

# An Ethno-ecological Introspection of the Bhagavad Gita:

## 6. The Present Distorted Environment Compared to Five Thousand Years Ago

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**ABSTRACT** Nature is the glory of the divinity. The abiotic and biotic manifestations, once declared 5,114 years ago by Sri Krishna as pure, prosperous and powerful, are now deteriorated to a great extent. The Gita says: *Let the human community protect the environment for their own survival and the biodiversity around.*

### INTRODUCTION

The tenth chapter of the Gita-Bibhuti Yoga (the yoga of divine manifestations) is a thought-provoking one (Box 1). In this chapter, Sri Krishna expresses the importance of His glory out of the endless divine manifestations of nature. The Lord was pleased with Arjuna's keen interest in realizing the totality of God, established in the phenomenon world. The basic aim of such expression by Sri Krishna is to motivate the human society to realize the divine glory, respect it (feeling the presence of divinity everywhere) and conserve it.

At the end of the tenth chapter, he says:

*“Whatever being there is glorious prosperous or powerful, know that to have sprung but from a spark of my splendor. It suffices to say that I stand holding this entire universe by a fraction of my yogic power”* (Gita 10/41, 42)

The conversation between Lord Krishna and Arjuna occurred 5,114 years ago (Table 1), when the world was comparatively safer and cleaner than the present condition. Sri Krishna has narrated a number of divine manifestations in the tenth chapter of Gita, out of which eight are related with the abiotic environment, fifteen are about the biotic community and the rest are for various other aspects of human ecology. The aim of the present paper is to evaluate the sanctity and purity of these abiotic and biotic glorious manifestations, relative to the present environment conditions. The meth-

ods of study used for this paper are as reported earlier (Padhy 2013 a, b, c, 2014 a, b).

### Box-1

Sri Krishna was the revealer of the Gita's knowledge. Arjuna was the first recipient of this knowledge. Maharishi Vysya has recorded it in the narrations of the epic of *Mahabharata*. This is the physical elaboration of the facts. But, the divine manifestations recorded in the tenth chapter of the Gita (10/37) say:

1. Among the *Pandavas*, I am Dhananjaya (Arjuna).

2. Among the Sages, I am Vyasa.

This reminds one that Arjuna and Vyasa have no separate individuality from Sri Krishna. Once man understands this secret message, he will be rid of conceit and self-importance, and this is a fact of human ecological significance. In fact, the knowledge of the Gita is revealed by Sri Krishna, received by Sri Krishna and also recorded by Sri Krishna; the concept for perception of one imperishable divine existence as undivided and equally present in all individual beings—the '*Gita Mantra*' for conservation of biodiversity (Padhy 2014a).

### MANIFESTATIONS OF THE ABIOTIC ENVIRONMENT

#### 1. *I am the radiant sun among the luminaries (Jyotisaam Raviramsumaan 10/21)*

The sun is the source of energy for the earth's solar system since the beginning of its creation. The importance of the sun and its energy is discussed (Padhy 2013b) under “Flow of Energy in the Ecosystem”. In the present situation, the equation of the sun with the earth is deteriorating. The earth is heading towards a global warming condition. If the temperature of the environ-

**Table 1: Age of the present period after Mahabharata war**

1.	King Yudhistira (Dvaapara Yuga) to Saakya Sambat	2526 Years
2.	Goutama Buddha to birth of Jesus Christ	574 Years
3.	From Christ to date 2014 AD	2014 Years
	Total	5114 Years

ment rises at this rate, the sustenance of biodiversity will be questionable. Of course, for all these warming hazards of the environment, the sun is not to be blamed. The greenhouse effect and depletion of the ozone layer are manmade hazards, and are obstacles to protecting the earth from excess solar radiation as well internal heat generation, leading to global warming.

## 2. *I am Moon among the asterisms (Naksatraanaamham Sasii 10/21)*

The moon is the favorite uncle for all concerns. The solar light being reflected on the moon's surface provides coolness to the earth. *Ayurveda* suggests that the development of medicinal property in herbs is due to moonlight. Most of the medicines are collected from plants on a full moon day or *Pushyaa Nakshatra* (constellation). From an astrological point of view, the moon is the controlling factor (*Devataa*) of the human mind (*Mana*). The moon controls the artistic character, affinity for music, art, beauty, marriage, love aspects and mental ability of a person as indicated in one's horoscope. Moreover, sleeping under direct moonlight is prohibited in *Ayurveda*, as it deteriorates the mental power.

The earth's moon is the largest satellite in relation to its planet, in the entire solar system. Its diameter is 34,756 km and mass is  $734,556 \times 10^6$  tons. A person weighing 65 kg on the earth would weigh 10.79 kg on the moon. Its rotation time is 27 days, 7 hours, 43 minutes and 11.5 seconds. The surface temperature of the moon ranges from  $-163^\circ\text{C}$  to  $+117^\circ\text{C}$ . Its average distance from the earth is 384,403 km.

On July 20, 1969 at 10:56 pm, Neil A. Armstrong first stepped on the Moon. Since then, 12 United States' astronauts including a farmer, in a total of six missions (Apollo 11, 12, 14-17) have spent time on the moon's surface. Research on space travel and discovery of extraterrestrial lands has been welcome since a long time. But, the assembling of broken parts of rockets, satellites, spacecraft and space probes on the moon's surface should not be encouraged. People are planning to purchase land spaces on the moon's surface. Scientists propose to build space research centers on the moon to use them as a base for exploration of other planets. All these

activities will certainly spoil the aesthetic value of the moon. That time is not far when human beings will convert the moon's surface into a polluted dumping area.

## 3. *Among purifiers, I am the wind (Pavanah Pavataamsmi 10/31)*

The earth's vertically extended atmosphere is an envelope of gases. It is divided into four layers:

1. Troposphere – Up to 5km from the earth's surface, the lowest,
2. Stratosphere - 5 to 45km,
3. Mesosphere - 45 to 80 km and
4. Thermosphere - above 80 km.

About seventy-five percent of the earth's atmosphere lies within 16 km from its surface. The atmosphere is an insulating blanket around the planet. It protects the earth from the lethal ultraviolet radiations and meteors. The normal composition of clean air comprises of: nitrogen (78.084%), oxygen (20.9476%), argon (0.934%), carbon dioxide (0.0314%), methane (0.0002%), hydrogen (0.00005%), and other gases in minute amounts.

Unfortunately, the concentration of different gases in the present atmosphere shows variations due to pollution. The different sources of air pollution include industrial chimney wastes, thermal power stations and automobiles. The varieties of pollutants released from different sources of air pollution are as follows:

- a. **Carbon Compounds:** These are mainly carbon dioxide ( $\text{CO}_2$ ) and carbon monoxide (CO).  $\text{CO}_2$  is released by combustion of fossil fuels and CO is released from automobile exhausts.
- b. **Sulphur Compounds:** These include sulphur dioxide ( $\text{SO}_2$ ) and hydrogen sulphide ( $\text{H}_2\text{S}$ ) released by fossil fuels, and industrial units and refineries.
- c. **Oxides of Nitrogen:** These chiefly include nitrous oxide ( $\text{N}_2\text{O}$ ), nitric oxide (NO) and nitrogen dioxide ( $\text{NO}_2$ ) mostly released by automobiles, power plants and industries.
- d. **Ozone ( $\text{O}_3$ ):** The ozone layer is present in the thermosphere and protects the earth from the harmful UV-radiations of the sun. It plays a major role in climatology and biology of the earth. It filters out all radia-

tions below 3000 A°. But, an increase in O<sub>3</sub> concentration near the earth's surface in the troposphere creates pollution. It reduces crop yield, affects human health and damages the internal organs of plants.

- e. **Fluorocarbons:** Its level rise in the atmosphere due to various human activities.
- f. **Hydrocarbons:** These are benzene and benzopyrene discharged by automobiles and industries.
- g. **Metals:** These include chiefly lead, nickel, arsenic, tin, vanadium, titanium, cadmium, and beryllium that present in the air as solid particles or liquid droplets or gases. They are produced by metallurgical processes and automobiles.
- h. **Photochemical Products:** These are olefins, aldehydes, ozone, PAN, PB<sub>2</sub>N and photochemical smog produced from different sources. These chemicals directly affect the biological world or they may undergo photochemical reactions to produce even more toxic compounds.
- i. **Particulate Matter:** The fly ash, dust, grit and other suspended matter released from power plants, stone crushers and other industries that remain suspended in the air are known as particulate matter. The bacterial cells, fungal spores and pollen grain of plants released from the biological world act as natural particulate pollutants.
- j. **Toxicants other than Heavy Metals:** Arsenic, asbestos, carbon tetrachloride, chloroform, chromium, 1, 4- Dioxane, 1,2-Dibromomethane, 1,2-Dichloroethane, nickel, nitrosamines, and vinyl chloride are a wide variety of toxic substances, which are air pollutants and cause human health hazards.

The harmful effects of individual air pollutants on biota are beyond the scope of this article. Air is one of the indispensable elements in the environment, vital for life. Air pollution affects the health and wealth of the ecosystem. It adversely affects human health, damages the plants and animals, causes acid rain, global warming and depletion of the ozone layer. The air as described in the Gita is a purifier, now does not exist with the same purity to support the quality of life of the living organisms. Man has the right to use the environment but not to misuse it for (so called) self-development. Human activities

in the name of development and a better life have changed the chemistry of the air from being pure to polluted, which is now unable to support their own breathing.

#### 4. (and)

#### 5. *I am the month known as Maargasiirsha and among seasons I am flowering spring (Maasaanaan Maargasiirasohamrtunaam Kusumaakarah 10/35)*

The month *Maargasiirsha* corresponds approximately to the month of November in the Christian calendar. It is the time when the climate is pleasant and calm. The biodiversity flourishes during this time. Goddess *Laxmi*, the power of nature, production, wealth and beauty is worshipped during this month. In fact the second part of the cultivation period (October, November, December) is for the proper growth of the corn plants, seed production and harvesting, which is equated with the glory of mother *Laxmi*. Crop production during this time feeds the people throughout the year. This is the importance of *Maargasiirsha* equated with God.

The months of February, March and April correspond with the spring season, described as the flowering period of the year. The life of the vegetable kingdom and that of the animals gets reanimated after a period of prolonged winter. The Lord describes the season as *Vasanta Rutu*.

The earth revolves around the sun and also rotates on its own axis. Days and nights are caused by the rotation of the earth on its axis. The axis of the earth is at an angle of 23½° with the vertical. This inclination causes changes in seasons due to the falling of sun's rays on different angles at the same place at different times of the year. On 21<sup>st</sup> March and 23<sup>rd</sup> September every year, the sun is exactly over the equator. On these two days, the duration of the day and the night is the same (12 hours) at every place on the earth. From 21<sup>st</sup> March to 21<sup>st</sup> June, the sun advances from the equator to the Tropic of Cancer. This results in the summer season in the northern hemisphere with long days and short nights, while causes winter in the southern hemisphere. From 21<sup>st</sup> June to 22<sup>nd</sup> December, the sun advances towards the Tropic of Capricorn. This causes summer season in the southern hemisphere and winter in the northern hemisphere.

During this time in the northern hemisphere, the days are shorter with longer nights. After 22<sup>nd</sup> December, the sun again starts (apparently) moving towards the north and reaches the equator again on 21<sup>st</sup> March. This cycle continues with the changes in the seasons, as well as the duration of the days and the nights.

In the present context, the earth is suffering from global warming, which is responsible for the warming of the atmosphere as well as the oceans. This causes more evaporation with more humidity in the atmosphere. The earth will face frequent and intense storms. Hurricanes and harder winds are expected to blow. The volume of the ocean water will expand due to heating. Unpredictable changes in the global climate will occur with loss of agriculture, difficulties for the survival of animals and plants, migration of animals and shifting of plants. The rise in temperature will cause sickness in human beings due to different diseases and there will be an increase in the number of flies and mosquitoes. Scarcity of pure water will lead to waterborne health problems. There will be a shift in rainfall and climatic zones. The plant world will suffer, being afflicted by more insects and diseases with crop failure. At present the planet experiences only three main seasons—summer, monsoons and winter instead of six seasons. All the days throughout the year, high temperature predominates. The people almost escape the pleasantness of *Maargasiirsha* and beauty of *Kusumaakara* season. God has rightly chosen two important times of the year, one month and another season, to testify the stability of the climate.

Global warming is the outcome of environment air pollution, termed as 'Greenhouse Effect'. The rising of temperatures due to solar radiations passing in through the atmosphere but unable to escape due to long wave heat radiations is known as the greenhouse effect. Some of the gases like carbon dioxide, methane, nitrous oxide, chlorofluorocarbon and water vapor, present in the atmosphere in high concentrations due to pollution, play a great role in raising the temperature of the earth. These gases allow the solar radiations to reach the earth surface and warm it during the day. At night the heat is radiated from the earth's surface in the form of long wave infrared radiations. But, the atmospheric gases like carbon dioxide, absorb the heat radiations, which are again radiated back towards the earth's surface. In this way the heat gets arrested inside the atmospheric envelope,

causing a rise in temperature, causing global warming and the missing of changes in seasons like *Maargasiirsha* and *Kusumaakara*.

#### **6. Among the water bodies, I am the Ocean (Sarasaan asmi Saagarah 10/24)**

Water is known as the solvent of life. Modern science and Vedic science (*Manusmriti* 1/8; Mohapatra et al 2001) converge to express that 'life' was first created in water. *Manusmriti* says:

"He, desiring to produce beings of many kinds from his body, first with a thought created the water and placed his seed." (*Beeja: The Power of Creation*) in it (1/8)

Water has played a central determinant role in the evolution of life on the planet, alternatively with a nickname *Jeevana* or 'life'. Most of the properties of water such as, highest boiling point, highest melting point, highest specific heat capacity, high heat of vaporization, high latent heat of fusion or melting, maximum density at 4°C, high surface tension, high viscosity and tensile strength, and very high dielectric constant are uniquely different to make it an ideal medium for conducting various life processes.

Next to air, water is the most important constituent of the life support system. Most of the water bodies are ponds, rivers, streams, lakes, sea and oceans. Scientists have estimated that  $1389 \times 10^6$  sq. km of water is deposited on the earth's surface. Out of this, ninety-seven percent is seawater, which covers three-fourth of the area on the globe. Only one percent of water as sweet water is used for drinking, daily use and agriculture. The rest two percent sweet water is either in stored form (ground water) or arrested in the hydrological cycle. The water bodies throughout the world have become polluted due to industrial growth, urbanization and other manmade problems. Industrial waste, domestic waste, agriculture waste, sewage, fertilizers, pesticides, insecticides, heavy metals, coal mining, oil spillage, animal and human excreta, detergents and radioactive substances are the various sources of water pollutants.

The biggest water bodies of the world, '*Saagarah*' or the oceans, are not free from pollution. The expanse of the ocean is infinite for a common man, who worships it as a representative of the Almighty. The rivers end up in the seas. On their way they are dumped with huge amounts of sewage, garbage, agriculture dis-



charge, and biocides including heavy metals, which are ultimately added to the sea. The discharge of oils and petroleum and dumping of radionuclides waste into the sea also causes marine pollution. About 285 million gallons of oil are spilled each year into ocean. Huge quantities of plastic are being added to sea as a waste product in the form of plastic packing material. Mercury and lead mix with the seawater through industrial effluents. Both, inorganic and organic forms of mercury are highly poisonous. Paper and pulp industries and chloro-alkali plants are the chief source of mercury containing effluents. The adverse effect of all pollutants on the ocean environment is discussed later on in the paper. God as the great ocean is out of reach in pure form.

### **7. Among the Rivers, I am the Ganga (Srotasaamsmi Jaahnavii 10/31)**

The surface flow of water in India takes place through 14 major river systems namely, Brahmani, Brahmaputra, Cauvery, Ganga, Godavari, Indus, Krishna, Mahanadi, Mahi, Narmada, Perrier, Sabarmati, Subarnarekha and Tapi. Apart from these, there are 44 medium and 55 minor river systems, which are monsoon-fed. In India, the rivers are worshipped. Ganga, the most sacred among the rivers originates from the Himalayas. Every Indian (Hindu) wishes to receive a drop of Ganga's water at the time of his/her death. But, unfortunately even if one takes a sacred bath in Ganga, one is reluctant to take a drop of its water into the mouth. Ganga, the symbol of purity of the Hindus, is too over polluted to be called a purifier. At the time of any ritual, people invite the water of the seven sacred rivers such as Ganga, Jamuna, Saraswati, Godavari, Narmada, Sindhu and Cauvery. Out of these, Saraswati is not traceable as a flowing river anymore and the Sindhu River is in Pakistan. There is a saying, "the cleanliness of a village can be observed from the Dhobi Ghat (washer man's point)". The 14 major rivers of India are now polluted, which reflects the state of pollution in the country.

All the rivers suffer from three types of pollution: silt, biological and chemical. Sedimentation can be reduced by rehabilitation of the catchment area through tree plantation. Biological pollution has three main sources, urban liquid and solid waste, dead bodies of animals, hu-

mans, and wallowing of cattle. In urban areas the waste is directly channeled to the river base. Even mass bathing at Rishikesh, Haridwar and Allahabad during *Kumbha Mela* and other occasions are the chief sources of waterborne diseases in the Ganga.

Chemical pollution in the Ganga (according to an earlier report) is due to the more than 132 medium and large industries along the bank of the river. Out of these, 86 are in Uttar Pradesh, 3 in Bihar and 43 in West Bengal. In Uttar Pradesh, out of 86, nearby 59 are tanneries, those who allow their dirty, foul odored effluents to flow into Ganga. Similarly other industries also discharge their effluents into the river. In 1984, the then Prime Minister Late Smt. Indira Gandhi took an initiative to draw up a plan of action to prevent pollution of the Ganga. Since then many NGOs have extended their help to save Ganga from pollution in addition to the government's efforts. The improvement in Ganga's water quality is far behind the plans and proposals. A recent study showed that, the water of river Ganga is capable of inducing cancer among the bank dwellers, those who use the water for day-to-day needs.

Similarly Yamuna, the other sacred river, whose bank was the play area of Lord Sri Krishna during his childhood days, is no more a symbol of purity. A dip in Yamuna at Delhi only saps the body and sags the soul, instead of any upliftment. At Delhi, the Yamuna is turned into an open sewer. Eighty percent of untreated wastewater and sewage of the Delhi Municipal Corporation is dumped into the river. The industrial estates of Delhi further add their discharges to the pollution of Yamuna. The water of Yamuna near Delhi is not fit even for irrigation, far from use for bathing, swimming, drinking, fisheries and industrial cooling. Yamuna's water is the chief source of epidemic diseases like jaundice, cholera and hepatitis in the region. The great Bollywood actor Raj Kapoor's movie *Ram Teri Ganga Maili* created eco-consciousness among the Indian citizens regarding this issue.

### **8. Among the immovables (I am) Himalaya (Sthaavaraanaam Himaalayah 10/25)**

India is the proud home of the Himalaya mountain ranges. These extend over almost 1,500 miles in length. The word *Himalaya* comes from Sanskrit word *Hima*, which means snow

and *alaya*, or the residence of snows. Himalaya has about 90 mounts, which are about 24,000 ft. high. Out of these, about 40 are higher than the height of other mountains of the world. Mount Everest, towering at 29,000 feet and the highest of all the mountains of the world, is a part of the Himalayas.

The Indian vegetation is divided into eleven botanical zones. Out of these, three regions are distributed in the Himalayas: Western Himalayas, Eastern Himalayas and Central Himalayas. Each region is again subdivided based upon the altitude. The Eastern and Western regions, each is broadly divided into three zones: subtropical or sub-montane zone, temperate zone and alpine zone. The Central Himalayas are mostly restricted to the Kingdom of Nepal, broadly divided into Western, Central and Eastern Nepal Zone. Each sub-region is again divided into sub-montane zones, temperate zone and alpine zone. The rich plant diversity of the Himalayas is associated with several interesting animals like wild sheep, mountain goats, Ibex, Shraw, Tapier, Panda and Snow Leopard along with traditional fauna. The geological and anthropological importance of Himalaya is also very significant.

Himalaya is famous for its spiritual importance. It is enriched with many pilgrim spots out of which Badrinath, Kedarnath, Gongotri and Yaumnotri are famous. Amidst the snow-covered glaciers, alpine meadows, lakes, holy rivers and exotic flora and fauna, the valley of flowers is most significant for its spectacular scenic beauty. At Amarnath, the nature builds the ice *Lingam* for a short time once every year. The mountain *Kailas* is considered the residence of Lord Shiva. Himalaya (as a king) is regarded as the father of *Parvati*, the consort of Lord Shiva. Since the Vedic period, Himalaya is adorned as the place of yogic wisdom and center for austerity of the sages.

In the present contest, Himalaya has lost its past glory. It has turned into a war field due to the aggressive attitude of the neighbors of India. The pilgrim spots are overcrowded with visitors. Accordingly, the peace of Himalaya is disturbed. The environment is getting polluted due to human activity and very poor care is taken to overcome such pollution. Every year, lakhs of people visit Amarnath to witness the ice *Lingam* in a fixed period of the year. Geologists have predicted that some portions of Himalaya are prone to earthquakes. It is anticipated that, the

movement and activity of lakhs of people and their carriage horses may initiate the primary events of an earthquake. The recent event at Nepal has proven this prediction. Moreover, the mountaineers leave their unused instruments and waste material in the top regions of the mountains, a main cause for Himalayan pollution with unwanted garbage. In addition to all these, global warming is another factor that is likely to melt the ice of the mountains, which is certainly a threat to the Indian subcontinent.

#### MANIFESTATIONS OF THE BIOTIC ENVIRONMENT

1. *Arjuna! I am the universal self-seated in the heart of all beings.*  
(*Ahamaatmaa Gudaakesa Sarvabh-uutaasayasthitah 10/20*)
2. *I am the consciousness (Life Force) in living beings.*  
(*Bhuutaanaamasmi Cetanaa 10/22*)
3. *Arjuna! I am even that which is the seed of all life. For there is no creature, moving (animal world) or inert (plant diversity), which exists without me.*  
(*Yaccaapi Sarvabhutaanaam bijam tadahamarjuna.*  
*Na tadasti vinaa yatsyaanmayaa bhuutam caraacaram 10/39*)

It has rightly been said that biology flourishes as the science of life without attempting to define life (Wald 1958). Probably, the above-referred *Slokas* of Gita rightly define the mystery of life to meet the enquiry of modern science. Life is referred to as "universal self" seated in the heart of all beings that is, the *Aatman*, a philosophical unit (10/20). *Aatman*, the soul is explained in Gita as imperishable, indefinable, unborn, eternal, everlasting and ancient. Weapons cannot cut it nor fire can burn it, water cannot wet it nor wind can dry it. *Aatman* is omnipresent, immovable, constant and everlasting, immutable and unthinkable. No biological laboratory on this world can prove the presence of *Aatman* in a living being.

Sri Krishna says, "*I am the beginning* (that is, start of life from the embryonic stage and beyond that), *I am the middle* (the life process) and *I am the end of all beings* (the death)." (10/20)

In *Ssloka 10/22*, Sri Krishna has referred to himself as the consciousness or life force in liv-

ing beings. Consciousness is the signature of life. The metabolism in a living cell is the life force that is vital and universal from the bacteria to the whale. The metabolic activity ceases with the end of life, called death. It is a big question whether the *Aatman* leaves the body due to end of vital activity or because the *Aatman* leaves, the vital activity turns to zero. *Aatman* is the philosophical factor of the physiological life process.

In the third step (10/39) Sri Krishna explain himself to be the seed of life (*Beeja*) in every creature, either plant or animal. Every being, however small or big he may be, starts its growth from a single-celled embryo, the *Beejam* (*Zygote*) of Gita. The zygote is a product of the union of male and female sex cells, each with a haploid nucleus. Otherwise, the *Beejam* can be traced out as the DNA within the chromosomes. The DNA, as the unit of heredity, controls the structural integrity and functional activity of a cell, the unit of life of an organism. The DNA controls the metabolism, growth and consciousness, but has nothing to do with the soul (*Aatman*).

The divine consciousness factor is spread all over biodiversity. But man, being the highest evolved organism exploits and spoils the biodiversity. Man's attitude of selfishness and exploitation is against nature's principle, that drags the whole ecosystem towards doom, an obscurity. There is a great depletion in human relationships, lack of communal harmony, religious hypocrisy, lack of social coordination, unwanted conflicts and unwanted war with mass destruction-massacre without any value of human life. All these negative impacts in human environment do not stand with the realization of the existence of divine power within the living beings.

#### **4. I am the sexual desire, which leads to procreation ("Prajanascaami Kandarph" 18/28)**

The proliferation of biodiversity needs reproduction. Progeny is possible because of the sexual desire in beings. The sexual instinct and attraction between opposite sexes is responsible for their meeting and mating. The personification of progenerative instinct is named as *Kandarpha*. The sexual desire of the biological world should be revered as divine in origin.

Modern science has successfully implemented the process of artificial insemination to facilitate women with carrying children, whose hus-

bands are either sterile (eunuch) or have some hereditary defects. Even those women, who are not interested to take the burden of marriage, want to have children through artificial insemination, from sperm banks. This process has been prevalent in the Indian scenario since the Vedic age as is evident from the legendary epic *Manusmruti* (Padhy 2010a). It is referred to as *Niyoga Prathaa*, which in literary sense means engaging someone to perform a specific work. *Niyoga* was a socially allowed sexual relationship with a female (who is either with a sterile husband or a young widow without issue) by another specific man (of her husband's family) other than her husband. The intention of *Niyoga* was to have a child (son). But this process was expected to occur under specific circumstances preserving certain ethical sense. Compared to modern science, *Niyoga* can be renamed as 'a natural process of artificial insemination'. *Niyoga Prathaa* was accepted in the society as is evident from many instances in the *Mahabharata* epic, in the form of giving birth to Dhru-tarashtra, Pandu, Bidura, Karna and five Paandavas (Padhy 2010b).

It is now possible to recover viable oocytes from females followed by *in-vitro* fertilization and embryo transfer (1-16 celled stage) to the uterus of another woman, with the normal development of the fetus. The acceptor woman is often described as a 'surrogate mother'. This process enables another sterile woman to have children through the surrogate mother. Such babies (whose embryo is formed by the union of the egg and sperm of donor parents/original parents in a test tube) are called test tube babies, a local name. Louise Joy Brown born on 25<sup>th</sup> July 1978 was the first test tube baby of the world. The woman who carried Louise in her womb, passed away in June 2012. During the past years since 1978 fifty lakh test tube babies have taken birth throughout the world. The embryo transfer technique is successfully used for the development of cows, goats, pigs, sheep, swine and other laboratory animals with a number of advantage characters. Furthermore, *Sri Balaraama* the elder brother of Sri Krishna was born from *Rohini* (the second wife of *Basudeva*), who was a surrogate mother carrying the embryo of *Basudeva* and *Devakee*. This event occurred five thousand years back in India, and is supported by *Puranic* evidences.

It is also possible to replace the nucleus of an egg of a genetically less desirable female ani-

mal with that of a somatic cell of a superior female so that superior transgenic pregnancy may be obtained. The complete animal obtained from somatic cells of an animal is called animal cloning. In early 1997, British scientists announced successful cloning of sheep by transferring the nucleus from an udder cell of an adult sheep into the cytoplasm of an enucleated fertilized egg. The egg was then transplanted into the uterus of a surrogate mother where it developed like a normal zygote into a normal lamb. Transgenic animals in this manner have been produced in mice, cows, sheep, goats, chicken, and pigs. One step ahead in this line of research, human genes have been introduced into animals, and *vice versa*. But research or transgenic animals, and the program for cloning of human beings is not free from ethical issues and opposition from the common people.

The above biotechnological activities to have a human child are often associated with serious social and psychological problems. Conception that is materialized through aid of instruments in the hospital environment could hardly have the emotional satisfaction of the natural method with the mediation of *Kandarpa*. Moreover, the worldwide demand for recognition and legalization of homosexual marriage is certainly a humiliation to the divine originated progenitive instinct *Kandarpa*.

5. *Among fishes, I am the Makara (Jhasaanaam Makarascaami 10/31)*
6. *Among serpents, I am Vaasuki (Sarpaanaamasmi Vaasukih 10/28)*
7. *Among Naagas, I am the serpent god Ananta (Anantascasmi Naagaanam (10/29)*
8. *Among the birds, I am Garuda (Vainateyasca Paksinaam 10/30)*
9. *Among elephants, I am Airaavata (Airaavatam Gajendraanaam 10/27)*
10. *Among the Quadrupeds, I am the Lion (Mrgaanaam Ca Mrgendroham 10/30)*

The Gita narrates the animal diversity with evolutionary significance in the above-referred *sslokas*. As per modern science, the zoological world is divided into two groups: invertebrates and vertebrates. Facts about the invertebrates and microorganisms are discussed in chapter thirteen (13/15), and that they are *Suukhma* (subtle) and *Avijnneyam* (incomprehensible) (Padhy 2014a). Evolution of the vertebrates has taken place from Pisces to Amphibia-Reptilia-Aves and

Mammalia. The Gita presents selected one or two representatives from each group except the amphibians, which comprise 6,433 species as per modern findings. The amphibian group of modern science is missing in the Gita and as well as in the animal classification of *Manusmruti*. However, *Manusmruti* recognizes animals living in both, aquatic and terrestrial habitats (Dash and Padhy 1997). This shows that amphibians are recognized by ancient Indians but are not given a separate status.

In the course of organic evolution, a number of species have appeared on this earth. Many species have also disappeared with the progress of time. Modern science has searched the number of species identified on earth, which stands at 1.7 million, both plants and animals (Osborn 2010). Biological extinction is a natural phenomenon, which has been taking place in a balanced way ever since life came into existence, due to effect of different ecological factors. In the present context, the fast rate of extinction of live forms is of serious concern. It is estimated that before the appearance of man on this planet, the rate of extinction was one species per thousand years. The pressure of human activity on the environment has drastically changed the picture. In a span of three hundred years, from 1650 AD to 1950 AD, about 30 species of animals have been lost. At present probably the earth is losing one species every year. In The Gita, Sri Krishna cautions the human beings to conserve animal diversity by representing himself as one from each group of higher animals.

Fish is often regarded as the first divine incarnation (*Matsya Avataara*) of Lord *Vishnu*. Life appeared first in the aqueous medium. In the Devonian period of Paleozoic era, the mid-ordovician is considered as the age of fishes. The climate of that period was most suitable for the evolution of chordates (from the non-chordates), which is represented in a symbolic form in the *Matsya Avataara* (Panigrahy et al. 2002). Fishes, about 31,300 species, represent more than half of the total number of vertebrate species present on earth. Following widespread degradation of aquatic habitats, there has been a worldwide decline in both, fresh water and marine population of fishes. In India, although adequate information is not available, sporadic observations indicate that of about 1,690 Indian, fish species (the population of more than half) are declining and nearly one-fourth to one-third has



become rare. The pressure of human activity in coastal states of the country has caused extensive damage to wetlands and the mangrove systems. This has adversely affected the fish fauna and in many places fish yield has declined. Many species, which were common earlier have become rare now, may be even in the process of extinction.

Sri Krishna has presented himself (10/28, 29) as serpent *Vaasuki* and *Ananta*, both of which are representative of the reptiles. The worshipping of snakes is a common phenomenon in India ever since. *Ananta* is the name of *Naga* (cobra), which is poisonous. The King Cobra is associated with Lord *Shiva* as his ornament. It is the symbol of *Shakti*, the cosmic energy. From the yoga point of view, the cosmic energy is in dormant form as *Kundalini Shakti* in every human body. This coiled up energy is symbolized as serpent power, which the yogi elevates with his yoga practice (Padhy 2011). The snake *Ananta* (*Na*= No+*Anta*=end, that is endless) in a different approach (Padhy et al 2001) represents the universal time factor. No one knows when time started as the abstract principle of the universe and when it will end. On the other hand, *Vaasuki* in mythology is considered as the spinal column of the earth (*Meru*). It is the hypothetical axis around which the earth rotates. *Vaasuki* is stable and inactive, and drowsily represents the non-poisonous snakes.

The reptile fauna of the planet comprises of over 9,084 species of snakes, lizards, tortoises and crocodiles. Many of these animals are commercially exploited for their skin. Some of them, mainly turtles, are widely consumed by humans. Besides this exploitation, the worldwide destruction of the forest ecosystem has caused nearly forty-five percent of the reptile species to become rare and endangered. About 270 turtle species are present on the planet, out of which a hundred are already facing extinction, as their population has become dangerously low. The Western Ghats of India has 50 species of snakes and their population is dwindling. The Indian python, although widely distributed, is also among those species, which are considered threatened. Moreover, the reptiles are poikilothermic in nature, which mean that they cannot maintain their body temperature. The present global warming conditions are not favorable for the existence of the reptiles, which once caused the disappearance of the giant reptiles like dino-

sours, sixty five million years ago. The *Kachhapa Avataara* of Lord *Vishnu* certainly carries a message to save the reptile population (Panigrahy et al. 2002).

*Vainateya* is the son of *Vinata* (10/30), which refers to *Garuda*, the vehicle animal of Lord *Vishnu*. It is equated with the eagle bird (*Aquila Sp* / *Haliaeetus Sp*) that flies high in the sky (Padhy et al. 1999). *Garuda* represents the Aves group in the biodiversity. There are over 9,998 species of birds on the planet. Almost three-fourth of these are threatened or endangered. Majority of birds are from wetlands, tropical forests and insular ecosystems, which are now disturbed and degraded. The frequent use of pesticides and other chemicals in agriculture often causes the accumulation of the chemicals at lower trophic levels and poisons the worms, larvae, insects and other small organisms. The poison enters the birds through the food chain and undergoes bioaccumulation. This affects the physiology of birds, causes a decline in their reproduction and even death. India has 1,175 species of birds out of which 42 are known to be endemic. About 50 species were included as endangered in Schedule-I, Part-III of the Indian Wildlife Protection Act, 1972. The country now misses the house sparrow and the population of crows is dwindling.

The global population of mammals consists of about 5,490 species, which includes human beings as well. Sri Krishna has presented *Airavata* (Elephant-*Elephas Sp*) and *Mrgendro* (Lion-*Panthera Sp*) representing the herbivores and carnivores of the ecosystem respectively (10/27, 30). According to myth, *Airavata* is a winged elephant with seven tusks and is used as the mount of the rain-god *Indra* (the hydrological cycle of the nature). The elephant, which can fly, unlike an earthly one is comparable with the black cloud, which carries the rain and moves in all directions of the sky (Padhy et al 2001). The earthly elephants are seen in Asia and Africa. The Asian elephant is smaller than the African. In India they are found in the Western Ghats, Mysore, Orissa, Bihar, and the Himalayan range. They comprise sixty percent of the elephant population in Asia. However, the elephant population throughout the world is declining. Human beings mostly kill them for their ivory tusks. Due to destruction of the natural habitats they are disturbed and frequently migrate towards human habitation. This leads to a man-elephant

conflict. Unfortunately the high voltage electric lines and train accidents are a frequent cause for the death of the elephants. Indians directly worship elephants. Ganesh, the elephant-headed God is known as *Agra Poojya*, that is, worshipped first before any other God, and significantly focuses on elephant conservation through religion (Padhy 2008).

*Mrgendra*, the lion, the king of the forest is regarded as the symbol of power and strength. The lion, which a carnivore member of the cat family, is at the top of the trophic level. About 2,000 years ago, lions were found in many parts of Europe. Gradually they were wiped off. Now they are found only in the forests of Africa and Northwest India. Once they were found in the whole of Northwest and Central India, and are now restricted to the Gir forest of Kathiawar, Gujarat. The total area of the Gir sanctuary is now 1,412.12 sq. km and is now declared as a national park. The lion population in 1968 was 177, which increased to 180 in 1979. The lion is very much associated with Hindu mythology being the *Vahana* of Goddess *Durga*. The lion has always been important in mythology, not only in India, but also in some other countries.

Lord *Vishnu* took a famous incarnation as *Nrusingha* (Lion-man) to kill the demon king *Hiranyakasipu*. The idea that God incarnates to the level of animates is a belief in some form or another in every religion throughout the world. There have been attempts to search the hidden scientific theme within the prominent incarnations of *Bhagawan Vishnu* (Panigrahy et al 2002). In the sequence of evolution of animals other than man, carnivores top the list. Lion and other carnivores are in a favorable position in the food chain enjoying the non-vegetarian food. The evolution of carnivores was the then demand of nature in order to maintain the ecological balance from the food chain point of view. At the time, herbivores were highly dominated nature, consuming the vegetarian food and creating a setback in expansion of the plant kingdom. Thus, the basic evolutionary principle of vegetation biota was disturbed. It was the right moment when *Vishnu* took the incarnation of a lion, which added to the evolution of carnivores, thereby saved the vegetation world from further damage leading to extinction. The lion also enjoys a position in the mythological *Panchamukhee Hanuman*, an empirical representation of ancient animal classification (Padhy et al. 1999).

Tigers, contemporary with lions now suffer from falling populations. There were about 40,000 Royal Bengal Tigers in 1909-10. This number was reduced to 2,500 by the year 1982. By the year 1992, there were 18 tiger reserves in India in 13 states covering an area of 28,609 sq. km. The hunting of lions and tigers, which was a heroic activity once upon a time, has destroyed their fauna and is now considered a cruel crime.

Many species of animals have already become extinct and there are many facing the danger of extinction. God is equalizing Himself, with the members of the biodiversity and carrying a hidden message for the protection of the animal kingdom. The basic ecological reasons of extinction of wildlife are as follows.

- a. Destruction of the natural habitats due to expanding agriculture, urbanization and industrialization.
- b. Pollution of water, land and air.
- c. Spoilage and forests and other natural resources.
- d. Over-exploitation of selected species.
- e. Natural calamities.
- f. Poaching for meat, skin, fur, and ivory rhino horns.
- g. Export of some species and introduction of exotic species.

At present, man is the most successful species in the world. But, this statement is questionable from an ethical point of view. The scientific progress and over industrialization by man with a careless attitude towards nature is responsible for the destruction of biodiversity. If man wants to survive, he has to improve his relationship with nature and change his attitude towards the plants and animals around him as the Gita has advised.

**11. I am the celestial cow Kaamadhenu- the cow of plenty.**

**(Dhenuuamasmi Kaamadhuk 10/28)**

**12. Among horses, know me to be the celestial horse**

**(Uccaihsravaa Uccaihsravasamasvaanaam 10/27)**

In the Vedic age, animal classification of the herbivore animals is divided into two groups— free living and domesticated (Dash and Padhy 1997). The cow and horse being important members of the domesticated animals group are projected in the Gita. *Kaamadhenu*, the cow of plenty is known as the *Surabhi*, the mother cow of all cows. It was one of the divine treasures lost

during dissolution, recovered during *Samundra Manthana* (churning of cosmic ocean, a mythological event) (Padhy et al 2001). In Indian tradition, the cow is worshipped as a mother. Killing or inflicting on a cow is considered a serious offence. Whoever kills or allows another to kill a cow is expected to suffer in 'hell' for as many as years as there are hairs upon the animal's body. Sri Krishna was very fond of cows, which significantly represents the importance of animal husbandry in ancient India. In Hindu mythology the different body parts of a cow are equalized with different divine symbols. Its horns symbolize the Gods, face the sun and moon, shoulders the fire god *Agni* and legs are the Himalayas. The whole body of the cow is almost an integrated place for all the gods (Vitasaxis 1977). To speak about the place of cow in Hinduism, one can recall the words of Mahatma Gandhi: "protection of the cow is the gift of Hinduism to mankind".

In the present scenario the position of the cow has changed. They are exploited to produce more milk with hormonal treatments. In towns, instead of taking care of the animals in homely premises, they are allowed to move on the streets in search of food. This certainly causes traffic problem on the roads. The owner of the cow picks it up during pregnancy and takes care of it till the end of milking season. This is how the Indians now domesticate cows. Moreover beef eating is a habit amongst non-Hindus. This food habit is one of the main causes for slaughtering of cows and the decline in their population.

The 'mad cow disease' that appeared in Britain was an outcome of feeding non-vegetarian food to the vegetarian animals. This caused the synthesis of a new protein molecule in the brain cells of the animal responsible for the disease. In order to prevent the contamination of the disease to man through milk and beef, thousands of cows were killed and buried. Cow, the favorite animal of Sri Krishna, is no more in safe hands due to adverse human activity. However, the *Viswa Hindu Parisada*, a religion-based social organization has recovered more than seven lakh cows from being slaughtered.

*Uchchaisrabaa*, the white stallion with seven heads was retrieved during the *Samudra Manthan* (Padhy et al. 2001). This celestial horse scientifically represents the integrated seven colors of the cosmic energy (white light). In Hin-

du mythology, the chariot of Sun god is pulled by seven horses, which are often attributed to the seven colors of light. Biologically, the horse never sleeps on the ground and is ready to run at any time, and this symbolizes the continuous generation of solar radiation. Moreover, energy in physics is measured in terms of horsepower (HP). The earthly horse, *Equus caballus* has evolved from its smaller ancestors, the earliest horse existing 50 million years back. This domesticated animal stands next to the cow and is tamed for riding. Before the invention of the steam engine, horses were used for riding, racing and harness work throughout the world. There are about fifteen horse breeds, which are used for different purposes. The modern transport system has discarded the importance of this animal. A time may come, when the fossil fuel sources of the world will be exhausted, and man may remember the horses and again take care of them.

Since prehistoric times, man has depended on animals for supplies of food, cheap labor, transportation, clothes and leather. As per the 1999-2000 data, there are about 1,322.6 million cattle, 1,759.7 million sheep and goats, 960.3 million pigs, 163.4 million horses, 43.4 million donkeys, and 14.1 million mules throughout the world. The rise in livestock population has kept pace with the growth in human numbers. India tops the world in having the largest number of cattle. In an agriculture-based society, domestic animals are still an essential component of domestic establishments in most of the developing countries. India is no doubt an agriculture-based society since the Vedic age. Sri Krishna has rightly cautioned in the Gita to take care of the domesticated animals, which he practiced during his lifetime, by presenting himself as a cow and horse.

### **13. Among all trees, I am the Asvattha (Asvatthah Sarvavrksaanaam 10/26)**

*Asvattha*, the holy fig tree (*Ficus religiosa*) commonly known as *Peepal*, is worshipped by Hindus, as a representative of *Bhagawana Vishnu*. This plant represents the entire plant diversity, which has 282,842 species of phanerogams and 89,933 species of cryptogames through out the globe. According to the world record in the year 1900, the earth was covered with 7,000 million hectares (Mha) of forest. By 1975 it was reduced to 2,890 Mha. At the time of indepen-

dence, India had 75 Mha of forest covering twenty-two percent of land. Today it has been reduced to just over ten percent. India has been losing 10 million trees every 24 hours. Thus deforestation is one of the main factors leading to desertification, primarily through its effect on climate of the area. Deforestation may occur due to natural causes like flood, fire and major changes in climate. But, manmade deforestation is more significant than the natural causes. Human activity like overpopulation, urbanization, overgrazing, development of industries, mining, construction of hill roads, shifting cultivation and unlimited exploitation of timber for commercial use are the various reasons of land abuse, which directly or indirectly affects the forest community. Nearly one percent of the land surface in India is turning barren every year due to deforestation. The spoilage of the plant community in the Himalayan range has reduced the rainfall by three to four percent. The negative impact of the environment on the plant diversity indirectly affects the animal world and human community and drags the whole biotic potentiality towards doom. In India at present nearly 450 plant species have been identified as endangered, threatened or rare. *Asvastha* may be one among them.

**14. I am Varuna, the Lord of aquatic creatures  
(Varuno Yaadasaamaham 10/29)**

*Varuna* is the mythological authority of water. He is the Lord of the Ocean. His duty is to provide protection and fostering for the innumerable biodiversity living in the sea. The aspects of marine pollution and spoilage of the water resources is discussed earlier. The geographic distribution of organisms in the sea depends on their responses to water currents, temperature and physical barriers. Waves and tides, types of bottoms, salinity and depth affect their local distribution. Marine ecology with environmental factors and problems of organic adjustment are quite different from those in fresh water. The ocean environment can be broadly divided into two parts—Benthic (bottom) and Pelagic (open water). The open sea is recognized with plankton and Nekton biome. The abundance of plankton varies greatly from place to place and from one season to another. The planktons are either phytoplankton or zooplankton. The Nikton is dominated will mollusks, fishes, birds and mammals. The benthos has much greater

animal diversity consisting of sessile forms, sponges, barnacles, mussels, oysters, crinoids, corals, hydroids, bryozoans, crabs, lobsters, copepods, amphipods, protozoans, snails, fishes and bivalves. The pollution of marine water affects the biodiversity adversely. Oil and petroleum product pollution particularly spoils the marine biotic potentiality. About 285 million gallons of oil is spilled each year into oceans, mostly from transport tankers. Every year, 50,000 to 250,000 birds are killed due to oil pollution and accordingly the population of other animals is also affected. Many pollutants like hydrocarbons, benzopyrene, mercury and other heavy metals accumulate in the food chain and enter human beings through consumption of marine products. Recently 170 'Abiotic Zones' (unsuitable for the growth of any plant and animal) are identified in the oceans throughout the world and their number is an increasing trend. *Varuna*, the biotic potentiality of the marine habitat is helpless in protecting the biodiversity against the pollution environment.

**15. Among man, I am the King  
(Naraanaam Ca Naraadhipam 10/27)**

A monarch born with royal excellence is regarded as representative of the divinity. The king is considered the leader, ruler and savior of the humanity and the environment. In the Vedic age compendium *Manusmruti*, the king is advised not to go hunting (Manu VII / 47, 50), a cruel play which involves unwanted death of innocent animals. The people of the *Kshatriya* race generally get tempted to perform such brutal activities. As the king's conduct is expected to reflect in the society, it was felt as a social standpoint that the king's indulgence in hunting, should not be encouraged in order to conserve the animal biota. This is how the ancient Indians became conscious of the environment (Padhy et al. 2006). In the present scenario, kings are restricted to a set of playing cards, and few ornamental monarchs in some countries and states. The government everywhere now, is run by people, electing their representatives. The elected members form the government, which works for the welfare of the country.

The concern for deteriorating conditions of the environment and degeneration of wildlife arose simultaneously in many countries in the world and felt that it is due to human activity.



Negative effects of population growth, industrialization, expansion of agriculture and overexploitation of nature became increasingly apparent by 1960s. Problems related with the environment took up innumerable shapes and variety. There was no consensus among people facing these problems. The need for a general concept of universal applicability to conserve the environment, wildlife and natural resources was felt throughout the globe. With a hope to solve the world environment problem, delegates from 114 governments all over the world, met on June 6-16<sup>th</sup>, 1972 at Stockholm (Sweden) in the United Nation's Conference on human environment for preservation and enhancement of its quality. Everyone felt that, the present environmental status quo is an outcome of economic development. After hectic discussions and deliberations of about a week, a consensus was reached known as Stockholm Declaration with the following important features:

1. The natural resources on earth including air, water, land, flora and fauna especially representative samples of the natural ecosystems must be safeguarded for the benefit of the present and future generations through careful planning and management as appropriate.
2. That man has a special responsibility to safeguard and manage the heritage of wildlife and its habitats. Discharge of toxic and other substances should be halted so that serious or irreparable damage to ecosystems can be avoided.
3. That science and technology for the economic and social development must be applied to the avoidance, identification and control of environmental risks and solution of environmental problems.
4. That scientific research and development in the context of environmental problems must be promoted at all levels especially in developing countries where most of the biological diversity is available.
5. That free flow of up to date information and transfer of technology must be maintained in order to facilitate the solution of environmental problems of developing countries and that states should ensure that international organizations play a coordinated role in the protection of the environment.

In the year 1980, the International Union for Conservation of Nature and Natural Resources (IUCN) in collaboration with the United Nation's

Environment Program (UNEP), World Wildlife Fund (WWF), Food and Agriculture Organization (FAO) and United Nation's Educational, Scientific and Cultural Organization (UNESCO) jointly developed a strategy to conserve and use the living natural resources with the following main objectives:

1. To maintain the essential ecological processes and life support systems on which human survival depends.
2. To preserve the genetic diversity on which ecological processes of life support systems are based.
3. To ensure the sustainable utilization of species and ecosystems (fishes, other wildlife, forests and grazing lands) which support millions of rural communities as well as industries.

The 12<sup>th</sup> general assembly of IUCN introduced the idea of a world charter for nature in June 1980. It was on October 28, 1982, that the world charter for nature was adopted by a majority of votes, which says:

1. Mankind is a part of nature and all life depends on the uninterrupted functioning of natural systems, which ensure the supply of nutrients and energy.
2. That essential ecological processes, life support systems and diversity of life forms, which are being destroyed by excessive exploitation and habitat destruction by man, must be protected.
3. That the natural systems should be used in such manner, which ensures the preservation of species and ecosystems for the benefit of present and future generations.
4. That the genetic diversity on earth should not be compromised and that the population levels of all life forms, wild or domesticated, must be at least sufficient for the survival, and to meet this end, necessary habitat should be safeguarded.
5. That optimum sustainable productivity should be maintained from the ecosystems, organisms, resource of land, marine systems and atmosphere so that the system or their species should coexist.
6. That proper measure at national or international, individual and collective, private or public should be adopted to protect nature and promote international cooperation.

The UN Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 approved a set of agreements known as "our common future". This conference is otherwise known

as the 'Earth Summit'. In their report, emphasis was laid on 'Sustainable Development' with the basic theme, 'Live and let live others', the basic concept of the Gita and Veda as follows:

*"He alone truly sees, who sees the Supreme Lord as imperishable and abiding equally in all perishable beings, both animate and inanimate. By that, he kills not himself by himself by seeing the Supreme Lord, equally present in all (Gita 13/27, 28).*

*"The whole universe together its creatures belong to the Lord (Nature). No creature is superior to any other, and the human being should not have absolute power over nature. Let no species encroach upon the rights and privileges of other species. However, one can enjoy the bounties of nature by giving up greed."*

*"Look upon all the animate beings as your bosom friends, for in all of them there resides one soul. Behave with others as you would with yourself. All are but a part of that universal soul. A person, who believes that all are his soul mates and loves them all alike, never feels lonely. He experiences the intense joy throughout his life". (Yajurveda: 40.1, 6)*

Sri Krishna's version, *"I am the king among the men, to conserve nature is rightly reflected and guided the leaders throughout the world, the converge at a point, to protect the environment for themselves and future generation."*

More work on the 10<sup>th</sup> chapter of the Gita revealing the human diversity and expansion of the creation from a single point to infinite is in progress.

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