

During the past ten years, more than 100,000 Olive Ridleys have been killed by illegal fishing along the coast of Orissa which is one of the three mass nesting sites in the world hosting as much as 50 percent of the world's population (Das, 2004). The scientists and environmentalists must urge the Indian authorities to take immediate steps to protect the mass nesting sites of the Olive Ridleys along the Orissa coast. To save the endangered sea turtles, action must be taken against mechanized fishing along the Orissa coast.

Conservative measures

Conservation and development have to be integrated to ensure a sustainable future. In addition to the protection offered by the Wildlife Protection Act of 1972 for a number of turtle species, Orissa's campaign against poachers of Olive Ridleys, Tamil Nadu's extensive hatchery programme in the Bay of Bengal, research and publications on turtle conservation by the CMFRI (Central Marine Fisheries Research Institute) and the appointment of a sea turtle specialist group by the Department of Environment to advise the Government of India helped India to achieve progress in sea turtle conservation.

Large land areas acquired as community reserves near the beaches can provide safe nesting areas. Moreover interpretation centres have to be established to provide details about the life cycle of the turtles to local people. In these reserves, human/ animal movement must be prohibited during the nesting season, October-May as the turtles require total privacy during reproduction (Sastry, 2004). Nesting is affected by rainfall as the Ridleys prefer a warm climate to lay eggs. Predators have to be prevented from disturbing the eggs, hatchlings and adults on the nesting beach for achieving conservation. During fishing, by catch reduction devices like Turtle Excluder Devices have to be used. Conservation of green turtle nesting sites can be initiated in Gujarat, Laccadives and Andaman and Nicobar islands. Awareness programmes can be organized on turtle conservation to make people aware of this endangered species (Kabi, 2009). Awareness about the significance of marine resources especially turtles and the consequences of their destruction have to be created among the public and fishing community. Studies related to the identification, lifecycle, behavior, distribution, nesting, feeding and reproduction of turtles may pave way to take effective conservative measures.

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Bio-Ethics and Sustainable Development: The Need for Proper Policy Making

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In the twentieth century, the discipline of philosophy has witnessed many philosophical turns. Some of them are: the linguistic turn, hermeneutical turn, the ecological turn, feminist turn and phenomenological turn. Philosophers began to look at philosophical problems from different perspective. Thus there is a paradigm shift from "arm-chair philosophy" to social oriented philosophy". Especially the hermeneutical turn and the ecological turn gave a new methodology of upstanding human problems and both these turns are interrelated.

The ecological turn may be defined as follows: "The ecological turn, is not a single or univocal issue; on the contrary, it stretches all the way from issues of pollution of our rivers to the question of the relationships of humans, the world and God. Every discipline and every ideology, every system of morality and every form of religion has to rethink their fundamentals in the light of the ecological question, on pain of otherwise turning themselves into engines of oppression". This definition clearly shows that there is a need for protecting the environment and man cannot have an isolated life. His life is interrelated with the nature and other living beings.

Similarly the hermeneutical turn explains the need for rethinking and reunderstanding the philosophical concepts. If we extend this scope, one can understand the need to revisit our way of approach towards nature and other living beings. Two aspects of hermeneutics are: (1) the interrelation between the whole and the parts and (2) the interrelation of the past and the present with that of the future. Our attitude towards nature should be such that that we must develop a holistic perspective wherein one cannot have a compartmentalized understanding of life. This means that in order to understand the totality of life, we must know the validity and the significance of parts, which include, nature as well as other living and non-living things on earth. Similarly we are always shaped by the past. Our

traditional values and ethos play a significant role in shaping the present; not only the present but also the future. Thus we see the interrelation between the ecological turn and the hermeneutical turn. If we use this methodology, a new way of understanding the sustainable development will emerge.

The "bio-philía" conception that there is an innate emotional affiliation of human beings to other living beings is important in this context. A respect for life is emphasized by many contemporary thinkers. One good example is Leopold (1948). He argues in favour of a land ethic, which includes soils, waters, plants and animals or collectively, the land. "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise". In Leopold, we see a need for a shift from human to nature. Thus, we see in the contemporary approach an extension of environmental aesthetics to plants and animals and to nature. The animal rights philosopher like Peter Singer and the Deep ecologists like Arne Naess and Warwick Fox are representatives of this.

Peter Singer (2003) asks the question, whether a non-human animal is a person and answers positively. He explains how animals are used in experiment for the sake of man. He narrates one such experiment in the U.S. Armed Forces Radiobiology Institute at Maryland. Here the rhesus monkeys are trained to run inside large wheel. If they slow down too much, the wheel also slows down and as a result, the monkeys get electric shock. Once they are trained in this for some time, they are given lethal doses of radiation. Then while sick and vomiting, they are forced to continue to run until they drop. This is supposed to provide information on the capacities of soldiers to continue to fight after a nuclear attack. Such experiments take away the rights of animals. This is due to the wrong assumption that both plants and animals exist for the sake of man. This is nothing but exploitation.

Hans Jonas (1984) says that this would result in the dehumanization of man. He explains how the future of man lies in the future of nature. Similarly, Deep ecologists like Naess raise deep questions about one's assumptions regarding ecological relationship. Naess gives seven principles, which must be taken seriously in the context of environmental aesthetics. These principles are: rejection of the man-in-the-environment image in favour of the relational, total field image, biospherical egalitarianism-in principle, principles of diversity and of symbiosis, anti-class posture, fight against pollution and resource depletion, complexity, not complication, and local autonomy and decentralization. Naess' deep ecology, otherwise known as "Ecosophy T" is explained as follows: *"I call my philosophy 'Ecosophy T', using the character T just to emphasize that other people in the movement would, if motivate to formulate their world view and general value priorities, arrive at different ecosophies: Ecosophy 'A', 'B', ..., 'T', ..., 'Z'. By an 'ecosophy' I here mean a philosophy inspired by the deep ecological movement."* (Naess, 1985).

Philosophy teaches how to live with our environment with peace and free from conflict. But sufficient care has not been taken to understand the traditional methods of preserving nature. This has led to innumerable environmental problems. The degradation of the environment is leading to vast areas of the world and as

a consequence of this, the world, which we live in, is becoming more and more unsuitable for human habitation. A clean and hygienic environment is a basic necessity for healthy living. Industrialization, unplanned development and mechanization have spoiled the environment considerably. The solution to the problem is possible only through global understanding. If sustainable development is to succeed as a new way of life, its moral content should be well justified. The need of the society is to transform the behaviour of the societies towards the biosphere. A new ethic of embracing plants and animals is required so as to live in harmony with nature. Eminent environmental thinkers like R.C. Clark, R. Elliot and P. Singer have emphasized the need to protect the living beings on earth. It is the duty of humans to take care of non-human beings also and hence humankind has more moral responsibilities towards earth. In the contemporary period in the West, the two great thinkers, namely, Heidegger and Habermas have attempted for an ethics, through their principle of deep ecology and Discourse ethics respectively.

We live in a civilization that is threatened by the uncontrolled growth of technology, deriving from the empirical sciences, which have nothing to say about human values. Modern civilization is radically rotten, and only a complete transformation in theory and practice could cure it. The environmental crisis facing industrial society is so grave that humankind has to do something to save the human society, as well as nature and other living beings. In the present society, there is a public demand for particular ethics for single profession of vocation, a demand that is as unwarranted as if one were to demand specific civic rights and laws for different groups, communities within the same political entity called State. The different professions and communal groups of people may have different mores, but there should only be one underlying set of ethical maxims, principles as obligatory for all human beings, irrespective of race, religion, nationality or other secondary qualities. Thus the contemporary Western thinkers have been contemplating the concept of "global ethics".

In our present scientific technological civilization, there is a need for protecting humans as well as the environment. Every individual and every creature has intrinsic dignity and inalienable rights, and each one of them has an inescapable responsibility for what he does. The role of bio-ethics, bio-safety, the ethical implications of genetic engineering are important in the contemporary society. Theoretical discussion of these issues will not solve the problem. The solution to the problem lies in application of the theories that are formulated to the issues and this is possible only through the help of philosophers. It deals with problems connected with humankind and nature.

In the context of contemporary society, we are talking about "Universal ethics" or "Global ethics". By these terms we mean that certain ethical concerns apply globally, not just within the borders of one country or even to one culture. There are certain issues, which are discussed globally and they are not restricted to one region alone. In 1993, the important Conference held in Rio de Janeiro, otherwise known as the "Earth Summit" in which most of the nations participated. The basic idea behind this Conference is to protect the earth. It is because the earth, which we live in, faces a common

crisis and it is in the interests of all, we must join together in combating it. Universal ethics is the synthesis of different traditions and aspects of biological, social and spiritual heritage that we have.

How to make this ideal a realistic one? A new move in the ethical philosophy has sprung up under the name environmental ethics, or environmental philosophy which will give us a lead. It is true that what we discuss under this topic is not totally new. Our ancient thinkers conceived this idea and have spoken elaborately on it. But the issue is more significant in this millennium because of the fact that the problem we face today is to be tackled immediately if humanity is to survive in the future. It is not only concerned about the living of human beings. Human beings must protect the plant and animal kingdom. They should not think that the nature exists for his use alone. They have to take care of every aspect of nature. The rights and wrongs of our treatment of animals are discussed at length in ethics. The ethics of population growth and the use of natural resources have an important part to play in the discussion of social or distributive justice between nations. Now philosophers understand their responsibility to consider questions of moral responsibility and political organization in a global context. The sense of a need to think afresh about questions of ethics in international relations gains importance from the belief that ecology has altered our understanding of life. This means till now we have been talking about issues connected with national boundaries like, self-determination of peoples, implications of war, nuclear deterrence etc. But now, environmental disaster is a common threat to the whole humanity and hence must be tackled immediately for the future survival of man. This explains that there is a demand for a radical re-thinking of moral parameters.

The increasing awareness that Western culture may be breaking down has made us to search for causes and examine facets of modern society, which we have hitherto ignored, neglected and overlooked. In technology, there is a focal point, in which conceptual and ideological paths meet. To understand these converging paths is to understand the main configurations of the network within which our civilization operates. For example, notions like progress, nature, invention, rationality, efficiency etc., have a link with culture. To put in simple terms, the philosophy of culture is the philosophy of society, a philosophy of humankind in a civilization which has found itself at an impasse, which is threatened by excessive specialization, fragmentation and atomization and which is becoming aware that it has chosen a mistaken idiom for its interaction with nature. All these problems to some extent are due to our wrong approach to science and technology.

In the contemporary period, the need for such ethics has been felt very much. Albert Schweitzer defines ethics as human's unlimited responsibility towards every living being. Philosophers like Immanuel Kant, Max Weber, Hans Jonas, Jürgen Habermas, Richard Hare, John Rawls, and others have stressed this. Kant developed the moral philosophy or philosophy of practical reason during 1785 and 1797 and published three important books namely, *Foundation of the Metaphysics of Morals*, *Critique of Practical Reason* and *Metaphysics of Morals*. The philosophy of practical reason or ethics is concerned with that only which ought to be done, i.e., what should

be enacted by man's action grounded in a free will, whereas the philosophy theoretical reason or nature is concerned merely with everything that is. Max Weber's ethics is known as "responsibility ethics". He was guided in his historical-sociological research by an idea which was decisive in his construction of concepts and his formation of theories; the idea of the rationalization of all social fields. Max Weber rejected the dogmatic interpretation of history and society, whether idealistic or materialistic and has pointed out that in every investigation of historical and social events one must ask a basic question namely, whether such an inquiry is strictly, factual. His study on *Protestant Ethics and the Spirit of Capitalism* is a typical example of his approach to the socio-historical phenomena. Similarly, Hans Jonas' *The Imperative of Responsibility in Search of an Ethics for the Technological Age* is an investigation with a reconsideration of the ethical key-concept freedom and like Kant he takes man's free will as the metaphysical condition of morality. According to him, in so far as technical science has extended man's educative power up to the point where it becomes sensitively dangerous to world as such, it also extends man's responsibility for future life on earth. Thus human responsibility becomes for the first time cosmic. It needed the obvious endangering of the whole system, the factual beginnings of its destruction, to make us discover or rediscover our solidarity with the whole world. Habermas' Discourse ethics or theory of communication attempts to serve the purpose of critically analyzing various possibilities of morally responsible acting, thus aiming at guidelines for a morality justifiable life in our technological world. The main objective of his Discourse Ethics is to re-formulate and re-assess Kant's formalistic moral theory, in particular the justification of ethical norms and principles by employing the means of communication by saying that moral questions can be by rational reflection and discourse.

In Indian tradition importance is given to animals and plants and it considered them as sentient beings, and even inanimate phenomena of nature like mountains and rivers, the sun and the moon--all endowed with life. The Vedic deities are personification of natural phenomena--the fire and the wind, the sun and the moon, the river and mountains, the day and the night. It is not a kind of poetic personification alone. The mystic seers of the Vedic hymns could realize the divine presence in every phenomena of nature and also understand that it is the same reality that appeared in different ways. This tendency is found even in later classical Sanskrit literature. In the *Kumarasambhava*, Kalidasa describes the Himalayas as Devatatma, the heroine, Parvati is the daughter of Himavan. Ganga and Sarasvati are rivers as well as deities.

In the context of contemporary problems of environmental destruction and pollution, we have to look all the harmony which existed between man and nature in ancient India, especially in the hermitage of Kanva and Marica in the *Abhijnana Sakuntala* and Vasistha in the *Raghuvamsa*. This is in contrast to the Western concept of dominance and exploitation and environmental destruction. Even in classical Sanskrit literature we often come across the contrast between the calm and serene atmosphere of peace and harmony found in the hermitages and the suffocating activities of the crowd in

the cities expressed by the young sage accompanying Sakuntala to the court of Dusyanta.

The theory of Samsara emphasizing karma and rebirth applied not only to human beings. The ten incarnations of Visnu as fish, tortoise, boar etc. are well known. The *Ramayana* refers to the story of Ahalya being cursed to become a stone for long until Lord Rama resurrected her by the touch of his foot. The *Bhagavata* refers to Kubera's sons Nalakubara and Manigriva being cursed to lead the life of two trees, until Krishna rescued them from the curse. The story of King Nrga who had to suffer as chameleon till Krishna saved him is also known. If cutting of trees and clearing part of a forest become necessary as for the construction of a temple, the deities or spirits presiding over the trees had to be requested with elaborate mantras to move out without making trouble, since a temple of God is to be constructed there. The concept of Vanadevatas or deities presiding over the forests is suggestive of the importance given to the planets and trees. The unsophisticated village man and women treated nature as part of their household. Sri Aurobindo believed that evolution is not always straightforward and that it often entailed involution also. Human and semi divine beings born as animals after death are quite frequent in our *Puranas*. The story of Gajendramoksha and Jadabharata being born as a deer exemplify this. The Hindu gods and goddesses were closely associated with their favorite animals and plants or trees. Thus Indian tradition always responded sympathetically to nature with human behaviour. Personification of insentient nature was often considered as a defect in western literature and philosophical methods, but Indian writers considered it as quite appropriate.

There is an inseparable relation between eco conservation and sustainable development. They are like two sides of the same coin. The eco system is not a mere collection of living and non-living things but an intricate connection between these various elements. It is because of this reason that the living things receive energy and matter from the environment and convert these into living matter. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs.

What is important at present is environmental auditing. It is a mechanism for assessing the impact of an existing industrial or commercial operations on the environment. It needs collection, evaluation and documentation of sufficient evidence to establish that the operation is in accordance with the standards. The eco system has its own limits to the amount of disturbance it can sustain. The balanced equilibrium of the eco conservation as a whole, works to the mutual benefit of living and non-living things. Eco philosophy culminates in transpersonal ethics, which transcends the individualistic and egoistic aspects.

How far this is acceptable? How far this transpersonal approach to ethics is acceptable in the context of globalization? Environmental management systems (EMS) are now growing in importance as a voluntary body for corporation to institutionalize environmental responsibility operations. Two main initiatives for certifying EMS are: the Eco Management and Audit Scheme (EMAS) and the International Organization for Standardization (ISO). There is a

demand for getting ISO certificate, which shows the environmental awareness among the people of India.

The need for re-thinking and re-ordering the contextual relation between nature and history is studied in the contemporary society. According to many, the "ecological repentance" is needed to understand the real relation between man and nature. Eco-humanism talks about the uniqueness or special status of humans precisely in their relationship to nature. Here one can make a distinction between: (1) separative humanism and (2) participatory humanism. The first one is autocentric whereas the second is allocentric, which allows openness. Marjorie Grene, for example talks about participatory humanism to explain the need to reinterpret the human in terms of nature. The participatory humanism attempts to interpret the attributes of human. The human is special not in transcending nature, we may say but in being specially related to it, not transcendence, but a special and unique mode of participation is what characterizes the human.

Thus it can be argued that only an interpretational understanding of the term "sustainable development" is the need of the hour. We have to take care of everything, i.e., both beings and non-being which alone will help us to preserve the nature for the future generations.

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Human cloning: Comments on Iftime (2012)

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Iftime (2012), writing on human cloning, has pointed out that there has been a lot of debate and discussion on philosophy and theology of cloning, but to a much lesser extent on its scientific and biological aspect. The biological objections to human cloning definitely need more attention. These objections have been discussed at some length by Verma and Saxena (1999).

Iftime (*loc. cit.*) has correctly said that in cloning gene function is affected. Verma and Saxena (*loc. cit.*) have drawn attention to the fact that the following two steps of normal sexual reproduction are missing in cloning, and that this in main is responsible for malfunctioning of genes.

Parental imprinting

In sexual reproduction a haploid set of maternal chromosomes and a similar set of paternal chromosomes