find definitions of human existence and his intelligence are centering around nature, and also in Sankhya philosophy it is ascribed with certain subjective qualities to define the evolutionary theory on earth. However, its role is more 'relative' in most of the metaphysically oriented philosophies. We find in Advaita Vedanta and also to some extent in the ethically defined Mad Bhagawat Gita the comparatively less important role of nature. More so, in Advaita Vedanta it is found nature to be in the ireful role of both in enticing impersonation in form of Maya i.e. illusion, as well as representing ignorance, which means it is being purportedly given a negative role to emphasise its triviality in man's life. However, it is not true in case all other philosophies, in fact some such as Sankhya or Vaisesika esteem nature highly to make it their pivotal theme philosophy.

We can find similar importance being ascribed to Leibniz's philosophy as in Vaisesika, where he had emphasized in 'atomism' as in the latter. Again, when we can define Patanjali's Sankhya philosophy to some extent with evolutionary theory of Darwin, although it is more with the conformity of metaphysical interpretation than with mechanical one. It also is similar to Hegel's metaphysical
theory of evolution although it also draws similarity with Advaita Vedanta where the quest is for greater reality from the confined one by the soul. In Hegel’s theory it is the greater truth.

Thus, we can draw many other similarities between Indian philosophies and western philosophy where the seemingly resembling interpretations of nature are parallel development, although the only difference lies in chronological order, as usually the branches of Indian philosophies precede those of western philosophies which were formulated mostly in medieval era by approximately thousand years as they were propagated early in the beginning or in the middle of the first millennium.

3.10. MAN AND HIS RELATIONSHIP WITH NATURE: OBJECTIVE

Man’s connection with nature is primarily pragmatic in nature and it precedes its subjective relationship with it. Man is set apart from other species because of his ability to utilize natural paraphernalia, and in spite of the other species being both part of it and live on the providence offered by it, are not endowed with the ability to utilize it beyond the bound demarcated by it due to their limitations they are provided with. Although some species of birds and mammals or even insects can create their own havens and niche in form of nest, they cannot pervade beyond certain skills and therefore remain limited in their capacities. On the other hand man is not only endowed with variegated form of skill, he can also adept it in accordance with necessities. However, the most important feature of his skill is that with the progress of time, not only man’s
ability to apply his intelligence along with his intelligence has increased, it has
developed into multifarious and multipurpose ability to create complex systems
that are often equivalent in many respect, if not equal to that of nature. For
example, at the height of his civilization, man can construct a dam with variety of
materials that can resist even the most fearful river and its energy accumulated
water to turn it into electricity besides the provision of supply water to previously
drought prone areas. At the end of twentieth century man is in a position to define
his necessities and find solution to it, whereas other species remain confounded by
the laws of nature and therefore cannot act on their own beyond their limitations.
Regarding the obvjective value of nature, author Holmes Rolston III expresses in
the following way, "But we will not be valuing Earth objectively until we
appreciate this marvellous natural history. This really is a superb planet, the most
valuable entity of all, because it is the entity able to produce all earthbound
values."*17

Man's ability of utilizing nature's paraphernalia, however, is as old as human
civilization and has developed into an 'industry' along with its development in
history. It has increased many fold by the end of twentieth century from the
nascent ability to create tools out of rocks at the beginning of human civilization.
With the increase of his ability, the objects of utilities too increased manifold giving
different hues and importance with landmark discoveries and inventions at
various stages of time. For example, after discovering how to use iron and make
iron tools and other accessories, man discovered copper and gave other
interpretations to its utility. With every discovery, man, however, reached
another zenith of his civilization, culminating into the creation of conception of complex identities such as Urbanisation and Industrialisation towards the latest development stages of human civilisation. Although both the stages of civilization have existed at different places wherever there was an early civilization, then it was confined to limited communities for stipulated time period of history only. But it was never so universalized as at the end of twentieth century. Both the concepts have been initiated and based on the ideas of maximum utilization of natural commodities as never before. The progress of human civilization with the pragmatic utilization of natural objects are given below:-

3.11. The Development of Civilisation

(A) Early Age

The development of civilization is significant from the objective perspective of man’s relationship with nature, as the utilization of natural objects had grown manifold and has taken turn to complexity with the growth of civilization too. Each stage of human civilization is intrinsically associated with particular type of natural object, which again helped it to develop into another stage. With each stage achieved, the man’s knowledge and skill of utilising natural objects grew manifold, making the whole process a complex structure and an integral par of development of human society as a whole. The development culminated with the processes of urbanization and the industrialization and which are complementary to each other, in which the level of utilisation of natural objects had reached
maximum level. The various levels of human society and stages of civilization attained with the help of natural objects are shown below:

**The Old Stone Age (Paleolithic)**: At the beginning of civilization, man learnt first how to use stone to provide themselves with foray by killing preys of animals and birds with it. Later they learnt how to improve the condition of the stone, with help of another stone to shape and sharpen them and use them for better help and result in their effort to earn their living hood. Simultaneously, they also learnt how to produce fire with help of flint stone, make houses with dead leaves of wood, cover themselves up with them and even try their hand at artistic expression in leisure time. The drawing found on the walls of some caves are the testimony to such effort on their part. The psychological and physiological development of man during different stages of stone age are called as Neanderthal, Cro Magnon etc. as they progressed on the path of development of civilization.

**The Neolithic Age**: After the stone age man has discovered iron and had learnt how to put them in many fold utilization. The stone tools for hunting and bowls for keeping food got replaced with the ones made of iron. They also started preparing many other objects such as protective shields and weapons for battles and wars with iron and use them extensively. It also help them in constructing and having spacious niche and also barrier for their own protection. At such a level of achievement they also learnt how to make boat and carry out riverine trade with other communities living elsewhere.
Calcolithic Age:- After learning how to fabricate iron for tools and other purposes, another age came in which man discovered copper, another element for usage of various utility.

In the Bronze Age, man became able to use the bronze metal to make utensils and other utility object. It started around years ago. In the Iron Age man not only learn how to use iron and fabricate it, but also learnt how to use them for larger purpose of battle, construction etc., helping in tremendous way in the materialistic achievements of the society. While mining bronze ore saw civilizations like Greek and Egyptian developed, Indian civilization was used with iron at the same time.

Development of Civilization: Modern Age

(A) The Process of Urbanisation:- The process of urbanization has started early in the days of civilization, (specially among the ones that were much developed than their neighbouring regions- such as India, China, Egypt) when certain section of the society, specially the privileged or royal acolytes chose to live in congregation for the convenience of functioning their activities.

Unlike in the village enclaves, the residences of the urban areas used to be in rows, the outlet for waste materials being canalled out by drain system and all the utility items necessary for day-to-day being available in one place i.e. in the market, unlike in the countryside where it has to be gathered and collected over a period of time. It helped the habitats of the urban areas not only in having easier movement and availability of goods, it also freed them from the cumbersome and
tenuous life of its counterpart in country sides, besides helping them in defending themselves in groups against the aggressive invaders.

However, the process of 'Urbanisation' has helped mankind on ascending the ladder of progress, at the same time allowing itself to be systematic, organized, acquiring strength for developmental activities. It is primarily the slackness, lack of foresight and non-application of rightful procedure that allows the fallout of the system to really effect environment in particular and mankind in general.

The Nature of Urbanisation

There are certain factors or aspects which contain the system of urbanization to its mobility. The aspects are inter linked and supplementary to one another to make the system moving and running in a consistent manner. The aspects are together called 'Infra-Structure' on which the system of urbanization depended upon. They are as follows:-


The habitat areas within the urban conclave are connected with the 'Transportation' facilities, and usually on and off separated by recreational i.e. (park, theatre place, stadium etc) facilities. The area for buying day-to-day life's necessities i.e. 'Market place' which is representative of 'Consumption' factor are usually found around the central location of the city. The city area i.e. the urban conclave is controlled by various man-powered administrative facilities which look
after the ‘running’, functioning and maintenance of all the factors by collecting revenues and spending it for the latter.

However, it is only the objective approach to the functioning of the urban process. Environmentalists also consider the process of urbanization from the point of view of ‘Energy consumed’ and ‘energy wasted.’ The urban conclave being hub of activities by congregation of people is also the source of energy spent and utilised, as a result of which it produces waste in huge amount which is needed to be managed properly so as not to put the local ecology in disorder and imbalanced therefore degraded and being harmful for the surrounding environment. The relation of energy consumed and energy in waste is being depicted in proper way:-

<table>
<thead>
<tr>
<th>Energy Utilised</th>
<th>Energy as Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity, petroleum</td>
<td>Heat</td>
</tr>
<tr>
<td>Gas used in household,</td>
<td></td>
</tr>
<tr>
<td>Water being used in</td>
<td>Polluted Water</td>
</tr>
<tr>
<td>household public utility</td>
<td></td>
</tr>
</tbody>
</table>

The energy in used as a result of energy consumed needs to be handled in rightful manner so that with the help of modern technology, not only the used energy can be managed properly, but it also can reproduce energy again for further utility so that no amount of energy resources can go in waste. After all, Energy in Waste is Energy Unused.

However, ignorance towards proper utilization and lack of management on the part of administration may result in improper functioning of the infra-
structural 3 1 system, thereby resulting in the wastage of energy and the cause of pollution.

_process of Industrialisation_ has taken root in the society specially in western world, way back in early nineteenth century when it has began to experience the joy and benefits of technological inventions, such as that of motor vehicles and electricity and radio signals etc. They have, along with the knowledge of utilizing them for mankind’s benefit also learned the necessity of using manpower and materials in an extensive manner, being oblivious of its repercussion both on human psyche and the natural surrounding. It also initiated the structural changes occurring into the society in a rapid manner, specially n the west. The society has become nuclear family oriented rather than the conglomerate of families that were encouraged by agricultural back ground. On the other hand, it also brought economic relief to a section of people who had experienced a kind of employment which could be ambiguous with an agriculture related life where economy depended much on the volatile nature of weather to insecurity and uncertainty in the future. The relatively small family life also encourage them to indulge in luxury and become utility oriented. However, the extensive usage of natural materials has made him not only dependable on the product made of natural objects, but also be unaware of the destruction of natural flora and fauna, but be oblivious of the repercussion of it.

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3 Infra structure in an urban area means the basic facilities of habitation, water supply, transportation and other communication, along with educational, health, religious and other recreation facilities.
However, on the other hand, it has done tremendous boost to the development of mankind. Besides the luxurious commodities, it has also helped in technological achievement in the field of medicinal sciences and carry on 'mass' product to serve the common population. Therefore, the process of industrialization cannot be ignored or considered inadequate or redundant at one instant or go, but must be understood in terms of its pros and cons only. Rather than letting the 'waste' products of industries go into waste, which are again some input of another kind of energy only, must be utilized farther. Besides, the process of Industrialisation, which allow, the atmosphere to be polluted by the waste, must let the modification of technology take upper hand, so that old and outdated scientific apparatus cannot effect the environment any more.

The process of industrialization in terms of its factors and 'energy intake' and 'energy utilised' is shown in the following manner:-

(1) \[ \text{Energy Required} \quad \text{---} \quad \text{Energy Utilised} \]

(2)

\[ \text{Man Power} \quad \text{Natural resources} \]

\[ \text{Production} \]

\[ \text{Consumption} \quad \text{Waste Product} \]

\[ \text{Utilisation} \]

*Pic: The process of Industrialisation*
Resources and Renewable and Non renewable Energies

The natural commodities from which mankind derives benefits, are usually called the 'resource'. From resource man can derive 'energy' with which one can continue constructive activities or construct permanent features that may be utility oriented for one. Right from the wood cut from forest to coal or crude oil extracted from underground can be called as 'natural resources' that man has been utilizing either as commodities of utility or sources to provide with 'energy'. However, the most important feature about the natural resources is that while some of them are renewable i.e. which can be reproduced again, some of them are bound to be exhausted or tapered off from earth within a stipulated time period. Along with it, mankind can hope some more sources of energy being lost forever from earth. Coal as 'fuel' energy or crude oil as resource for petroleum used for automobile can be called as 'non renewable' energy, which we can believe to be exhausted sooner or later from the earth.

The Non Bio-degradable and Bio degradable Objective Product...The way energy comes to be considered as a productive resource for industrialization process in form of renewable i.e. naturally refilled and non renewable i.e. which cannot be replaced anymore at its initiation, like wise the finished products at the end of it, meant for human utility, can also be considered either as absorbable to nature i.e. biodegradable- which results as natural to nature's process and therefore good, or as non biodegradable, i.e. non absorbable to natural condition, resulting as redundant on earth, and sometimes or more than often as nuisance or even dangerous to organic matters-living or non living ones. The technological
processes of human science has allowed many natural elements or the combinations of more than one of them often turn into such composite substances that they become unabsorbable to natural conditions.

(C) Technological Achievement

Besides the processes of urbanization and industrialization, man has also applied his technological knowledge for the utility purpose of human welfare. With the help of industrial process but not for the direct utility by man but for the whole community, man has used his knowledge for such activities as establishing power station, mining ore, pumping out crude oil for various usage of transportation and other industrial production and even prepare rockets to go to the moon. Beside in the field of technology man has also succeeded considerably in the field of medicine, biology and chemical industry. According to the scientific doctrine, the purpose of such activities is to provide mankind with material comfort by utilizing natural assets, which was not possible in the preceding eras and also to signify the progress of man's knowledge.

The Concept Of Management and Management of Environment

Management is a concept used in the process of both urbanization and industrialization for better functioning and smooth regulation of production respectively. It is a pragmatic concept for objective gain for achieving utmost result in the process. In larger sense the administrative and the government of countries can also be called as individual management processes only. The
concept of management, when used for environment can help in regulating the proper utilization of natural resources. Environmental management, however, unlike the concept of corporate management does not emphasise on the achieving the goal of maximum production of commodities. The management of environment is best complying when there is parity between resources and its utility. It is like

\[ \text{NaturalResources} = \text{Utility} \]

It does not mean less or non utilization of natural resources either but proper optimum level of utilisation of both natural resources and its ancillary factors, ensuring in the process the lesser of the ill impact of the urban or industrial processes. For example, big cities and other urban areas usually are with the waste collection system that help keep them in proper stead and free of pollutions. Preservation and conservation of natural resources also form part of environmental management only. The process of assessment is also a part of management concept only. Likewise assessment of environment helps in monitoring the impact industrial processes on the environment only.

**Assessment** is one of the management form of application only. While in management practice it helps in asserting a situation, in environmental management it helps in finding the position of a subject or an objective issue relating to environment. In its objective approach, assessment can help finding the true condition of the impact of a particular material or subject on a place and its environment and thereby help in taking rightful measures in future. One of the
most modern practice for finding or detecting the impact, that is, the effect of any industry on its surrounding environment and making assessment of it is called the process of EIA - Environmental Impact Assessment. It is a science oriented and studious process which results in finding solution or reducing unwanted effect of any particular industry on its surrounding. However, then the process fails to completely eradicate the influence of the polluting factors on environment. Presently with the development of assessment process, there are other kind practices to find the impact of pollution on nature. **Geomorphology** is one of the latest scientific and technological methodology which, through the help of artificial satellites’ positioning in earth’s orbit can detect time and on the status of natural resources on earth.

3.12. **Critical Assessment of Man’s Objective Perspective of Nature (i.e. Environment)**

With the development of civilization, from its puerile stage in its early days few thousands years ago to present days at the end of second millennium A.D. and the beginning of twenty-first century, man’s utility of nature and natural resources also have grown proportionately, i.e. manifold than what used to be at the initial stages of it. However, the objective utility of nature, in stark contrast to its subjective influence on human kind, has ultimately bore grievous impact on society in the last two centuries by widespread destruction of it, thereby giving rise to the crisis of various predicaments— the crisis of conservation, crisis of development theories to ultimately moral crisis. According to modern ethicist
Nigel Dower, "unlike other species man has always been on the exhaustive mode of resources since time immemorial, he has been used to exhausting forest, land and often of water resources too. But never had it been so widespread to bring earth on the threshold of exhausting marine biology". He expresses his concern in the following way: environmental problems have existed in one form or others since time immemorial. Resources were used up, land became degraded, responses took place. This can usefully sum up be summed up in the idea of global finiteness. The stem from the recognition of the combined and cumulative effects of what is happening everywhere. And the fact that human practices in the latter half of the twentieth century are coming up against the limits imposed by the finiteness. This finiteness has always been there, of course, but it is now real constraint on human action. 

Many other objective concept oriented methods- such as management and assessment to keep in control the utilization of natural resources can only be partly helpful in bringing in the equilibrium or balance in nature and society if looked at the overall perspectives of present day status of environment. According to R.K. Turner and J.C. Powell, "The multi criteria evaluation technique has a number of clear limitations." Again they express, "Although the notion of an integrated and comprehensive residuals impact assessment and management system, is intuitively appealing, there are conceptual and practical limits to it. The constraints are both practicable (i.e. the data and institutional resource demands) and philosophical..."
However, regarding the impact of both the subjective and objective perspectives of relationship between man and nature, scholar Carolyn Egri has expressed in the following manner- "The restoration of harmony or balance with nature can only be achieved through subjective and objective understandings, as well as self-transformation in, all aspects of human existence – spiritual, intellectual, social and material." 21

While making an Assessment of Man Environment Relationship we have found out that man’s relationship with nature is intrinsic and human society is an integral part of nature. However, unlike any other species on earth, man both eulogises and utilizes nature, again both for his spiritual and materialistic gains. But in the subjective objective relation with nature, man, over the centuries has developed inclinations more towards his objective relation than the subjective approach towards nature.

While subjective relation helps in strengthening the bond between man and nature, resulting in a more positivistic attitude in the society, the objective perspective may tend to imprint society with a negativistic attitude towards nature, as in such a relation, man tend to take upper hand and use nature, making the it ineffective in absence of the mutual bonding.

However, the most important out come of his subjective and objective relation with environment is, man being a ‘rational’ by nature has succeeded in analysing and scrutinising the fall back of his (mis)deed and since been trying to reprimand it, as soon as he has realised it. Man has since been trying to find out the rationale in his deeds that he has been carrying out since time immemorial,
and to rediscover his bond with nature that withstood the test of time and always had been inherent in his activities and never been looked at separately in the past. But man, in his bid to redefine his bond with nature has tried to find out the 'logic' behind it, so that he can renew his vow of reverence towards nature and try to restore it into its position of past glory as far as is possible. Man is needing to establish a new trend of Ethics that will enhance his faith in himself to retrieve the nature's old glory, even at the expense of personal needs and gains if need arises.

Therefore, an attempt has been made here to find out and reestablish the relationship between man and his ethics and his environment to further the cause of safeguarding mother nature, so that not only he can restore the glory of nature immediately, even in distant future when any human being may forget and ignore the possible consequences of any of his destructive action and try to destroy nature for his own gain, other beings of society may remind him of the possible consequences of his deeds, pledging by the nature revering values of ethics.

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