

# **ENVIRONMENTAL ETHICS AND FUTURE GENERATIONS: A CRITICAL STUDY**

**THESIS SUBMITTED TO THE UNIVERSITY OF NORTH BENGAL FOR  
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DOCTOR OF PHILOSOPHY IN PHILOSOPHY**

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**DEDICATED  
TO MY  
PARENTS**

## DECLARATION

I declare that the thesis entitled “**Environmental Ethics and Future Generations: A Critical Study**” has been prepared by me under the guidance of Dr. Laxmikanta Padhi, Assistant Professor of Philosophy, University of North Bengal. No part of this thesis has formed the basis for the award of any degree or fellowship previously.

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## TO WHOM IT MAY CONCERN

This is to certify that the Doctoral thesis entitled “**Environmental Ethics and Future Generations: A Critical Study**” prepared by Sri Pankoj Kanti Sarkar, is the result of his academic work. To the best of my knowledge, this thesis is not submitted for the award of any degree of this University or any other University. As the thesis bears the evidence of his originality, I consider it fit and recommend its submission for evaluation for the partial fulfillment of Doctorate degree in Philosophy of the University of North Bengal. The candidate has complied with all requirements as laid down under PhD regulation, 2009.

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# Abstract

We all know that we are in an environmentally endangered period, like Pesticides in the ground water, over fished oceans, ozone holes and soaring extinction rates. When we think that we are distinct from the world, we also open up the possibility of its exploitation and destruction. Human beings have always had impact on their environment, killing animals for food or plowing fields, and entertainment. The accumulation of that power is evident in the ecological crises of the latter half of the twentieth century in the threats of catastrophic extinctions, for example. What was for so long a “given” has of late become an “obligation”. Human’s absolute anthropocentric or despot like attitude unconstrained by ethics is subject of great ecological abuse. We do not yet have an adequate ethics for this planet Earth and its communities of life. Towards that end, an attempt has been made in this doctoral dissertation entitled: *Environmental Ethics and Future Generations: A Critical Study*, to explore values carried by the natural world, and responsibilities towards future generations. By doing so we think that we can solve environmental problem and save the world form global catastrophe. Keeping this view there are five chapters in this endeavour.

In the *introduction* chapter we have introduced the development of applied ethics and environmental ethics and sustainable development with the following inquires:

- ❖ Do we need a new environmental ethics?
- ❖ Intrinsic value of nature?
- ❖ The source of this value of nature?
- ❖ The rights of nature?
- ❖ A proper foundation for environmental ethics?
- ❖ Value in nature itself, or projected by humans?

So far as the sustainable development and future generation is concerned the following questions have been raised:

- ❖ Are we responsible for deciding which future people will come into being?
- ❖ Are our decisions in bringing these people into existence morally valuable with respect to these people?
- ❖ Would it be right to bring them into existence at all?

- ❖ If it were so responsible for bringing people into being need to we feel any obligation in a way that they have a life worth living?
- ❖ What right do we have in deciding what would count as a good life for future people?

In the second chapter entitled: *Theories in Environmental Ethics* we have made an attempt to discuss the basic theories in environmental ethics and discussed the question that “to what extent anthropocentrism is acceptable”? We have also mentioned the philosophical arguments for anthropocentrism in environmental ethics. From a moral perspective anthropocentrism describes that only human beings are intrinsically valuable, nature has only instrumental value. We have discussed three varieties of anthropocentrism prevalent in environmental ethics. We have discussed some philosophical arguments for non-anthropocentrism some arguments against both these theories. In this chapter, we have tried to say that human interest in survival is the best ground on which to argue for an ecological balance which is good both for human and for the whole biological community. We humans are gifted with rationality; therefore, we need to use that gift in a rational manner to save our environment.

In the third chapter entitled: *Environmental Ethics, Sustainable Development and Future Generations: Some Observations* we have discussed that environmental ethics is concerned with the issues of responsible personal conduct with respect to natural objects, resources and non-human organisms. It is one of the most important modern environmental conservation and sustainable development tools. It teaches us to be healthy and reciprocal to the global environment and development.

In this chapter we have defined the concept of sustainable development, and tried to show that the term sustainable development contains two key concepts. In addition to these two key concepts four interlinked dimensions of sustainable development also introduced in this chapter such as, *economic, environmental, social and cultural*, because if development is to be sustainable in the long-term, there needs to be a balance between these four dimensions. We also discuss the ethical approach of sustainable development, in this chapter. The basic normative principles of sustainable development are: Common but differentiated responsibilities, Intra-generational equity, Inter-generational equity, Justice, Gender equality. We have also discussed some relevant questions of sustainable development. These are: Sustainability of what? Sustainability for whom? Why

Sustainability? Questions like what is future generation, what is the moral status of future generation, what is our obligation, what is the Utilitarian approach towards future generations, are discussed in this chapter.

In the fourth chapter entitled: *Environmental Ethics and Sustainable Development in Indian Philosophy and Culture* an attempt has been made to show that Indian philosophy and culture have strong foundation for environmental protection and it has a holistic approach towards environment, sustainable development and future generations. We discussed the ecological insight of the three best known schools i, e., *Nyāya*, *Sāṃkhya*, and *Advaita Vedānta*. Here we have also discussed environmental consciousness in Hinduism and the *Darśanī* of Kautilya as environmental consciousness. Indian philosophical culture is devoted towards nature. Humans' attitude towards nature was cordial, loving and caring. They devoted nature through prayers, through worships and various customary manners. We can develop an ecological paradigm and strategy which is based on the concept of *Vasudheiva Kutumbakam* to formulate a global environmental ethics and sustainable development for future generation.

As a *concluding remark*, we suggest that our obligations to protect environment from human's despot like attitude must be primarily based on obligations to future generations. If we have no moral reason to consider the interests of future individuals, then we have few compelling reasons to conserve environment. This is because the present generation, will not be harmed very much if we continue to destroy our environment. So, if we only consider the interests of the present generation in our moral calculations, we will fail our posterity. In order to advocate environmental protection, we must have moral reasons to look out for future individuals. It is imperative for these environmental reasons that we find a way to justify our moral obligations to future generations. The question is whether or not we have any obligations to future, and what these obligations are, this may seem like a simple question with a clear answer. Yes, we do have obligations to future generations, including an obligation to leave behind a clean environment. This obligation is expressed in the concept of sustainable development which is defined as the development that meets the need of present without compromising the need and interest of future generations.

We have suggested that environmental ethics can solve environmental problems for future generations and save the world if we recognise the normative nature of these problems and their solutions. Humanity will not be able to save the world from environmental catastrophe unless and until the normative nature of environmental problems is recognised. Environmental problems are essentially and irreducibly normative in nature because for the following reasons.

1. Environmental problems are the result of human behaviour, and human behaviour is the result of human values which is usually socially inculcated.
2. Our detrimental behaviour to the natural environment in modern industrial society is the result of the specific modern values, such as, limitless economic growth and competitive materialism, so that changes in these values will be necessary if we are to resolve our environmental problems.
3. Science alone will not be sufficient to solve environmental problems since they involve more than empirical causation and consequences, the foci of science.
4. Since technology applies scientific knowledge without examining or arguing about existing social values, the community's public political process of discussion, debate and decision-making among value alternatives will be necessary to lead to the solution of environmental problems according to such political values as: justice, fairness, equality and democracy.
5. Political theorists who study political values have an important role to play in environmental studies despite the latter are domination by environmental scientists producing the misleading impression that our environmental problems are purely empirical. The other elements of normative discourse environmental ethics, aesthetics and theology will also be important to the value changes needed to the mitigation, or amelioration of our environmental problems, let alone, their solution.
6. Finally, environmental problems, producing the widely admitted global environmental crisis, will be the catalyst for the transformation of the current hegemonic modern social values, practices and institutions, making normative discourse with its critical and prescriptive functions vitally important to both environmental studies and the aim of saving the world.

It is therefore, the responsibility of human beings to preserve the environment for the betterment of the future generation. Sustainable development is the need of the hour

in this advent of changing scenario. We must think that we are not bound to solve all the problems of the world; our duty is only avoid creating problem. We must not be responsible for evil of others: we must not harm others, and if we have harmed them then we must repair the damage. This is called "Ethics of Responsibility."

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# **ENVIRONMENTAL ETHICS AND FUTURE GENERATIONS: A CRITICAL STUDY**

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## PREFACE

We all know that we are in an environmentally endangered period, like Pesticides in the ground water, ozone holes and soaring extinction rates. When we think that we are distinct from the world, we also open up the possibility of its exploitation and destruction. Thus, we are the causes of destroying our environment. Humans must live in response to nature in encounter with their natural environment. Humans have a responsibility towards nature, is among the more recent philosophical discoveries, although not without precedent in the past. Humans have always had impact on their environment, killing animals for food or plowing fields, and entertainment.

Like no humans before us, we know Earth with its past evolutionary story, we know its present fauna, flora, ecosystems and we hold Earth's future in our hands. The accumulation of that power is evident in the ecological crises of the latter half of the twentieth century in the threats of catastrophic extinctions, for example. What was for so long a "given" has of late become an "obligation". Human's absolute anthropocentric or despot like attitude unconstrained by ethics is subject of great ecological abuse. We do not yet have an adequate ethics for this planet Earth and its communities of life. Towards that end, an attempt has been made in this dissertation with widening ethical scope, exploring values carried by the natural world, and responsibilities towards future generations. In this respect, we have tried to introduce environmental ethics, which we think can solve environmental problems to face by future generations and save the world from global catastrophe.

The idea of the present topic came to my mind during the discussion with my supervisor. But the germ of interest in the area of Environmental Ethics grew-up within me during my post graduate

classes in NBU. I found it interesting as to what should be the responsibilities of human beings towards future generations from environmental ethical perspective. Thus, when time came to select the exact topic of M. Phil dissertation, I readily took up the topic, by receiving some valuable suggestions of my supervisor Dr. Laxmikanta Padhi. After completion of my M. Phil degree I have registered for Ph. D degree. What was incomplete in my M. Phil dissertation I have tried to clarify it in my Ph. D thesis.

The bibliographical notes contain some of the books with which I am not directly acquainted. The names of the books in the bibliography are added with the hope that the future researchers will be benefited.

PANKOJ KANTI SARKAR

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I have no word to express my respect, love and heartfelt gratitude to my Parents and my elder sisters and elder brother for their unconditional constant encouragement, strong mental support and guidance throughout the entire period of my writing of thesis. I also express my deep sense of gratitude to my entire close friend circle for their encouragement behind my work and last but not to the least, I also indebted to the UGC for giving me the financial assistance through Rajiv Gandhi National Fellowship and ICPR, New Delhi and I also thankful to the staff members of the administrative building of our University for submitting the thesis. It is my responsibility to the University of North Bengal an institute of higher education of excellence whose peaceful and beautiful large campus with its infrastructural and geophysical support provided me to complete this work.

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## **CHAPTER- I**

### **INTRODUCTION**

The challenges of the world we face in the 21<sup>st</sup> century and the subsequent situations are increasingly complex in character and multiple in dimension. The threat to environment, constant depletion of natural resources, ever-widening gap between the rich and poor, the changes introduced by scientific progress, effects of globalization on economic, cultural, moral and political levels which are all united and global in character.

These problems, along with the unprecedented level of interconnectedness and interdependence of human beings from all regions may be described as a 'crisis'. Human beings instead of trying to reach at a solution for such a crisis are confronted with war, border issues and problems that come from the global community. However, what are required are the conditions of such a community that demand reflection on the basic elements to maintain a peaceful and healthy life. In any community, there must be a minimum level of understanding of the policies or rules that will be founded on a guiding set of basic principles. But unlike other communities, the global community has neither basic principles, nor tradition or customs to serve as a reference. What is lacking is a global structure for understanding and an ethical framework as its reference. Thus we are confronted with some basic questions like: what is responsibility? What constitutes values? What is a notion of a community? What do these notions entail, assume and project? Thus, ethics or moral philosophy plays a role here.

For some thinkers, there are two approaches to the ethical reflection within the transformations of science and technology. First, ethical reflection needs to consider particular situations in problem solving, and second, there must be content in ethical reflection. The latter one provides openness to other cultural traditions. In order to establish solution for particular situations, references must be made to culture, tradition and wisdom. Thus ethics or moral philosophy can bridge the gap to arrive at ethical solutions to deal with specific problems that science and technologies face in the 21<sup>st</sup> century. This is possible only when we define human fulfillment in relation to nature. Thus, the field of ethics involves systematizing, defending, and recommending concepts of right and behavior, duties and responsibilities. Moral philosophers normally

divide ethical theories into three categories such as Normative Ethics, Meta-ethics and Applied Ethics. Let us describe these in brief.

The word 'Ethics' is derived from the Greek word 'ethos' which means character. Ethics may be briefly defined as 'the science of morality' or as 'the study of right human conduct or duty'. It is a theory which explains the facts of moral life and indicates the course in which human activities should be directed. Thus, it is essentially a philosophical investigation into the notions of good and bad, right and wrong, and the connected notion of duty, as applied to conduct or voluntary action. Ethics may also be defined as 'the science of moral character as expressing itself in right or wrong conduct or action', or as "the science which deals with the goodness and badness of human character and seeks to determine the ideally perfect type of character which it is the duty of all men to strive to realize within themselves". Ethics is sometimes defined as an enquiry into the nature of the ultimate end of human action, the highest good of man and the means of attaining it. Thus, it may be said that Ethics is the study which deals with the moral ideal or standard, the supreme good or chief end of human activity and with those laws or regulative principles by conformity to which the supreme good is attained.

Ethics implies knowledge of basic principles and responsibility to make appropriate choices when necessary. The strong bond between ethics and a society's customs raises the issue of relativism. Moral philosophers argue that ethics implies values that are universal and are not tied to one society or time period. The particular rules implementing ethical beliefs in a specific society may change, but not the fundamental principles. In a society composed of subcultures, the specific laws or customs of each may be expressed differently. The distinction between ethics and morality becomes important when the rules used by different groups are not understood or accepted. Unacceptable behaviour may be assumed to mean unacceptable values. In that case, the unifying characteristics, of a society are weakened and individuals within that society must justify their actions.

### **1.1: Normative Ethics:**

Normative ethics deals with the questions like which moral standards regulate right and wrong conduct. This question involves the good habits and duties that we should follow and the consequences of our behaviour towards others. It deals with a set

of questions like “how ought one to act morally”? Thus, normative ethics is distinguishable from Meta-ethics because it scrutinizes values for the rightness and wrongness of actions, while Meta-ethics studies the meaning and justification of moral language and moral facts.

A distinguished branch of normative ethics is the theory of value which looks at what things or which are deemed to be valuable. For example, suppose we have decided that certain things are intrinsically good, or are more valuable than other things that are also intrinsically good. In such a context the following questions are plausible. What would this suggest about how we should live our lives? What sorts of things are good? What sorts of situations are good? Is pleasure permanently good? Is it good for people to be equally well off? Is it inherently good for beautiful things to exist? Or what does “good” mean? It may literally define “good” and “bad” for a community or society. Let us discuss some of the normative ethical theories, in the following way.

A) Consequentialism (Teleology) argues that morality of an action is dependent upon the action’s outcome or result. Some of the consequentialist theories are as follows:

- According to utilitarianism, an action is right if it leads to the most value for the greatest number of people (Maximizes value for all people).
- According to egoism, an action is right if it maximizes good for the self-person’s self-interest.
- According to situation ethics, the right action to take is the one which creates the most loving result, and that love should always be our goal.

B) Deontology: Deontology argues that decisions should be made considering the factors of one’s duties and other’s rights. Deontological theories include:

- Immanuel Kant’s Categorical Imperative, which roots morality in humanity’s rational capacity and averts certain inviolable moral laws.
- The Contractarianism of John Rawls and Thomas Hobbes, which holds that the moral acts, are those that we would all agree to if we were unbiased.
- Natural rights theories, of Thomas Aquinas or John Locke, which holds that human beings have absolute, natural rights.

C) Virtue Ethics, which has been advocated by Aristotle, focuses on the inherent character of a person rather than on the specific actions that he or she performs. There has been a significant revival of virtue ethics in the past half century,

through the work of philosophers like G.E.Moore, E.Anscombe, Phillipa Foot, A. MacIntyre, Jane Austen, and Benjamin Franklin.

### **Metaethics:**

Metaethics is the study of the nature of ethical statements. It involves questions like “are ethical claims true?” i.e., capable of being true or false, or “are they, expressions of emotion?” If they are true, are they true forever? If they are ever true, what is the nature of the truths that they express? And are they ever true completely or always only relative to some individual, society, or culture?

Metaethics studies the nature of ethical sentences and attitudes. This includes such questions as what does “good” and “right” mean?, how we know what is right and good?, whether moral values are objective?, and how ethical attitudes motivate us? Often this is derived from some lists of moral absolutes, e.g. a religious moral code, whether explicit or not, some would view aesthetics as itself a form of Metaethics. Metaethics also investigates where our ethical principles come from, and what they mean. Are they merely social creations? Do they encompass more expressions of our individual emotions? Metaethical responses to these questions focus on the issues of universal truths, the will of God, the role of reason in ethical judgments, and the meaning of moral terms themselves.

### **1.2: Applied Ethics:**

Applied ethics is a branch of ethics that considers the practical application of ethical principles to specific issues of social or personal concern, including medical ethics, professional ethics, and environmental ethics. Applied ethics is the philosophical examination, from a moral standpoint, of particular issues in private and public life that are matters of moral judgment. It is thus, a term used to describe attempts to use philosophical methods to identify the morally correct course of action in various fields of human life. Thus, applied ethics tries to provide guidance on specific issues within the context of a consistent notion of the elements of a good life. It is a discipline of philosophy that tries to apply ethical theory to real life situations. But it is not simply a matter of the application of ethical norms. Applied ethics also gives a special attention to humanity’s specificity and the urgency of the situation in which the ethical issues arise. The distinctiveness of applied ethics lies in its particular and direct attention to

those features. In fact, ethics as it has been understood traditionally, integrates both theoretical and the practical ethical concerns.

### **The emergence of applied ethics:**

There has been an unprecedented growth and demand for applied ethics since the last half of the previous century. In order to make sense of the demand for applied ethics, let us discuss some major developments that contributed to the turn to applied ethics that have been witnessed over the last three decades.

### **The contemporary turn towards applied ethics:**

This is an age of application for the various disciplines under humanities. And it is customary in philosophy to discriminate any applied or practical oriented subject on the ground that it destroys philosophy and applied ethics is not free from such kind of segregation. In spite of this approach towards applied ethics, it is believed that applied ethics is a direct outgrowth of the earlier philosophical periods. Because we know that at the beginning of this century *Logical Positivism*, which is considered a part of philosophy of science rejected all ethical theories. For them all ethical theories or judgments are expressions of emotions, which are neither verifiable in principle nor in practice, therefore, do not have meaning. But after the Second World War Logical Positivism came under attack. Critics started to look at those issues of sciences and what the positivist's said about those issues. These issues of the critics are called *The Logic of Discoveries*.

Philosophers started to look at the logic of ethical judgments and found that when people make ethical judgments and decisions they simply do not express their emotions or feelings; rather they are making a distinction between making the decisions and justifying the decisions. Research in this area is called "practical ethics". Philosophers became more interested in this area and examined specific ethical issues. Thus practical ethics gradually developed and transformed itself into applied ethics.

From another perspective, the contemporary turn towards Applied Ethics was fuelled by a variety of developments. Perhaps the most important of these developments was due to the rise and status of science in the modern times. Say for example, Francis Bacon's famous statement that 'knowledge is power' has become a reality in the modern times. Philosophical ethics, which by its very nature deals with

values, has been pushed to the sidelines, if not totally excluded from the main line of modern scientific discourse’.

The developments of philosophy have contributed to the marginalization of philosophical ethics. Modern philosophical ethics, in an attempt to cope with the rationality of modern science, has produced the approaches to ethics that imitate the universal laws of nature produced by the natural sciences. Say for instance, deontological ethics of Immanuel Kant and utilitarian ethics of John Stuart Mill has produced its own account of a universal moral law in the form of Categorical Imperative and the Greatest Happiness Principle.

We have started to recognize that we need to assume responsibility for the impact of our actions on our natural and social World. This awareness of responsibility towards the World has generated the need for a new way of engaging ourselves ethically within the world. Philosophical ethics, with its focus on abstract moral principles on the one hand, and its attraction with meta-ethical issues on the other, was not able to answer this need in the modern World. Thus, applied ethics emerged as a strong contender to fill up this gap. Applied ethics is concerned with the specific, controversial moral issues, such as abortion, animal rights and euthanasia. Medical ethics is the first applied ethics ever to be developed. The following principles are the most common principles in applied ethical discussions.

- *Social benefit*: acknowledges the content to which an action produces beneficial consequences for society.
- *Principle of benevolence*: helps those in need.
- *Principle of honesty*: do not deceive others.
- *Principle of autonomy*: acknowledges a person’s freedom over his/her actions or physical body.
- *Principle of justice*: acknowledges a person’s right to due process, for compensation for harm done, and fair distribution of benefits.
- *Rights*: acknowledges a person’s right to life, information, privacy, free expression, and safety.

The above principles represent a spectrum of traditional normative principles and are derived from both consequentialist and duty-based approaches.

### **1.3: Environmental Ethics:**

Environmental ethics is a sub branch of applied ethics. The word “environment” maybe defined as the ‘collective term for the conditions in which an organism lives, both biotic and abiotic’. Environmental ethics emerged as a new sub discipline of philosophy in the early 1970. It is a discipline that studies the moral relationship of human beings, and also the value and moral status of the environment and its nonhuman contents. Environmental ethics has given a new dimension to the conversation of natural resources. In wider sense ‘environment’ signifies the surroundings, which include the social, cultural and moral sphere. In its narrow sense, it includes the non-human nature including plants and animals. Man and nature together constitute environment as a totality. Thus, environment includes both man and nature and environment of man comprises of the relation between man and man and the relation between man and nature.

Environmental ethics studies the ethical relationship between human beings and natural environment. Human beings are a part of society and so are the other living beings. When we talk about the moral principle that guides our life, we often ignore the fact that even floras and faunas are a part of our lives. They are an integral part of the environment and therefore have a right to be considered a part of the human life. On these lines it is clear that they should also be related with our guiding principles as well as our moral and ethical values. There are some basic premises in environmental ethics that govern human-nature relationship which are as follows:

- Human being is a part of nature.
- Our knowledge and understanding of the complexity, diversity, and interrelationship of life and living system remain rudimentary.
- The sustainability of our life support system is incompatible with current consumptive growth patterns and the rate of human population growth.
- Humans have altered the natural system of the Earth to such an extent that much extinction have already taken place and the existence of countless species, including our own, is in jeopardy.
- Human beings need to have a profound respect for nature in all its diverse manifestation.
- All species are unique and have value regardless of any value that they may have for humans.

- All persons need to take responsibility towards nature.
- Indigenous knowledge of eco-system and the culture of which it is a part should be respected and valued in the effort to enhance knowledge and pursuit of environmental sustainability.

When industrial progresses lead to destruction of resources, is it not the industry's duty to restore the depleted resources? Moreover, can a restored environment make up for the originally natural one? Mining process hamper the ecology of certain regions, they may outcome in disturbance of plant and animal life in those areas. Slash and burn techniques are used for clearing land for cultivation. Thus, most of the human activities lead to environmental pollution. The excessively increasing population is increasing the demand for resources like food and shelter. As the population is exceeding the carrying of our planet, natural environment are being used for human inhabitation. The damage we, as human beings, are causing to nature, as coming back to us by resulting in a polluted environment. The diminution of natural resources is jeopardizing our future generations. The imbalance in the nature that we have caused is going to disrupt our life. By destroying nature, we are depriving these life forms of their right to live. We are going against the proper ethical and moral values by disturbing the equilibrium in nature. We are being unethical in treating the plants and animals life forms, which co-exist in the society.

Human beings have certain obligations towards their fellow beings; similarly, we have a set of duties towards our environment. Environmental ethics claims that our behaviour needs to be based on a set of moral values that guide our approach towards other living beings in nature. Environmental ethics is about including the right of non-human animals in our ethical and moral values. Even if human race is considered as the prime concern of society, animals and plants are in no way less important. They have a right to acquire their fair share for survival. We the human beings, along with the other farms of life make up our society. We all are a part of the food chain and thus, closely related with each other. We together form our environment. The preservation of natural resources is not only the need of the day but also our prime duty.

Rachel Carson's *Silent Spring* P. Erlich's *The Population Bomb* , B. Commoner's *The Closing Circle* and, in particular, the Club of Rome's report *Limits of Growth* are often quoted as being the motivation for the environmental movement which penetrated politics, the media, science and philosophy. The relatively late

spreading of ecologist discourse into the general public stemmed from human tendency to act by taking rational measures only after a critical situation has arisen, i.e. under pressure. At present, contrary to opinions suggesting that the ecological movement has become less active following its institutionalisation, we can perceive that in Western Europe, the range of protest actions has actually increased.

Technological growth brought humankind face to face with a historically exceptional situation, the importance of changes imposed upon nature, the image of the Earth viewed from space, and local, regional or even global crises and the boomerang outcome of certain technical attainments generated insuperable difficulties for traditional ethics. Earlier it is believed that traditional ethics deals with only humans and their fellow humans and is therefore anthropocentric and also non-cumulative. Confronted with our technical resources, the brittle nature of life on our planet calls for ethical thinking to enlarge and include future generations and the non-human world.

Environmental ethics is the only sub-branch of applied ethics that does not solely involve culture. It measures conditions produced by nature and the point at which nature and culture meet. The ethical-environmental method is a precarious one: once we humans have gone through nothing will ever be the same again; problems must be undertaken rather than bypassed. But presently the condition forces us to face the problems. The distinctive feature of any ethical method is to scrutinize issues and difficulties and try to understand them rather than dishing out resolutions. The immediacy of threats on the same scale as, nuclear war overshadows controversy about abstract issues such as the controversy between supporters of ethical nativism and those who see ethics as rooted in culture alone. Sidgwick comes to the conclusion that a theory about 'the origin of ethics would make very little difference to the controversies between the different schools of ethics'.<sup>1</sup>

One might question the necessity for another type of ethics, given that traditional ethics and several religious ethics already exist. The response is that environmental ethics does not look like any of these ethics in any way, for several reasons at least. Let us discuss. Firstly, No universal religious ethics, is available to solve conflicts of international law. In addition, the bases of religious ethics are not the equal as those of environmental ethics. Religious ethics have a spiritual foundation whereas environmental ethics have a rational, scientific foundation. But there is a

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<sup>1</sup> Sidgwick H. and Singer M.G. edit. *Essays on Ethics and Method*, Oxford University Press. 2005, P.10-26.

constant attraction and tension between the two. Both realms belong to humankind and neither can rule the other one out. We cannot use certain religion to explain ethics or vice versa, but rather to understand the way that the two are inter-related. Any practical ethical method should take account of, and expand its basis of reflection to include, all human proportions for which environmental ethics has a transversal dimension. In a disappointed world which has lost its sacred aura, the fear of harmful consequences leads to precaution, but ultimately in the long term, only the fear of interfering with something sacred will be able to keep us out of harm's way. However, that stage is still a long way off.

The emergence of questioning about the relationship between human and environment on a global scale calls for reflection, on the same level of generalisation, about establishing a framework for analysing actions, which independently or together, in the present or the future, are liable to cause damage to humankind and the ecosphere. Large-scale creativities represent a new type which is no longer ethically neutral. Similarly to the fields of ecology and systemology, it would seem that the field of ethics also has emerging properties. Just as persons and societies require ethics to reach a minimum of consensus and escape the relativism of values and moral tribalism, so humankind requires ethics regarding the ecosphere and its components.

The year 1988 was an important year so far as the development of environmental ethics is concerned. Several books were published in marking the birth of this discipline. *Respect for Nature, Environmental Ethics, Foundations of Environmental Ethics, Why Preserve Natural Diversity? And Biodiversity*, were all published. In 1989, Holmes Rolston III, E. Katz, L. Westra and others formed *The International Society for Environmental Ethics*. In the year 1997 another scientific association has formed *The International Association for Environmental Philosophy*. Various periodicals were published including *Environmental Ethics, Environmental Values* and *Ethics and the Environment*.

The relationship between environmental ethics and environmental philosophy share a common characteristic, namely, they can be ranked into two categories, i.e. *anthropocentric* and *biocentric*. *Ecocentrism* is a third category, which is closely associated to biocentrism. The detail about these theories is discussed in the second chapter. These categories are useful for moralistic purposes, but, like any wide-ranging outline, are rather simplistic. The differentiated approach separates anthropocentrism

from biocentrism and the criterion is the moral entity whether this is human or non-human. Utilitarianism and equality lie at opposite poles.

The relationship between human and environment/nature, or relationship between humankind and its natural habitat, is a matter which requires some idea of tradition, religion, culture and philosophical, political and economic systems. This relationship is a vast field of research for ecology, particularly its cultural and ideological dimensions. The human-nature relationship also includes elements of philosophy as it concerns humankind's place in the world.

The mutual character of the human-nature relationship is nothing new. Humankind has had a significant impact on its environment ever since it first started using fire over 700,000 years ago. Humankind's excessive hunting led to the extinction of fauna, and its agricultural practices. These are all instances of the *co-evolution* of human beings social systems and natural systems.

Historical elements of humankind's attitudes towards nature or environment can only be discussed in this dissertation in the light of religious approaches, as far as the modern age is concerned. Humankind organized its values on religious beliefs; implicitly, this is here where ethics came to the picture. There are also socially constructed perceptions of nature that represents a model. This model is originally the part of religious models. After the religious approach then came scientific knowledge and both approaches continued to exist side by side. If we were to judge the legitimacy of the knowledge developed by one or other viewpoint, we would indirectly tend to favour the rational, i.e. scientific school of thought. However, if we ponder the convergence of models obtained by mystics and scientists, the harmonizing nature of the two viewpoints goes beyond the realm of mere hypothesis. The elements presented here may be the key to understand human-nature relationship, especially its progress and current status, which go a long way to elucidate environmental crisis.

Primitive religions originated in early humankind's contact with nature. From the disparity between its own power and that of the natural elements, primordial humankind gained a sense of the existence of a reality which transcended this world, and was brought into contact with the sacred. It is useful to point out here that this first step in the emergence of Homo religious gave rise to humankind's sense of

dependency. Religions and ancient theories stem from nature, which are classified under the term naturalism: animism, totemism etc.<sup>2</sup>

The beginning of modernity noticed as a turning point in history and reason initiated to take on importance in all of humankind's attitudes and activities which resulted in a religious crisis. Logical reasoning, methodical reasoning of Descartes, mechanicism of Newton, quantification and experimentation of Bacon and Galileo were all transformations of the paradigm that governed modernity. The changes made possible by the influx of industry followed by science and modern technology. Industrialization, which also had consequences on agriculture, brought about considerable developments for Homo sapiens. It dramatically increased environment's carrying capacity and a population boom soon followed. The 'nature-machine' or 'nature resource store' is an image which remained in modernists' mind and, which, in many ways, still endures today. In the early 1970s, at the dawning of the environmental crisis, doubt was cast over the idea of an everlasting, untamed nature, endowed with considerable autopoietic capability and flexibility.

#### **1.4: Sustainable Development:**

Sustainable development is a broadly used concept which is shared by economics, ecology and politics. Sustainable development incorporates well-known solutions to reconcile economic development with the worthy continuance of human civilisation and the protection and renewal of natural resources. Basically sustainable development is today's institutionalised answer to the environmental crisis. The economic side of sustainable development is transformed and subordinated to the cause of human solidarity which must go beyond national and temporal barriers of universal, intragenerational and intergenerational harmony. It involves conserving the natural environment in a state of minimum deterioration. The idea emerged out of the climate of imitation which followed the UN Summit in Stockholm (1972) and the creation of the United Nations Environment Programme (UNEP). In 1983, the United Nations General Assembly formed the United Nations World Commission on Environment and Development (UNWCED) to study the compatibility amongst economic development and environmental protection. In 1987, the Commission produced a report entitled *Our Common Future*, also known as the *Brundtland Report*. The report defines sustainable development, initially known as eco-development, as: "...development which meets the

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<sup>2</sup> <https://www.slideshare.net/H.S.VIRK/man-nature-relationship-and-the-sikh-perspective>.

needs of the present without sacrificing the ability of future generations to meet their needs.”

The definition is brief, vague and, inapplicable according to the experts. It can be used by environmentalists, who highlight the sustainable part and also by economists who focus on the development part. Tim O’Riordan drew a distinction between sustainability and sustainable development<sup>3</sup>, but in Agenda 21 the terms ‘sustainability’ and ‘sustainable development’ were used interchangeably. The first one prioritizes the environment, while the later highlights the development aspect which could be confused by some with economic growth.

Radical ecologists have been anxious of using the term sustainable development in the contexts where progress is sporadic or regional. They suggest the term sustaincentrism as the middle ground amongst techno-centrism and eco-centrism. Development can be judged economically using simple indicators such as the GDP/inhabitant, but this does not give an idea of well-being. Various types of capital support development, like: natural capital, physical capital produced by humans, human capital and social capital. There are two forms of sustainable development like strong and weak. An important issue is that of the degree of substitutability between natural capital and other capitals, a degree which defines whether there is strong sustainability or weak sustainability. Followers of weak sustainability consider that a loss of natural capital can be compensated by other forms of capital. This idea is full of optimism and confidence in future scientific and mechanical solutions. On the other hand, supporters of strong sustainability consider the other forms of capital to be harmonizing and non-substitutable.

After the Rio summit, the use of the term sustainable grew up in popularity like, sustainable agriculture, sustainable political systems, sustainable societies, etc.. From an environmental viewpoint, seeing the connection amongst economic and ecological systems and examining local and regional problems within overall economic and ecological context indicate a change of perception. *Think global, act local* is a fashionable slogan. Sustainability cannot be envisaged on a local or regional scale if global sustainability is ignored, as sustainability is possible locally by importing natural resources which may damage, or even render impossible, the sustainability in the

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<sup>3</sup> Riordan, Tim O. ‘The Politics of Sustainability’ in *Sustainable Environmental Management: Principles and Practice*, edited by R. Kerry Turner, London: Belhaven, 1988.

exporting regions or areas.<sup>4</sup> On first glance, the concept of sustainability, which refers to notions of equity, may appear to be highly compatible with socialism. In a recent report, the Commission recognizes the limits of sustainable development, which are related to the current state of our methods, current social organisation and the biosphere's capability to support the effects of human activity. Under these conditions, sustainable development is not a state of equilibrium, but a state of change and research, which implies the need to make painful sacrifices and decisions. And where there are decisions there are also choices and ethics.

In the second chapter entitled: *Theories in Environmental Ethics* we have made an attempt to discuss the very basic normative theories in environmental ethics and discussed the question that "to what extent anthropocentrism is acceptable"? We have also mentioned the philosophical arguments for anthropocentrism in environmental ethics. From a moral perspective anthropocentrism describes that only human beings are intrinsically valuable, nature has only instrumental value. We have discussed three varieties of anthropocentrism prevalent in environmental ethics. Some of these are concerned with the interests of human while some are not concerned with the human interest. We have tried to show that to a certain extent, anthropocentrism in a weak sense can be acceptable because, we think that absolute destruction is dangerous and absolute preservation is impossible. We have discussed some philosophical arguments for non-anthropocentrism some arguments against both these theories. In this chapter, we have tried to say that human interest in survival is the best ground on which to argue for an ecological balance which is good both for human and for the whole biological community. We humans are gifted with rationality; therefore, we need to use that gift in a rational manner to save our environment.

In the third chapter entitled: *Environmental Ethics, Sustainable Development and Future Generations: Some Observations* we have discussed that environmental ethics is concerned with the issues of responsible personal conduct with respect to natural objects, resources and non-human organisms. It is one of the most important modern environmental conservation and sustainable development tools. It teaches us to be healthy and reciprocal to the global environment and development. Here we have defined the concept of sustainable development, and tried to show that the term

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<sup>4</sup> [http://www.uvm.edu/giee/AV/PUBS/PARADOX/Sust\\_Par.html](http://www.uvm.edu/giee/AV/PUBS/PARADOX/Sust_Par.html), (Voinov, A.A. Paradoxes of Sustainability, *Journal of Environmental Management*, 1998.)

sustainable development contains two key concepts. Firstly, the concept of needs, in particular the essential need of the world's poor, to which priority should be given, and the idea of limitations imposed by the state of technology and secondly, social organization on environment's ability "to meet present and future needs". In addition to these two key concepts four interlinked dimensions of sustainable development also introduced in this chapter such as, economic, environmental, social and cultural, because if development is to be sustainable in the long-term, there needs to be a balance between these four dimensions. We also discuss the ethical approach of sustainable development, in this chapter. The basic normative principles of sustainable development are: Common but differentiated responsibilities, Intra-generational equity, Inter-generational equity, Justice, and Gender equality. We have also discussed some relevant questions of sustainable development. These are: sustainability of what? Sustainability for whom? Why Sustainability? We have mentioned the distinction between strong and weak sustainability, cultural sustainability. The paradigm shifts in sustainable development, different environmental ethical theories and sustainable development we have discussed in this chapter. Ethical concern of population control, how wildlife preservation can help to promote sustainable development, is highlighted in our discussion.

Question like what is future generation, the moral status of future generation what is our obligations towards future generation, what sort of problems can be raised if we support our obligation to future generation, what is the Utilitarian approach towards future generations, are discussed in this chapter. Since the 1970s, the topic of ethical obligations to future generations has been of interest to philosophers, economists, environmentalists, and others. While the context for application differs for each field, the central issues are the same: whether a current generation has moral obligations to non-contemporaneous future generations, the nature of those obligations, and whether those obligations require an earlier generation to make sacrifices for a future generation, are discussed in this chapter.

In the fourth chapter entitled: *Environmental Ethics and Sustainable Development in Indian Philosophy and Culture* an attempt has been made to show that Indian philosophy and culture have strong foundation for environmental protection and it has a holistic approach towards environment, sustainable development and future generations. Indian culture shows greater concern and deep respect towards nature and

emphasizes the holiness and purity of life for both at present and future. Indian philosophy and culture seeks to identify and evaluate the distinctive ecological attitudes, values and practices of human beings by making clear their relations with the intellectual and ethical thought within scripture, ritual, myth, symbols, cosmology, and sacrament.

A good environmental sense has been one of the fundamental features of India's ancient philosophy. History reveals the fact that the civilization of India had grown up in close association with nature. Indian philosophical tradition provides a solid foundation for adequate concern and deep respect for nature, biosphere and ecosphere and future generations. Indian environmental thinking reaches its apex in the philosophical *sutras* of the six school of *Darśanaś*, or a way of life. We discussed the ecological insight of the three best known schools i, e., *Nyāya*, *Sāṃkhya*, and *Advaita Vedānta*. These schools are intended to regulate our conduct in tune with cosmic order. Environmental consciousness in Hinduism and the *Dāṇḍaniti* of Kautilya as environmental consciousness is highlighted in this chapter.

While discussing environmental sustainability in Indian philosophy and culture it is suggested that, though sustainable development and ecologically appropriate lifestyle are a relatively new concept in the Western world to overcome environmental crisis, but it has been an integral part of the traditional Indian culture and philosophy for ages. The sustainability of Indian culture has been made possible by virtue of cultural diversity which in turn is on account of the diversity of ecosystems prevailing. The operational software for the sustainability of diversity is however the traditional Indian value system much of which is retained even today. As a conclusive remark of this chapter we have suggested that the holistic concept of environmental ethics, sustainable development and preservation of natural resources for future generations was already there in Indian philosophy and culture.

As a *concluding remark*, we have tried to propose that our obligations to protect environment from human's despot like attitude must be primarily based on obligations to future generations. If we have no moral reason to consider the interests of future individuals, then we have few compelling reasons to conserve environment. This is because the present generation, will not be harmed very much if we continue to destroy our environment. So, if we only consider the interests of the present generation in our moral calculations, we will fail our posterity. In order to advocate environmental

protection, we must have moral reasons to look out for future individuals. It is imperative for these environmental reasons that we find a way to justify our moral obligations to future generations. The question is whether or not we have any obligations to future, and what these obligations are, this may seem like a simple question with a clear answer. Yes, we do have obligations to future generations, including an obligation to leave behind a clean environment. This obligation is expressed in the definition of sustainable development as the development that meets the need of present without compromising the need and interest of future generations. While discussing environmental ethics, sustainable development and future generations, we believe that environmental problems and the related problems for future generation can be solved and the world will be saved if we necessarily understand the normative nature of such problems.

We can say that nature has weak anthropocentric intrinsic value following Rolston III. But humans' destruction of environment according to their own needs, without compromising the interest of future generation, is excessive and unexpected. We need to protect our environment from unnecessary destruction and preserve natural resources for future generation by a sustainable developing technique, which may be considered as an **Ethics of Responsibility**. There are lot of issues and concerns in relation to environmental ethics, sustainable development and future generations which are not covered and discussed in this dissertation, keeping necessarily in mind for future research.

## CHAPTER-II

### THEORIES IN ENVIRONMENTAL ETHICS

#### **2.1: Anthropocentrism:**

Anthropocentrism means human centeredness. In environmental ethics the term is described as the attitude, values and practices, which focuses only on human interest or position rather than the position and interest of other non-human species in the natural world. It places human beings at the center of universe and measurers of all things because only humans have soul, rationality and capacity to analyze and expressing language. According to this view, man stands apart from nature and nature is viewed as something to be conquered. Human beings have every right to use and manipulate nature according to their own needs and deeds. From a moral point of view, anthropocentrism holds an independent value solely and predominately for human interests. Human beings create all ethical codes and norms, so there are no moral norms or absolute rules other than what human beings have invented. Only humans are the sources of intrinsic value. All other non-human species exist to subserve the purpose of humans. Thus, anthropocentrism is concerned only with human interests, excluding the desires, goals and values of non-human species and interprets everything in the world in terms of human values.

#### **Philosophical Arguments in Favour of Anthropocentrism:**

This attitude of human being towards nature can be traced back to Platonic dualism. In the early stage of Western philosophy both Plato and Socrates have interpreted the external world as the copy of the real world existing elsewhere which Plato called the world of ideas. That world of ideas is opposed to the real world from where all ultimate truth could be found only through human reason. Plato thinks that only human beings have reason and by that capacity they can conceptualize, analyze and concentrate on the external world. This makes human beings capable of observing the shadows of the real world that exists beyond the material world. This kind of dualism by Plato perhaps, helped the Greeks to think human beings as reasoning beings different from and more important than nature.

According to the Western tradition this kind of attitude is seen in the idea of *The Great Chain of Being*, which can be traced in Plato, Aristotle, Aquinas and Plotinus.

*The great chain of being* shows that according to the degrees of perfection there is a descending order of beings from God through angels to human beings, animals and plants. The famous Protagorean view that “Man is the measure of all things” captures the idea that only man can know what reality is for him. Calvin’s statement that “God created all things for man’s sake”<sup>5</sup> supports anthropocentric attitude.

Aristotle pointed out that species that have lower reasoning ability exist for the sake of those who have higher reasoning ability. He regarded nature as hierarchical and opines:

Plant exists for the sake of animals, brute and beast for the sake of man domestic animal for his use and food, wild one for food and other accessories of life such as clothing and various tools. Since nature makes nothing purposeless or in vain, it is undeniably true that she has made all animals for the sake of man.<sup>6</sup>

In his own major work, the *Summa Theologica*, Aquinas followed the passage from Aristotle and made classification of sins. In his classification of sins, Aquinas has room only for sins against God, ourselves or our neighbours. There is no possibility of sinning against nonhuman animals or against the natural world.<sup>7</sup>

In the religious tradition like the Judaic-Christian tradition there is a dualistic view, where it is said that God is a supernatural and spiritual being who only shares his spirituality with human beings. No other beings have such kind of spirituality. According to the ancient Hebrew tradition, (in 1450 B.C.) the divine creator created the world as good and man and woman in His own image. It is said in the *Genesis* that,

God said “let us make man in our own image in the likeness of ourselves and let them be the master of the fish, of the sea, the birds of the heaven, the cattle, all the wild beasts and the earth”. God created man in the image of himself, in the image of God He created them. God blessed them saying to them “Be fruitful, multiply, fill the earth and conquer it. Be masters of the sea, the birds of the heaven and all living animals of the earth.”<sup>8</sup>

It can be said that Christianity is the most anthropocentric religion. Here man shares God’s transcendence of nature a lot. Thus Christianity in contrast with other Asian religions not only established a dualistic difference between man and nature but also emphasized that it is because of God’s will human species exploits nature for his

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<sup>5</sup> Schwetckhe, A. and Bruhn, M. *The Commentaries of John Calvin on the Old Testament* Calvin Translation Society: Edinburgh 1843-48, 1:96.

<sup>6</sup> Singer, P. *The Environment: Practical Ethics* 3<sup>rd</sup> edition Cambridge University Press: Cambridge 2011, P.240-41.

<sup>7</sup> *Ibid.*

<sup>8</sup> *Genesis* 1: 26, 27-28.

fulfillment. This makes nature and everything subordinate to human species and their wishes, keeping in mind that nature has no value in itself<sup>9</sup>.

Descartes' supposition that the world is a machine and human being is the chief operator of that machine supports this anthropocentric position. The Cartesian distinction between mind and body, that made the body subservient to the mind implies that the material world is used by human mind also justifies anthropocentric position. Descartes and Kant give priority to rationality and power of communication, to form concepts. In the natural order human beings have the highest reasoning capacity. Inanimate objects and plants do not have this ability. Even the linguistic Philosopher Wittgenstein, the most anti-Cartesian of all philosophers, shares the Cartesian bias against animal mentation by virtue of the absence of language in animals. In one passage he expresses that:

“If a lion could speak, we could not understand him; in another he suggests that it is conceptually impossible for an animal to smile. He also suggests that a dog cannot simulate pain or feel remorse, that an animal cannot hope or consciously imitate, and that a dog cannot mean something by wagging its tail and a crocodile cannot think.”<sup>10</sup>

The rise of science influences some exploitative attitude of human beings towards nature. Our technology and scientific development is Western in style. This requires a greater use of natural resources like land, air, and water. Thus, science and technology makes nature more and more used, exploited and subordinated to human being's needs and desires. Only human being is there with inherent value, nature has only instrumental value.

### **2.1.1: Anthropocentrism and its Varieties:**

There are at least three varieties of anthropocentrism prevalent in environmental ethics. Some of these concerned with the interests of human, while some are less concerned with human interest. Let us discuss these varieties given below.

- I. Perspectival anthropocentrism
- II. Strong anthropocentrism
- III. Weak anthropocentrism

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<sup>9</sup> *Genesis* 1: 26, 27-28.

<sup>10</sup> Wittgenstein, L. *Philosophical Investigations* Oxford: Blackwell, 1958, p. 90,153,166,174,224.

### **(I) Perspectival Anthropocentrism:**

Perspectival anthropocentrism holds the view that human being's view about the world is shaped and limited by their position and their way of being in the world. Fredrick Ferre, the supporter of this variety opines: "Man's view about the world is shaped and limited by their position and the way of being within it".<sup>11</sup> For Ferre human beings have no choice but to think as human. It is not objectionable that they should be interested in themselves. Like other beings human beings have reasonable interests to pursue. Mary Midgley, one of the supporters of this kind says "people do right not wrong to have particular regard of their own species".<sup>12</sup>

Thus, this kind of anthropocentrism holds that human centeredness is desirable because human-centered means having a well-balanced idea of what it means to be a man, the place and moral significance of human being in the world. Some philosophers and psychologists maintain that properly understood self-love could be considered as a precondition for loving others. Thus, it follows that if human beings know how to treat other fellow beings decently then they will be able to treat others decently. Therefore, a positive concern for human well-being need not prevent a concern for the well-being of nonhumans automatically rather it will develop it. We can say that human self-interests are more important but it needs to be expanded. Bryan Norton introduces two other kinds of anthropocentrism like strong and weak anthropocentrism<sup>13</sup>, which are as follows.

### **(II) Strong Anthropocentrism:**

Strong anthropocentrism allows some immediately felt preferences with an exploitative attitude or despot like attitude of human beings towards nature. Sometimes it refers to "specieism" which affirms that suffering and death of human beings come within the purview of morality. By definition 'specieism' means a discrimination, prejudice or differential treatment justified by species membership. It is introduced by Richard Ryder in analogy with sexism and racism, which is developed later by Peter Singer. According to strong anthropocentrism the death and suffering of nonhuman do not come under the purview of morality. There are no moral similarities between

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<sup>11</sup> Frederick, F. Personalistic Organicism: Paradox or Paradigm? : *Philosophy and the Natural Environment* edit. Attfield, R. and Belsey, A. Cambridge University Press: UK 1994. P.72.

<sup>12</sup> Midgeley, M. The End of Anthropocentrism: *Philosophy and the Natural Environment* edit. Attfield, R. and Belsey, A. Cambridge University Press: UK 1994. P. 111.

<sup>13</sup>David Clowney & Patricia Mosto edit. *Earthcare: An Anthology in Environmental Ethics*, Rowman & Littlefield Publisher, Inc. 2009. p.159.

human and nonhuman. Man takes the position of a despot with respect to nature. However, it denies any relevant similarities between human and nonhuman nature from the moral standpoint.

### **(III) Weak Anthropocentrism:**

Weak anthropocentrism considers the role of an enlightened self-interested human capable of supporting environmental values. This variety supports environmental values remaining in an anthropocentric world. It does not support harming against nonhumans, such as factory farming and the testing of cosmetics on animals. Harming nonhuman beings is regarded as contrary to the enlightened self-interest in a healthy humane culture. Weak anthropocentrism supports exploitation of nonhuman beings when it is needed for survival of human beings. In certain situations like, when human populations need to clear other species out of their habitats or when the basic needs of humans for survival lead to the exploitation of natural objects or resources, or when human needs medicine that can be obtained by carrying out painful experiments on animals, the vital interests of humans and populations are against those of the interests of nonhumans. In these and similar instances, that may be called “hard cases” where one expects the response of a weak anthropocentrist to be indistinguishable in practice from that of a strong anthropocentrist. One may say that weak anthropocentric position can generate strong anthropocentric policies. However, we can say that when adequately understood, weak anthropocentric assumption rests ultimately on human interests but they coincide with the interest of nature more generally.

Thus, weak sense of anthropocentrism gives importance on some obligations to nonhuman beings but it strongly presupposes that moral obligation towards human beings is stronger or greater than other nonhuman entities. Peter Singer develops the idea of “Speciecism” which refers to arbitrary discrimination when humans are given preferences simply because of their species membership. For instance, the suffering involved in physical abuse matters morally in case of humans but not in non-humans. Following weak anthropocentrism, one may say that if human beings are truly human-centered, they will understand human nature as important and this will encourage good treatment of nonhuman nature. We cannot criticize a cat for its cat-centeredness, why do we need to criticize man for man-centeredness? Aquinas and Kant both believed that cruelty to nonhuman is wrong because it breeds cruelty that is bad for humans as well

as for other animals. Human beings need to understand that they live in one world along with the rest of nature.

### **2.1.2: Some Observations on Anthropocentrism:**

It is often considered that anthropocentrism is a dominant and utilitarian approach towards nature. So far as the critique of anthropocentrism is concerned, we can say that if utilitarian consideration dominates human thinking, then proper respect for other creature will not arise. And so long as human's relationship to nature is valued by considering nature to be our utilitarian source, there will be no place for ethical consideration of the natural ecosystem.

Despite the force and support of arguments justifying anthropocentrism, it is not without problems. It is a basic presupposition that human dominion on Earth is the product of just one sort of cosmology. But there are religions in the world which have a humbler estimate of human place within nature and greater solicitude for other living beings. Say for example, Buddhism, Hinduism and Jainism, etc. Modern science also challenges this kind of anthropocentric attitude, which gives less importance of human being within nature. In eighteenth century Linnaeus put forward the idea of *Great Chain of Being* that revealed to be inadequate in the taxonomy of species. In the taxonomy of species the evolutionary picture of inter-species relation is not only more complex but also it is in principle different from the teleological view usually implied by the great chain of being.

According to the Judeo-Christian concept of the *Great Chain of Being*, humans are the superior to animals and plants because their creator has given them a higher place on the chain. Paul Taylor in 'Biocentric Egalitarianism' claims that this structure of concepts and beliefs is completely groundless that is seen as against anthropocentrism. If the *Chain of Beings* start with God at the top, and then moves to the angels, who are lower than God but higher than humans, then to human, positioned between angeles and the beast, and then on down to the lower levels occupied by nonhumans animals, plants, and finally inanimate objects. Humans, being "made God's image" are inherently superior to animals and plants by virtue of their being clever in their essential nature to God.

The Metaphysical and epistemological difficulties with this conception of hierarchy of entities are inseparable. Taylor only points out here that if we are

unwilling to accept the metaphysics of traditional Judaism and Christianity, we are again left without good reason for holders to the claim of inherent human superiority.

This consideration leaves us with one ground for the assertion that a human being, regardless of merit, is a higher kind of entity than other living entities. This is a mere fact of the genetic make-up of the species *Homo sapiens*. But this is surely irrational and arbitrary: why should the arrangement of genes of a certain type be a mark of superior value? There are other aspects of life of a living being, and we need to consider these aspects. We might refer to any other genetic make-up as a ground of superior value. Thus, human's beings are confronted here with arbitrary claim, that can only be explained as an irrational bias in our own favour, which, as Taylor says a deep-seated prejudice. Taylor asks in what sense are humans alleged to be superior to other animals? We are different from them in having certain capacities that they lack. But why should these capacities be a mark of superiority? From what point of view are those judged to be signs of superiority and what sense of superiority is meant? Various non-human species have capacities that human lack. Say for example a speed of Cheetah, the acute vision of an eagle, the agility of monkey and so on. Why should not these be taken as signs of superiority?

One answer that may come to our mind is that, these capacities are not as valuable as human capacity that are claimed to make us superior. Such uniquely human characteristics as rational thought, aesthetic creativity, autonomy and self-determination and moral freedom, have a higher value than the capacities found in other species. Yet, we must ask: to whom those characteristics are valuable, and on what grounds? These human characteristic are all valuable to humans. They are essential to the preservation and enrichment of our civilization and culture. It is clearly from the human standpoint that they are being judged to be desirable and good. It is not difficult here to recognize the question. Humans are claiming human superiority strictly from human point of view in which the good of human is taken as the standard of evaluation or judgement. All we need to do is to look at the capacities of nonhumans and plants from the standpoint of their good to find a contrary judgement of superiority. The speed of a cheetah, for example, is a sign of superiority to humans when considered from the standpoint of the good of its species. If it were as slow as a human, it will not be able to survive. In each case the claim of human superiority would be rejected from a nonhuman standpoint.

The enlightened self-interest defense of perspectival anthropocentrism may be criticized for an over optimistic, and unwarranted, assumption that humans and non-humans interests ultimately coincide. From the above criticism a more determined attempt to deprioritize the claim of humans may be required.

Everything in the universe is a part of the natural process. And, this natural process is something that is beyond the control of any species. This assumption provides a cosmic vision that promotes the thinking that human species are not the sole controlling authority of natural phenomenon and will give different picture of nature-human relationship. Once the thinking process is elevated to this broad vision that humans are just a part of nature, a strong foundation for environmental ethics will be laid. Because once we accept that we are part of an integral whole, we will also be able to develop a sense of sharing with others.

Mery Midgeley gives the best possible criticism of anthropocentrism in her essay 'The end of anthropocentrism'.<sup>14</sup> Let us discuss her position. The central idea of anthropocentrism is that human being is the centre of cosmos. But are human beings central to the cosmos? From one point of view it seems that human beings are central to their own lives, own species. Also the concept of self-centeredness in anthropocentrism implies that each of us is central to the universe. Because human beings have no choice so they have to be interested in themselves. If human beings do not have enough self-love, then they cannot survive and love other species. But the problem with humans is not that they love themselves too much but that they do not extend love towards others species. In this sense the human self must be the centre of the world. But if there is so much self-centeredness in this cosmos then the natural balance of independence cannot be relied on for human being's social life. And extreme centeredness or ego will result into less care for others.

If we say that not the human self but the human species are at the center then people will see themselves as placed at the absolute and objective centre of everything. This kind of centrality is found in both the Western and Asian religious traditions. "God made human in his own image" recognizes human being's special status among the ordinary and non-God-like creatures. This kind of centrality is also found in Kant where he says,

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<sup>14</sup> Midgeley, M. *The End of Anthropocentrism: Philosophy and Natural Environment* edit. Attfield, R. and Belsey, A. Cambridge University Press: UK 1994. P.103.

As the single being upon earth that possess understanding [MAN] is certainly a titular lord of nature and supposing we regard nature as a teleological systems he is born to be its ultimate end.<sup>15</sup>

For Marx capitalism is the right choice to reject the deification of nature. He says, ‘Thus nature becomes for the first time simply an object for mankind, purely a matter of utility’.<sup>16</sup> John Passmore in this regard quotes Pokrovsky while writing in a brief history of Russia in 1931;

It is easy to foresee that in the future when science and technique have attained to a perfection, which we are as yet unable to visualize, nature will become soft wax in MAN’S hand which he will be able to cast into whatever forms he chooses.<sup>17</sup>

Thus, the attitude to dominate nature by science and technology seems perfectly normal to many thinkers in the past. But in modern times the dark side of this attitude needs to be looked at seriously and can be reviewed and considered by philosophers like Mery Midgeley as ‘end of anthropocentrism’.

Midgeley argues that both science and technology made the universe so large and so small that the idea of human being as the centre of cosmos in the physical sense does not make any sense. Various sciences, for example, Astronomy tells us that there is no physical centre rather a formless stage surrounds us in space and time and human beings, bacteria and insects are imperceptible as they move through time and space. Biology adds to the view that among the living things human beings have an accidental arrival and they entered into the biosphere later. Geography adds the view that the continent on which we think that it is a ground or stage for us is itself on mobility. Even Ecology informs us that we cannot mould the wax like nature to fulfill our needs and we will never abide by it without responding to the guiding principles of nature and ecological systems. Thus, we are simply cutting down the trees where we sit on. We can make a stop by responding to the internal guiding principle of ecology carefully. So science and technology that fixes human being at centre as we have seen seems incoherent and weak. Thus, the meaning of anthropocentrism does not appear to be scientific. This word is phrased only to show the point that the central cosmic purpose is foreign to modern sciences like the idea of central location. The error in

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<sup>15</sup>Kant, I. *Critique of Teleological Judgment* trans. C. Meredith, Clarendon Press: Oxford 1928 P.93-94.

<sup>16</sup>Marx, C. *Marx’s Grundrisse* edit. David McClellan, London: Macmillan 1971 p.94.

<sup>17</sup>Passmore, J. *Man’s Responsibility for Nature* Second Edition, Duckworth: London 1980 p.25.

anthropocentrism is that “Man is the premeditated aim of the creation of the earth”. So science that emphasises on human centrality removes its base.

Contemporary scientists believe that human perception is absolutely crucial for the existence of cosmos because an unconsciousness matter cannot really function unless it is observed in a special way as physicists observe quantum events.<sup>18</sup> It is believed that the cosmos must have those properties, which permit life to develop within it at some period in its history. But this does not imply that the cosmos or universe works with the aim of producing an observer who will save it. It is combined with the fact that the constitution of the contemporary universe is so extraordinarily improbable that its development is only accounted for by the need to produce an artifact. In a coincidence that selected artifact becomes the species *Homo sapiens* and considered as MAN. Midgley argues that though universe has indeed had the production of Man as its central business but that MAN is indeed simply a physicist, who has the capacity to collapse certain wave functions by observing quantum events and thereby making the universe at least fully or properly real. This position of MAN seems to be in some sense occupying the position of GOD. Though observation of quantum events makes the universe real but it is not considered not as science but rather as a piece of wild metaphysics which, is motivated by the fear of a total cosmic insignificance of MAN. That fear of cosmic insignificance produces violent reactions that lead humans to claim immense and inconceivable kind of significance. Consequently, frightened subjects react against being downgraded by grading themselves up.

So the trouble starts with the fact that when our traditional human-centered position is attacked we do not stop thinking about our image or position rather we simply change the image. We start to think of ourselves like shrinking puppets, bacteria and ants<sup>19</sup>. But this role is unbearable because people want to play a key role on the cosmos. So we have to change the image in a more discriminating and profound way. This cannot be possible with anything that is outside of our own planet.

Everyone needs a background or framework that gives life a meaning. Everyone needs a sense of destiny or a sense of larger background where his or her life makes a sense. We need that sense whether or not we believe in God, or whether or not we think

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<sup>18</sup> Midgley, M. *The End of Anthropocentrism: Philosophy and Natural Environment* edit. Attfield, R. and Belsey, A. Cambridge University Press: UK 1994. P.108

<sup>19</sup> *Ibid.* P.109.

that we are important and influential. A quickest way to give life a meaning is to draw a line between the opponents and us. Individuals can set themselves against the whole world. Similarly group members can established their group against everyone outside their group. Consequently, life will be so organized that it can go charmingly inside its circle. This line of thinking is not to be considered as anthropocentrism.

It is right for us to think and feel that we are at the centre of our own life. An attempt to get rid of this position may be doomed. We need to think that people will do right and not wrong to have a particular regard for their own species. This recognition does not make any harm to the cosmos. Because we can say that the principles and measures to protect and preserve human race are also the same to preserve and protect the nonhuman world. Human beings cannot save themselves alone or apart from nature, rather whatever cautions they take to protect nature they take those along with the rest of nature. Anthropocentrism in the present day is understood as human-chauvinism or exclusive humanism. Humanism of the exclusive kind is indefensible and we need to think and try to explain anthropocentrism in a less egoistic and less individualistic way. In short human self-interest needs to be understood as an enlightened self-interest.

In the literature of environmental ethics, anti-anthropocentrism is the position that human desires, goals, and need should not be taken as privileged or superseding in considering the needs, desires, interests, and goals of all members of all biological species taken together, and in general that the Earth as a whole should not be interpreted or managed from a human standpoint. According to this situation, birds, trees, and the land itself measured as the biosphere have a right to be and to live out their individual and species capabilities, and that members of the human species have no right to disturb, perturb, or destroy the ecological equilibrium of the planet.

## **2.2: Non-Anthropocentrism:**

If we are seriously looking for a better community life that is shared by both humans and non-humans, then we have to broaden our vision and our limit of greed. This, in fact, will provide a strong foundation for environmental protection. Now, the question is how do we achieve this goal? What kind of Philosophical/Metaphysical view would set such a foundation? The thinking process has to be changed in order to incorporate nature into our moral purview. The sense of sharing will be strengthened, only if we accept that we are part of the integral whole.

The most dangerous propensity of the present human generation is enjoying anthropocentrism in every part of life that directly or indirectly invites environmental degradation which in turn poses a serious threat to the mankind in general. From religion to ethics and from ethics to science there underlies a cemented view of anthropocentrism where man is determined as the measurer of all things; where everything is determined in terms of instrumental value rather than non-instrumental value; where human greed overlaps human's basic needs; where nature is considered as a storehouse of materials. In short, anthropocentric attitude of humans degrades environment, devalues nature and above all injudiciously attempts to conquer nature. Non-anthropocentric approach, on the contrary, pleads for a radical change of human attitude towards nature so that nature can be treated not only as a mere storehouse of materials, but also as the beholder of all biotic and abiotic community. This could be justified in restoring and recognizing an intrinsic value of natural entities.

Non-anthropocentrism thereby brings a message of world peace and environmental protection where every natural entity maintains a harmonious life with others. It tries to establish that all non-human living creatures are morally valuable in themselves as each of them possesses intrinsic value irrespective of valuers. It does not support moral hierarchy within biotic communities, restores equal moral status, and restores environmental justice, mutual care, love and sympathy. It equally nurtures individual rationality by means of which one can understand that his own self is no longer different from other and every individual self is essentially merged with the Self. Thus, self-realization is the most important key in non-anthropocentrism to understand nature. Here one would be a virtuous being who can understand others, feel for others, controls himself from doing mischievous action and confines himself within his basic needs. He then understands that he is a tiny being like many others and he is no longer in a position to command nature. He would come to know that his own fortune and own flourishing actually hinges on the contribution of other fellow beings and he cannot survive any more without the survival of others. This realization in non-anthropocentrism actually prompts him to care for others, love others, and share with others. Lack of feeling for others is a serious threat of present generation and strong anthropocentrism is responsible for this. So our environment can be maintained and preserved by non-anthropocentrism which in turn minimizes the so-called

environmental degradation in general. Everything would be futile as long as one cannot realize himself, cultivate himself within the parameter of non-anthropocentrism.

Therefore, according to this position man is not apart from nature but a part of nature. Human species as a creation of natural evolution has a substantial affinity with other nonhuman species and has a vulnerable dependence on environmental conditions of survival. In general nature should be understood as a whole and should not be interpreted or viewed from human standpoint only. Natural objects and the earth itself have right to exist within nature. Each of them has their respective potentialities.<sup>20</sup>

It is undeniably true that human species has greater developed capacities for reason, language and social interactions. In order to justify the position of non-anthropocentrism, environmentalist will argue that all these special, unique and developed characteristics are not absolutely absent in the nonhuman species. There are some animals like the apes, chimpanzees that have some kind of sociability and are capable of formulating and indicating symbols. Though human beings have capacity for reason, still it does not keep human being apart and different from nature. Reason should not be used to be alienated from nature; it needs to be used in a more rationalized and civilized manner. Due to reason human species need to understand that there is not a dualistic rather a holistic relationship between human species and nature. According to some religions human species have capacity for reason, value. God created them for which they should be kind and benevolent to nonhuman species. Also some non-anthropocentrists claim that there might be a day, when human being will be replaced by another higher being or species. So nature is not inferior to human beings and human beings must treat nature with care and respect.

### **Philosophical Arguments for non-Anthropocentrism:**

Supporters of non-anthropocentrism may claim that modern science gives less importance to human being within nature. In eighteenth century Linnaeus, a natural historian and also the founder of the science of ecology revealed the inadequacy of the idea of “the great chain of being” that justified anthropocentrism. For him, in the taxonomy of species the evolutionary picture of the interspecies relation of the chain is more complex and it is in principle different from the teleological view, which is actually derived from the idea of the great chain of being. In the *Origin of the Species*

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<sup>20</sup> Sarkar, Pankoj Kanti. Environmental Crisis: Necessity of Non-Anthropocentrism, *Lokayata: Journal of Positive Philosophy*, Vol. II, No.02, 2012, P.45-49.

Darwin cited the evidence and refutes that nature is to subserve human purpose. Darwin argues that “natural selection cannot possibly produce any modification in a species exclusively for the good of another species.” In his work *The Decent of Man* in 1871 Darwin mentioned that:

‘Man is a part of nature and one of the products of the evolutionary processes. That man is an ecological species but this species has evolved with such unique and unprecedented properties on the animal level that in man the biological evolution has transcended itself.’<sup>21</sup>

Perhaps, Darwin is accountable for the thought that human beings are not different from nature, rather one of the products of evolution. Albert Schweitzer in *Reverence for Life* mentioned that life itself as such is sacred. Schweitzer opines;

‘We must live accordingly and treat each being as an inherently valuable “will-to-live”. In my own will-to-live there is yearning for more life and the mysterious exaltation of the will-to-live is called pleasure and terror in the face of annihilation and that injury to the will-to-live is called pain; the same obtains in all the will to live around me: it may express itself to my comprehension or it may remain unvoiced. Ethics thus, consists in the necessity of practising the same reverence for life toward all will-to-live, as towards my own. It is good to maintain and cherish life; it is evil to destroy and check life.’<sup>22</sup>

From the religious point of view, we can find that there are some kind of moral, non-exploitative and nondestructive attitude towards nature, especially in the *Old* and *New Testament*. In the *Old Testament* in *Genesis*, Chapter-9, Verses-12-15, it is observed that God made his covenant with Noah to include not only human beings but also animals. It is said in the following verses.

**Verse-12:** And God said this is the token of the covenant, which I make between one and you and every living creature that is with you for perpetual generations.

**Verse -15:** And I will remember my covenant, which is between me and you and every living creature of all flesh; and the waters shall no more become a flood to destroy all flesh.

In the *New Testament*, Chapter-7 and 4, God again seems to express some concern for the nature He created.

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<sup>21</sup> Dobzhansky, T. Human Nature as a Product of Evolution: *The Range of Ethics* Harold H. Titus, Morris T. Keeton East-West Press Pvt. Ltd., New Delhi 1972, p.123.

<sup>22</sup> Schweitzer, A. *Reverence for Life: Civilization and Ethics* trans. A Naish, Blackwell: London 1923.

**Chapter-7, Verse 2-3:** And I saw another angel ascending from the east, having the seal of the living God, and he cried with a loud voice to the four angles, to whom it was given to hurt earth and sea, saying, “Hurt not the earth, neither the sea, nor the trees, till we have sealed a hundred and forty and four thousands of all the tribes of the children of Israel.”

**Chapter-4, Verse 3-4:** And there came out of the smoke locusts upon the earth: and unto them was given power, as the scorpions of the earth have power. And it was commanded them that they should not hurt the grass of the earth, neither any green thing, neither any tree: but only those men, which have not the seal of God in their foreheads.

For Paul Taylor, every living individual has a goal, and to have a goal implies that they have a will or desire to attain it. One’s goal is one’s good, so all living things are inherently good<sup>23</sup>. Christopher Stone argues in his essay ‘Should trees have standing’ that we should assign natural objects (rivers, oceans, trees, the atmosphere, animals) legal rights<sup>24</sup>. For Arne Naess “self-realization and biotic equality” are the two absolute norms to solve environmental problems. These two norms naturally lead to the idea that the good of each individual becomes the identification with the good of the whole<sup>25</sup>. John Rodman opines; “to affirm that natural objects have ‘rights’ is to symbolically affirm that all natural entities including humans have intrinsic worth, simply by virtue of being what they are.”<sup>26</sup> Support of the hands-off-nature approach is provided by George Sessions in his ‘Spinoza perennial philosophy, and deep ecology’, where among other things, he describes how Aldo Leopold moved from a position considering humans as stewards or managers of nature to one considering man as “plain members” of the total biotic community<sup>27</sup>. Leopold in his *Land Ethics* says that “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”.<sup>28</sup> Modern science gives less importance to human beings within nature.

Non-Anthropocentrism can be considered under two banners, i.e, Biocentrism and Ecocentrism. Biocentrism can be understood from two perspectives i.e, Animal Rights of Tom Regan and Animal Liberation of Peter Singer. Ecocentrism is also

<sup>23</sup>Pojman Louis P., Pojman Paul, McShane Katie: *Environmental Ethics: Readings in Theory and Application*, 7<sup>th</sup> edition Cengage learning USA, 2015, p.168.

<sup>24</sup> *Ibid.* P.217.

<sup>25</sup> Naess, A. ‘The shallow and the deep, long range ecological movement’ *Inquiry* 16, Spring 1973. 95-100.

<sup>26</sup> Rodman, J. ‘The liberation of nature’ *Inquiry* 20:108 “Quoted with emphasis on capitals by George Sessions in *Eco-philosophy* III, 1997 p.5.

<sup>27</sup> Sessions, G. Spinoza, Perennial Philosophy and Deep Ecology Unpublished Paper 1979 p.15.

<sup>28</sup> Leopold, A. *A Sand Country Almanac* Oxford Univ. Press: NY 1966 p.340.

understood from three perspectives like, Deep Ecology and Shallow Ecology of Arne Naess, Land Ethics of Aldo Leopold and Gaia Hypothesis of James Lovelock. Let us discuss the two different perspectives of non-anthropocentrism i.e. biocentrism and ecocentrism in the following paragraphs.

### **Biocentrism:**

In environmental ethics biocentrism is an ethical attitude which stands on the maxim that moral obligations need to be extended beyond humans to include all living things. But these moral obligations are not indirect obligations; these are obligations to the living things themselves. In terms of value, it can be said that all living things have intrinsic as well as instrumental value. If we go through the development of biocentrism, we can find that moral obligation was initially recognized in a narrow circumscribed group. It has taken centuries and centuries to expand its circle. Initially moral obligation confined only to the male members of a tribe, but later on it has been expanded towards man, women, slaves, members of other tribes and children. But in the recent progress, it is realized that we have moral obligations to sentient animals, as well as nature and nonhuman entities.

Biocentrism is often defined as the belief that all forms of life are equally valuable and that humanity is not at center of existence. Biocentric positions advocate a focus on the well-being of all life in relation to their ecological, political, and economic perspectives. Biocentrism in this sense is in contrast to anthropocentrism. It refers to the widely-held belief that a person who was born as a male or a female is more “real” and more valid than the individual who has become a man or woman through hormonal, surgical, and cosmetic means. For biocentrism everything in nature is valuable.

Animal right is the idea that the most basic interest of animal should be afforded the same consideration as similar interests of human beings. Animals should be viewed as legal persons and members of moral community. They should not be used in food, clothing, research subjects or entertainment. Jean-Jacques Rousseau argued in *Discourse on Inequality* in 1754 that animals are part of natural rights, and have natural rights, not because they are rational, but because they are sentient. Wollstonecraft argues that animals have “intrinsic and real dignity and worth”. In 1879 Edward Nicholson argued that animals have the same natural right to life and liberty that human beings have. In 1824, Lewis Gompertz, published *Moral Inquiries on the Situation of*

Man and of Brutes, in which he argued that every living creatures, human and non-human, has more right to the use of its own body than anyone else has to use, and our duty to promote happiness applies equally to all beings.<sup>29</sup> Bentham wrote:

“The day may come when the rest of the animal creation may acquire those rights which never could have been withholden from them but by the hand of tyranny. The French have already discovered that the blackness of the skin is no reason why a human being should be abandoned without redress to the caprice of a tormentor. It may one day come to be recognized that the number of the legs, the villosity of the skin, or the termination of the so sacrum, are reasons equally insufficient for abandoning a sensitive being to the same fate. What else is it that should trace the insuperable line? It is the faculty of reason, or perhaps the faculty of discourse? But a full-grown horse or dog is beyond comparison a more rational, as well as a more conversable animal, than an infant of a day, or a week, or even a month, old. But suppose they were otherwise, what would it avail? The question is not, Can they reason? Nor can they talk but, Can they suffer?”<sup>30</sup>

There are two main philosophical approaches to the issue of animal rights: Utilitarian and Rights-based. The former is proposed by Peter Singer and the later is proposed by Tom Regan. As an act utilitarian, Peter Singer judges the rightness of an action by its consequence, and specifically by the extent to which it satisfies the preferences of those affected, maximizing pleasure and minimizing pain. His principle of equality does not require equal or identical treatment, but equal consideration of interests. Tom Regan argues that animals have “inherent value” as subjects-of-a-life and cannot be regarded as a means to an end. Animals have the same moral rights as humans. Regan believes that we ought to treat non-human animals as we would to human beings.

We are acquainted with Black Liberation, Gay Liberation, and a variety of other movements. Animal Liberation is a movement against the destructive attitude of man towards non-human beings. What does animal liberation try to achieve? The aim is to end the present speciesist bias against the interests of nonhuman animals.

Animal Liberation requires greater altruism on the part of mankind than any other liberation movement, since animals are incapable of demanding it for themselves, or of protesting against their exploitation by votes, demonstrations, or bombs. The question is man capable of such genuine altruism? It will be a vindication of all those

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<sup>29</sup> Taylor, A. *Animals and Ethics*, Broadview Press, 2003, P.62.

<sup>30</sup> Singer, P. *Equality For Animal: Practical Ethics* 2<sup>nd</sup> edition Cambridge University Press: Cambridge 1993: p.56-57.

who believes that man has within himself the potential for more than cruelty and selfishness. The whole Animal Liberation movement is based on the strength of its ethical concern, and it must not abandon its high moral ground.

### **Ecocentrism:**

The term ecocentrism etymologically derived from the word “Oikos” which means ‘home’ or ‘earth-centered’. Ecocentric attitude towards environmental ethics develops from the assumption that ecology must play a vital role in our understanding and valuing nature. It is that kind of normative approach which gives emphasis not only on individual living organisms but also on our relations with biological systems, processes and nonliving natural objects. Ecology teaches the interrelatedness of all organisms and their environment, so ecology must be the first science to realize that all the systems are interdependent, and all philosophical, scientific and religious approaches of nature together form the global ecosystem. Ecocentrists will say that we have direct moral obligations to all things i.e. biotic as well as abiotic components of the natural world. Goodpaster, Rolston, Callicott and Rodman are the exponents of this approach. But Aldo Leopold’s *Land Ethics* is the comprehensive approach towards ecocentrism.

Ecocentrism is a term used in ecological and political philosophy to denote a nature-centered ecological ethics. Justification for ecocentrism usually consists in an ontological belief and subsequent ethical claim. The ontological belief denies any existential division between human and non-human nature which is sufficient to ground a claim that humans are either (a) the only bearers of intrinsic value or (b) possess greater intrinsic value than non-human nature. Thus, the subsequent ethical claim is for an equality of intrinsic value across human and non-human nature, or ‘biocentric egalitarianism’.

Ecocentric ethics actually was conceived by Aldo-Leopold who recognizes that all species, including humans are product of a long evolutionary process and are inter-related in their life processes. Ecocentrism focuses on biotic community as a whole and strive to maintain ecosystem composition and ecological process. Ecocentrism emphasizes not only on individual living organisms but also on our relations with biological system and non-living natural objects. Ecocentrism can be understood if we can introduce the difference between deep and shallow ecology, Land ethics and Gaia Hypothesis.

### **Deep and Shallow Ecology:**

The term deep ecology was coined by Arne Naess in 1973. Deep Ecology is an associated form of radical eco-philosophy which enables us to think that the root of all ecological crisis involve anthropocentrism. It is a philosophy which focuses on fundamental ontological interrelatedness and identification of all life forms, natural objects and ecosystem. It advocates a nature-centered moral code for human beings. “Deep ecology” is a movement calling for a deeper questioning and a deeper self of answer to our environmental concern. The essence of deep ecology is to keep asking more searching questions about human’s life, society and nature.

Deep ecological thinking of Arne Naess was influenced by Rachel Carson’s book *Silent Spring*, published in 1962. Deep ecology is a development of Aldo Leopold land ethics, which has been newly emerged as the science of ecology, a critique of anthropocentrism. In deep ecology we are not only confined ourselves in scientific study but also we an obligation for a global outlook.

The basic ideas and values that constitute the wide variety of deep ecological total views are the followings:

- The rejection of strong anthropocentrism.
- A consideration of eco-centrism as a replacement of anthropocentrism.
- Identification with all forms of life.
- The sense that caring for the environment is a part of individual self-realization.

The philosophy of deep ecology emphasizes alternative modes of thinking such as spiritual enlightenment that emphasizes life-enhancing qualitative values.

Diversity plays a significant role in deep ecology. Diversity is a fundamental norm and common delight. Naess claim that diversity enhances the potentialities of survival, the chances of new models of life and the richness of life forms, and the so called “struggle of life. The maxim survival of the fittest needs to be interpreted in the sense of ability to co-exist and cooperate in complex relationships rather than ability to kill, exploit and suppress. Live and let live is a more powerful ecological principle than either you or me”. There are two ultimate norms of deep ecology such as Self-realization and Bio-centric egalitarianism.

Naess coined the term “Shallow ecology” in the early 1970s for his human centered or “anthropocentric” way of viewing the world. In shallow ecological thinking, people starts from an assumption, often unexamined that human beings are

central species in the ecosystem, and then other beings are part of the system are of less importance or value. In its extreme manifestation, shallow ecology views other beings and features of Earth as resources for human use, and fails to see their intrinsic value. For the shallow ecologist without a value of mankind it is nonsense to talk about value. Natural resources must be saved for preservation of human agriculture and medicine, for the develop countries.

Naess was of the opinion that environmental movement was also approaching its efforts to protect earth from a shallow standpoint, focusing mostly on human health and well-being rather than seeing the environment as a seamless whole with inherent value through out. A number of key terms and slogans from the environmental debate will clarify the difference between the shallow and the deep ecology. Let us discuss.

### **Pollution**

**Shallow Approach:** Technology seeks to purify the air and water and to spread pollution more evenly. Laws limit permissible pollution. Polluting industries are preferably exported to developing countries.

**Deep Approach:** pollution is evaluated from a biospheric point of view, not focusing exclusively on its effects on human health, but rather on his life as a whole, including the life conditions of every species system.

### **Resources**

**Shallow Approach:** The emphasis is upon resource for humans, especially for the present generation in affluent societies. In this view, the resource of the earth belongs to those who have the technology to exploit them. Plants, animals and natural objects are valuable only as a resource for humans.

**Deep Approach:** The concern here is with resources and habitats for all life forms for their own sake. No natural object is conceived of solely as a resource.

### **Population**

**Shallow Approach:** The threat of “overpopulation” is seen mainly as a problem for the developing countries. The issue of an “optimum population” for humans is discussed without reference to the question of an “optimum population” for other life forms.

**Deep Approach:** It is recognized that excessive pressures on planetary life stem from the human population explosion. The pressure stemming from the industrial

societies is a major factor, and population reduction must have the highest priority in those societies.

### **Cultural diversity and appropriate technology**

Shallow Approach: Industrialization of the Western industrial type is the goal of developing countries. The universal adoption of Western technology is compatible with cultural diversity, together with conservation of the positive elements of present non-industrial societies. There is a low estimate of deep cultural differences in non-industrial societies which deviate significantly from contemporary Western standard.

Deep Approach: Protection of non-industrial cultures from invasion by industrial societies. Deep cultural diversity is an analogue on the human level to the biological richness and diversity of life forms. A high priority should be given to cultural anthropology in general education programs in industrial societies.

There should be limits on the impact of Western technology upon present existing non-industrial countries and the Fourth World should be defended against foreign domination. Political and economic policies should favor subcultures within industrial societies.

### **An Ethics for Land**

Shallow Approach: landscape, ecosystem, rivers, and other whole entities of nature are conceptually cut into fragments, thus disregarding larger units and comprehensive gestalts. These fragments are regarded as the properties and resources of individuals' organizations or states. The social costs and long-term global ecological cost of resources extraction and use are usually not considered. Wildlife management is conceived of as conserving nature for "future generation of humans." Soil erosion or the deterioration of ground water quality, for example, is noted as a human loss, but a strong belief in future technological progress makes deep changes seem unnecessary.

Deep Approach: The earth does not belong only to humans. For example, the Norwegian landscapes, rivers, flora and fauna, and the neighboring sea are not the property of Norwegians. Humans only inhabit the lands, using resources to satisfy vital needs. And if their non-vital needs come to conflict with the vital needs of nonhumans, then humans should defer the later. The ecological destruction now going on will not be cured by technological fix. Current arrogant nations in industrial societies must be resisted.

### **Education and Scientific Enterprise**

Shallow Approach: The degradation of the environment and resources depletion requires the training of more and more “experts” who can provide advice concerning how to continue combining economic growth with maintaining a healthy environment. We are likely to need an increasingly more dominating and manipulative technology to “manage the planet” when global economic growth makes further environmental degradation inevitable. The scientific enterprise must continue giving priority to the “hard sciences.” High educational standards with intense competition in the relevant “tough” areas of learning will be required.

Deep Approach: If sane ecological policies are adopted, then education should be concentrate on an increased sensitivity to non-consumptive goods, and on such consumable where there enough for all. Education should therefore counteract the excessive emphasis upon thing with a price tag. There should be a shift in concentration from the “hard” to the “soft” science which stresses the importance of the local and global cultures. The educational objective of the world conservation strategy should be given a high priority, but within the deeper framework of respect of respect for the biosphere.

### **Land Ethics:**

The term Land Ethics first championed by Aldo Leopold in his book *A Sand County Almanac* in 1949. He wrote that there was a need for a “new ethics”, an “ethics dealing with man’s relation to land and to the animals and plants which grow upon it”. Leopold states the basic principle of his *Land Ethics* as, “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.<sup>31</sup>” He also describes it in this way: “The Land Ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land. *Land Ethics* changes the role of Homo sapiens from conqueror of the land-community to plain member and citizen of it. It implies respect for his fellow-members, and also respect for the community as such.<sup>32</sup>”

Leopold’s land ethics have a distinctively holistic approach, which emphasizes upon populations, communities, species and ecosystems as deserving of moral consideration. In fact, Leopold was the first scholar ever to suggest that such ecological

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<sup>31</sup> Leopold, *A Land Ethics, A Sand Country Almanac* Oxford Univ. Press: NY 1966 p.340.

<sup>32</sup> *Ibid*, p.340.

“whole” are “morally considerable.” Secondly, Leopold offers what he takes to be an equally pressing moral principle as constitutive of the *Land Ethics* is one ought to love and respect the land. Both “head and heart” are central to the land ethics. Leopold’s land ethic is intimately interconnected with changing people’s “loyalties, affections, and convictions” to love and respect the land. Aldo Leopold’s *Land Ethics* not only helped to create and shape the development of the field of environmental ethic but also challenged some of the most fundamental assumptions of Western philosophical thought about the nature of humans, ethics and human relationships to the nonhuman world.

### **Gaia Hypothesis:**

Gaia Hypothesis named after Gaia means Greek goddess of the Earth, is a broadly inclusive term for related concepts that living creatures on a planet will affect the nature of their environment in order to make the environment more appropriate for life. This theory holds that all organisms or extraterrestrial life in this planet regulate the biosphere to the benefit of the whole. The concept of Gaia draws a connection amongst the survivability of a species and its usefulness to the survival of other species. The Gaia hypothesis deals with the concept of homeostasis, and claims the resident life forms of a host planet coupled with their environment have acted and act as a single, self-regulating system. This system includes the near-surface rocks, the soil, and the atmosphere.<sup>33</sup> The Gaia hypothesis was first scientifically formulated in the 1960s by the British atmospheric chemist James Lovelock, as a consequence of his work for NASA on method of detecting life on Mars. James Lovelock defined Gaia as: “a complex entity involving the Earth’s biosphere, atmosphere, oceans, and soil; the totality constituting a feedback or cybernetic system which seeks an optimal physical and chemical environment for life on this planet”<sup>34</sup>.

#### **2.2.1: Some Observations on Non-Anthropocentrism:**

The inconsistency in non-anthropocentrism stems from its fundamental stance of ascribing nonhuman entities with “intrinsic value and species equality”<sup>35</sup>. It claims that natural properties such as integrity, beauty and biodiversity can provide a non-human basis for valuing nature. The basis and value of subjects are assumed to lie

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<sup>33</sup> [https://en.wikipedia.org/wiki/Gaia\\_philosophy](https://en.wikipedia.org/wiki/Gaia_philosophy).

<sup>34</sup> Blewitt, John. *Understanding Sustainable Development*, 2<sup>nd</sup> edition, Earthscan by Routledge, 2015, P.59.

<sup>35</sup> Devall, B & Sessions, G. *Deep Ecology*. Environmental Ethics, Readings in Theory and Application, Sixth Edition, 1985, p. 146.

independent of human observers. However, according to the skeptics, such qualities are neither intrinsic nor non-anthropocentric. In *A Critique of Anti-Anthropocentric Ethics*, Richard Watson argues that non-anthropocentric approaches are, in essence, anthropocentric:

“The notion of a climax situation in ecology is a human invention, based on anthropocentric ideas of variety, completion, wholeness and balance. [...] What would it be, after all, to think like a mountain as Aldo Leopold is said to have recommended? It would be anthropocentric because mountains do not think, but also because mountains are imagined to be thinking which human interests in their preservation or development they prefer.”<sup>36</sup>

Attributing the environment with non-anthropocentric values requires us to place ourselves in their positions and imagine their viewpoints from human perspectives; this, ultimately, is a human-centered endeavour. It is “logically impossible”, to know how an animal thinks about itself and about human beings.<sup>37</sup> Likewise, the genuine feelings of mountains and plants cannot be rationally known. Grey agrees and suggests that if we attempt to step too far outside the scale of the recognizably human, rather than expanding and enriching our moral horizons, we render them meaningless, or at least almost unrecognizable.<sup>38</sup> To assign nature with intrinsic value is a contentious approach; from a mild anthropocentric position, nature can be said to have inherent value as the basis of value lies within it but the source of value is in the external valuator. Due to this arguable ascription of intrinsic value to nature, non-anthropocentrism, at its very core, may not be as non-anthropocentric as it appears.

Some anthropocentrists argue that only humans have moral standing and intrinsic value; they claim that nature must and can only be understood from human perspectives. Of these philosophers, Immanuel Kant is perhaps the most notable. In his definitive essay, rational beings alone have moral worth; Kant argues that “our duties towards animals are merely indirect duties towards humanity”<sup>39</sup>. From his perspectives, we have no duties to nonhumans, only duties to other humans; nonhumans are

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<sup>36</sup> Watson, R. *A Critique of Anti-Anthropocentric Ethics*. Environmental Ethics, Readings in Theory and Application, Sixth Edition, 1983, p. 157.

<sup>37</sup> Nuyen, Anh Tuan. *An Anthropocentric Ethics Towards Animals and Nature*. Martinus Nijhoff Publishers, 1981, p. 211.

<sup>38</sup> Grey, William. *Anthropocentrism and Deep Ecology*. Australian Journal of Philosophy, Vol. 71, No 4, 1993, p. 464.

<sup>39</sup> Kant, Immanuel. *Rational beings alone have moral worth*. Environmental Ethics, Readings in Theory and Application, Sixth Edition. 1873, p-61.

appraised as instruments to human interests and values. A tree, by itself, is not valuable; it is only treasured because of its potential to be exploited as a source of fuel, paper, food, medicine and entertainment. The natural subject, by itself, has no intrinsic value; it is only valuable because it can be used to accomplish a goal desired by the valuer. In Kantian language, they are means to an end but not an end in itself.

Non-anthropocentrism has been criticised as being anthropocentric in essence and failing to convey a rational, relevant indebtedness of nature. Nonanthropocentric ethics goes against the practice of nature and it is “swimming upstream”. Norton argues that nonanthropocentrism is:

- a. Conceptually flawed.
- b. Pragmatically unnecessary.

Non-anthropocentrism is often criticised for its propensity to generate moral conclusions that are abhorrent or unworkable conclusions that require vital human interests to be sacrificed for the good of non-sentient entities. The propensity to generate such conclusion seems particularly pronounced in the case of holistic ethics which view the ecosystem or ‘biotic community’ as the primary repository of value, and its component parts as valuable only insofar as they contribute to the flourishing of the whole. Such views have been labeled ‘environmental fascism’ by Tom Regan.<sup>40</sup> But it is not only holists who are vulnerable to such an argument, as Attfield acknowledges:

“The objection may be expressed as follows. If plants or bacteria have any more than negligible moral significance, then in their millions their interests must sometimes outweigh those of individual humans or other sentient beings; but this flies in the face of our reflective moral judgments, and should thus, short of compelling reasons, be rejected.”<sup>41</sup>

There is a logical gap between the claim that something has goods of its own, and the claim that it is morally considerable or has moral standing. The former is a factual claim, that the object in question has a natural potential or a tendency towards the achievement of certain ‘ends’, relative to which it may be said to flourish or not. The latter, on the other hand, is a normative claim, that moral agents ought or ought not to treat it in certain ways. As Taylor notes:

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<sup>40</sup> Regan 1988, pp. 361–2. Regan’s primary target is Aldo Leopold’s famous ‘land ethic’ (proposed in his *Sand County Almanac*), which has influenced writers such as Callicott and Rolston, and which holds that actions are right when they contribute to ‘the integrity, stability, and beauty of the biotic community’ and wrong otherwise. Note, however, that while this quotation tends to support the holist view attacked by Regan, others of his formulations suggest an *extension* rather than an abandonment of human-centred ethics, which would not deny the moral considerability of humans and other individual creatures.

<sup>41</sup> Attfield, Robin. *The Ethics of Environmental Concern*, Athens: University of Georgia Press, 2nd edition 1991, p. 154.

“One can acknowledge that an animal or plant has a good of its own and yet, consistently with this acknowledgement, deny that moral agents have a duty to promote or protect its good or even to refrain from harming it.”<sup>42</sup>

O’Neill similarly observes:

‘That Y is a good of X does not entail that Y should be realized unless we have a prior reason for believing that X is the sort of thing whose good ought to be promoted.’<sup>43</sup>

In other words the nonanthropocentrists must show not only that it makes sense to speak of nonsentient things having ‘goods’ or ‘interests’, but also that these ‘interests’ are morally significant ones which we ought to promote.

The necessity and even the possibility of a genuinely non-anthropocentric ethic, however, have been challenged by Gery and Justus in the following way. First, non-anthropocentrism suffers epistemological problems: how do we come to know these non-anthropocentric values and how do we rank them? Second, non-anthropocentrism is not genuinely motivating: deep ecology preaches to the choir, and even then only to that portion of the choir who are supporters of intrinsic value. Third, non-anthropocentrism leads to a loss of bearings in moral space. The non-anthropocentric or ecocentric aspirants for the basis of ecological value, such as biodiversity, do not tell us which bio-diverse or biotas we should prefer.

A great deal of effort in environmental ethics has made in trying to develop the circle of moral concern to take account of natural entities. The circle has been variously extended to conscious beings, sentient beings, living beings, even to all existing things. Most of these efforts fail because, for example, they fail to value species and giving preference to individuals, they generate the problem of value attenuation, and they create serious problems for priority-setting. Peter Singer’s animal welfare method is difficult because it appears to lead to sentience chauvinism. It does not pay due respect to non-sentient creatures. The failure of existing arguments for spreading our circle of moral concern need not be a reason for declining the position altogether, just for declining these considerations as providing the basis for the sole source of value. We might, for example, allow diversity about these wider circles of interest, valuing sentient and non-sentient creatures, individuals and species, and so on. But it is rational

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<sup>42</sup> Taylor, Paul. *Respect for Nature: A Theory of Environmental Ethics*, Princeton University Press 1986, p.72.

<sup>43</sup> O’Neill, John. *Ecology, Policy and Politics: Human Well Being and the Natural World*, London and New York: Routledge. 1993, p. 23.

to say that any effort to found preservation efforts on such non-anthropocentric widening of the circle of moral concern needs more development.

Leopold's *Land Ethics* culminated in the principle that defines right and wrong interventions into nature in terms, of their effects on the integrity, stability and beauty of ecosystem. Leopold has canonical status among environmentalist who lean towards deep ecology and similar movements. But critics have pointed out numerous problems with his famous principle. First, there is a problem of determining exactly what counts as an ecosystem for the purpose of the criteria of integrity, stability and beauty. Secondly, Leopold purposes ecology in which, ecosystem maintains a kind of homeostatic balance. This "ecology of stability" has come under attack in recent years; many ecologists now subscribe to an "ecology of flux" in which radical change is considered normal. But if ecosystem are in constant flux it is not clear what it would mean to preserve or restore the stability of an ecosystem even if we could decide what features of the ecosystem count in determinations of stability. Third, the notion of integrity of an ecosystem is ambiguous. Does integrity refer to health or the ability to cope with stress? It is difficult to know precisely what ecosystem states correspond to these features. In short, all attempts to determine what counts as integrity or stability rely on extra-scientific judgments of value. This is certainly also the case with Leopold's third criterion, i.e, beauty. Finally, Leopold does not adequately address the is-ought problem. Non-anthropocentric theories have thus provided an inadequate basis for the ethical evaluation of transgenic organism.

### **2.3.: Reconciliation between Anthropocentrism and Non-Anthropocentrism:**

Reconciliation between anthropocentrism and non-anthropocentrism can be made, though there are some fundamental and theoretical disagreements. In the non-anthropocentric theory, it is observed that there is no sound reason for thinking that any species is special or superior, including humans, with the implication that there are no good grounds for treating the species collectively or differently. In particular, they didn't occupy any privileged place in nature. So it seems that the human interests for the sake of preservation of human basic needs i.e. if their life is at stake. The warning here is that it is permissible to attain those needs at the expense of other human needs. It is very natural to them that they prefer their own species. In other words, there is no reciprocity between species. One may object that if reciprocity is the criteria for moral constraint, then why should we have any kind of moral concern for other species? But

if we think on the issue we can see that anthropocentric ethics honors human existence and we can arrange the nature according to our desire then this view is a self-destructive. On the other hand if we make our ethics absolutely non-anthropocentric, then the existence of human being will be at stake.

From the above discussion it can be said that if the basic needs of humans are at stake then there are good reasons for humans to harm against other individual living things. But if the non-basic or luxury needs are at stake, there are no good grounds for humans to harm against other individual living things. This justifies the Weak Anthropocentric and Shallow Ecologist's position.

In a way of conclusion it can be said that anthropocentrism in a weak sense is acceptable. Following weak anthropocentrism we can say that if human's beings are truly human-centered then they will understand human nature as important and this will encourage the good treatment of nonhuman nature. We cannot criticize a cat for its cat-centeredness. Aquinas and Kant both believed that cruelty to nonhuman is wrong because it breeds cruelty that is bad for man as well as for other animals. Humans beings need to understand that they live in one world along with the rest of nature. On the one hand, uncontrolled human behavior and absolute despot like attitude might lead to the destruction of environment and thus lead to the extinction of human beings. Absolute preservation on the other hand, is impossible. Thus, it can be said by supporting weak anthropocentrism that human interest in survival is the best ground on which to argue for an ecological balance which is good both for human and for the whole biological community. A cat does not distinguish between good and bad, but we human beings do. We are gifted with rationality; therefore, we need to use that gift in a rational manner to save our planet and our environment. Thus, to some extent anthropocentrism in a weak sense as we have earlier discussed may be acceptable, if human beings' survival is at stake.

### CHAPTER- III

## ENVIRONMENTAL ETHICS, SUSTAINABLE DEVELOPMENT AND FUTURE GENERATIONS: SOME OBSERVATIONS

It is a fact that due to the increasing and unintended result of human's economic activity and rapid population growth, twenty first century saw an unprecedented environmental change. This change involves exhaustion of natural resources and extensive pollution like air, water, soil and sound pollution. These changes have an unprecedented impact on climate, life-sustaining systems in our planet. These changes also undermine the conditions that are necessary for economic activity to continue<sup>44</sup>. Thus, economic activity of human beings in the present is considered to be unsustainable. One may say though economic growth resulted into environmental degradation but this does not follow that to abandon growth will be a remedy for unsustainability. Rather zero growth will lead to global war, in the form of environmental degradations and hazards.

Environmental ethics is one of the most important modern environmental conservation and sustainable development tools. It is also a global issue to its implications in development. But some people in the underdeveloped and developed countries are not aware of its importance. Considering the necessity of environmental ethics, it is very easy for all of us to carry out our duties and responsibilities properly that may lead to sustainable development which we could hope for a healthy environment for our future generations. Environmental ethics is interlinked with sustainable environment and development as a whole. It teaches us to be healthy and reciprocal to global environment and development. This virtue is basically based on international humanitarian law, international human rights, and international environmental law under public international law. Modern societies including the United Nations Organization (UNO) and its specialized agencies, International Union for Conservation of Nature (IUCN) and other national and regional organizations, etc., have been playing significant role in the process of implementing environmental ethics for our society in order to attain sustainable development. The compliance with the

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<sup>44</sup> Holland, A. *Sustainability: A Companion to Environmental Philosophy* edit. Jamieson, D. Blackwell Publishing Company: USA 2001 p. 391.

existing laws and policies along with environmental ethics are also crucial for our existence. It deals with environmental rights, moral education, traditional knowledge and environmental conservation issues, which are very important for sustainable development.

### **3.1: Sustainable Development:**

The World Commission for Environment and Development defined Sustainable Development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.<sup>45</sup> This principle and definition of sustainable development can be compared with J.S. Mill’s Principle of Liberty, where Mill says that the pursuit of liberty must be compatible with a similar liberty for all. Also, the principle of sustainable development says that the pursuit of quality of life must be compatible with a similar equality of life for all including future generation. Such a principle seems to protect the future of environment.

There are some ambiguities in the concept of sustainable development and sustainability. Say for example, Amartya sen asks: what are we trying to sustain?<sup>46</sup> Is it the nature around us or the lives that we can lead on nature? These two points are not the same. Let us discuss Amartya Sens example. Suppose there is a wonderful magazine with which James is involved. It produces lovely pictures of animals, for example, the Royal Bengal Tiger and some others. It may be the fact that having Royal Bengal Tiger does not affect our standard of living in any way, but that does not mean that we do not value it because human beings are capable of valuing things which are not connected with their standard of living. Amartya Sen states that, we might say that it is important that no species are to go out of existence, but it can be a case that, we also believe that survival of some of the species has no effect on our living standard or on anyone else.

Paul Hawken in *The Ecology of Commerce* defined sustainability as follows: “Sustainability is an economic state where the demands placed upon the environment by people and commerce can be met without reducing the capacity of the environment to provide for future generations. It can also be expressed in the simple terms of an economic golden rule for the restorative economy: Leave the world better than you

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<sup>45</sup> *World Commission for Environment and Development: Our Common Future*, Oxford University Press: New York, 1987, p.8.

<sup>46</sup> [www.cyber.vt.edu/LSG/3104/enviro/html](http://www.cyber.vt.edu/LSG/3104/enviro/html).

found it, take no more than you need, try not to harm life or the environment, make amends if you do.”<sup>47</sup>

The term sustainable development contains two key concepts.<sup>48</sup> Firstly, the concept of needs, in particular the vital need of the world’s poor, to which (overriding) priority should be given, and the idea of limitations imposed by the state of technology and secondly, social organization on environment’s ability “to meet present and future needs”. In addition to these two key concepts four interlinked dimensions of sustainable development may be introduced such as, economic, environmental, social and cultural, because if development is to be sustainable in the long-term, there needs to be a balance between these four dimensions. Let us discuss the four dimensions in detail.

### **I) Environmental dimension:**

The environmental dimension of sustainable development maintains a solid base of natural resources and avoids excessive use of such resources. This involves conservation of biodiversity, attaining atmospheric balance, productivity of soil as well as other systems of natural environment which are usually classified as noneconomic resources. In resolving the problems of sustainable development, environmentalists tend to focus on what is known as environment borders. As a concept it means that each natural environment system has certain limits that should not be exceeded by excessive consumption for which it will be deteriorated. Therefore, from an environmental point of view, sustainable development means setting limits for consumption, population growth and pollution, as well as the faulty ways of production including wastage of water and deforestation.

### **II) Economic dimension:**

Economic dimension of sustainable development means providing economic welfare to the present as well as to the future while paying more attention to the ‘natural capital’, such as plants, soil, animals, fish, and bio-environmental system. Economic sustainability can be reached through optimised distribution of goods and services. Income generation and poverty reduction are the main issues in this area. Economic sustainability reflects the need to strike the balance between the costs and benefits of economic activity, within the confines of the carrying capacity of the

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<sup>47</sup> Hawken, P. *The Ecology of Commerce: a Declaration of Sustainability*, Harper-Business, A Division of Harper-Collins Publishers. 1993. P.139.

<sup>48</sup> [www.foundation.novartis.com/sustainable\\_development\\_print.html](http://www.foundation.novartis.com/sustainable_development_print.html)

environment.<sup>49</sup> Economic progress should not be made at the expense of intergenerational equity. Therefore, resources should not be exploited to the extent that their regenerative ability is compromised.

### **III) Social dimension:**

Development is considered to be socially sustainable if it achieves social justice in conformity with equitable resource allocation, eradicates poverty, and provides social services, such as education, health and others to all members of the society, especially the neediest one. The social dimension of sustainable development is, thus, based on the notion that human beings constitutes an important means of development and its prime target who should strive to achieve this notion for both present and future generations.

Social dimension of sustainable development relates to the maintenance of political and community values, and social values and norms, relate to ethics, value systems, language, education, work attitudes, class systems etc., that influence social relation. Social dimension of sustainable development also deals with the satisfaction of basic human needs within the society such as food, clothing, and shelter. The sustainability of social needs and values indicates to the quality of growth that occurs in the economy. Equity in the allocation of properties is integral to social sustainability. According to the Brundtland Report “economic and social development should be mutually reinforcing”<sup>50</sup>.

### **IV) Cultural dimension:**

Cultural dimension may be defined as a compromise between cultural diversity and common values. Protection of various cultural identities is the key to cultural sustainability. Some thinkers argue that this is a part of social dimension. However, there is a clear distinction between social and cultural issues, in sustainable development.

The aim of cultural dimension in sustainable development is to raise the significance of culture and its factors in local, regional and global sustainable development. Culture is an important aspect of sustainable development, as it refers to how we understand and appreciate natural resources and each other. However, the role

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<sup>49</sup> David, M. “Sustainability: Rhetoric or Reality?” In *A Sustainable World*, edit. Thaddeus C. Trzyna, & Julia K. Osborn. California: International Center for the Environment and Public Policy. 1995.

<sup>50</sup> *World Commission on Environment and Development Our Common Future*, Oxford University Press, Oxford. 1987, P. 54.

and meaning of culture within the framework of sustainable development is relatively unclear both in science and policy. Culture has been treated as a component of social sustainability and sometimes as a fourth pillar of sustainable development even sometimes as a key dimension of sustainable development. However, the term culture is becoming more powerful along with the increasing ecological, economic and social challenges to meet the objectives of sustainability. Cultural sustainability is gradually emerging out of the realm of social sustainability and being recognized as having a separate, distinct, and integral role in sustainable development. Within the community development, culture is defined broadly as being “the whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or social group. It includes the modes of life, the fundamental rights of human beings, value systems, traditions and beliefs”<sup>51</sup>. The Declaration of the principles of International Cultural Cooperation states that “each culture has a dignity and value which must be respected and preserved and cultures from part of the common heritage belonging to mankind”<sup>52</sup>.

Cultural sustainability can be defined as “the ability to retain cultural identity and to allow change to be guided in ways that are consistent with the cultural values of people”. According to Doubleday, MacKenzie, & Dalby sustainability integrates both dynamic understandings of culture and the recognition that place matters because the practice that is in need of sustaining, as well as those that pose threats, happen in particular communities and in specific geographic contexts. Sustainability also requires considerations of the dynamics of complex cultural arrangements in particular places, rather than assumptions of either peoples or their ecological contexts.<sup>53</sup> Within the sustainability field, culture is discussed in terms of cultural capital, defined as “traditions and values, heritage and place, the arts, diversity and social history”. The accumulation of cultural capital, both tangible and intangible, is what we inherit from our earlier generations and what we will pass onto upcoming generations.

From a philosophical perspective, Pilotti & Rinaldin discuss how the “sustainability of cultural resources means an increase over time of a better quality of

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<sup>51</sup> UNESCO. *The Cultural Dimension of Development: Towards a Practical Approach*. Culture and Development Series. UNESCO Publishing, Paris. 1995. P. 22.

<sup>52</sup> Declaration of the Principles of International Culture Cooperation, Resolutions, Gen. Conf.of UNESCO, Nov.4, 1966(Sess. 14).

<sup>53</sup> Duxbury, N. & Gillette, E. *Culture as a Key Dimension of Sustainability: Exploring Concepts, Themes and Models*. Creative City Network of Canada. 2007.P.4.

life defined as a better knowledge of ourselves”<sup>54</sup>. From a more tangible perspective, in *Ecology of Place*, Beatley & Manning note that sustainable communities must foster a sense of place that stimulates and reinforces social attachment:

“Communities must nurture built environment and settlement patterns that are uplifting, inspirational, and memorable, and that engender a special feeling of attachment and belonging.... A sustainable community respects the history and character of those existing features that nurture a sense of attachment to, and familiarity with, place. Such “community landmarks” may be natural a meadow or an ancient tree, an urban creek or built a civic monument, a local diner, an historic courthouse or clock tower. Finally, in a sustainable place, special effort is made to create and preserve places, rituals, and events that foster greater attachment to the social fabric of the community”<sup>55</sup>.

### **3.2: Ethical Approach to Sustainable Development:**

Sustainable development is commonly understood to require a balanced pursuit of three goods such as ecological health, social equity, and economic welfare. It is grounded on the ethical commitment to the well-being not only of present generation population but also the wellbeing and enhanced opportunities of future generation. Sustainable development is about ethics, because it calls on present people not only to consider the condition of the current impoverished population, but also the potential condition of future populations who are the responsibility of our production and consumption patterns.

Inherent in the definition of Sustainable development is the proposed responsibility of contemporary society for the quality of life in today’s population, in addition to the preservation of resources, environment, other ingredients needed for future populations, and quality of life. This is an enormous and difficult job and it requires huge changes in thinking, policy, and basic assumptions about the economy for its full implementation. For the contemporary, more scientifically cultured societies would have to contribute substantially and through a wide range of assistance programmes to increase the wealth of poorer nations, to help them in developing the capability to provide the basic needs of their population. It means confirming the availability of a wide range of resources like: natural, cultural, mineral, educational,

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<sup>54</sup> Luciano, P. & Marina, R. *Culture & Arts as Knowledge Resources Towards Sustainability for Identity of Nations and Cognitive Richness of Human Being*. Department of Economics University & Departmental Working Papers. Milan, Italy. [www.economia.unimi.it/uploads/wp/wp187.pdf](http://www.economia.unimi.it/uploads/wp/wp187.pdf), 2004, November. P.1.

<sup>55</sup> Beatley, Timothy & Manning, Kristy. edit. *The Ecology of Place: Planning for Environment, Economy, and Community*, Island Press, Washington D.C, 1997, P.32.

food, clean air and water, genetic diversity, and many others that support a good quality of life for future generations. One may ask why do we apply the sustainability framework? To respond these question concepts like rights, obligations, and interdependence must be introduced. Everyone on the Earth has a right to food, shelter, and clothing. Present people have an obligation to future generations to provide them an intact and functioning planet in at least as good state as they received it. We all are interdependent upon present and future generations, but it is the present generation in the wealthier countries that control the fate of future. The application of sustainability framework therefore, requires a better understanding of the ethical concepts which support it. Among these ethical concepts are the precautionary principle, the chain of obligation, the distributional principle, the land ethic, and the rights of the other species.<sup>56</sup> Through a better understanding of the ethics of sustainability, it becomes clear why sustainability framework is not only an approach to address and solve many difficult problems. Why is it in fact the right approach, the right thing to do.

The world faces numerous political, economic, and social challenges that threaten to undermine the welfare of people all over. Sustainability provides just the type of approach which is needed to address these challenges and the ethics of sustainability gives sustainability legitimacy as a framework. The ethics of sustainability provides a clear sense of the principles that make sustainability more than just a simple problem-solving system, but make it an idea that is grounded in commonly understood ethical principles. In short, the ethics of sustainability provides a moral authority behind sustainability as a fair and equitable approach in making the world a better place.<sup>57</sup>

Sustainability is a human construct in which human use their environment for a range of objectives, including subsistence, commodity production and aesthetic pleasure. These objectives have their basis in the desire to sustain human life, enhancement of standards of living, maintenance of culture and protection of environmental quality for generations to follow. The different objectives for the use of environmental resources lead to different expectations as to what is to be sustained and who is to have claims on environmental services.

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<sup>56</sup> <http://www.unescap.org/ru/node/12538>, (*Integrity, Ethics and the Future We Want*, Delivered at the 28th Convocation Ceremony of the Lahore University of Management Sciences in Lahore, Pakistan.)

<sup>57</sup> <http://rio20.net/wp-content/uploads/2012/01/Ethics-of-Sustainability-Textbook.pdf>. (Charles J. Kibert, Leslie Thiele, Anna Peterson, Martha Monroe. *The Ethics of Sustainability*, P.8.)

Equity is an important aspect of this approach to sustainability. Environmental view of sustainable development focuses on the stability of biological and physical systems. The emphasis here is on preserving the resilience and dynamic ability of such systems to adapt change, rather than conservation of some ideal static state. Natural resource degradation, pollution and loss of biodiversity reduce system resilience. Reconciling these various concepts and implementing them as a means to achieve sustainable development is a challenging task, since all these above three elements of sustainable development must be given a balanced consideration.

Ethical approach on sustainable development emphasizes on protection of environment which is a major objective of sustainable development. Economic development ultimately depends on the institutions that can protect and maintain environment's carrying capacity and resilience. The behaviour of humans in relation to their use of environment is critical to the design and implementations of effective environmental protection. It should be noted that ethics and rules are effective in modulating the interaction between humans and their environment and this must reflect both general principles and specific social and ecological context. Ecological context contains the structure of eco-systems in which humans live and work, as well as the particular functional properties of those ecosystems.

Many philosophers have written on this topic though it is only developed in the 1970s due to increased awareness in the 1960s of what technology, industrial economic expansion and population growth were having on the environment. Some thinkers like Thomas Hobbes have concentrated on man's native egoism and insatiate greed. Others point out that self-regard and benevolence are both natural to man. Machiavelli argued that social and political order has by right an ethical basis. It is not imposed on its subjects but itself grows out of the tissue of the institution of normal human life. Radical ecologists are of the view that ethical extensionism is inadequate because it is stuck in traditional ways of thinking that led to those environmental problems in the first place. Their opinion is that it is too human centered. Social ecology and deep ecology are of the view that environmental crisis lies in the dominant ideology of western societies. Ecofeminism points to the link between social domination and the domination of the natural world. By mid 1970s feminists had raised the issue of whether patriarchal modes of thinking encouraged not only widespread inferior and colonizing of women but also people of color, animals and nature. Ecofeminism

calls for radical overhaul of the prevailing philosophical perspective and ideology of Western society.

From the above discussion it can be said that thoughts on environmental ethics demonstrate that, ethics has an important role to play in ensuring sustainability in a contemporary society. However, ethics alone cannot be effective to deal with the major causes of pollution and these include poverty, rapid population growth, deforestation and wars among others. Ethical behaviour could inspire a collaborative culture of new thinking and unconventional ideas that push change in unexpected way. Degradation has reached an alarming stage that it is vital to create greater awareness of environmental problems. Hence it is crucial to see how we comprehend our relationship between our daily practices and thinking and sustainability of natural world. We can affirm that any deliberate attempt to reach a rational and enduring state of equilibrium by planned measures, rather than by chance or catastrophe must ultimately be founded on the basic change of values and goals at individual, national and global level<sup>58</sup>. Let us discuss some normative principles in sustainable development.

### **Some Normative Principles of Sustainable Development:**

The term sustainable development is associated with a number of normative principles. Normative principles are moral statements that specify what is good or bad, and guide human behaviour. Normative principles in Brundtland Report are primarily associated with meeting of human needs, especially the needs of the poor and the protection of environmental resources, including global environmental systems. The following are the basic normative principles of sustainable development.

- a) Common but differentiated responsibilities,
- b) Intra-generational equity,
- c) Inter-generational equity,
- d) Justice, and
- e) Gender equality.

#### **a) Common but differentiated responsibilities**

This principle of ‘common but differentiated responsibilities’ provides a way of distributing responsibilities and tasks associated with the promotion of sustainable development more fairly among the Third World and industrial countries. The principle acknowledges that industrial countries have been the main contributor to environmental

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<sup>58</sup> Schiffman, Howard S. edit. *Green Issues and Debates: An A-to-Z Guide*, Sage Publications Ltd., 2011, P.230.

problems through their patterns of resource exploitation, production and high consumption. It also recognizes the unequally borne economic effects of implementing international environmental laws and agreements. Further, it takes account of different capacities, including financial and technical capacities, available within the countries to address the problem. In short, the use of the principle of common but differentiated responsibilities is driven by equity considerations.

While drawing upon considerations of equity, the use of the principle of common but differentiated responsibilities has a strong functional logic. It is often used as a means of ensuring that developing countries sign up and continue to participate in international environmental management regimes, such as climate change. Developing countries may be more motivated to implement conventions that acknowledge their vulnerability in the face of an environmental crisis that they did not primarily cause. When international conventions are faced with pervasive, multi-causal problems that traverse national boundaries, such participation is highly valued<sup>59</sup>. The use of the principle thus helps to ensure that efforts to promote sustainable development have a more global reach. Thus, care and attention needs to be taken in the way in which the principle is put into practice if it is to promote sustainable development at the global level.

#### **b) Intra-generational equity**

Intra-generational equity refers to equity within our own generation. This highlights the importance of meeting the basic needs of present generations, given the widely uneven pattern of global development. The notion of equity within generations owes much to the work of John Rawls's *A Theory of Justice*, although Rawls's work pre-dates current concerns about global environment. The principle of equity is fundamental to Rawls's theory of justice, in which he argues for equality in the distribution of basic social good, such as liberty and opportunity, income, wealth and social respect<sup>60</sup>.

Contemporary concern about equity admits the inequity in resource use between the rich and poor, while at the same time seeing poverty as both a cause and a consequence of unsustainable behaviour. Poverty can lead to over-exploitation of resources of a local environment to satisfy immediate needs. 'Those who are poor and

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<sup>59</sup> Iles, A. 'Rethinking differential obligations: equity under the Biodiversity Convention', *Leiden Journal of International Law*, 16:02, 2003. P. 217–51.

<sup>60</sup> Rawls, J. *A Theory of Justice*, Harvard University Press; Cambridge. 1971. P.92.

hungry will often destroy their immediate environment in order to survive<sup>61</sup>. Poverty, caused by the failure to address land reform, for example, can lead landless farmers to use ecologically harmful ‘slash and burn’ agricultural techniques, as is happening in the Amazon rain forest. Poverty can also lead to the growth of urban slums, which lack adequate infrastructure, especially for sewage and waste disposal, resulting in both health and environmental hazards. There is thus a relationship between poverty and exposure to the negative consequences of environmental degradation, such as polluted water. Such concerns led to the development of environmental justice movement. This movement primarily addresses the negative impacts of environmental degradation on human health<sup>62</sup>. The concerns of environmental justice movement, however, are narrower than those raised in the sustainable development agenda. The broader remit of the later encompasses issues not just of health, but of environmental protection, and maintenance of biodiversity as well as issues of global equity and justice of access to, and use of, resources.

According to Brundtland report, there is a strong functional relationship between social justice and sustainable development; because poverty is a major cause of environmental deterioration and the reduction in poverty is a precondition for environmentally sound development.<sup>63</sup> It is said that,

“Developing countries must operate in a world in which the resource gap between developing and industrial nations is widening, in which the industrial world dominates in the rule making of some key international bodies, and in which the industrial world has already used much of the planet’s ecological capital. This inequality is the planet’s main ‘environmental’ problem; it is also its main development problem”.<sup>64</sup>

However, Brundtland report gives priority to the world’s poor, independent of any poverty environment relationship. This is because poverty is seen ‘as an evil in itself’ and sustainable development requires meeting the basic needs of all, thus extending to all the opportunity to fulfill their aspirations to a better life. The relationship between social and economic justice and physical sustainability is not just

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<sup>61</sup> WCED (World Commission on Environment and Development) *Our Common Future*, Oxford: Oxford University Press, 1987, P. 28.

<sup>62</sup> Martinez-Alier, J. ‘The socio-ecological embeddedness of economic activity: the emergence of a transdisciplinary field’, E. Becker & T. Jahn, edit. *Sustainability and the Social Sciences: A Cross-disciplinary Approach to Integrating Environmental Considerations into Theoretical Reorientation*, London: Zed Books, 1999. P. 112–140.

<sup>63</sup> WCED (World Commission on Environment and Development) *Our Common Future*, Oxford: Oxford University Press, 1987.

<sup>64</sup> *Principles of Environmental Conservation and Sustainable Development: Summary and Survey*, A Study in the Field of International Law and Related International Reports, Prepared for the Earth Charter Project by Steven C. Rockefeller, Revised April 1996, P.46.

functional that is, it does not merely serve a particular, practical and efficiency purpose but it is also normative that is, it is based upon ethical considerations<sup>65</sup>.

Making the relation between poverty and environmental harm is not to deny that many Third World communities have devised sustainable coping strategies to deal with resource use problems. In addition, it is not only the poor who overuse environmental resources but the rich as well, so that the alleviation of poverty does not necessarily lead to the end of environmental degradation. Poverty relief needs to be combined with other policies if environmental degradation is to be stopped.<sup>66</sup>

### c) Inter-generational equity

Inter-generational equity refers to equity between generations, which includes the needs of future generation in the design and implementation of current policies.<sup>67</sup> The idea of inter-generational equity dates as far back as the political philosophy of Immanuel Kant, who developed the idea of posterity benefiting from the work of its ancestors<sup>68</sup>. Edmund Burke also wrote about the idea of inter-generational partnership<sup>69</sup>. Brundtland argued that today's society might compromise, in many different ways, the ability of future generation to meet their essential needs.<sup>70</sup> Rather than focusing upon the ways in which the actions of present generation may help those of the future, Brundtland report focused upon how today's unsustainable behaviour can narrow the options available for future generations. Promoting sustainable development requires shutting out as few future options as possible.<sup>71</sup> Environmental philosophers have developed Brundtland's ideas further, to suggest that our relation with other generations creates obligations. This poses a problem however; as it is unclear how far into the future these obligations stretch. It would seem insufficient to restrict concern to the next generation only, as many environmental problems or processes work on a very long-term scale. Reflections of inter-generational equity also raise another very difficult political issue, namely how future generations can be given some form of voice or

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<sup>65</sup> Langhelle, O. 'Why ecological modernisation and sustainable development should not be conflated', *Journal of Environmental Policy and Planning*, 2000, 2(4): P. 303–22.

<sup>66</sup> Dobson, A. *Justice and the Environment: Conceptions of Environmental Sustainability and Dimensions of Social Justice*, Oxford: Oxford University Press, 1998.

<sup>67</sup> World Commission on Environment and Development *Our Common Future*, Oxford: Oxford University Press 1987, P. 5-6.

<sup>68</sup> B, Susan. *Sustainable development: Routledge introductions to the environment series*, Routledge Taylor & Francis Group 2006, P.40.

<sup>69</sup> Ball, T. 'The earth belongs to the living: Thomas Jefferson and the problem of intergenerational relations', *Environmental Politics*, 2000, 9(2): P. 61–77.

<sup>70</sup> *Ibid.*

<sup>71</sup> *Ibid.* P. 46.

consideration in present policy making. The question remains, how to find out what the interests or needs of future generations will be. In addition, environmental management tasks, such as planning, monitoring and evaluation, typically do not fit in with the longer-term period needed to take account of future generations. As such, considerations of inter-generational equity require considerable extension of the time scale of current planning and policymaking models and practices.

Other theorists have argued that the principle of inter-generational equity brings with it more stringent requirements. Dobson in particular has argued that the principle means that future generations' human needs have to take precedence over the present generation's human wants. He argues that:

“It would be odd for those who argue for the sustaining of ecological processes to put the wants of the present generation of human beings which might threaten those processes ahead of the needs of future generations of human beings who depend upon them.”<sup>72</sup>

It has also been argued that once the interests of future generations are taken into account, then concern for many features and aspects of the *non-human* natural world can be generated. This would include concern for other species, which may be an essential prerequisite for future generations to meet their needs.

One may say that there are three basic principles of intergenerational equity. First, each generation should be required to preserve the diversity of the natural and cultural resource base, so that it does not excessively restrict the options available to future generations in solving their problems and satisfying their own values, and should also be allowed to diversity comparable to that enjoyed by previous generations. This principle is called “conservation of options”. Second, each generation should be required to maintain the quality of the planet so that it is passed on in no worse condition than in which it was received, and should also be entitled to planetary quality comparable to that enjoyed by previous generations. This is the principle of “Conservation of equality”. Thus, each generation should provide its members with equitable rights of access to the legacy of past generations and should conserve this access for future generations. This is the principle of “conservation of access”.<sup>73</sup>

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<sup>72</sup> Dobson, A. *Justice and the Environment: Conceptions of Environmental Sustainability and Dimensions of Social Justice*, Oxford: Oxford University Press, 1998, P. 46.

<sup>73</sup> Weiss, E. Brown. Reprint. *Our Rights and Obligations to Future Generations for the Environment*, American Journal of International Law, Vol.-13, American Society of International Law 1990. P.6.

These principles of intergenerational equity form the basis of a set of intergenerational obligations and rights, planetary rights and obligations that are held by each generation. These rights and responsibilities derive from each generation's position as part of the inter-temporal object of human society.

#### **d) Justice**

The concept of justice pleads everyone, whether a philosopher, scientist, social reformer, poet or even an ordinary human. Craving so much about justice surmises that there is a crisis of justice in the present form of environment. When human beings are anthropocentric in nature, where materialism, individualism, subjectivism, egoism is the order of the day, when the greedy propensity of human beings counts the most and overlaps their basic needs, when the society reaches its principal in terms of 'can' instead of 'ought', the point of justice appears in a much more relevant manner. Since, from Plato, Aristotle, Socrates, down to Rawls and Amartya Sen, there we find various formulations of justice. But the question is what is justice? Justice in the relative sense means what is just. The reflection of just vision of individuals is a sign of justice. Just vision is the true reflection of humanity that can be fulfilled with the three concepts, like liberty, equality and fraternity.

When we are talking about liberty, equality and fraternity, we are talking about social justice. But what do we mean by environmental justice? Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, colour, sex, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies.<sup>74</sup> Thus, environmental justice is served when people can realise their highest potential. Unlike social and political justice, environmental justice is much wider in scope; it incorporates every biotic animal and even it can be extended to future generation as well.

Thus, environmental justice indicates the expansion of the class of those who are the beneficiaries of justice. The word 'environment' of environmental justice actually refers to a condition on the pursuit of justice. 'Environmental' can be understood as modifying 'justice' in much the same way as 'sustainable' can be understood as modifying 'development'<sup>75</sup>. Thus, the only permissible paths to development are those which are sustainable. Environmental justice unlike traditional

<sup>74</sup> <https://www.epa.gov/environmentaljustice>.

<sup>75</sup> Jamieson, Dale. *Global Environmental Justice*, in *Philosophy and the Natural Environment*, edit. Robin Attfield and Andrew Belsey, Cambridge University Press, 1994. P.202.

or classical concept of justice is environmental friendly or environmental preserving. The cause of concern of environmental justice is to redress inequitable distributions of environmental burdens. Therefore, the root cause of environmental injustices includes institutionalised racism, the co-modification of land, water, energy and air; unresponsive, unaccountable government policies and regulations; and lack of resource and power in affected communities. According to Alexander Solzhenitsyn, Justice is conscience, not a personal conscience but the conscience of the whole of humanity. Those who clearly recognize the voice of their own conscience usually recognize the voice of justice<sup>76</sup>.

Environmental justice fights against destruction of environment to protect our mother Earth and reestablish our spiritual interdependence to the sacredness of our Mother Earth; to respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves; to promote economic alternatives which would contribute to the development of environment for safe livelihoods. The principles of environmental justice are the following<sup>77</sup>:

1. Environmental Justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.
2. Environmental Justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.
3. Environmental Justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.
4. Environmental Justice calls for universal protection from nuclear testing, extraction, production and disposal of toxic/hazardous wastes and poisons and nuclear testing that threaten the fundamental right to clean air, land, water, and food.
5. Environmental Justice affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples.

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<sup>76</sup> J. Grana Sheryl. *Women and Justice*, Rowman & Littlefield Publishers, Inc. USA. 2010. P.5.

<sup>77</sup> <http://www.ejnet.org/ej/principles.html> (accessed on 05.06.2015), (Delegates to the First National People of Color Environmental Leadership Summit held on October 24-27, 1991, in Washington DC, drafted and adopted 17 principles of Environmental Justice. Since then, The Principles have served as a defining document for the growing grassroots movement for environmental justice.)

6. Environmental Justice demands the cessation of the production of all toxins, hazardous wastes, and radioactive materials, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.
7. Environmental Justice demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation.
8. Environmental Justice affirms the right of all workers to a safe and healthy work environment without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.
9. Environmental Justice protects the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care.
10. Environmental Justice considers governmental acts of environmental injustice a violation of international law, the Universal Declaration On Human Rights, and the United Nations Convention on Genocide.
11. Environmental Justice must recognize a special legal and natural relationship of Native Peoples to the U.S. government through treaties, agreements, compacts, and covenants affirming sovereignty and self-determination.
12. Environmental Justice affirms the need for urban and rural ecological policies to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and provided fair access for all to the full range of resources.
13. Environmental Justice calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of colour.
14. Environmental Justice opposes the destructive operations of multi-national corporations.
15. Environmental Justice opposes military occupation, repression and exploitation of lands, peoples and cultures, and other life forms.

16. Environmental Justice Calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives.
17. Environmental Justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth's resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to ensure the health of the natural world for present and future generations.

#### **e) Gender equality**

Prompting sustainable development without considering the needs of women which is half of the world's population is an empty gesture<sup>78</sup>. At a minimum, it breaches the principles of inter-generational and intra-generational equity. This means that due account has to be taken of the fact that environmental degradation affects men and women differently. This arises from the different societal tasks men and women have, from their different roles in relation to reproduction and from the differences in access to and distribution of power.

Equitable participation of women in environmental decision making is also a minimum requirement for the promotion of sustainable development. This opens a space for a female-sensitive identification of needs. In addition, by drawing upon the insights, experience and knowledge that women can bring to the problem, it can help to identify a wider range of policy solutions.

Thus the above normative principles have come to be associated with sustainable development led to the elaboration of specific rights and obligations for states, and these are the guidelines for international and national environmental regulations and laws. These normative principles have widened the scope of those to whom environmental obligations are owed beyond states and beyond present generations. They also place obligations upon the individual, especially as a consumer. These normative dimensions stretch their demands into the policy-making system, or system of governance, to require that the policy-making processes become more inclusive and gender-sensitive, and facilitate the fuller participation of societal actors in decision making that affects their future.

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<sup>78</sup> Dobson, A. 'Representative democracy and the environment', W.M. Lafferty & J. Meadowcroft, edit. *Democracy and the Environment: Problems and Prospects*, Cheltenham: Edward Elgar, 1996, P. 124–39.

When economists suggest to achieve sustainability on the basis of capital, they make a distinction between two kinds of capital i.e., nature-made capital and human-made capital.<sup>79</sup> Human-made capital comprises of all attributes including human and social capital i.e., people, their skill, intelligence, virtues, and institutions. Natural capital comprises of all natural occurring organic and inorganic resources including genetic information, biodiversity, life-support systems and sinks. These two distinctions make another two divisions of sustainability i.e. weak sustainability and strong sustainability. Let us discuss the two divisions as follows:

### **Strong and Weak sustainability:**

- ❖ Weak sustainability stipulates an undiminished capital bequest irrespective of how it is composed. On the other hand Strong sustainability stipulates an undiminished bequest of natural capital.
- ❖ The followers of weak sustainability are committed to unlimited substitutability between natural and human-made capital. For them all value of all kinds of capital is comparable. But this is different from which we are going to value and that can be substituted. For example, the visit to cinema might cost as much as good meal, but this does not follow that it can replace a good meal. On the other hand the followers of strong sustainability hold that the value of human-made and natural capital is comparable in terms of economic value.
- ❖ Weak sustainability is characterized by the goal to sustain a constant level of consumption or utility. To achieve this goal, nature and capital goods can be substituted with each other. Neither nature nor capital has an intrinsic value, but is an instrumental value to achieve the highest possible level of utility. On the other hand Strong sustainability can be seen as a series of thresholds that must not be crossed. In impact assessment, any outcome of a proposed intervention must fall within those thresholds. Lacking such threshold is largely a matter of socially and politically determined preferences, but also a matter of resilience: to what extent is a system able to recover from shocks and stress?
- ❖ Weak sustainability is the idea that natural capital can be used up as long as it is converted into manufactured capital of equal value. On the other hand Strong sustainability is the idea that there are certain functions that the environment performs that cannot be duplicated by humans. The ozone layer is one example

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<sup>79</sup> Pearce, D., Markandya, A., Barbier, E.B., *Blueprint for a Green Economy*. London: Earth Scans, 1989, p. 5-34.

of an ecosystem service that is difficult for humans to duplicate. Weak sustainability deals with the following factors:

- a human-centered worldview is adopted;
- there is an emphasis on a growth-oriented approach to economic development;
- there is a relative lack of consideration given to the need for radical change in people's demands on the earth and
- there is a perpetuation of the view that nature is merely a collection of natural resources that can be subdued by the human race.

On the other hand Strong sustainability deals with the two principal arguments that are ecosystem services and stewardship. According to the earlier, human life survives only by the grace of nature, which provides a number of vital services termed ecosystem services. We damage these systems at our peril. The second argument is an ethical one, i.e. we do not have the right to abolish the right to life of other species, or that we must preserve the beauty and diversity of our natural environment for our own satisfaction as well as for future generations.

- ❖ Weak sustainability is the prevailing approach to sustainability in the western, industrialized world. Weak sustainability is a human-centered approach to sustainability. On the other hand Strong sustainability is the old approach in the Indian Traditional scripture and culture. Strong sustainability is an eco-centric approach to sustainability.
- ❖ For Weak sustainability the next generation should inherit a stock of wealth, containing man-made assets and environmental assets, no less than the stock inherited by the previous generation. On the other hand for strong sustainability the next generation should inherit a stock of environmental assets no less than the stock inherited by the earlier generation.
- ❖ Weak sustainability reuse, recycle and repair of consumer goods; product life cycle management. It sustains the substitution of natural capital with human capital; harvesting of biodiversity resources. The Initial moves to local economic self-sufficiency; minor initiatives to alleviate the power of global markets. On the other hand Strong sustainability Changes in patterns and levels of consumption; shift from growth to non-material aspects of development;

necessary development in Third World. It Maintains the critical natural capital and biodiversity. It heightened local economic self-sufficiency, promoted in the context of global markets; Green and fair trade.

The distinctive feature of strong sustainability is that it is not indifferent to natural and Human-made capital, but requires natural capital to be maintained. It requires natural capital to be maintained where substitution of human-made capital is possible. From the environmental perspective the defect of weak sustainability is that it permits natural environment to be degraded if and only if human well-being can be secured. The approaches of economics to achieve the objective of sustainable development have several advantages which are as follows:<sup>80</sup>

- Environmental conservation cannot economic costs and burdens and economic benefits carry environmental cost crucially.
- It measures the benefits of environmental conservation against other forms of expenditure like, military, health etc.
- The concept of “natural capital” says that we should not regard our use of environmental resources as living off income.

The moral objection to construe nature as capital is that, the natural world is not a resource but contains sentient beings that have the capacity to claim moral consideration. Natural world embodies value apart from the value for human beings. It has inherent value rather than instrumental value. All values are not commensurable and they cannot be assessed according to the common economic need. To implement the principle of sustainable development it requires the presence of certain sorts of social and political institution. Technology has failed to attain sustainable development on the basis that it does not have a reach to each and every part of natural resources. Therefore, it needs a cultural sustainability, which is discussed below.

### **Cultural Sustainability:**

The aim of cultural sustainability is to raise the significance of culture and its factors in local, regional and global sustainable development. It refers how we understand and appreciate natural resources and each other. However, the term culture is becoming more powerful along with the increasing ecological, economic and social challenges to meet the aims of sustainability. Cultural sustainability is gradually

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<sup>80</sup> Holland, A. *Sustainability: A Companion to Environmental Philosophy* edit. Jamieson, D. Blackwell Publishing Company: USA 2001 p. 397.

evolving out of the realm of social sustainability and being recognized as having a separate, distinct, and integral role in sustainable development. The Cultural sustainability is consisting as follows,

- Resilient political institutions,
- Effective regulation,
- Appropriate social skills and technology, and
- A climate of trust.

Question may be raised how to implement these criteria's for future generations. The response may be future generation can reciprocate by worshipping their predecessors or striving to fulfill their hopes. Sustainable development does not prejudice future development. As a criterion of environmental modification it says that we may not be able to predict the 'need' of future but we can be sure that future human development will require resources, sinks, and life-sustaining systems. There must be a minimization of human impact on resources and changes to life-supporting systems. Thus there must be a supporting social fabric to achieve the environmental targets. What a generation leaves for the next/future includes not only "costs" but also "benefits". It is true that environmental degradation has economic costs, but it does not follow that economic values only measure the costs. If our assessment of economic value is determined by the economic system then it is hard to see how the translation of that value system into the environmental sphere can produce a just estimate of environmental value or enforce the re-evaluation of environmental goods.<sup>81</sup>

### **Ecological Sustainability:**

When we talk about sustainable development in a developed country we understand that the so called country is an ecologically developed country, because sustainability unconditionally requires ecological sustainability. It is a necessary, not a sufficient condition. Ecological sustainability requires significant economic, technological, social, political and cultural changes in most of all countries. When we say underdeveloped countries from the perspective of sustainable development we mean all ecologically unsustainable countries. Even the richest industrial country is not a developed country if it is not in the process of ecological sustainability.

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<sup>81</sup> Holland, Alan. Sustainability, in *A Companion to Environmental Philosophy*, edit. Dale Jamieson, Blackwell Publishers Ltd. 2001. P.400.

According to Arne Naess, “there is ecological sustainability if and only if the richness and diversity of life forms is sustained”.<sup>82</sup> The word ‘richness’ not only refers to the sufficiency of species but also to their wide distributions. Also ‘richness’ is applicable to the Planet Earth as a whole, region, nations, societies and to some localities. We can talk about Ecological unsustainability in some areas of monoculture. For the growing population more and more cities are needed to contain the population. There is no global sustainability if some regions do not contain the growing populations. The term development as used in sustainable development is ambiguous and it must be used properly in policy making. Naess presents one of its proper uses and says that “development is globally sustainable if and only if there is a long term trend that assures, or that may justifiably be considered to assure, global ecological sustainability, and also assures long range elimination of object poverty”<sup>83</sup>.

Ecological sustainability is a necessary support to realize sustainable development. To satisfy the vital needs even the just needs of human beings biodiversity is required, and this is to be realized in this present ecological and environmental problems. Therefore biodiversity must be protected for its own sake as well as for humanity. The United Nations World Charter for Nature has acknowledged the richness of biodiversity and tried to implement the initiatives. A group of poor nations implicated the initiatives to this charter and the general assembly of United Nations adopted it in 1982 on the basis of a vote. The resolution passed in the general assembly was that biodiversity has a value in itself apart from its usefulness. It also helps people to maintain its implications in their day-to-day life. The humanitarian perspective of biodiversity will result in to ecologically negative policies. They are short-termed and can be avoided by the cooperation of both poor and rich nations worldwide in a greater extent. The sole thing, which makes a barrier in a global sustainable development, is the size of the human population. Human population must be seen from a cultural philosophical perspective which helps a long range future and slow decrease of the human population that will increase the chances of full biodiversity, sustainable development, deep cultural diversity and the prospect of satisfying vital needs and reaching the cultural and philosophical goals. *Our Common Future* suggests that ecologically sustainable development is:

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<sup>82</sup> Arne Naess, “Sustainability: the integral approach”, presented in the Conference, organized by Environment For Europe, Dobris Castle, Czechoslovakia, June 21-23, 1991.

<sup>83</sup> *Ibid.*

“a process in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change [will] ... all ... [be] in harmony, and enhance both the current and future potential to meet human needs and aspirations<sup>84</sup>.”

A closer look of the term sustainable development reveals “Humanity has the ability to make development sustainable.” A narrow interpretation of it says that what must be considered sustainable is compatible with maximum destruction of life conditions on Earth, a maximum extinction of life forms and habitats, a maximum interference of humans with ecosystem. These maximums are conceived at any time to permit the satisfaction of human needs. Artificial trees plantations which grow very fast do not support the biodiversity of a forest. The number of species in them may be very less in comparison to the real forest. So if our aim is to make a distinction between the forests itself and the species and life forms, then there will be maximal destruction. Consequently, it will be incompatible with the satisfaction of the vital needs of the future generations. In this conflicting situation the narrow interpretation of sustainable development is convenient for the destructive policies, because it is very difficult to convince people that, future generations will lack the ability to take care of themselves, when it is found to be suitable. People can read and understand the technological inventions and revolutions, which push the limits of growth indefinitely. But they don't read about the lack of economical growth and political will to make global use of the inventions made in the previous years.

### **Paradigm Shifts in Sustainable Development:**

Sustainable development is the most popular concept in economic development. The concept of sustainable development deals with two immediate related aims. i.e. a) to ensure the proper, safe, good life for all people this is the aim of development, and b) to live and work according to the biophysical boundaries of the environment this is the aim of sustainability. These two aims may seem contradictory, but still they can be achieved simultaneously. Additionally, there emerges an ethical necessity for the insurance of opportunities for the future generations, which would be analogous to those used by earlier generations. The ethical necessity alongside the scientific certitude and the motives of long term pragmatic selfishness is treated as the normative basis for the sustainable development and allows approaching the sustainable development ethics as a new ethics.

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<sup>84</sup> WCED, World Commission on Environment and Development, 1987, P. 53.

It is easy to say that acting for the benefits of the present and immediate future generations than for acting for the benefit of distant future generations hence the sustainability debate is very much rooted in the present. It is difficult to plan for the needs of future generations we should rather enable them to meet their own needs. Hence, the need to preserve natural capital is a prime factor in sustainability.

In the early 1990s emphasis was given on cleaner production and pollution prevention. In the Mid-1990s it was on eco-efficiency and environmental management and in the early 21st century there is an emphasis on sustainable development. Environmentalism in the present century is giving a way to sustainability in a process that is aided by complementary shifts in economic, social, ethical and political arenas. The shift towards sustainable development is beginning to take place because the mood of the time is ready to promote its early stages. But the question is ‘are we seriously prepared to transform our lifestyle into a sustainable lifestyle?’ i.e. ‘Are we able to adopt simple in means and rich in ends?’ Let us discuss the paradigm shifts in sustainable development.

#### **From physical to biological**

- From productivity and pollution towards renewable resource exploitation beyond rates of regeneration.
- Habitat destruction, loss of biodiversity and ecological services.

#### **From discrete to systematic**

- Move towards the holistic evaluations.
- Feedback rather than linear cause-effect chains.
- Patterns of change rather than static snapshots.

#### **From direction to destination**

- Old models (say, for example, pollution prevention) pointed “in the right direction” reduce environmental impacts.
- Sustainability models develop absolute benchmarks.

#### **From natural to social**

- New awareness of interdependencies between poverty, gender bias, population growth, environmental degradation.
- “Bottom-up” approach ecological health, social justice, and economic progress.

#### **From loads to impacts**

- Traditional model based on reducing loads (footprints) on environment.

- Shift towards impacts and consequences for eco-social systems.

### **3.3: Environmental Ethical Theories and Sustainable Development:**

#### **Sustainable Development and Anthropocentrism:**

So far as the definition of sustainable development is concerned it meets the needs of the present without compromising the needs of future generation and sustainable development contains two key concepts. The first is the essential needs of the poor that should be given overriding priority, with an eye of environment's ability to meet the present and future needs. The second involves the carrying capacity of ecosystems, its recuperative ability and availability of natural resources. Thus, sustainable development considers both the needs and interest of human being and environment. It also follows that there is an urgent need to evaluate the availability of environmental resources and how they relate to the requirements of a rapidly growing human population. All our basic resources, such as land, water, energy and biota, are inherently limited. As human population continues to expand, finite resources will be divided among the increasing number of people. Consequently it is very difficult to maintain prosperity and quality of life and personal freedom will decline.

There are two basic theories in environmental ethics i.e. anthropocentrism and non-anthropocentrism. Anthropocentrists emphasizes upon human centrality because humans are the only species who are intrinsically valuable and moral standing. Non-anthropocentrists claim that other living things as well as nature are intrinsically valuable.

Sustainable development presupposes that “development that meets the needs of the present without compromising the ability of future generations to meet their own basic needs<sup>85</sup>”. But the Brudtland Report foresees a *new era of economic growth* and believes that such a growth is absolutely essential for the relief of poverty. On the other hand it also believes that growth is not sufficient to relieve poverty and sees the need for *new development path*, which will sustain environmental capacity. Thus the approach seems to be anthropocentric as it aims at the benefit for humanity. The two versions of anthropocentrism must be distinguished in this context i.e., strong and weak anthropocentrism. Strong anthropocentrism presupposes the despot like attitude of

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<sup>85</sup> The World Commission on Environment and Development: *Our Common Future* the Brudtland Report, Oxford: Oxford University Press 1987, P. 8.

human beings towards nature, while weak anthropocentrism considers environmental values remaining within the anthropocentric purview.

Therefore, we can say that weak anthropocentrism supports some of the principles and objectives of sustainable development as defined by both the World Commission on Environment and Development and the *Brudtland Report*. Because weak anthropocentrism supports the vital interests of human beings like, if human populations need to clear other species out of their habitats, if the survival of human beings depends on the exploitation of natural resources. Apart from these above mentioned cases there are so many vital needs to fulfill, for which weak anthropocentric attitude is supported by the principle of sustainable development. At the same time weak anthropocentric attitude supports environmental values, and sustainable development also supports the priority of the needs of present and future generations and the carrying capacity of ecosystems and restorative ability of environment.

#### **Sustainable Development and Non-anthropocentrism:**

There are two varieties non-anthropocentrism i.e. biocentrism and ecocentrism. Let us make a comparison between the two varieties of non-anthropocentrism with sustainable development. Biocentrism can be understood that human being's attitude towards nature must be evaluated on the basis of how they affect living beings including humans and other individual species. According to biocentrists apart from human individuals other individual organisms are under the moral purview. Ecocentrism views that people's attitude towards nature should be evaluated on the basis of how they affect species, the whole ecosystem, but not merely individual living beings. It is true that various versions of environmental ethical theories disagree about which natural things have intrinsic values. However we have to gather more information, whether these theories support the principle of sustainable development. The theories, which give importance to human beings than other living things, will be much closer to weak anthropocentrism when it comes under the concept of sustainable development and environmental policies.

The presupposition given by a weak anthropocentist is explicitly stated in the World Commission's book *Our Common Future* and the United Nation's *Agenda 21*. Similar documents expressing the presuppositions of biocentrism and ecocentrism are harder to find. In the Rio Conference it has been declared that human beings are at the

center of concern for sustainable development. Thus the goal of weak anthropocentrism in the context of sustainable development is to ensure that natural resources are to subserve the purpose of humans in an efficient and farsighted way so that the needs of the present and future human generation can be satisfied<sup>86</sup> i.e. to create an ecologically sustainable situation.

If we compare sustainable development and biocentrism, we can get a good hint in Tom Regan, who explicitly states that the overarching goal of wild-life management should ensure maximum sustainable yield; it should be to protect the wild animals from those who would violate their rights.<sup>87</sup> It goes against the declaration of World Commission that it is not merely the well-being of humans, but also the interest of animals and ecosystems, which is the ultimate goal of sustainable development and environmental development policies. Thus the goal of biocentrism from the perspective of sustainability is, to ensure that humans in their treatment of nature need not violate the rights of other living things and they are to be left alone and to flourish.<sup>88</sup>

Ecocentrism from the perspective of sustainable development ensures that humans in their approach towards nature need not violate the integrity and stability of the biotic community and its individual members. When we make sustainable policy making, we must consider the health and flourishing of species, ecosystem, wetlands, rain forests and endangered species and think that they are at the heart of concern whether or not they benefit the human community.

Some issue must be cited here that the goals for sustainability and environmental policy making envisioned by anthropocentrists and nonanthropocentrists are not the same. Rather both the approaches support divergent policies to such an important extent that we become aware that what should be the goal of environmental protection and sustainable development. The value commitments in both the theory are different and they generate divergent policies for attaining sustainable development. Two basic areas of sustainability may be discussed here. These are human population and wildlife preservation.

### **Human Population:**

In the contemporary age population growth is in such an increasing state that, available environmental resources cannot sustain for which potentiality of ecosystem is

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<sup>86</sup> Stenmark, M. 'The relevance of environmental ethical theories in policymaking' *Environmental Ethics*, 24:2, 2002, P. 137.

<sup>87</sup> Regan, T. *The Case For Animal Rights*, Berkley: University of California Press 1983, p. 357.

<sup>88</sup> *Ibid.*

threatened. Therefore urgent steps are needed to prevent population boom. In this regard The World Commission for Environment and Development suggests that the issue is not only population growth but also consumption of available resources. The commission argues that government needs to develop long population policies, because sustainable development can only be pursued, if population size and growth are in harmony with the changing productive potentiality of an ecosystem. It also says that the critical issues are the balance between population size and available resources and the rate of population growth in relation to the capacity of the economy to provide for the basic needs of the population, not just today but for generations.<sup>89</sup> Thus, our responsibility towards human generation requires a “stabilization policy” which ensures that the size of the population stabilizes at a level compatible with the productive capacity of the supporting ecosystem. It cannot be stabilized unless the objective of ensuring a sustainable level of population is achieved.<sup>90</sup>

According to Rolston, it is more important than the needs, and welfare of existing people<sup>91</sup>. Arne Naess in his key principles in *Deep Ecology* suggests that the flourishing of human life and culture is compatible with a substantial decrease of the human population. The flourishing of nonhuman life requires such a decrease<sup>92</sup>. Naess recommended that how many people could be supported on the earth today with a normal living standard on the basis of the present worldwide industrial, agricultural and technological development and resource use. Callicott suggests that a global population of more than four billion persons and showing no signs of an orderly decline is at present a global disaster for the biotic community<sup>93</sup>.

### **Ethical Concern of Population Control:**

Ethically, almost all the countries will favour a low or stabilized population growth. This is because, they think that problems of peace, poverty, racism, disease, pollution, urbanization, ecosystem simplification and resource depletion will be very difficult to solve due to the increased population. At the same time, almost all the developing and under-developing countries feel that population control along with the

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<sup>89</sup> The World Commission on Environment and Development: *Our Common Future* [the Brundtland Report] Oxford: Oxford University Press 1987, P. 89.

<sup>90</sup> Ibid. P. 49.

<sup>91</sup> Rolston III, *Conserving Natural Value*, New York; Columbia University Press, 1994, p. 233.

<sup>92</sup> Arne Naess, *Ecology, Community and Life Style: Outline of an Ecosophy* trans. and edit. Rothenberg, D. Cambridge: Cambridge University Press, 1989, P. 29.

<sup>93</sup> Callicott, J.B. ‘Animal liberation: a triangular affair’ *Environmental Ethics* 2:1980, P. 27.

status of international economic order poses a threat to those people who are below poverty line and oppressed. These nations suggest that there must be a reorganization of both economic and political power if population control is to be accepted. Human ingenuity and technology can solve the problems of resource depletion and pollution, as it is a fact that human beings are the most vital part of world's resources. Economic growth can be stimulated if more people will be engaged, consequently production will be more.

In contrast, it may be argued that ethically there must be a limit to population growth, because more people will be added to the population of the least-developed countries, where education, health and nutrition levels are so low and slow that rapid population growth would result into millions into an early death. The nations which favour limited population growth feel that, if we encourage rapid birth rate, then some one may be born to solve the world's pollution and resource problems in an inhumane way to preserve the lives of the present existing people. Also the nations which encourage better education, nutrition, health care and work opportunities for a smaller population feel that, ethically this approach will make greater change for making technological breakthroughs without adding human suffering. The enormous population problem can be combated if proper urban planning is adopted in both rural and urban areas in India. Development should lead towards sustainable eco-houses and eco-towns. Incentives and rewards for small families will help to control the population boom. The population problem has no technical solution; it requires a fundamental extension in morality.

### **Wildlife Preservation:**

We all know that in 21<sup>st</sup> Century, the world population is growing on and if population continues to grow then many areas of earth must be transformed into agricultural land to satisfy the needs of people. Therefore, the main objective of world commission is to conserve "a representative sample of Earth's Ecosystems" which is an inseparable part of sustainable development. The authors of *Our Common Future* and *Agenda-21* maintain that we have a duty to the future generations to make them understood for not to exploit wilderness areas.

We have a duty to protect the wilderness that remains, to ecosystem itself rather for future people. An ecocentrist may claim to form a wildlife preservation policy, which ensures that the remaining areas of wilderness must be set aside and kept non-

exploited. Though there is a difference between the pioneers of sustainable development and an ecocentrist, regarding how much wilderness area is to be protected but both of them converge into one another regarding the protection of wilderness areas. Therefore, there is no difference between ecocentrism and weak anthropocentrism so far as sustainable development is concerned in the short run. But in the long run they do diverge.

The advocates of sustainable development think that species and natural ecosystem make many important contributions to human welfare particularly they contain useful genetic material. But wilderness areas contribute important genetic material if they are allowed to use these areas. Thus it seems that nothing will be required that the twelve percent of wilderness areas remain protected or untouched in the future. Rolston III, on the other hand says that any further exploitation of the wilderness areas will upset an already unbalanced ecosystem<sup>94</sup>. Whatever present or future generation may use the wilderness areas, they ought to be left alone in now and forever. Thus weak anthropocentric preservation of wilderness areas ensures that at least some part of the landscape remains wild for human generations.

In the strong sense ecocentrist will not satisfy the preservation policy of wilderness areas. For example, Callicott holds that it is the well being of the biotic community, and not of the human community, that ought to be the center of concern of any environmental policy and sustainable development<sup>95</sup>. Therefore the ecocentrist's view implies that human being should live in such a way that less of the natural ecosystem would be modified for human purposes than the actual case. Bill Devall and George Sessions in *Deep Ecology* states that we should live with minimum rather than maximum impact on other species and on the Earth in general<sup>96</sup>.

So far as sustainable development is concerned, intrinsic value of the entire biotic community leads them to an environmental protection programme, which not only consists of wilderness preservation policy but also a restoration policy to make development sustainable. Thus, the restoration policy in sustainable development can be defined as a policy, which states that we should rehabilitate those areas of

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<sup>94</sup> Rolston, III, H. *Conserving Natural Value*. New York: Columbia University Press, 1994. P. 27.

<sup>95</sup> S, Mikael. The Relevance of Environmental Ethical Theories for Policy Making, *Environmental Ethics* Vol. 24, P. 145.

<sup>96</sup> D. Bill & S. George, "Deep Ecology," in Donald VanDeVeer and Christine Pierce, eds., *The Environmental Ethics and Policy Book*, Belmont, Calif.: Wadsworth, 1994, P. 217.

wilderness, which, can still be restored to enrich nature. Human beings' responsibility is to reverse from these areas, which is occupied by natural objects for the sake of wildlife, so that they can live there without any external interference. This human intervention may not be required in the ecosystems because the ecocentrists approve a population limitation policy, which implies a reduction of the number of human beings in future. Thus nature can take its own course of rehabilitation, for sustainable development.

### **3.4: Some observations on sustainable development:**

The concepts of "Sustainable Development" raises several objections at different levels, and let us discuss these in the following paragraphs.

#### **Growth:**

Generally it is said that growth is a fundamental cause of overusing nature. Therefore, it can be said that the cause of the problem is not the same time its solution. However, unlimited growth itself is not possible. Nature has limits, such as the surface of the planet, and therefore unlimited growth within limits is not possible. "As long as the concept of sustainable development is based on the imperative of growth, sooner or later the limits to growth will be met." Growth is not separable from consuming nature. Say for example, to produce two houses requires more natural resources than to produce one. Under this assumption, it follows the fact that ecological systems have limits in providing resources, and this gives a fundamental insight that nature has limits for human emissions, too. Therefore, a sustained growth cannot exist. Hence, a conception of sustainable development claiming sustained growth is paradox in its aims. From the above discussion it can be said that "sustainable growth is impossible".

#### **Efficiency:**

We know that increase in efficiency is essential for capitalist firms. Any company, which would not increase its efficiency, would not continue to exist. Increasing efficiency decreases the production costs of the company. This means that increase in efficiency is much more an economic mechanism than an ecological one. Increasing the efficiency is part of the economical rationality, and leads over using of natural resources. Therefore, efficiency increases ecological crisis and fail to heal it.

#### **The Concept of "Needs":**

Sometimes to know "the needs of future generations" is not possible. Since future generations do not exist, they cannot formulate them. Thus, to evaluate them, it

is necessary to assume certain values, to imply our needs for these future generations. This presupposes the premises of temporal and trans-cultural continuity. Both premises assume an essentialistic concept of “needs”. The needs would be part of the nature of human beings. One may say that needs are historically, socially, and culturally shaped; they are constructed in discourses, which take place in the context of power relations, and the hegemonic definition of sustainable development that talk about “future needs” is ethnocentric and thus useless.

If future generations should have the same options as we have today, we would need to stop any interventions in nature immediately. The idea of substitution of non-renewable resources, for example, is based on a certain idea of the function of the resource within our historically, socially, and culturally shaped perspective. Future generations might want to use the resource from a different perspective. Thus, sustainable development should not be defined on the idea of “needs” or “options”, but concentrates on how far it is acceptable in certain historically, socially, and culturally shaped context to cut options for future generations normatively.

### **Consequences:**

According to John Baden the notion of sustainable development is dangerous because the consequences have unknown effects. He writes: “In economy like in ecology, the interdependence rule applies. Isolated actions are impossible. A policy which is not carefully enough thought will carry along various perverse and adverse effects for the ecology as much as for the economy. Many suggestions to save our environment and to promote a model of ‘sustainable development’ risk indeed leading to reverse effects.”<sup>97</sup> Moreover, he evokes the bounds of public action which are underlined by the public choice theory the quest by politicians of their own interests, lobby pressure, partial disclosure etc. According to him, “the improvement of environment quality depends on the market economy and the existence of legitimate and protected property rights.”<sup>98</sup>

### **Basis:**

Sylvie Brunel, French geographer and specialist of the Third World in 2008 asks: who benefits from sustainable development? For her, sustainable development, with its binary vision of the world, can be compared to the Christian vision of Good

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<sup>97</sup><http://greenplanetethics.com/wordpress/sustainable-development-can-we-balance-sustainable-development-with-growth-to-help-protect-us-from-ourselves/>

<sup>98</sup> *Ibid.*

and Evil, an idealized nature where human being is an animal like others. Nature as Rousseau thought is better than human beings. It is a parasite, harmful for nature. But human is the one who protects biodiversity, where normally only the strong survive. Moreover, she deliberates that the main ideas of sustainable development are the hidden form of protectionism by developed countries impeding the development of other countries.

### **Measurability:**

In 2007 a report for the U.S. Environmental Protection Agency stated: “While much discussion and effort has gone into sustainability indicators, none of the resulting systems clearly tells us whether our society is sustainable. At best, they can tell us that we are heading in the wrong direction, or that our current activities are not sustainable. More often, they simply draw our attention to the existence of problems, doing little to tell us the origin of those problems and nothing to tell us how to solve them.”<sup>99</sup> Nevertheless a majority of authors assume that a set of well-defined and harmonised indicators is the only way to make sustainability tangible.

The most common criticisms are related to the matters like data quality, comparability, objective function and the essential resources. However a more common criticism is coming from the project management community. How can a sustainable development be reached at global level if we cannot monitor it in any single project?

### **Some Objections on the Brundtland’s definition of Sustainable Development:**

It is not enough to agree quickly on the Brundtland definition of sustainable development, this definition has serious problems. However, only through detailed and fundamental criticism it is possible to know the problems in the definition. As a guiding principle one needs to question the Brundtland definition, to comprehend the historical development of the concept “sustainable development”, to critically examine Agenda 21 and other follow-up documents. From such a critically brief analysis of the definition are five points emphasised:

- ❖ First, modernity is reproduced through sustainability in the hegemonic sense.
- ❖ Second, the epistemological question, how to deal with future needs, has to be addressed.

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<sup>99</sup> Hecht, Joy E. *Can Indicators and Accounts Really Measure Sustainability? Considerations for the US Environmental Protection Agency*, May, 2007. P.12.

- ❖ Third rationality, technology, and management as solutions to the ecological crisis are reflected.
- ❖ Fourth, the issue of resources is briefly touched, and from this point the social aspect of the ecological crisis is pointed out.
- ❖ Finally the concept and the analysis of sustainable development is reflected as taking place in a political context.

The hegemonic discourse of sustainable development is characterised by the hope to renew modernity, which finds itself in a crisis, with the means of modernity: This is called ecological modernisation. By that, the institutions of modernity are reproduced. Yet, those institutions are very much the cause of the existing crisis. Science is one of these institutions, besides governments, the capitalistic mode of production, and others. Also management is part of these institutions, which are seen as both, cause as well as remedy. The modern hegemonic approach to sustainable development, therefore, could degenerate the problems, which it is supposed to solve. For this kind of a paradox situation a critical approach towards sustainability is needed.

To a large amount it is a consensus that sustainability should contain both, inter and intra-generational justice. The idea of justice is based on rights and needs. However, it has been shown that it is not that much easy to cope with the epistemological problems of 'sustainability'. The intergenerational approach of sustainable development should be appreciated, however, we cannot know what kind of future needs exist, or how needs are evaluated. Further, we cannot know how the effects of today's actions are valued one generation later. Thus, we cannot know whether an object, and our dealing with the object, has the attribute sustainable in the sense that future generations would appreciate our decision to sustain or destroy the object.

However, some socio-cultural critics says that the mainstream Sustainable Development is a trick, yet another attempt to reduce the aspirations and needs of marginalized populations across the planet is needed in the name of green development. Some critics, while broadly sympathetic towards its goals, point out Sustainable Development's fundamental lack of attention to the powerful political and economic structures of the international system that constrain and shape even the most well-

intentioned policies<sup>100</sup>. For critics grounded in the ecological sciences Sustainable Development is unforgivably anthropocentric and thus unable to dissolve the false barriers between the human sphere of economic and social activities and the ecological sphere that sustains these activities<sup>101</sup>.

One may wonder; that does sustainability exist or are we joking? Is it not simply an oxymoron? “Development” in sustainable development implies instability and change and “sustainable” implies a notion of equilibrium as a momentary and transient state in the process of development. It can be said that development cannot be stopped and science and technology will continue. Thus, sustainability sounds like a paradox i.e. to have a society and nature co-evolving in one directional arrow of time, simultaneously maintaining their relationships and not depleting their potential resources.

Still the question remains; does sustainability imply how to continue to exploit environment, and at the same time live healthy and happily? Or how to continue current anthropocentric predatory processes led by human beings towards nature and society and at the same time to preach about governmental and citizen-based mechanisms designed to ensure greater accountability of business and industry? Does responsibility to future generations imply sustainability? Is sustainability a subsidiary to fulfill responsibility? These are the questions to be addressed when we talk about sustainability.

The major impact of sustainable development is the rejection of the notion that environmental conservation necessarily constrains development or that development necessarily means environmental pollution which is certainly not an insignificant gain. One may wonder, sustainable development has faltered in its inability to develop a set of concepts, criteria and policies that are coherent or consistent both externally and internally. The formulation of sustainable development suffers from the following significant weaknesses in:

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<sup>100</sup> Redclift's early work on sustainable development, published roughly the same time as the Brundtland Report, is quite sympathetic to the goals of the WCED, although he is often cited as an outspoken critic of mainstream SD. He states quite clearly that “the Brundtland Commission is expressing views similar to those expressed” in Sustainable Development: Exploring the Contradictions, and that the full document (at the time unpublished) will be “worth serious attention” (Redclift, 1987, p. 14). In a testament to his prescience, he also asserts that it “remains unlikely. . .that the developed countries (or even the developing ones) will put into action the measures advocated by the Brundtland Commission” (Ibid.).

<sup>101</sup> Richardson gives a particularly harsh assessment of the Brundtland Report, calling it a “sham” process and a “political fudge” that fails to face up to the basic contradiction of how to reconcile the “expansionist nature of industrial society” with the limitations presented by the planet's array of self-regulating ecological systems. 1997, P. 57.

- its characterization of the problems of poverty and environmental degradation.
- its conceptualization of the objectives of development, sustainability and participation and
- the strategy it has adopted in the face of incomplete knowledge and uncertainty.

### **3.5: Future Generation:**

The definition of Sustainable development as explained by the World Commission on Environment and Development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. This principle says that the pursuit of quality of life must be compatible with a similar equality of life for all including future generation. Such a principle seems to protect future generation and environment. Thus, according to this principle, we have a duty to conserve the resource of nature because they are essential to all human life both at present and in the indefinite future. Here the moral significance falls less on our responsibilities to other species or to nature in itself, and more on the duties we have towards it in virtue of the obligations we have towards future generations. Whereas obligations to future generations have major significance, they can also affect choices that do not have their major impact on future generations. For example, if one has a choice between allocating funds to medical programme providing acute care for persons presently ill or for preventive programs, obligations to future generation might incline in favour of funding preventive programmes.

Our thoughts and talk are replete with reference to the future, with reference to “what will be”. We think that we can in fact change and affect the future, and more often than not we act accordingly. So we may say that our actions have a direction towards future. Our present actions have bearing on especially future people, people we have no chance of encountering in our lifetime. This is something we are increasingly realising with the degradation of environment looking right at our face as a constant warning about the world that we are leaving behind us. But ethical questions regarding future have always been an issue that was worth discussing even outside the purview of environmental ethics.

Our present actions, decisions may not only have bearing on the wellbeing of future generation, but also determine whether future generation would exist at all. Our actions may help the proliferation of life in future, as well as help the proliferation of

good life for such future beings. So, with regard to these future people, and the future of these future people, we may have certain basic questions:

1. Are we responsible for deciding which future people will come into being?
2. Are our decisions in bringing these people into existence morally valuable with respect to these people?
3. Would it be right to bring them into existence at all?
4. Would we be benefiting them, by just bringing them into being?
5. If it were so responsible for bringing people into being should we feel any obligation in a way that they have a life worth living?
6. How long downstream are we to be held responsible for the existence as well as wellbeing of these future people?
7. What right do we have in deciding what would count as a good life for future people?
8. Along with this we are faced with the more fundamental question of what would constitute good life and whether life had some intrinsic value beyond the question regarding good or bad life.
9. All these questions are related to a more basic question, which makes ethics of posterity at the same time so difficult and so interesting. What is the metaphysical as well as ethical status of future people?

All the ethical principles, which we have so far used in coming to decisions about ethical problems, involve reciprocal moral relations between people involved in the ethical dispute. This presupposes that these people involved in the ethical dispute exist. In the case of ethics of posterity this is the element which is precisely missing. Another question that arises here is: Are lives of non-existing future people can be judged better or worse? If we go through the ethics of posterity, we may review our principles which are based on the idea of reciprocal moral relations. We may judge actions in themselves while the hey days of consequentialism or contractualism are gone. This is why raising the relevant questions in posterity matter in the relevant way is so essential.

There raises two more fundamental questions, when we discuss about future generation. Firstly, what do we mean by future, or to be more precise future people? The reason why this needs to be clarified is that it seems in a way that we who presently exist should be morally bound to the beings that do not exist now and may not

even ever exist, people who have no reciprocal moral relation with us. We understand how confusing the phrase 'future people' is as soon as we realise that future persons may mean so many things. Our understanding may be expressed in the following way.

- A baby who is to be born tomorrow is a future person.
- A baby yet to be conceived but is very much likely to be conceived is a future person.
- A generation to be born constitutes future generation. Even we may think of generations which might possibly exist centuries ahead of ours and so on.

Secondly, why do people think about future? In the end we cannot but think about the future. It is an existential burden for all of us to carry, some more constructively than others. The great psychologist Abraham Maslow said that thinking about future and planning for future are central attributes of a healthy human personality<sup>102</sup>.

At a practical level, people think about future because they want future to be kind to them or to others, such as their grandchildren; and planning for future thoughtfully choosing today's actions with regard to their future consequences may help that to happen. Even when it appears that one's future situation cannot be influenced by today's actions, it may still be judged useful to plan responses to the occurrence of any of various scenarios of possible futures. People also think about aspects of future in a disinterested way, that is, without interpreting what might unfold in terms of their own self-interest. This sort of thinking may just be curiosity driven or it may stem from a concern for others, for society if we prefer. We may say that we have to review our ethical stand in view of the following questions about future generation.

- Do we have obligation to future generation at all?
- Are we permitted to discount future course of events?
- Which ethical theory should govern our assessment of future events?
- Should the ethical approach towards future generation be egalitarian or utilitarian?

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<sup>102</sup> Cocks D. *Deep Futures: Our Prospects for Survival* McGill-Queen University Press, 2003. P. 135.

One may say that the issue of obligation towards future generations raises two more interesting questions.<sup>103</sup> The first question is concerned with the identity of future generations and this is usually center on the identity of future persons based on specific genetic criteria, i.e. they are persons linked to us genetically and form specific link between us and future people. However, one may not find any definition of identity dealing with the problem in light of the problem of identity over time. The question remains, what constitutes a link between ourselves and those to whom we supposedly have an obligation?

The second question is concerned with the possibility of perceiving future obligations as obligations to all future generations taken as a group, without any specific identity of the individuals in that group. Even if we do not know precisely who it will be, someone will live in generations after us. But moral obligations are usually undertaken in reference to one's own promises or commitments to specific individuals. It is unclear what type of obligation exists with reference to a group of people to whom no promises have been made.

### **3.5.1: Moral Status of Future Generation:**

Moral status is a characteristic that we human moral agents attribute to entities, by virtue of which they matter morally for their own sake, so that we pay attention to their interests or integrity when we consider actions that might affect them, regardless of whether other beings are concerned about them. When an entity has moral status, we may not act towards it in any way we satisfy, disregarding its well-being, preferences, or continued existence. We owe some moral obligations to that entity itself. As a moral agent, we need to care to some degree about what it wants or needs, or simply what it is. This imposes some limitations on how we may act towards it. Moral status is also importantly different from moral goodness. A person's intentional conformity to moral principles might be one of the characteristics that enhance their moral status, relative to persons who routinely act immorally and to beings who are incapable of moral action. But being worthy of consideration in others' moral reasoning is conceptually distinct from acting morally oneself. Because moral status gives rise to moral obligations, what moral status different beings occupy is crucial to social existence and law.

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<sup>103</sup> Stephen M. Clinton, 'The problem of future generations: as it relates to environmental ethics,' *Journal of the Evangelical Philosophical Society*, 14:1, 1991.

Moral status of future generation may involve nothing more than a simple extension of our moral community to include family, animals, ecosystems and persons who will be born after we have departed. By this account, our responsibilities to future generation would not be significantly different in kind from our responsibilities to present generations. It seems that given our knowledge and capacities, future persons have a right to our responsible care and forbearance on behalf of them.

If we have a closer look, it can be revealed that the ontological and epistemological status of future persons raises numerous and extraordinary moral and meta-ethical problems. Let us discuss some of them<sup>104</sup>.

- Most fundamentally, future persons, qua future, do not exist now, when the alleged burdens of responsibility fall upon the living. Thus, question may be raised that can we have duties to non-existent beings? What sense can be made of attributing rights to those who do not exist?
- The more perplexing fact is that by initiating a policy to improve the lives of future persons, we will be causing different individuals to be born in future. But if so, then we can in no sense be said to be ‘improving the lives’ of particular future persons, who, but for our provision would not exist. We cannot know future people as individuals. Also, ‘posterity’ is an abstract category containing unnumbered and undifferentiated members. And yet, much moral concept is based upon the principle of “respect for autonomous individuals.”
- Our relationship with future generations is unidirectional and non-reciprocal. Future individuals will be unable to reward or punish us, as the case may be, for our provision for their lives.
- How can we tell with any confidence just what might benefit future persons i.e., what will or will not be ‘good’ to them?
- Who is entitled to act on behalf of future persons?

Thus, assigning moral significance to those not yet born, we are introducing and inviting problems that are unique to the history of moral philosophy. But we cannot extend our moral concern towards them as we do in the moral status of non-human species. All these questions are related to a more basic question, which makes ethics of

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<sup>104</sup> Clowney, David & Mosto, Patricia. *Earthcare: An Anthology in Environmental Ethics*, Rowman & Littlefield Publishers, Inc. 2009, P. 639.

posterity at the same time so difficult and so interesting like, what is the metaphysical as well as ethical status of future people?

When we say that something counts morally in its own right, we are often said to be thinking of its intrinsic worth or value rather than its instrumental value. For example, if it were morally right to treat animals well only because this would promote kindness between persons, then animals would count morally i.e. only instrumentally. That is, they should be treated well not because of what they are in their own right, but because of the effects on others of treating them well. That is, if the animal counts morally in its own right, there is no further end that needs to be served by our treating animals well in order for us to have a reason to treat it well. If something is an end, in this limited sense, this need not mean that it has value that can never be trumped, or that it can never be treated as a mere means. At the minimum level, it means only that its condition can provide a reason for attitudes or actions appropriate to its moral worth, independent of other considerations. When we save a bird, we can do it for the bird's sake, because it will get something out of its continued existence and it could be harmed if it does not continue to exist. It seems that something is already have or have had the capacity for sentience or consciousness in order for it to be harmed by not continuing on in existence. This is because an entity must be able to get something out of its continuing existence and a capacity for sentience or consciousness seems to be necessary for this. We can say that an entity has moral status when in its own right, for its own sake, it gives us reason to help it and to refrain from destroying it.

On this account, a nonsentient, nonconscious embryo lacks moral status but could count morally in itself (for example, could give us reason in its own right not to destroy it) because of its intrinsic and extrinsic properties, such as what its potential is. This is different from its merely having instrumental value because it will in fact give rise to a future person that has moral status. In case of future generations we can say that they count morally in itself because of their intrinsic and extrinsic properties, such as what their potentialities are.

In his essay, Norman Care<sup>105</sup> presents doubts regarding "our ability to solve the motivation problem relative to what morality requires on behalf of future generations." He argues that (a) we can have no bonds of love or concern for indefinite future

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<sup>105</sup> Care, N. "Future Generations, Public Policy, and the Motivation Problem," *Environmental Ethics*, Fall, 1982, P. 195.

persons: “their interests cannot interest us;” (b) we have no “community bond” with future persons no “sense of belonging to some joint enterprise;” and finally, (c) we feel no “extended or unbounded shared-fate motivation,” no “sense of common humanity.” This proposal immediately suggests two problems: first, it implies that childless individuals are incapable of caring for future generations, and thus are excused from making just provision. Second, Rawls’s “heads of families” condition presents a “discounting” problem even more severe than that of the economists, for a parent’s love and concern for a child is generally greater than for a grandchild, and so on, diminishing to insignificance within a very few generations.

The question of our responsibility to future generations cannot be returned to obscurity. For if our analysis of “moral responsibility” is correct, the only plausible escape from this responsibility would be a knowledge provided by sciences, and an abandonment of the capacity and choice bestowed by technology. But few people are willing to pay that price to avoid the moral accountability of our duty to posterity. On the other hand, we continue to support the development of science and technology, and yet ignore the long term consequences, if we will not avoid our moral duty, we will be in default thereof, and will be properly condemned by the generations that succeed us.

### **3.5.2: Obligations Towards Future Generation:**

Obligations towards future generations examine moral issues concerning persons who have yet to born, but may come into existence. The questions it examines include whether future persons are morally significant, whether they have a right to exist, whether we are required to make certain sacrifices for the sake of their welfare, whether concern for future persons can abrogate moral obligations to existing persons, and what sorts of resources and institutions we are obligated to pass to them.

Philosophical concerns for future generation go back to at least Aristotle’s theory of distributive justice. In contemporary literature, obligations to future generations are often included within discussions on intergenerational justice, which concerns moral obligations, that presently existing moral agents owe to non-contemporaneous past and future generations, in part because of Rawls advocating its inclusion within the domains of justice.

Why do present generations have an obligation towards future generation? Present generation has obligations towards future generations because there remains a kinship relationship between the present generation and the future generations. It is a

biological fact that future generation would be causally linked with present generation. It is an attempt to extend notions of obligations of justice from those that apply to current existing persons and groups to those that apply over time.

Human being's actions affect natural system. We humans alone among all living creatures have the capacity to shape our relationship to environment. We can use it on a sustainable basis or we can degrade environmental quality and natural resource base. As part of the natural system, we have no right to abolish its integrity; nor is it in our interest to do so. Rather, as the most sentient of living beings, we have a special responsibility to care for the planet.

In recent years, lawyers have begun to join with the ecologists in debating whether there should be obligations to protect the interests of future generations.<sup>106</sup> This legal debate was preceded by a philosophical one, in the early 1970s, on the emergence of a new or "ecological ethics" redefining the relationship between man and nature in such a way as to ensure the survival of human species on Earth.<sup>107</sup> The background of the various ethical approaches has been an indisputable fact that humanity has accumulated a monstrous potential to destroy life on Earth, and that it is using natural resources and environment in a way that threatens the survival of future generations at a standard that we today consider worthy of human beings.

According to some law makers our responsibility towards future generations not only as a moral postulate, but also as a legal principle. The protection of future generations is mentioned specifically in various international instruments.<sup>108</sup> Also responsibility towards future generations is an implied subject of several recent developments. Our duties towards protecting future generations can be disputed and need to be justified. Duties towards future generations or rights of future generations ultimately rest on a value judgment. This is a fundamental assumption which reveals the fact that human species and all other species, should survive, and that future generations are entitled to live in dignity. According to Weiss, "future generations have rights and duties: rights flowing from preceding generations, duties towards the generations to follow." If we accept that there is a responsibility towards future

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<sup>106</sup>Gündling Lothar. *Our Responsibility to Future Generations* The American Journal of International Law, Vol. 84, No. 1 Jan, 1990, p. 207-212 Published by: American Society of International Law.

<sup>107</sup> Partridge, E. Responsibilities to Future Generations: *Environmental Ethics* edit. 1980. (Gündling Lothar. *Our Responsibility to Future Generations* The American Journal of International Law, Vol. 84, No. 1 Jan, 1990, p. 207-212 Published by: American Society of International Law.)

<sup>108</sup> Weiss, *The Planetary Trust: Conservation and Intergenerational Equity*, 11 Ecology L.Q. 495, 540ff 1984. Ibid. Vol. 84, No. 1 Jan, 1990, p. 207-212.

generations, the question arises whether this should be the “only” duties of present generations. Weiss argues strongly in favour of rights of future generations, for which she believes that rights of future generations would have “greater moral force” than obligations of present ones.

We do not have any difficulty in following Weiss’s concept of subscribing to the rights of future generations. Though it transcends the traditional understanding of rights that ordinarily has reference to the individuals. We can share the view that right of future generations has “greater moral force” than the mere obligations of present generations. However, it can be suggested that the whole controversy should not be concentrated on the issue of right or duties towards future generations. But the major problem is what we have to do today is to meet our responsibility towards future generations, what the concrete obligations are and how we can fulfill these obligations under the present circumstances of the international community. This remains the major problem even if we recognize right of future generations because, right is always connected to obligations. What we need is some basic principles for acting in the interest of future generation.

We cannot simply rely on the assumption that our way of dealing with nature and environment will turn out to be harmless. Nor can we expect that future generations will develop knowledge and technology which is necessary to cope with all the problems they inherit from us. Therefore, at present we need to take necessary preventive measures, or more precisely, precautionary action, which will ensure that natural resources are used sparingly and that degradation of environment is reduced to a minimum. This, will be achieved only if we change our basic system and thinking about values. We need to understand that economic growth is not an indicator of progress, nor is wealth necessarily an indicator of prosperity.

Our knowledge of our environment is very limited. For example, we do not know which plants and animals can still be discovered that can provide us with new types of food, medicines and other life sustaining resources. When we damage this complex biosphere, we endanger not just the life and health of the future generations, but also rob them of a world of intellectual, aesthetic and values, as a whole.

Environmental problems we face now show that the growth of our technological power calls for a new, more forward-looking notion of moral responsibility, which is helpless to trace and anticipate the far-reaching consequences of our present actions.

Traditional concepts of responsibility for our fault are irrelevant when the issue is one of agricultural or industrial practices are caused, inspired or even favoured by our present economic system. Rather than the notion of individuals having to answer for culpable actions committed in the past, in those cases, what is needed is the more forward-looking concept of collectivities economic or political entities bearing responsibility for the long-term risks which their policies create. One may derive an unacceptable conclusion that in the end responsibility rests, on our cultural priorities as a whole and on the structures in which these priorities are invested. To give its rightful place to the concept of a forward-looking responsibility which compels us to stretch our foresight as far as we can, and to base our actions on the worst possible scenario, we need to avoid the present as well as future potential dangers. This concept links up very well with the intuitive conception of intergenerational equity. What we need here is moral inspiration on the level of public action and organization.

Our concern for environment also raises the question of our responsibilities to future generations. How much do we owe to the future? From a 'social contract' view of ethics, the answer would seem to be nothing. Because we benefit them but they are unable to reciprocate. Most other ethical concepts, however, do give weight to the interests of generations to come. The fact that members of future generations do not exist, is no reason for giving less considerations to their interests than we give to our own. That it is sure that they will come and shall have interests that will be affected by what we do today, should be a reason enough for us to be more considerate. For example, in the case of the storage of radioactive wastes, it seems to clear that what we do will indeed affect the interests of generations to come.

However, the question becomes much more complex, when we consider that we can affect the size of future generations by the population policies we adopt. Most environmentalists believe that the world is already dangerously overcrowded and we are responsible for the existence of future generations. We can manage their size so that the resources of nature are more than enough for their needs and they live a sustainable life. We cannot allow the maximum numbers to come into existence so that per capita availability of resources and harsh environment compels them to live a life of want, misery and starvation<sup>109</sup>.

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<sup>109</sup>Asthana, Dr. D.K & Asthana, Dr. M. *A Text Book of Environmental Studies*, S. Chand & Company Ltd., New Delhi, 2006. P.265.

Human beings are the temporary custodian of this planet, simply a link in the cycle of events, which has been operating since time immemorial. They do not have the right to spoil the resources, pollute environment and disrupt the very cycle of life of which forms a simple insignificant link. It will affect the future generations whether small or large. Just as we have inherited the resources of the world from our predecessors, should not we pass it on to our future generations in a clean and usable state? The concept of *Land Ethics* by Leopold affirms the right of all resources, including microbes, plants, animals and earth materials as well to continued existence in a natural state. Humans have an ethical responsibility of preservation and maintenance of biosphere, atmosphere, hydrosphere and lithosphere<sup>110</sup>.

### **3.6: SOME OBSERVATIONS ON THE OBLIGATION TOWARDS FUTURE GENERATION:**

Discussion about the obligation to future generations will generate some problems, like (a) the non-identity problem, (b) the problem of circumstances of justice and (c) the problem of positive obligations.

The non-identity problem states that the choices between two policies, such as, P1 and P2, for example, between high risk and low-risk energy paths, will affect not just the state of well-being of future generations, but who will exist, their identity, S1 and S2. It may happen that one of the policies, such as, P1, might produce a much lower quality of life than the other. However, the argument runs, since the population S1 that is produced would not have existed were it not for P1, then providing their life is worth living, they cannot be said to have been harmed. As there is no specific person how can somebody be wronged or harmed? How can something be wrong if it does not wrong anyone? How can something be worse if it is not worse for anyone? The non-identity problem is sometimes used to deny that we have any obligations to future generations to produce a better rather than a worse future. It also raises questions about the nature of our obligations, and in particular about the status of person-affecting restrictions in ethics. The non-identity problem has been voiced with the slogan given by Temkin as: ‘One situation cannot be worse (or better) than another in any respect if there is no one for whom it is worse (or better) in any respect’.<sup>111</sup>

The non-identity problem as a slogan is centred on person-affecting restriction and is used against certain versions of egalitarianism. It is often taken to support the

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<sup>110</sup> Leopold, A ‘*Land ethics*’ A Sand Country Almanac, Oxford Univ. Press: NY 1966 p.340.

<sup>111</sup> Temkin, Larry S. *Inequality*, Oxford: Oxford University Press, 1993, P.256..

levelling down objection to equality. The levelling down objection runs that if equality is in itself a good state of affairs, then one must allow that where equality is achieved through 'levelling down', creating a state of affairs in which none are better off and some worse. But how can it be better in any respect given that there is no one for whom it is better, while for some it is worse? Nothing can be good or bad unless it is good or bad for someone. However, given the implications of the slogan in the case of future generations, there may be good reason for scepticism about the slogan. Some policy decisions, for example, to deplete rather than to conserve, appear to be wrong even if there is no individual for whom it makes life worse. The non-identity problem then raises questions about the nature of our obligations to future obligations. Can the future generations who live following the resource-depleting policy decision claim that their rights have been violated? How can an action violate an individual's right not to be harmed if the individual would not have existed in absence of the action and hence would not have been better off? Thus the implication that can be drawn from the non-identity problem is that we need to move to a consequentialist and impersonal perspective on our obligations to future generations. This would maximize the total amount of good or to produce an equal distribution of goods.

However, there are various ways through which the position of non-identity problem can be resisted. One suggestion is that we need to distinguish between two claims that are normally conflated in the statement of the non-identity problem:

- (i) The claim that the choice of policy P1 does not harm or wrong anyone.
- (ii) The claim that P1 makes no one worse off than they would have been.

The argument runs that while the second claim may be true, that P1 does not make anyone worse off, the first claim that it does not wrong or harm anyone, does not necessarily follow. It is indeed possible to harm or wrong persons without necessarily making them worse off.

The second problem with extending conceptions of justice and ethical obligation that apply to current generation and future generation are those concerned with the absence of some of the circumstances of justice and ethical obligations on certain views of those obligations. According to contractarian theories of justice and obligation the point of moral rules or rules of justice is to serve as a means by which individuals of limited altruism can realise their long term interest in conditions where they are roughly equal in power and susceptibility. However, it has been claimed that

such theories have problems in extending obligations to future generation, for given that there is an inequality of power and susceptibility (we can harm them, they cannot harm us) the circumstance of justice or obligation are absent. According to communitarian view many obligation only exist in conditions in which we belong to the same community. It links particular obligations to others to the existence of community. Question may be raised that since future generations either cannot or may not belong to a community with ourselves, what kind of responsibilities do we have for them?

There are a number of responses one might make given these problems. One might accept the theories by viewing that we have only limited-obligations to future generations. Secondly, one might reject those conceptions of justice or ethical obligations since they fail to offer an account of our obligations to future generations. Thirdly, one might attempt to defend such conceptions by modifying them so as to include intergenerational obligations. For example, by introducing the notion of an intergenerational contact or by denying the supplementary claims, for example, that we cannot be harmed by future generation or the future generations and ourselves cannot belong to the same community. Here the second response is owed to contractual theories of ethical duties and the third to communitarian theories.

We also find different response to the problems for the communitarian view. It states that many of the projects we engage like, scientific, artistic, familial, political and everyday working activities actually guard for their point and their potential success on the future beyond us. It matters to us that future generations do belong to a community with ourselves. Future generations are capable of appreciating works of science and art, the good of non-human environment, and value of human skills. They are also capable of contributing to these values. According to this response, this is an obligation not only to future generations, but also to ourselves in present. We do not undermine our own achievements by rendering impossible to our own success, and to those of the past, so that their achievements continue to be both appreciated and extended. It further states that our obligations should not be understood as obligations to strangers but to members, a transgenerational community of which we are potentially be a part. The central point is that how we characterise the value of events in our lives actually hinges on a larger frame in which they occur and that frame itself depends upon a particular future. Hence, the future matters to us now, so as the future generations.

The third problem concerns with the apparently inegalitarian nature of many positive obligations that are taken to apply over generations, what Harzen called the ‘*chronological unfairness of human development*’.<sup>112</sup> This point is raised in Beckerman’s paper ‘Intergenerational Equity and the Environment’ which highlights the issue not just of how far egalitarian justice applies at all over generations, but also how far the language of ‘sustainable development’ captures any principle of egalitarian justice. Sustainable development is often understood in terms not of equality of welfare over generations, but of improving the welfare or quality of life of future generations. Obligations to the future generations may be counted as positive and negative. With regard to negative obligations, there is something *prima facie* unjust about our engaging in projects in which the benefits fall on ourselves while the harms fall on those who follow us. There is also a negative sense in which harms and suffering felt on one generation for the benefit of future generation can also be said to be unjust. One might also understand how such obligations might be grounded in considerations of equality outlined above. However, when it comes to positive obligations, notions of intergenerational justice and equality do not always appear to be the right language in which it will articulate our concerns.

One may ask, “But we don’t know what people in the future will want,”. “May be they will prefer a world of fast roads and vast shopping malls, and a world of luxury. So why preserve things for them that they may not even appreciate?” This is the argument from ignorance. In standard form it goes something like this:

- ❖ We can have obligations to beings only if we can know what those beings are like and what they need or desire, and
- ❖ We can’t know what future people will be like or what they will need or desire.

Therefore, we have no obligations to future people.

The argument is valid. And the first premise is probably accurate; if we knew absolutely nothing about a class of beings, then we could not know what was good or bad for them and would have no basis on which to act responsibly toward them. Our ignorance, moreover, would not be willful, since the first premise envisions a situation in which no information about these beings is available to us. But the second premise is false. We have a great deal of inductive evidence, based on the entire past history of humanity and on its biology, physiology and psychology, for what

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<sup>112</sup> Rawls, J. *A Theory of Justice*, Oxford: Oxford University Press, 1972, P.290.

future people will be like and what they will need or desire. We can be virtually certain, for example at least with respect to people living in the next few centuries that they will need sources of food, clothing, shelter, and clean water and air. They will prefer an environment that is not dangerously contaminated with toxic or radioactive substances. It is very likely, given what we know of humans so far, that many of them will want open space and natural beauty. Clearly we know enough to act with some degree of responsibility towards future people. We may not hide behind the excuse of ignorance and there is a further point: we are to a certain extent responsible for shaping what future generations will want, not only in the way we educate people, but also in our shaping of the world. If we destroy wilderness, for example, then we ensure that future generations will never value wilderness; for how could they learn to love what they will never know? If, by contrast, we preserve wilderness, then we preserve at least the possibility of their valuing it. And, given the pervasive human appreciation of nature across history and culture, it is likely that many future people will realize that possibility. Thus, we know what future generations will need, not only because we know what human beings in general want, but also because to some extent we participate in shaping their values.

### **Utilitarian Approach Towards Future Generations:**

According to classical utilitarianism which shapes much of our current ethical thinking, we should aim to maximize happiness for all people. It seems obvious that “all people” should include future generations. If so, then utilitarianism implies a doctrine of sustainability the idea of providing for the needs of future generations without reducing the ability of future generations to provide for themselves. This seems quite reasonable. But humanistic utilitarianism does not do so well when applied to the issue of population. For if the goal is to maximize the total quantity of happiness in the world and then we must recognize that with each new person born, provided that that person lives at least a marginally happy life, the quantity of happiness is increased. Utilitarianism therefore seems to imply a policy of population increase! Of course, if things get too crowded, so that, for example, there is mass starvation, then each additional person will decrease the world’s happiness. So what utilitarianism seems to recommend is a policy of increasing the population just up until the point where adding anyone else would produce enough misery actually to lower the total happiness. But that could well imply that each person’s quality of life, though still positive, is seriously

diminished, though the total happiness increases. That is, instead of having fewer very happy people, we may wind up with many only slightly happy people. Surely this is an absurd result. We may conclude, then, that classical humanistic utilitarianism is not an adequate theory for future population policy.

One suggestion aims at to maximize, not the total happiness, but the average happiness. We may call this average utilitarianism. Average utilitarianism seems to recommend a policy of population reduction. Many of us would probably be happier if the world contained fewer people and there was less competition for resources. Of course, this could be carried too far. Very few of us would want to be the only person in the world or one of only a few people in the world, for this would lower our quality of life by limiting technology, companionship, etc. So the upshot seems to be that we should decrease population to a certain relatively small size and then keep it stable. So far, this sounds plausible. But there are problems with averaging utilitarianism, too. May be the most effective way to maximize average happiness is simply to eliminate i.e., unexpectedly and painlessly kill people who are chronically unhappy. But that wouldn't maximize average happiness if the survivors cared about or if the survivors feared in eliminating themselves. But suppose there was as large group of unhappy people whom none of the other relatively happy people really cared about. Then to eliminate this group would not reduce the survivors' happiness and would considerably increase the averaging happiness. It is quite plainly immoral. Any theory which implies such results, even in hypothetical cases, must be inadequate. Hence we must reject average utilitarianism.

There are many other theories of this sort that we might consider, including other variants of utilitarianism, various deontological theories, care ethics, and so on, but the fact is that a really adequate theory of moral obligations to future generations that deals with things like population policy has yet to be formulated. John Rawls thinks that government and social policy are best crafted by imagining the drawing up of rules for a society prior to that society's existence, under the assumption that we belong to that society but we don't know which role we play in it. This not-knowing of our place is the veil of ignorance. Its function is to provide certain objectivity; if we don't know who we will be in this society, we will not be influenced by our own prejudices to provide especially for ourselves or people in our social class. From this sort of thought experiment, Rawls deduces a wide variety of desiderata for a just

society. This strategy can also be applied to future generations. A number of thinkers have proposed that the veil of ignorance be made intergenerational that is, not only do we not know what position we will have in the society, we do not know what generation we will belong to. This gives us a perspective from which we treat all generations fairly. We can see immediately, for example, the unfairness of one generation's depleting resources such as fossil fuels or disrupting the climate for its own benefit and to the detriment of future generations. Thought experiments such as this can take us a long way toward crafting fair and rational policies that apply to future people as well as those of us who are now alive.

Finally, many claim that a key obligation we have towards future generations is to curb population growth, perhaps reduce population. Golding does not see how we could have such an obligation, because in effect it requires actions that would determine the membership of future generations.<sup>113</sup> Also our obligations towards future must find a firm basis in social ethics: those obligations have to do with our conception of a just society. What moral forces can help us to enlarge the time horizon of that conception? From the environmental context it creates an additional challenge that forces us to think on a global level. Fundamental questions concerning the meaning of human history which go beyond social ethics then come into their own position.

Future generations are exposed to great harm by the way in which we, the living beings, exploit environmental resources of the earth. There is a sense in which the whole issue of obligations towards future generations is therefore part and parcel of ecological discourse in general. We need to strive for a new and more respectful relation with our natural environment. But in doing this, there is a danger of being tempted by the mysticism of "deep ecology" which obscures the specifically human aspect of the problem. It is surely legitimate to discover intrinsic value in the beauty of natural forms or in biological diversity. The believer can share such an experience in terms of respect for God's creation. Ecological awareness precisely consists in recognizing that mankind is part of a wider reality. But when we feel that we have duties towards future people, it is a specifically moral and anthropocentric perspective that we take. We are not dealing then with "nature" but with human beings, whom we

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<sup>113</sup> Others have argued in another way that if we have any obligations to future people then it must at least be to bring them into existence. Further, that if we are to be Utilitarian, we should bring into existence as many people as possible perhaps, within the limits of maximizing utility.

perceive to be the victims of a particularly strong handicap. As they do not yet exist, they cannot resist our uninhibited exploitation of the resources of the planet.

Kantian ethics seems to have significant implications for obligation towards future generations, but they are not elaborated by many philosophers. Perhaps the most fruitful Kantian approach is by the formula of the law of nature: “Act as though the maxim of your action were must both be able to conceive of the maxim becoming a law of nature on which everyone acts and be able to rationally will it.”<sup>114</sup> For a maxim to be a law of nature the species must be able to continue and the time at which effects occur is irrelevant. Thus, dumping toxic waste that poison the environment would be condemned, because one cannot conceive of a system of nature with the species surviving where that done.<sup>115</sup>

The utilitarian tradition is concerned with maximizing net utility and this seems to be a good basis for being concerned with the happiness of future generations. However, if utilitarianism is restricted to the happiness of identifiable people, it directly falls in to the identity problem. No one is made worse off if actions results in different people were being born in the future provided their lives are at least minimally worth living.

Utilitarianism has been extensively discussed by philosophers, and many objections have been raised against it. Two objections are especially relevant here. Firstly, Utilitarianism is an extremely, even excessively demanding moral view. If we have a duty always to bring about the best outcome, then any time we can increase the wellbeing or others or ourselves, just about any time we have a moral duty to do so. There is no moral extension, no such thing as moral holiday. We are always duty bound to sacrificing something for the sake of benefits elsewhere. Secondly, Utilitarianism can favour unequal distribution of wellbeing, and in particular can impose severe deprivations on the few for the sake of gains for the many. Given its interpretation of impartiality, utilitarianism will count the deprivations of the few as a moral cost, but if they produce benefits for many other people, this cost will be outweighed and even as a severe inequality can be on balance approved.

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<sup>114</sup> Kant, I. *Foundation of the Metaphysics of Morals with Critical Essays*, trans. Lewis White Back, ed. Robert Paul Wolff Indianapolis: Bobbs-Merrill, 1969, p.45.

<sup>115</sup> Annette Baier, “For the Sake of Future Generations,” in *Earthbound: New introductory Eassy in Environmental Ethics*, ed. Tom Regan (New York: Random House, 1984), p.217.

To respond to the objections against our obligation to future generations some philosophers have proposed replacing utilitarianism about future generations with a different, egalitarian view. This view cares not just about the sum of benefits across generations but also about equitable distribution, or about intergenerational equality. We do not sacrifice the worst-off generation for better-off generations, but in some way at equality of condition among them.

The natural environment, species and the generations that will succeed us lie in the fate of our hand. In this respect, environmental ethics represents a kind of ethical approach, which considers intrinsic value not only in the interest of individual sentient creature, but also in nature living creatures in the world. The reason is that we humans are complex beings and we make decisions about what to do, about what is right and wrong through thoughts and feelings, rational arguments and intuitions, head and heart, data and gut instinct. These varieties in human nature compel them to think and do accordingly in a responsible and sustainable manner.

To attain sustainable development environmental planning and management is very necessary. Planning should be directed towards (i) an overall growth of the society and (ii) removal of socio-economic disparities through proper utilization of resources. Environmental management which is related to rational adjustment based on the principle of realization between man and nature involving judicious exploitation and utilization of natural resources without disturbing the ecological balance and ecosystem equilibrium is the need of the day. Environment management aims at improvement of human-environment relationship by imposing a check on destructive human activities, along with conservation, protection, regulation and regeneration of nature. Such management is sure to bring out socio-economic development on one hand and improvement of environmental quality on the other.

There are two approaches in environmental planning and management such as, the preservative approach and the conservative approach. First, the preservative approach promotes non-interference of human with nature and total adaptation of human to nature, i.e. human must surrender completely to the whims of nature. This approach is not practicable as it would lead to the total extinction of human. Second, the Conservative approach is in fact practicable as it advocates human-environment adjustment in terms of judicious utilization of natural resources for socio-economic development and at the same time maintenance of ecological balance, ecosystem,

stability and environmental quality by adoption of eco-friendly and pollution free technologies.

One may say that environmental planning and management needs to be based on the following ecological principles in order to attain sustainable development:

- (i) The biotic and abiotic components of the environment are interrelated which in turn are related to large scale biogeochemical cycles.
- (ii) Sustained life on Earth is a characteristic of eco-system.
- (iii) Resources of the planet are mostly finite.
- (iv) Resources are created over millions of years.
- (v) All living species and the physical environment are mutually reactive.
- (vi) Energy flow in the eco-system is governed by the first and the second law of thermodynamics.
- (vii) Productivity of the eco-systems depends on the availability of solar energy and the ability of the plants to transform solar energy into chemical energy.

Environmental planning and management based on the above mentioned ecological principles will foster harmonious living of all species within an ecologically balanced environment.

The question arises that how sustainable development should proceed? Restoration of environmentally degraded areas along with launching of new development projects in previously developed areas incurs large expenditure and at the same time may not be successful. Such development strategy cannot be called sustainable. In an eco-systemic sense sustainability of both eco-system and human life requires development. Therefore, in order to understand sustainability or carry out sustainable development in the eco-systemic sense, the good of all non-human entities needs to be recognized along with the good of human beings. Once it is recognized conditions favouring or assuring the good of all entities should be stably maintained. Thus human actions needs to be directed not only towards maintenance of human well-being or human good but also towards promotion of good or well-being of all non-human entities constituting the eco-systems and therefore the environment. Such an endeavour would be sustainable development of the society in the true sense of the term.

The question which arises is whether sustainable development can be achieved in its true sense without taking environmental justice into consideration? In fact,

sustainability, development and environmental justice are all interconnected or interlinked and the discussion of one by forfeiting the other makes our understanding incomplete. We all know that the environment is our habitat and we are all the constituents as well as the observers of the environment. We are therefore entitled to a healthy and protective life in harmony with nature. All biotic species indeed are entitled to acquire proper or qualitative living within a healthy environment. These entitlements involve duties or obligations on the part of international or national organization, governments of different countries with the aim to meet equitably the development and environmental needs of the present and future generations. The question of justice comes only when the desire and needs of human exceeds the means of satisfaction. Justice may usually be applied in areas of scarcity of resources. The scarce resource needs to be distributed equitably among the members residing in that area so that each gets their fair share. But it is even wrong to think that justice is not required when resources are plentiful. To allow people to utilize plentiful resources according to their desire will eventually jeopardize the environment.

We understand that we do require development, which can come through science and technology, but such development must protect the generative capacity of nature, natural environment in the true sense of the term. If any such development would be detrimental to the natural environment, degrade the so-called biosphere, transform the fertility of natural environment to barren land, such type of development must be resisted. So when we plead for environmental development through sustainability, we must resist the so-called modern scientific development based on consumerism, materialism, individual subjectivism where ups and downs, exploitation and subjugation, where superiority and inferiority in terms of material wealth is the sole criterion of cultural development, where development runs with empty ethical foundation, metaphysical basis. Such type of development is no longer sustainable. So sustainability is the criterion of development.

However, when we talk about sustainable development, we thereby rationalize ourselves, set a rational criterion of development which is associated with morality, ethics and metaphysics and it will rationalize human's desires. So it can be said that sustainable development in one sense is very much a form of enlightened anthropocentrism or popularly known as weak anthropocentrism, but it would require a different attitude of humans which is unlikely in the domain of strong

anthropocentrism. Environmental ethics in the form of non-anthropocentrism actually has tried to bring back humans attitude towards nature in a revolutionary manner. It tries to show or at least it gives opportunity to humans to re-look their own position through the realization process where they stand, what they are doing, what is wrong with them, and how they overcome the harmful actions that give rise to serious threat to the mankind in general.

We think that sustainability is not a pure form of non-anthropocentrism, but definitely it is an enlightened form of anthropocentrism and shallow ecological attitude by means of which environmental journey has started. There is no question of doubt that sustainability requires a drastic change of humans' attitude towards nature which is completely foreign in the domain of brute anthropocentrism. Sustainable development is intimately associated with environmental justice, because sustainable development can only be restored through the process of environmental justice. We should not abuse our natural resources and we should preserve our natural resources for future generations.

Since the 1970s, the topic of ethical obligations to future generations has been of interest to philosophers, economists, environmentalists, and others. While the context for application differs for each field, the central issues are the same: whether a current generation has moral obligations to non-contemporaneous future generations, the nature of those obligations, and whether those obligations require an earlier generation to make sacrifices for a future generation. For example, does the present generation have the right to exhaust the planet's resources or render the planet uninhabitable? Do future generations have rights which require the present generation to conserve resources and preserve the environment for future generations? All thoughtful people agree that we ought not to make the world a much less pleasant place for our descendants than the world we have inherited from our ancestor by dumping our wastes into rivers, lakes and oceans, cutting down our forests indiscriminately, and polluting the atmosphere with noxious gases. As temporary inhabitants of this planet, we do have certain duties to perform for future generations such as not to pollute the atmosphere, to protect threatened plant and animal species, to preserve the beauty of the wilderness areas, and artistic treasures of earlier human civilization. These are certain valuable objects, and things what we have inherited from our ancestors, and we must preserve them for our descendants. If we talk about the duties to future generation,

we imply that future generations have rights, which are morally obligated to respect. Joel Feinberg, on *The Rights of Animals and Unborn Generations*, emphasizes the interests of future generations to preserve endangered species. He says, “surely we owe it to future generations to pass on a world that is not a used up garbage heap”<sup>116</sup>. We as temporary inhabitants of this planet, therefore, have certain duties to perform for future human beings to leave a livable planet. Finally, it can be concluded that sustainable development is constructed in a way that it reflects how society wants to live in nature, about the expectations of society for the future, and the societal idea of justice. The construction is taking place in the presence of power. Thus, the concept sustainable development needs to be reflected philosophically and politically when used.

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<sup>116</sup> Feinberg, J. “*The Rights of Animals and Unborn Generations*”, in James E. White, (edit), “Contemporary Moral Problems”, New York, West Publishing Company, 1994, P. 434.

## CHAPTER- IV

### ENVIRONMENTAL ETHICS AND SUSTAINABLE DEVELOPMENT IN INDIAN PHILOSOPHY AND CULTURE

In the previous chapter, we have discussed the relationship between sustainable development and future generations in detail. And we know that if development is to be sustainable in the long-term, there needs to be a balance between the four dimensions and we have already discussed these dimensions in the previous chapter. We all know that environmental ethics is one of the most important modern environmental conservation and sustainable development tools. It is also a global issue to its implications in development, but some people in the underdeveloped and developed countries are not aware of its importance. Considering the necessity of environmental ethics, it is very easy for all to carry out their duties and responsibilities properly that may lead to sustainable development which we could hope for a healthy environment for our generations as well as future generations.

While discussing future generations, we assert that we have a duty to conserve natural resources because they are essential to all human life both at present and in the indefinite future. Here the moral emphasis fall less on our responsibilities to other species or to nature in itself, and more on the duties we have towards it, in virtue of the obligations we have towards future generations. Whereas obligations to future generations have major significance, they can also affect choices that do not have their major impact on future generations. Say for example, if one has a choice between allocating funds to medical programme providing acute care for persons presently ill or for preventive programmes, obligations to future generation might incline in favour of funding preventive programmes.

#### **4.1: Sustainable Development, Future Generation and Culture:**

In our previous chapter, we have discussed that culture is a key issue and one of the dimensions of sustainable development. The aim of culture in sustainable development is to raise the significance of culture and its factors in local, regional and global sustainable development. Culture is an important aspect of sustainable development, as it refers to how do we understand and appreciate natural resources and each other. However, the role and meaning of culture within the framework of

sustainable development is relatively unclear both in science and policy. Culture has been treated as a component of social sustainability and sometimes as a fourth pillar of sustainable development. However, the term culture is becoming more powerful along with the increasing ecological, economic and social challenges to meet the objectives of sustainable development. Within the community development, culture is defined broadly as being “the whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or social group. It includes the modes of life, the fundamental rights of human beings, value systems, traditions and beliefs”<sup>117</sup>. The accumulation of cultural capital, both tangible and intangible, is what we inherit from past generations and what we will pass onto our future generations. Indian philosophy and culture have strong foundation for environmental protection and it has a holistic approach towards environment, sustainable development and future generations. Indian culture shows greater concern and deep respect towards nature and emphasizes the holiness and purity of life for both at present and future.

Indian culture is the culture of various religions living together in harmony. The cultural and spiritual heritage of this civilization is both vast as well as rich. But there is nothing sectarian or regional about it. It is so universal in its appeal and so wide-ranging in its approach that it belongs to the whole world. Its setting is no doubt Indian, but its content is such as to cover all aspects of human life, irrespective of geographical units and historical expressions. It is both universal and timeless and, as such, applies to peoples of all ages and of all countries. A good environmental sense has been one of the fundamental features of India’s ancient philosophy. History reveals the fact that the civilization of India had grown up in close association with nature. There has always been a compassionate concern for every form of life in the Indian mind. This concern is projected through the doctrine of *Dharma*, preached by every religious school that flowered in our land. *Vaiśeṣika Sūtra* defines: ‘*Yataḥ abhyudaya-niḥśreyasa-siddhiḥ saḥ dharmah*’<sup>118</sup>

“*Dharma* is that from which results the accomplishment of exaltation and of the Supreme Good.” ‘*Abhyudaya*’ means knowledge of the essences. ‘*Niḥśreyasam*’ is final cessation of pain. That from which both of them result is *dharma*. The compound

<sup>117</sup> UNESCO. *The cultural dimension of development: Towards a practical approach*. Culture and Development Series. UNESCO Publishing, Paris. 1995. P. 22.

<sup>118</sup> Sinha. N. trans.: *The Vaisesika Sutras of Kanada*, Published by Sudhindra Nath Basu M.B, The Panini Office, Bhuvaneśwarī āśrama, Allahabad, 1923. P.5.

of the two words, rendered as ‘*niḥśreyasa*’ by the path of ‘*abhyudaya*,’ belongs to that class of compounds which are formed by the elision of the middle term: or it is a *tat-purva* compound ablatively formed. This *dharma* will be later on described as being characterised by forbearance. If it is the effect of constant contemplation and other practices of *yoga* and is the same as *adṛstam* (the invisible, potential after effects of actions or Merit and Demerit), then it is producible by positive performances. *Ṛṣis* of the Vedic era perceived the value of maintaining a harmonious relationship between the needs of human and spectacular diversity of the Universe. To them, nature was not only the mother that sustained life but also the abode of divinity.<sup>119</sup> For them sanctity of life includes not only the efforts to seek salvation (*mokṣa*), but also to seek it by developing a sacred attitude towards spiritual significance of nature. Human beings in Indian culture, was instructed to maintain harmony with nature and to show reverence to the presence of divinity in nature.<sup>120</sup> So there is divinity or spirituality in nature.

True philosophy must be simple and at the same time capable of explaining the vital problems which science can’t explain. Indian seers do not believe in theories, which cannot be carried into practice in everyday life. What they believe is applicable to life and therefore, Indian philosophy had been during these thousands of years of existence, truly practical. “Its chief concern has not been to conceive a philosophical scheme like a toy machine to play with, but to make of it a chariot in which man could ride.”<sup>121</sup> According to Radhakrishnan in the *Vedas*, we find a deliberate attempt to enunciate the ultimate truth through sacred incantations. Further it was articulated as rituals for repeatedly reminding humans of the need to sustain and foster ecological balance.

Indian culture and civilization deals with an ethics of environment that is concerned with a harmonious relationship between human and nature. This culture seeks to identify and evaluate the distinctive ecological attitudes, values and practices of human beings by making clear their relation with the intellectual and ethical thought within scripture, ritual, myth, symbols, cosmology, and sacrament.

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<sup>119</sup> Singh Dr. Shiva Bhanu. A Comparative Analysis of Deep Ecology and Cosmo-centric Ethics: *Human Freedom and Environment: Contemporary Paradigms and Moral Strategies* edit. Indoo Pandey Khanduri, kalpaz publication, Delhi. 2010, P.247.

<sup>120</sup> M Rohit, *The Call of the Upanishads*, Motilal Banarsidass, 1970. P.10.

<sup>121</sup> Radhakrishnan, S & Mairhead, J.H, edit. *Contemporary Indian Philosophy*, second edition, Willmer Brothers and Co. Ltd. Birkenhead, 1952. P.15.

Due to dualistic and materialistic philosophy in the West we learn that we are essentially different from others, we are superior to others and others are inferior to us, we are the ruler and others are the ruled, we are the enjoyer (*bhoktā*) and food-object of the world is enjoyed (*bhogyā*). (*Bhoktā* is the *jivātmā* who is the enjoyer) who is the inner self of the object of enjoyment (*bhogyam* is the body obtained from *paṛkṛiti*). Owing to this damage we use to think that the so-called flora and fauna are essentially different from us, we are superior to them, we are ruler and they are the ruled, we are to enjoy and they are to be enjoyed. We may consider this attitude as anthropocentrism.

In our day to day life, we in fact maintain a double standard behaviour. Human beings are not satisfied unless and until they beat a non-pet cat that has taken his milk. But one and the same human become highly satisfied by feeding milk to his pet cat. Similarly, a man gets angry with his family members if he sees that even small amount of water from the tank of his own house is misused. One and the same man, on the other hand does not bother to close the municipal water tap even if he sees that water is flowing hour after hour without any use. We behave in opposite ways because we think that this is mine and that is not. This type of thinking is the outcome mainly of the Western dualistic and materialistic teaching. So, far as our discussion is concerned, probably we have discovered the root cause of environmental degradation. The question remains, how can the root cause be eliminated? How can people be made free from such influence in question? In reply to this question it can be said that as the state of darkness can be wiped out by its opposite state of light, so the influence of dualistic and materialistic teaching can be prevented by the influence of its opposite type of teaching i.e., monistic and spiritualistic. The individualistic or purely subjective attitude can be eliminated through the holistic one. This type of lesson can be given through Indian ideology underlying in the *Vedas*, the *Upaniṣad*, the *Purāṇas*, the *Mahābhārata*, *Śrīmad Bhagavadgītā*, and *Vedānta* philosophy.

In the past two decades philosophy, especially Western philosophy, took an applied turn. Philosophers at present are venturing into the value dimensions of science and technology, engineering and business. The ethics of environment in particular, is widely discussed by philosophers and humanist, scientists and statesmen. Discussions on environmental ethics in recent Western philosophy generally centre on the following issues:

- (a) Whether ethics is purely human-centred or anthropocentric,

- (b) Whether the scope of ethics include all sentient creatures, not just humans alone,
- (c) Whether ethics is ecocentric, i.e., whether non-human objects such as plants, animals, rocks, and rivers also have a moral standing.

The positions of Indian philosophy on these three issues are as follows:

- (a) Ethics is not just human centred, but *Dharma*-centred;
- (b) All life is sacred and ethical relationship between humans and animals is one of equality, and
- (c) Natural objects like rivers and hills, trees and rocks are sacred and therefore deserve respect. Indian philosophy maintains that ‘humans are in nature ’ and rejects other positions like ‘humans against nature’, ‘humans and nature’, ‘humans guide nature’, etc.

Indian philosophy does not accept ethics as ‘man-given’ or ‘God-given’; nor is ethics ‘human centred’ or ‘God centred’. Ethics in India is *dharma* centred. As early as the *Rigveda* morality was conceived of as an aspect of *Ṛta*. *Ṛta* is the eternal law of the universe which, when applied to nature, becomes natural law and when applied to living beings, become moral law. From the time of *Upaniṣad*, the Vedic concept of *Ṛta* becomes the concept of *dharma*. The nature of *dharma* is said to be subtle, says the *Mahābhārata*.<sup>122</sup> *Dharma* has the same connotation as *Ṛta*, but the implication and application of *dharma* is widely discussed in later Indian literature. *Dharma* means ‘that which holds together’. It is the eternal law which governs every aspect of universe. It is the very foundation of the universe itself. It is all encompassing, manifesting itself in every aspect of nature or life. Even God does not give us *dharma*; he is the ‘immutable protector of the eternal *dharma*.’ The *Gītā* explains:

*Tvam akṣaram paramam veditavyam*  
*Tvam asya viśvasya param nidhānam*  
*Tvam avyayaḥ śāśvta dharma goptā*  
*Sanātanas tvam puruṣo mato me.*<sup>123</sup>

This means, You are the Supreme Ultimate Truth knowable by the Vedic scriptures. You are the only support of this universe. You are the imperishable

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<sup>122</sup> Oruka, Odera: edit. *Philosophy, Humanity and Ecology: Philosophy of Nature and Environmental Ethics*, S.S.Rama Pappu, *Humans, animals and environment: Indian perspectives* Diane Publishing Co, 1996, P. 296.

<sup>123</sup> *The Bhagavadgītā*, Verse-11/18, Gītā Press, Gorakhpur, India, P.129.

preserver of eternal righteousness. You are the everlasting, Supreme Ultimate Personality. This is my conviction.

Indian ethics is *dharma*-centred, therefore, not anthropocentric but universal in nature including in its fold not only humans but also all living beings and the physical environment. Starting with the assumption that human beings are the paradigm for having good and interest, recent discussions in the West raise the following question: ‘what kind of beings can have good, interests, preferences, etc.?’ because Indian ethics starts with the paradigm that existence itself has value, the question whether non-humans have intrinsic value or are conferred value by humans is never raised. The *Yajur Veda*, for example says: ‘the person who sees all animate and inanimate creation in God, and God pervading all material objects, falls not a prey to doubt’.

*Yastu Sarvāṇi Bhūtāni ātmanyevānupaśyati,  
Sarva bhūteṣu cātmānam tato navijigupaste,  
Yasmin sarvāni bhūtāni atmaivābhudvi jānataḥ,  
Tatrako mohaḥ sokaḥ ekatvam anupaśyataḥ.*<sup>124</sup> (*Yajur Veda* 40.6)

This means, He who sees all beings in the very Self and Self in all beings feels no hatred or contempt or revulsion towards any object or being because there is no other. For the man of realisation all beings become the self, for such a man of unitary experience there is no delusion or sorrow. Such a man of realisation becomes free from ignorance and sorrow.<sup>125</sup>

In Indian thought, the fundamental moral belief which governs the relation not only between human but also human and non-human species is the concept of *ahimsā*. The concept of *ahimsā* or nonviolence as it developed in Indian culture is closely linked with notions of *karma*. *Karma* means one’s actions in sacrificial process. The first principle of Indian ethics is *ahimsā paramodharmaḥ*, means ‘*ahimsā* is the supreme religion’; and *mā himsyāt sarvabhūtāni*, means ‘do not kill any living being’. The expression *sarvabhūtāni* is important here as it refers to all living beings and not to human beings alone. The reason for this ethical commandment implies the doctrine of ‘unity of life’, a doctrine which recognizes not only ‘brotherhood of humans’, but also brotherhood of all living creatures. It is the same life principle which exists in all life forms i.e. from amoeba to human. The life forms do not differ in kind but only in the degree in the process of evolution.

<sup>124</sup> <http://www.aryasamaj.com/enews/2010/oct/2.htm>, accessed on 21 June 2015. (*Yajur Veda* 40.6).

<sup>125</sup> N. Sahebrao Genu. *Axiological Approach to the Vedas*, Northern Book Centre.1986, P. 102.

One may wonder, what is the nature of this life principle which connects all living creatures, including human? The response is it is consciousness. Even the essence of *Brahman* is also consciousness. Thus, God, human and all living creatures has the same essence which is consciousness. Indian culture, therefore, does not maintain ‘man is made in the image of God’, as it maintains, that ‘God, man and all living creatures have the same essence, viz. consciousness’. In their essential nature, God is identical with human and all living creatures.

#### **4.2: Environmental Insight in some Indian Philosophical System:**

Indian tradition provides a solid foundation for adequate concern and deep respect for nature, biosphere and ecosphere. Indian environmental thinking reaches its apex in the philosophical *Sūtras* of the six school of *Darśanaṣ*, or a way of life. Let us discuss the ecological insight in some of the best known schools i, e., *Nyāya*, *Sāṃkhya*, and *Advita Vedānta*. These schools are intended to regulate our conduct in tune with the cosmic order.

The Indian philosophical thinkers see nature as root of all existence. Nature is considered as an entity from which everything has evolved. So human being is a part of nature. Nature is not considered merely a physical world which is separate from human. Human is not considered as essentially spiritual and alien to nature. A closer examination of traditional Indian philosophical systems reveals their complex and often sophisticated nature. In this wide variety of beliefs and attitude, human, animals, plants, God and earth are all subject to cosmic laws and the place of humankind in the universe is variable. Let us explain a brief environmental concern in *Nyāya Darśana*.

#### ***Nyāya*:**

*Nyāya* philosophy is primarily concerned with the conditions of correct thinking and the means of acquiring a true knowledge of reality. We are taught in our schools that Acharya Jagdish Chandra Bose discovered that plants have life. But in *Kiraṇāvali* Udayana shows that trees have soul. He opines:

*Vṛkṣādayaḥ pratiniyata- bhoktradhīṣṭitāḥ,*  
*Jīvana-marāṇa-svapna-prajāgaraṇa-roga-bheṣaja-prayogabīja-sajātīyānubandhā-*  
*nukūlopagama-pratikūlāpagamādibhyaḥ, prasiddha-śarīravat<sup>126</sup>.*

This means,

<sup>126</sup> Śāstrī, Gourīnāth. edit. *Kiraṇāvalī* of Udayanācārya, Sampurnanda Sanskrit Visvavidyalaya, Baranasi, 1980. P.39-40.

‘Trees have sentient agent in them, because have life, death sleep, awakening, disease, application of medicine, seed, feeling for the members of its class, approaching favourable and going away from unfavourable,’ like any known human body. Udayana further says that one need not doubt whether plants do have these features noted in the ground (*hetu*). Because plants do have life (*ādhyātmikavāyu*). In fact he inferred it from the fact that trees sucks water poured at its root. This sucking is also inferred from the growth and healing up of cuts in the trees which are directly verifiable. If this chain of cause and effect relationships is not accepted then that will demolish the entire structure of reality, because that will imply that even without a cause there can be an effect.<sup>127</sup>

Further, in connection with the inference of sentient agent on the basis of the comparison of human body with a house Udayana points that one must accept a sentient agent in plants. This clarifies the form of inference as follows:

*Śarīrāvayava-vṛddhi-kṣatabhanga-samrohane prayatnavannimittake, vṛddhitvāt, samrohanatvāc ca gṛhakuḍya-vṛddhivat tat-samrohanavac ca*<sup>128</sup>.

This means, the growth and repair of the parts of the body are caused by some sentient agents, because it is a growth and because it is a repair, like the growing of the walls of a house and like the repair of them. Like *Śrīdhara*, he too anticipates a fallacy called *anaikāntika* in the case of plants and trees where there is *hetu* (*vṛddhi* etc.). But there is no *sādhya* (i.e., *ātman*). Thus, he firmly refutes by saying that in case of trees, there has to be a particular sentient agent<sup>129</sup>. Udayana does not bring God to explain the phenomenon of growth and healing up of cuts in a tree.

### ***Sāṃkhya:***

*Sāṃkhya* the most prominent school, is actively engaged in disclosing the fact of nature, has prominently explained that the proper attitude for the science of nature is detachment from the sense appetites, so as to let the subjectivity of nature appear as it is, before it has been distorted by human interference.

According to *Sāṃkhya* Philosophy, *Prakṛti* is the material cause of everything. It is the vital source of every being. Human beings as conscious beings are conditioned by the natural world. The interaction between physical world and human being is a

<sup>127</sup> *Ibid.* P.40. “*Na ca ete sandigdḥāsiddhāḥ, ādhyātmikavāyu-sambandhāt. So’pi mūle niṣiktānām apām dohadasya ca pārvīvasya dhātor abhyādānāt. Tad api vṛddhi-bhagnakṣatasamrohaṇābhyāmiti. Anyathā kāraṇam vinā kāryānutpatti-prasaṅge sarvaṃ idam āmūlavīsīrṇam āpadyeta iti saṃksepah.*”

<sup>128</sup> *Ibid.* 89. *Dinakarī on Siddhāntamuktāvalī* verse No. 38. *Paraphrases ādhyātmikavāyu as prāṇa.*

<sup>129</sup> *Ibid.* *Na ca etad vṛkṣādīgata-vṛddhyādīnā anaikāntikam, tatrāpi bhokṛt-viśeṣā-dhiṣṭhānasya iṣṭatvāt.*

logical necessity. *Prakṛiti* is necessary for manifestation of consciousness. The *Mula Prakṛiti* is constituting of three *guṇas*, i.e., *sattva* (luminosity), *raja* (activity), and *tama* (turgidity) and these three are the source of entire process of evolution. These *guṇas* pervade the whole beings. They evolve into this creation that is full of diversities; because of reflection of cosmic consciousness (*puruṣa*), unity evolves into diversity. Like rest of the creation, human beings are one of the evolutes. So, the creation is full of diversities and contained in *Mula Prakṛiti*. The only difference between the objects is of a degree of *guṇas*.

What is environmentally noteworthy in *Sāṃkhya*'s theory of evolution is that, though the universal is viewed dualistically, spirit and matter are held together in a teleological balance. Further, unlike some systems in which spirit and matter are polarised as good and evil, the *Sāṃkhya* system suggest no such moral dualism. To the contrary, both the design and function of *Prakṛiti* are aimed at the liberation of *Puruṣa*. *Sāṃkhya Kārika* mentions:

“*Vatsa vivrid dvi nimittam kshūrasya yathā pravṛithir ajñasya  
Puruṣa vimoksha nimittam tathā pravṛitthih pradhānasya*”<sup>130</sup>

“As the insentient milk flows out for the growth of the calf, so does nature act towards the emancipation of spirit.” Hiriyanna comments: the noteworthy point here is the physical accompaniment of man as well as his environment is either hostile or indifferent to his attaining the ideal of freedom. Through them rather, *Prakṛiti* is ever educating him into a fuller knowledge of himself with a view to securing that result. Nature therefore, cannot in the end, be said to enslave spirit. In fact, it behaves towards man as a “veritable fairy Godmother.”<sup>131</sup>

#### ***Vedānta:***

The modern society whether national or international has enough resources and technology ensures the existence of every human beings on earth. The physical, intellectual, material, and spiritual, inputs are necessary for full and healthy life. But this life also has a position in its expansion or development. In this context, the necessity for an alternative philosophy of life becomes intense. And because of the universal values that it enshrines, the *Vedānta* represents precisely an integrated and

<sup>130</sup> Virupakshananda Swami. *Sāṃkhya Kārikā of Īśvara Kṛṣṇa with the Tattva Kaumudī of Śrī Vācaspati Mīśra*, Sri Ramkrishna Math, Mylapore, Madras. 1995. 57. P.113.

<sup>131</sup> Hiriyanna.M, *The Essentials of Hindu Philosophy*, London: Allen and Unwin, 1967, P.119.

universal philosophy. *Vedānta* is basically based upon the great source of knowledge, the *Upaniṣads* and the *Bhagavad Gitā*, a testimony to the magnificent spiritual endeavour to solve the problems of present society. It provides insights which can be of crucial value for the survival of humanity in this nuclear age. The basic principles of *Vedānta* provide the framework for a philosophy to sustain the emerging global consciousness on our planet.

The first important concept of *vedāntic* knowledge is that all life is pervasive *Īsabhāsyam idam sarvam yat kiñca jagatyām jagat* i.e. whatever exists where ever it exists is permeated by the same divine power and force. This is in a way parallels the realization of modern science which rejects the incurable dichotomy between matter and energy and accepts whatever exists is really the same energy although it may appear in different form of matter, particle or wave. So the theory, towards which the scientists are desperately proving, has already its spiritual counterpart in the concept of the all-pervasive *Brahman* of the *Upaniṣads*.

*Advaita Vedānta* recognizes *Brahman* as the ultimate reality, pure cosmic consciousness. Everything in this world has evolved from *Brahman* by operation of law of duality; *Brahman* expresses itself in the form of manifold particular “*Akohaman bahu bhavishyamah*”.<sup>132</sup> He is not the creator of many, but became many. The whole world is pervaded with *Brahman*. The first verse of *Īsavāsyopaniṣad* says, “The entire creation is pervaded with God, regardless or visible or invisible, even a trace of creation, there is essential unity of all existence. Diversity is only phenomenal and unity is real. The divine is all pervasive. So every being in universe should get equal respect and we should not have a feeling of mastery over other species of universe. It concludes the idea that other things and beings do not have instrumental value for human being. The ideal ethical code expounded in the second part of this *Vedānta* Philosophy is that true enjoyment consists in renunciation and not in acquisition. The plausible inference in the light of *Vedānta*’s outlook is that human being is a part of nature and governed by basic laws of nature.”

### **4.3: Environmental Consciousness in Hinduism:**

The word Hindu has two different senses. The term Hindu is inherently a non-Indian construct, first coined by Persians to describe those persons living on the other

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<sup>132</sup> Mudgil, A. *Environmental ethics* in Indoo Pandey Khanduri (edit.) Human Freedom and Environment: Contemporary Paradigms and Moral Strategies, Kalpaz Publications, 2010, P.220.

side of the Indus River. Another definition of Hinduism links the term to a cluster of religious faiths and theological schools that ascribe truth to the earliest of India's sacred texts, the *Vedas*, the *Upaniṣads*, *Rāmāyaṇa*, *Mahābhārata*, *Gītā*, *Pūrāṇas*, *Manusmṛti*, *Arthaśāstra* and the various texts and traditions stemming there from. This definition would include several million persons living outside India. It would, in a sense, also include many persons of non- Indian descent who ascribe to the monistic *Vedānta* philosophy and to the many practitioners of Indian physical and spiritual disciplines such as *Yoga*. The term Hindu could also refer in a general way to the people who live in the sub continental region.

Hinduism is a accumulation of religious, philosophical, and cultural notions and practices that originated in India, categorized by the belief in reincarnation, one absolute being of multiple manifestations, the law of cause and effect, following the path of righteousness, and the desire for liberation from the cycle of birth and death. Hinduism cannot be neatly slotted into any particular belief system. Unlike other religions, Hinduism is a way of life, a *Dharma*, that is, the law that governs all action. It has its own beliefs, tradition, advanced system of ethics, meaningful rituals, philosophy and theology. It also believes in truth, honesty, non-violence, celibacy, cleanliness, contentment, prayer, austerity, perseverance, penance, and pious company. Hinduism also worships spirits, trees, animals and even planets.

The question “how was the attitude of the Hindus towards nature” has been shaped by their religious attitudes to the creation and as well as towards the environment. What we need to understand is what role a Hindu once was playing with respect to human nature relationship. Hinduism suggests how should we treat other human beings and how are we related to nature. These values make up an ethical orientation of a sustainable society. Hinduism thus, generates an ethics, which underlies fundamental attitudes and values of Indian culture and society. This reminds us the famous statement of Lynn White when he says: “what people do about their ecology depends on what they think about themselves in relation to things around them. Human ecology is deeply conditioned by beliefs about our nature and destiny that is by religion”<sup>133</sup>.

For the contemporary thinkers, the important content of the current environmental crisis is spiritual and ethical. It is here where Hinduism plays a role in

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<sup>133</sup> White, L. ‘The historical root of our ecological crisis’ *Science* 155 p.1204, March, 1967.

cooperation with other individuals, institutions and initiatives that have been engaged with environmental issues for a considerable period of time. Despite of some practical and theoretical differences with other religions it responds its ecological attitude in a remarkable and creative way. It not only rethinks its theology but also reorient its sustainable practices and long-term environmental commitments. In doing so, the very nature of Hinduism and of ethics is being challenged and modified. This is true, because of the reexamination of the other world views created by other religious believers and practices, which may be critical to our recovery of sufficient comprehensive cosmologies, broad conceptual frameworks, and effective environmental ethics in the twenty first century.

In ancient times, human race might first have perceived various events happening in his surroundings, such as, touch of solidity, an experience of heat, fluidity and pressure which he might have associated with their respective bedrocks, namely, earth, fire, water and air. Looking at the sun, the moon, stars and planets would have made him believe about their substratum, i.e. space, existence and significance. The powers of nature, like storm, thunder, rains were closely related with one another. The oldest and sacred Indian Literature *Rgveda* speaks about different deities associated with the said events as having similar characters. The first recognition of a cosmic order or law prevailing in nature under the guardianship of the highest God is to be found in the use of the word to denote the ‘order’ in the moral world as truth and ‘right’ and in the religious world as sacrifice. The earlier Vedic thinkers, had developed the concept of ‘cosmic’ nature, believed that there is a particular order in the universe and the nature has its own system of manifestation. The nature and natural powers move in a definite periphery and there is regularity in all natural phenomena. This unchangeable regularity of nature was termed as ‘*Rta*’ by Vedic thinkers. It is told that not only the natural phenomena, but the deities controlling them are produced by ‘*Rta*’.<sup>134</sup> The unalterable law in nature later on developed into a complete law of action or *Karmavāda* which laid stress on the doctrine that ‘as you sow, so shall you reap’. Thus *karma* regulates not only the present but also the future; the chain of moral causation links the three points of time in a being’s existence, viz, past, present and future.

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<sup>134</sup> Lallye, P.G. Environmental awareness in Sanskrit Literature: Gleaning from Darmaśāstra in V.N.Jha (edit.) *Proceedings of the National Seminar on Environmental Awareness Reflected in Sanskrit Literature*, Centre of Advanced Study in Sanskrit, Poona, 1991, P.73-74.

One of the most fundamental doctrines of Indian religious thought is the doctrine of *karma*. It is found in all the Indian systems of religion and philosophy, and is one of those features of Indian culture which are known to every Indian. It is also one of those most ancient doctrines that are common to *Jainism*, *Buddhism* and *Hinduism*. It is closely related to the notion of transmigration or metempsychosis. In fact the theory of *karma* presents us with the Indian endeavour to explain the problem of suffering and happiness in the world of living beings. It is a moral law of causality which explains the causes and effects of actions.

The idea of transmigration of soul was known to some ancient Greeks and Egyptians. According to some scholars, the Greek philosophers like Pythagoras and Empedocles may have been influenced by the Indian theory. But the detailed philosophical and moral analysis of the law of *karma* is found especially in Indian systems.

Any action, either physical or mental is called *karma*. The word includes both the cause and the effect. It may be mentioned that the Sanskrit word *karma* includes both sacred as well as secular deeds. Thus the word includes the performance of religious rites, official duties, business, moral actions, and so on. The word is also sometimes understood as fate referring to certain consequences of acts in a previous existence.

The general conception of *karma* is that good deeds bear good fruits, and evil deeds bear evil results. The law of *karma* conditions the course of transmigration and influences the state of life in each existence. Theoretically there is no escape from the results of *karma*. The inexorability of the law extends to all kinds of actions mental as well as moral.

The law of *karma* is based upon the moral principle of causality. It is based on the series of acts and effects in which each act is followed by its effect. This effect which is called the result of its antecedent act becomes the cause of its succeeding act in return. Thus an act is an effect from one point of view and the same effect is the cause of another act from another point of view. So every new effect produces another effect for which it serves as a cause. This is called the law of *karma*:

“The law which regulates the action of *karmas* is based upon the principle of cause and effect, so that the saying ‘as one sows so must he reap’, presents the whole doctrine in a nutshell. Every action, whether mental or physical, is a sowing of the ‘seed’, or in the

technical language of the Hindu philosophy, an engendering of *karma*. In the act of sowing the seed, or engendering the karma, the soul has the choice of acting or refraining from action, but when once the seed is sown or karma engendered, its freedom is replaced by an inevitable liability to bear its consequences. The harvest which is sown must be reaped, gathered, and assimilated in its unabated fullness. This is what constitutes the bondage of the soul. *Karma*, therefore, is a kind of force which compels the soul to bear the consequences of its right or wrong actions, and this force originates in the very action itself which is performed by the soul and at the very moment of its performance.”<sup>135</sup>

Indian culture is noted for its respect and consideration of natural world. This includes flora and fauna of earth, and creatures in the sky and under the sea. Indian philosophy sees divinity in all living creatures. Animal deities therefore, occupy an important place in Indian Philosophy and culture. Hence, we observe human intellect’s developing perception from concrete to abstract, from crude to subtle. Here lies the peculiarity of Indian culture that since the dawn of human culture people here have been feeding and nourishing animals and insects in nature. In Indian theology, it is said that animals, birds and different living entities are treated with respect and obligation, because the Supreme Being, God was Himself incarnated in the form of various species.

In Hinduism, not only, useful animals like cow and fishes but poisonous reptiles like snakes are also affectionately fed along with insignificant insects like ants. In Hindu mythology, Lord *Viṣṇu*, for maintaining the universe has been shown retiring on the body of the king of snakes “*Śeśānga*” and rides on the back of birds’ king “*Garuḍa*”. Lord *Śiva*, the *God* of the great dissolution enjoys garland of snakes around his neck. The goddess of wealth, *Lakṣmi* rides on owl while the goddess of learning *Saraswati* rides on a swan. These are a few instances which can fully testify to the fact of intimate and harmonious relations among all living being of the world.

Not only animals are intimately related with human beings in Hinduism but also trees are. Hindu idea of the whole world is like a forest. To keep this world-forest intact Hinduism describes everything in terms of divinity and in relation to the ultimate reality. Every physical object symbolizes some aspect of reality. Amongst these the forest symbolizes the divine attribute of ‘totality’, combining all life forms together in a

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<sup>135</sup> Jain, C.R. *The key of knowledge*, Jaipur, 1915. P. 876-77.

single interdependent whole. In the *Gītā* lord compares the world to a single banyan tree with unlimited branches in which all the species of animals and humans. Indian consciousness is full of trees and forests. If we look for example the *Rāmāyaṇa* and the *Mahābhārata*, we can find that it is full of such descriptions as if people were always under the trees. The bond between people and the trees is very strong. Hindu tradition describes that there are three basic categories of forests. One is *Śrivan*: the forest, which provides prosperity, *Tapovan*: a place for the sages who seek after truth, *Mahāvan*: the greatest natural forest where all species of life will find shelter. Each of these categories must be preserved.

It is popularly believed that trees are animate and every tree has a *Vṛkṣa Devatā*, a tree-deity. God exists in different part of a tree. *Brahmā* is in the roots, *Viṣṇu* is in the body, and *Śiva* is in the branches. In every leaf there is a heavenly being. That is why trees should be treated with respect. In Hindu tradition this respect is given by tree worship, with prayers and offerings of water, flowers, sweets and sacred threads. The tree symbolizes various attributes of God.

Man for his survival essentially depends upon tree. Man uses wood for various purposes without thinking their well-being and value. But our ancestors know that trees and animals were absolutely necessary for the benefit and good for humans. They knew that man due to his selfishness use nature without thinking their interests. They also knew that future generation would suffer due to man's disassociation and delineations from nature. Therefore, they linked each religious rites and worship with nature. Through religious principle they developed an emotional bond with nature. They loved and worshipped each part of nature not because of their purpose but because they themselves are one with all of nature. It is believed that if we take a tree to build a house, we must plant five trees for future. Whenever we take, consume, or eat, we must consider whether we left something for others, for God, for nature, for the poor and for the future generations. This is inherent in the concerning *purāṇas* and epics in Hindu Philosophy and culture.

In the *Mahābhāṣya* of *Patanjali* we can see some intimate relationship between man and nature. In this *bhāṣya* a plant is described as the source of food, energy, cloth, shelter, medicine etc. Plant represents nature or environment that supports the idea that a growth of plant is the growth of environment. All living organisms directly or indirectly dependent upon a plant. Thus, ancient man was aware of to protect plants and

the environment. The role of plant was undoubtedly the major one for the development of environment and maintenance of ecosystem was also intrinsic in their mind.

Like humans, plants do possess sensibilities of hearing, saying, smelling, testing and touching. They have their faculties of sensing, sorrow and joy, declares the Sage. The same thing has also been discovered by Acharya Jagadish Chandra Bose the greatest scientist in the later development of science.

In gratitude to the Bodhi-tree under which he received his enlightenment, the Buddha bade his all monks not to harm trees because they, too, possessed sensate existence. Similar sentiments are expressed in the Epic literature. Through intuition Manu appears to have made the discovery, now known to science, that trees and plants when subjected to injury, exhibit reactions which can be photographed. Manu says:

*Tamasā bahurupena veshtitāh karmahetunā  
antassamjna bhavantyete sukhadukkhasamanvitāh. (Manu Samhita 1.49)*

that means “All trees and plants are full of consciousness within themselves and are endowed with the feelings of pleasure and pain.”<sup>136</sup>

One needs to realize that a healthy human race depends on a healthy environment. The value system in Hindu philosophy is based on maintaining harmony with environment. They worship earth, water, fire, air, sun, clouds, trees, cows, and many more as their Gods and Goddesses. Hindu philosophy loved and worshipped each part of nature not because of their purpose but because they themselves are one with all of nature. It is also believed that if you take a tree to build a house, you must plant five trees for the future. So, whenever we take, consume, or eat, we must consider whether we left something for others for God, for nature, for the poor and for the future generations. This is inherent in the traditional Indian culture. This kind of thinking supports the definition of sustainable development, which has been defined by the World Commission on Environment and Development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”<sup>137</sup>

#### **4.4: Environmental Consciousness in Kautilya’s Daṇḍaniti:**

The relationship between human being’s and their natural environment is already discussed in Hindu scriptures and they give some codes of conduct to maintain

<sup>136</sup> Buhler G. trans. *The laws of Manu* Orford at the Clarendon Press, 1886. 1.49. P.16.

<sup>137</sup> The World Commission on Environment and Development: *Our Common Future* Oxford University, 1987, p.8.

environment properly. One of the codes of conduct (*dharma*) is maintaining proper sanitation. In the past it was the duty of every one to maintain proper sanitation and violation of this act is a punishable offence. Ancient Hindu society did not permit to throw dirt and wastage on a public place, and violation of this act is a punishable offence. *Kautilya's Arthaśāstra* describes,

The punishment of one-eighth of a *pana* should be inflicted to those who throw dirt on the roads. For muddy water it is one-fourth. If both are thrown then the punishment should be doubled. If latrine is done or thrown near a temple, well or pond or sacred place or Government building then the punishment should be increased gradually by one *pana* in each case. For urine punishment should be half<sup>138</sup>.

Kautilya specifically says that the notified carnivorous and herbivorous animals, birds and aquatic animal as well as animals in the notified areas are neither to be caught killed nor molested. A fine is levied on one indulging in entrapping, killing or molesting fishes and birds which do not live on other animals: the fine is doubled, if animals were involved. In the case of animals which prey on other animals, and of open forests the fine is heavier. A part of the confiscated living animals are to be set free in the sanctuaries. This may suggest Kautilya had knowledge of biological control. The *Sūnādhyakṣa* (superintendent of abatoir) is in charge of looking after this.<sup>139</sup>

Kautilya firmly believes that human beings have no right to use animals for their luxury, is borne out by his statement that skin, hair, bones and other things are to be collected from the dead animals.<sup>140</sup> In other words no animal shall be killed for any of their parts.

According to Kautilya, causing pain by killing smaller animals is a cognizable offence to be punished with a fine. If the animal should bleed, the fine is doubled. In case of bigger animal, the fines are to be doubled along with compensation of cost of medical care.<sup>141</sup> The animals of sanctuary strolling into fields and eating crops are to be driven back without hurting them. Only rope and canes are to be used. However,

<sup>138</sup> Shamasastri, R. trans. & edit, *Kautilya's Arthashastra*, Mysore: Mysore Publication, 1967, P.166.

<sup>139</sup> Venkatanathacarya, N.S. ed. *Arthasastrani*, Mysore: Oriental Research Institute, University of Mysore, 5<sup>th</sup> edition, 1986.

"*Sūnādhyakṣaḥ pradīṣṭābhayānām abhaya-vana-vāsinām ca mṛga-paśu-pakṣi-matsyānām bandha-vadha-himsāyām uttamam daṇḍam kārayet. ....pravṛttavadhānām matsya-pakṣiṇām bandha-vadha-himsāyām pādonasapta-vimsati-panam atyayam kuryāt. Mṛga-paśūnām dviguṇam. Pravṛtta-himsānām aparigṛhītānām ṣaḍbhāgam grhṇīyāt..... pakṣi-mṛgānām jīvat-ṣaḍbhāgam abhaya-vaneṣu-pramuñcet.*" 2.26., P.157.

<sup>140</sup> *Ibid.* "*Kāraṇa-mṛtasya aṅka-carma go-mahiṣasya..... śṛṅgāsthīni cāhareyuh.*" 2.29, P.167.

<sup>141</sup> *Ibid.* "*Kṣudra –paśūnām kāsthādībhīr duḥkhotpādane paṇo dvipaṇo vā daṇḍaḥ. Śoṇitopādane dviguṇaḥ. Mahāpaśūnām eteṣu avaśṭhāneṣu dviguṇo daṇḍaḥ, samutthāna- vyayaś ca.*" 3.19., P.247.

permission is accorded to kill a wild animal<sup>142</sup> if perhaps; the situation is likely to go beyond control.

In Indian civilization not only fauna is respected but also flora is. Since the evolution of man on this earth, trees and plants have been used as different purpose in different cultures in different ways. But also the worship towards the trees is also from prehistoric period. Besides animals and birds, trees and plants are also protected in different ways in Indian culture. Some of the plant, trees and flowers have been proved having medicinal power. Some of the trees are well known for their spiritual power and some again are well known as an abode of God and Goddesses. Cutting of trees has been stated as punishable offence in *Padma-Purāṇa*.<sup>143</sup>

*Kauṭilya's Arthaśāstra* prescribed various punishments for destroying trees and plants:

For cutting off the tender sprouts of fruit trees, or shady trees in the parks near a city, a fine of six *panas* shall be imposed; for cutting of the minor branches of the same trees, twelve *panas*, and for cutting of the big branches, twenty four *panas* shall be levied. Cutting off the trunks of the same, shall be punished with the first amercement; and feeling shall be punished with the middlemost amercement (*Kauṭilya's Arthaśāstra III 19:197*)<sup>144</sup>

As per as plant kingdom is concerned, many Indian festivals, Such as, Holi and Onām are celebrated soon after the harvesting of crops. These festivals and rituals significantly indicate a common underlying bond of unity in the different forms of life on earth, howsoever subtle it may appear.

In Indian civilization, an approach of a gardener has been accorded instead of a botanist who is chiefly interested in the dissection of a flower, about the functions of roots, stems, leaves, the process of pollination etc. in order to explain the reason for the survival of a plant or tree. Whereas a gardener while looking at a plant, feels intimate relationship with it, enjoys its growing, producing flowers and fruits and becomes sad to see its decay. This is an established fact that human beings and other animals depend directly or indirectly on plants. So the plants are indispensable for maintaining life on earth. In *Chhāndogya Upaniṣad* we find the above mentioned fixation of nature in a lucid manner, by alluding five life winds in human body. Inhalation of oxygen is called

<sup>142</sup> "Abhayavanamṛgāḥ pariḡrhitāḥ bhakṣayantaḥ svāmino nivedya yathā avadhyās tathā pratiseddhavyāḥ." 3.10., P.217. "vyālabhaye.... lubdhakaḥ svaganīno vā kūṭa-pañjarāvapatais careyuh. āvaraṇīnaḥ śastrapāṇayo vyālān anihanyuh." 3.3, P.261.

<sup>143</sup> Padma-Purāṇa, 56, 40-41.

<sup>144</sup> Shamasastri, R. edit. *Kauṭilya's Arthashastra* Mysore: Mysore Publication, 1967. P. 224.

there as 'Prāṇa' while 'Apāna' stands for breathing out. 'Prāṇa' and 'Apāna' together constitute the principle of life in a living being.

*Hathayoga* refers to a set of physical exercises and sequences of asanas, designed to align your skin, muscles, and bones. The postures are also designed to open the many channels of the body especially the main channel, the spine so that energy can flow freely<sup>145</sup>. The *Hatha yoga* mystically describes the alphabets 'Ha' means 'Sun' (*Pingla Naddi*) and 'Tha' means 'Moon' (*Idda Naddi*) respectively. Through the former flows 'Prāṇa' life wind, while through the latter flows 'Apāna' life wind<sup>146</sup>. And a rhythmic balancing of the both is called 'Hatha Yoga' a preparatory stage leading to further higher levels of Yogic experiences. *Hathayoga* is a powerful tool for self-transformation. It asks us to bring our attention to our breath, which helps us to still the fluctuations of the mind and be more present in the unfolding of each moment.<sup>147</sup>

#### **4.5: Prevention of Pollution and Sustainable Development:**

Indian culture and scriptures reveals a clear conception of the eco-system. Indian scripture shows important parts of codes of conduct and defined human being's relationship with environment. One of the codes of conduct (*dharma*) is maintaining proper sanitation. In the past it was the duty of every one to maintain proper sanitation and violation of this act is a punishable offence.

Traditional Indian society does not permit to throw dirt and wastage on a public place, and violation of this act is a punishable offence. *Kauṭilya's Arthaśāstra* describes the following:

The punishment of one-eighth of a *panas* should be inflicted to those who throw dirt on the roads. For muddy water it is one-fourth. If both are thrown then the punishment should be doubled. If latrine is done or thrown near a temple, well or pond or sacred place or Government building then the punishment should be increased gradually by one *pana* in each case. For urine punishment should be half<sup>148</sup>.

The *Dharmasāstra* of *Manu*, *Yājñavalkyasmṛti* and *Arthaśāstra* of *Kauṭilya* expose their sensitivity towards environment. Particular attention is given towards agricultural practices (farming and animal husbandry), technique of excavation (mining and well digging) as well as references to time based upon an awareness of

<sup>145</sup> <http://www.iamyogastudio.com/new-to-yoga>.

<sup>146</sup> Samkaracharya's Chhandogya-Bhadsya, Gita Press, Gorakhpur, I, 3.3. Also I.7.1.

<sup>147</sup> Suman, Krishan Kumar. *Yoga for Health and Relaxation*, Lotus Press, New Delhi, 2006, P.20.

<sup>148</sup> Shamasastri, R. trans. & edit, *Kauṭilya's Arthashastra* Mysore: Mysore Publication, 1967, II: 36:145.

seasons and planetary movements. *Dharmaśāstra* deals with religious, secular and ethical responsibility towards others and customary practices (*ācāra*), legal procedures (*vyavahāra*), and expiation (*prāyaścitta*). *Arthaśāstra* is designed as handbooks on polity for the rulers, emphasize public administration and foreign relationships, civil and criminal law. If we take both the *Śāstras* together we can say that both provide us with clues and discerning levels for appreciation and awareness especially among the ruling classes, of the natural environment, on which so much of the Indian economy has traditionally depended.

For Hinduism cremation of the dead bodies and maintaining proper sanitation of human habitat are considered as the essential acts. In 200 BCE Caraka mentioned *Vikṛti* or pollution and diseases. In the *Vimānāsthānam* in his *Samhitā* Caraka says that air pollution is the main cause of many diseases:

The polluted air is mixed with bad elements. The air is uncharacteristic of the season, full of mixture, stormy, hard to breathe, icy cool, hot and dry, harmful, roaring, coming at the same time from all the direction, bad smelling, oily, full of dirt, sand stream creating disease in the body and considered polluted (*Caraka Samhitā, Vimanastanam* III 6:1).<sup>149</sup>

Caraka talked about water pollution and says that water is considered polluted when it is excessively smelly, unnatural in color, tasted and touch, slimy, not frequented by aquatic birds and aquatic life is reduced and the appearance is unpleasing. (ibid verse 6.2)<sup>150</sup>

The healing property and medicinal value of water is universally accepted in the Hindu society provided that it must be pure and free from all pollutions. An ancient Hindu thinker like Manu was aware of the reasons of water pollution. He says that,

*napsu mutram purisham va shthivanam va samutshrijet  
amedhyaliptamanyad va lohitaṁ va vishani va.*

that means one should not throw urine or faeces into the water, nor saliva, nor blood, nor poisonous things, which clearly proves serious concern against water pollution.<sup>151</sup>

Disposal of wastages or any polluted objects in to the water is prohibited and violation of this act is a punishable offence. The *Prāyaścittataṭṭva* mentions that, one

<sup>149</sup> Sharma, P. trans. *Caraka Samhitā: Vimanasthanam*, Chaukhambha Orientalia: Varanasi, 1983, I, P. 315.

<sup>150</sup> *Ibid.*

<sup>151</sup> Buhler G. trans. *The laws of Manu* Orford at the Clarendon Press, 1886. 4.56. P.137.

should not perform some acts near the holy water of the river *Gangā*: i.e. remove excrement. Brushing and gargling, removing ceriman from body, throwing hairs and dry garlands, playing in water, taking donations, performing sex, attachment with other sacred places, praising other holy places, washing cloths throwing dirty cloths, thumping water and swimming.<sup>152</sup>

Those who involve themselves in doing such unsocial activities and pollute environment directly or indirectly will be cursed. The *Padma Purāna* describes that a person, who is engaged in killing creatures, polluting wells and ponds, tanks, destroying gardens goes to hell<sup>153</sup>. In general on pollution the *Mahābhārata* describes that from pollutions two types of diseases occur in human beings, the first is related to the body and the other is to mind and both are interconnected. One follows the other and none exist without the other.<sup>154</sup>

#### **4.6: Environmental Justice:**

When the society is anthropocentric in nature, where materialism, individualism, subjectivism, egoism is the order of the day, when the greedy propensity of humans' counts the most and overlaps their basic needs, when the society reaches its glory days in terms of 'can' instead of 'ought', the point of justice appears in a much more relevant manner. We find that there are various formulations of justice in the East and West. The question remains, what is justice? Justice in the relative sense means what is just. The reflection of just vision of individuals is a sign of justice. Just vision is the true reflection of humanity that can be fulfilled with the trio-concepts, such as, liberty, equality and fraternity. When we are talking about liberty, equality and fraternity, we are essentially talking about social justice. What do we mean by environmental justice? Environmental justice is the fair treatment and significant participation of all people regardless of race, colour, sex, national origin or income with respect to the development, implementation of environmental laws, regulations, and policies. Thus, environmental justice is served when people can realise their highest potential. Unlike social and political justice, environmental justice is much wider in scope; it incorporates every biotic animal and even it can be extended to future generation as well. Thus environmental justice signals the expansion of the class of

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<sup>152</sup> *Prāyascittatattva*, 1:535

<sup>153</sup> *Padma Purana, Bhoomi Khandā*, 96:7-8, [http://www.hinduwisdom.info/Nature\\_Worship.htm](http://www.hinduwisdom.info/Nature_Worship.htm), accessed on 21<sup>st</sup> June 2016.

<sup>154</sup> Dutta, M. N. trans. *Mahabharata, Rajadharmanushashana Parva*, Parimala Publications Delhi, 1988, 16:8-9.

those who are the beneficiaries of justice. The word 'environment' of environmental justice actually refers to a condition on the pursuit of justice. 'Environmental' can be understood as modifying 'justice' in much the same way as 'sustainable' can be assumed as modifying 'development'. Thus, the only permissible paths to development are those which are sustainable. Environmental justice unlike traditional or classical concept of justice is environmental friendly or environmental preserving. The cause of concern of environmental justice is to redress inequitable distributions of environmental burdens. Therefore, the root causes of environmental injustices include institutionalised racism, the co-modification of land, water, energy and air; unresponsive, unaccountable government policies and regulations; and lack of resource and power in affected communities.

The relationship between human beings and nature involved the seers of the *Vedic* period in a manner incomparable to any other religious and cultural traditions. The *Vedic* seers acknowledged that the material causes of this creation happened to be the *Pancha Mahābhūtas*. Traditionally they are enumerated in the following order as earth, air, space, water and light-fire. These five *Mahābhūtas* are cosmic elements which create, nurture, and sustain all forms of life thus they play an important role in preserving and sustaining the environment.<sup>155</sup>

The *Atharva Veda* is perhaps the first of its kind of scripture in any spiritual tradition where the respect to the earth has been propounded. The *Prithvi Sukta* maintains that qualities of earth such as its firmness, purity and fertility are for everybody and no one group or nation has special right over them. It has been said that human greed and exploitative propensities have been the main cause of environmental destruction.

According to Hindu scriptures, people must not demand or command domination over other creatures. Eco-spirituality and eco-care need that the whole universe is seen as an extended family, with all living beings in this universe as members of the household. This concept, also known as *Vasudhava Kutumbakam*, refers to all human beings as well as other creatures living on earth as members of the same extended family. Only by considering the whole universe as a part of our

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<sup>155</sup> Dwivedi, O.P. 'Classical India' in Dale Jamieson (ed.). *A Companion to Environmental Philosophy*, (Massachusetts: Blackwell Publishers Inc, 2001) 37 -51 at 38. See also, Dwivedi, O.P. and Tiwari, B.N., *Environmental Crisis and Hindu Religion* (New Delhi: Gitanjali Publishing House, 1987), Discussion under the title "Environmental Policy During Ancient India" in Singh, Sukh Pal, *Environmental Law and Policy on Air Pollution in India*, (New Delhi : Satyam Book, 2005, First Edn.) pp. 01-08.

extended family, we can individually and collectively develop the necessary maturity and respect for all other living beings. From the above discussion, it may be said that people of India have a rich religious, social and cultural heritage of environmental justice.

#### **4.7: Environmental Sustainability:**

Though sustainable development and ecologically appropriate lifestyle are a relatively new concept in the Western world to overcome the environmental crisis, but it has been an integral part of the traditional Indian culture and philosophy for ages. The sustainability of Indian culture has been made possible by virtue of its cultural diversity which in turn is on account of the diversity of ecosystems. The very mechanism for the sustainability of diversity is however in the traditional Indian value system where much is retained even today.

Hinduism with its deep notions of trusteeship of natural resources and reverence for nature as a sustainer of humanity had encapsulated, the contemporary idea of sustainable development. The assets of nature are there for humans to use for their sustenance and development is in harmony with the needs of other beings. But the assets of nature are held in trust and human has the responsibility of this trusteeship. This, in essence, is the modern concept of sustainable development and Hindu ideology provides a strong philosophical base to it.

We have already discussed that environmental ethics had always been an inherent part of Indian religious precepts and philosophy. The relationship between man and nature is at the Centre of *Vedic* vision and those Holy Scriptures precisely talk about human's responsibility to preserve environment. Reverence of sun, moon, earth, air and water was not only primeval human's response to the fear of the unknown but arose from the deep respect shown to the forces of nature which sustained and preserved human life on earth. The *Upanishads* provide a vision of cosmic devotion and concord with the natural environment. The concept of sustainable development is there in the *Upaniṣad*. The *Iṣa Upaniṣad* speaks of how we should consume only according to our needs. The first verse of the *Iṣbhāsyā Upaniṣad* justifies this position:

*Iṣbhāsyam idaṃ sarvaṃ yat kim ca jagatyāṃ jagat,  
tena tyaktena bhunḡjithā, mā grdhaḥ kasyaśvid dhanam (Iṣa 1)*

that means “everything animate or inanimate that is within the universe is controlled and owned by the Lord. One therefore needs to accept only those things

necessary for himself, which are set aside as his quota, and one must not accept other things, knowing well to whom they belong.”<sup>156</sup>

The above verse also says that Reality pervades everything. The part that is assigned to someone can alone be the source of one’s joy. To covet the wealth of another is to display utter ignorance of the fact that the tiniest part of the universe is impregnated with whole. The injunction here is to develop harmony with nature and not to exploit the resources of nature for one’s own selfish purpose. The idea of inter-generational equity, one of the salient features of sustainable development is most graphically brought out in the *Śrimad Bagvadgitā*. According to *Gītā*, he who prepares food for himself, he who seeks nourishment from his own selfhood he verily eats sin. Such is the beautiful exhortation of *Sri Krishna to Arjuna*. According to Him, it is the sacrifice, which is the sustaining force of all creation<sup>157</sup>.

What we see today before us is not just an ecological crisis or diminishing resources but the entire world is in agony as the inherent harmonious inter-relationship and interdependence between mother earth and all her inhabitants are changing to hatred, gradual extinction and destruction of several inhabitants of the planet. The Darwinian concept of “*survival of the fittest*” is the predominating culture today promoting selfish motive “only me and not you”. Application of science and technology based on objectification based paradigm and Darwinism has thus, inflicted an exploitative attitude degrading nature and from human to subhuman. This attitude has also deteriorated radically the ethical values in human beings. Now the question is, what is the way out? Any human-made problems can be rectified only by human and not by changing technology. It has been rightly stated by one of the greatest scientist and philosopher, Albert Einstein of the 20<sup>th</sup> century, that: “Problems cannot be solved by the level of thinking that created them.” Indeed there is an urgent need to transform the consciousness of individuals towards their betterment which can subsequently prevent further injury to mother earth.

The *Vedas* are as much the source of moral values system as the source of much of the traditional knowledge and religious cultural practices. Harmonious existence of distinctly different entities, made possible only with tolerance, acceptance of difference

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<sup>156</sup> *Isavasya Upanishad, Hymn 1.*

<sup>157</sup> Mehta, Rohit. *From Mind to Super-mind: A Commentary on the Bhagavad Gītā*, Motilal Banarsidass Publisher, New Delhi, 1966, P. 37.

and openness to things or aspects that are external to the system, is a main tenet of moral value. Nature, and every aspect of earth, is considered divine manifestation of God. Human is seen only as a trustee of the earth and its resources. Appropriate moral guidelines are interwoven into the way of life, of human beings.

There is also a concern for the future generations linked with it. Trusteeship is a socio-economic philosophy that was propounded by Mahatma Gandhi. It provides a means by which the wealthy people would be the trustees of trusts that looked after the welfare of the people in general. This concept was condemned by socialists as being in favor of the landlords, feudal princes and the capitalists. Gandhi's philosophy of life provides a sustainable development paradigm which is symbiotic with nature and ecosystem. In Gandhian frame of reference economy, ecology and spirituality are interrelated. That is why Gandhian economy is often referred to as 'economy of environment'.<sup>158</sup>

The pattern of development has to be eco-development so far as Gandhi's philosophy is concerned. According to Gandhi, such development is economic development based on ecological principles like environmental harmony, economic efficiency, resource (including energy) conservation, local self-reliance and equity with social justice. Natural resources have to be protected and sustained not only for humankind, but also for other species; and not only for this generation, but also for generations to follow. To manage and sustain the earth's resources, the approach must not be centred on any one species like the human being, but should encompass the entire life-support system. Thus, people will have to work with nature, and aims at not wasting resources unnecessarily, nor interfering with other species. According to Gandhi sustainable development and better quality of life is simple. To quote:

*'Material economic growth (within sustainable limits), together with population control, for the poorer sections of any society and for poor nations; and on the other hand, there is need for non-material growth and continued population control for the affluent sections of any society and rich nations.'*<sup>159</sup>

Adoption of this principle would also be a major step towards inter-generational and international equity in resource allocation and consumption.

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<sup>158</sup> Joseph, Siby K. "The Principles of Gandhian Economy: Integrating Spirituality and Ecology", *Gandhi Marg*, Vol.28, No.30, October-December 2006,P.309-320.

<sup>159</sup> Khoshoo, T N & Moolakkattu, John S. *Mahatma Gandhi and the Environment*, TERI Press, New Delhi, 2009. P. 69.

Gandhi believed that the rich people could be persuaded to part with their wealth to help the poor. Putting it in Gandhiji's words "Supposing I have come by a fair amount of wealth either by way of legacy, or by means of trade and industry I must know that all that wealth does not belong to me; what belongs to me is the right to an honourable livelihood, no better than that enjoyed by millions of others. The rest of my wealth belongs to the community and must be used for the welfare of the community."<sup>160</sup> The resource is provided for humanity as a whole in space and for all times and not for this generation or that. It is totally incompatible with this notion that any one generation adopts such a lifestyle that it causes the loss or reduction in the quality or quantity of the resources that nature provides. Indeed this would almost amount to sacrilege and also theft from future generations of their rightful inheritance.

The epics and scriptures teach the intimate relation and the attitude of human race with nature and its forces. Among the customs of all ancient people were natural resources whose purpose was to acknowledge human's dependence on the natural forces and reward of his environment. Primordial people adored and worshiped natural power due to a feeling of assertion, they felt kinship without being akin to nature. It is no coincidence that the utilitarian attitude prevailing in the modern age has spawned a civilization out of touch with the beneficence of nature. God gives a role of guardianship of earth but did not confer on humans' absolute sovereignty. Their wanton domination is destructive for the very conditions necessary for their existence. The only way in the present circumstances is to thrive on our old sentimental legacy, increase our awareness and broaden the frontiers of empathy. This is possible only by increasing rationality, so that human mind may be trained to feel more identified with the rest of nature. "Love and be loved" needs to be the very creed of human society.

It will not be a prudent step for the present to reverse the process of modernization to preserve environment. What we can emphasize is that in order to build a national environmental conscience and ecological wisdom, we have to draw upon those religious, ethical and spiritual values and beliefs which have been proven eternal. Such tendency and attitude will be of great help in transforming society from its current pre-occupation with materialism and consumerism to a conserve society.

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<sup>160</sup> Prabhu, RK & Rao, UR. edit. *The Mind of Mahatma Gandhi*, Navajivan Mudranalaya, 1945. P. 249.

Various laws enacted for environmental protection can be strengthened by a moral and spiritual awakening.

Indian culture and philosophy is also very important to rescue human kind from excessive greed, inordinate ambition and selfish pursuit of frauds of life. Welfare of all beings "*bahujana sukhāya bhujana hitāya*" is the salient feature of Indian philosophy. This slogan seeks the welfare of all creation, not only human beings but also of what we call the lower creatures. Indian Philosophical tradition believes that man is not apart from nature and therefore, it believes in compassion for all living being and preaches us that while we are working for our own salvation; we must seek to develop both elements of our psyche, in the inner and the outer, the quietest and activist. Indeed, both are two sides of same coin.

In short, it is these valuable concepts and teaching of Indian philosophy which provides us a comprehensive worldview that will greatly help to solve the problems and the challenges of globalization. Gradually a world of civilization is being born, and it has to be born if mankind is to survive in this nuclear age. Although science and technology have given us tremendous power but at the same time we must never forget that the worship of power of science is not enough, we also need to recapture wisdom, compassion and understanding. We can now survive only if we have an alternative ideology to the one which has led mankind to this position and we boldly stand at in harmony with that ideology, the rich tradition of Indian Philosophy provides such an alternative worldview and if even at this late hour we can imbibe some of its universal truths, we can perhaps reverse the mad rush towards destruction and begin the long, slow climb back to sanity. Let us close than with that immortal Indian values which provide the basic framework of their approach to tackle the problems of current challenges in Indian context and in the context of globalization as well.

In the way of concluding this chapter, it can be said that concept environmental ethics, sustainable development and preservation of natural resources for future generations was already in Indian philosophy and culture. We all know that Indian culture paves the way of religions living together in harmony. The cultural and spiritual heritage of Indian society is harmony both vast and rich. But, there is nothing sectarian or regional about it. It is so universal in its appeal and so wide-ranging in its approach that it belongs to the whole world. A good environmental sense has been one of the fundamental features of India's ancient philosophy. Indian civilization had grown up in

close association with nature. There has always been a compassionate concern for every form of life in the Indian mind. The seers of the Vedic era perceived the value of maintaining a harmonious relationship between the needs of man and spectacular diversity of the Universe. To them, nature was not only the mother that sustained their life; it was the abode of divinity. Sanctity of life to them included not only the efforts to seek salvation, but to seek it by developing a sacred attitude towards spiritual significance of nature.

Traditional Indian culture stated that environmental ethics is concerned with a harmonious relationship between man and nature. Indian philosophy and culture seeks to identify and evaluate the distinctive ecological attitudes, values and practices of human beings by making clear their relations with the intellectual and ethical thought within scripture, ritual, myth, symbols, cosmology, and sacrament.

In ancient times, the human race might first have perceived various events happening in his surroundings, such as, touch of solidity, an experience of heat, fluidity and pressure which he might have associated with their respective substrata, namely, earth, fire, water and air. Looking at the sun, the moon, stars and planets would have made him believe about their substratum, i.e. space. The powers of nature, such as, the storm, thunder, the rains were closely related with one another. The oldest and sacred Indian Literature *Rgveda* speaks about God associated with the said events as having similar characters: the first recognition of a cosmic order or law prevailing in nature under the guardianship of the highest God is to be found in the use of the word *thanos* to denote the 'order' in the moral world as truth and 'right' and in the religious world as sacrifice. The unalterable law in nature later on developed into a complete law of action which laid stress on the doctrine that 'as you sow, so shall you reap'. Hence, we observe human intellect's developing perception from concrete to abstract, from crude to subtle. Here lies the peculiarity of Indian culture that since the dawn of human culture people here have been feeding and nourishing animals and insects in nature. Diversity in nature complements itself, i.e., every component complements another. In the words of Mahatma Gandhi, "the earth provides enough to satisfy every man's need but not for every man's greed."<sup>161</sup> Nature has created enough to meet the requirements of every living creature, but there is an essential element of give and take that we

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<sup>161</sup> Pyarelal, *Towards New Horizons*, Ahmedabad: Navajivan, 1978, P.12.

cannot forget. We must remember that in reality, sacrifice and enjoyment are two sides of the same coin. Today, however, we have erroneously set our sights on enjoyment alone, and avoid any form of giving back. Our enjoying benefits without contributing back to the environment are equal to theft. This is clearly mentioned in Chapter 3, verse 2 of the *Gītā*, where *Lord Krishna* explains to *Arjuna* that the Gods will shower *Arjuna* with worldly pleasures and luxuries if he is industrious. His labour will be richly rewarded. The Lord clarifies that it is possible to enjoy the same benefits without using one's labour, but then it would cease to be a reward, and thus doing so would be nothing short of theft.

This spirit of give and take is also underscored in a verse from the *Ishavasyopanishad* that mandates that only after contributing productively should one seek gratification. This is actually the most fundamental tenet of environmental conservation. However, the Mahabharata was the last phase of true environmental preservation and soon after the nature loving *Yadavas* along with their king *Lord Krishna* perished. An era of environmental destruction began anew and this started the final Dark Age called the '*Kalyuga*', which continues into the present day.

However, with time a gradual distance grew between man and his environment. The human mind is inherently hedonistic, and seeks greater happiness and pleasures. These desires slowly resulted in man indiscriminately hunting animals, fishing in the rivers beyond the water's natural regenerative capacities, and also in the manufacture of different types of weapons. The utensils, tools, spinning wheels, handlooms, furniture and weaponry that have been found by archaeologists helps us reconstruct the lifestyles during this era.

The ancient man also believed in cosmic law. They felt that the imbalance in any part of the nature affects the life as a whole and therefore, a trial to maintain harmony among the members of the universe was felt a necessary. According to them man is a son of nature, the relationship between man and nature is interdependent. At that time man took help from nature without harming nature. *Kautilya's Arthaśāstra* represents in many ways human's attitudes towards nature. While the human society depends entirely on the nature for its existence and enjoyment, *Kautilya* appears to underline the principle that there must be a judicious and intelligent use of nature.

In the ancient period man was fully devoted towards nature. At that time humans' attitude towards nature was soft and cordial and nature was worshiped by man

in many ways. During Vedic times, human lifestyle was totally depending on nature. At that time people believed that nature possesses wonderful powers which can deliver well or bring harm to them. Vedic philosophers believed in the theory of “as the man, so the universe”. They believed that human life is comparable to the whole universe and man does not live in isolation but leads a collective life. This reflects the affection of man towards nature in Vedic period.

Vedic tradition beholds a rich ethical foundation. The highest ethical standard that Vedic people ought to apply comes from the concept of “*Sarva Bhuta Hiterata*, the welfare of all living beings. Since the highest goal of Vedic people is to be uniting with God and everything is the manifestation of God, so its ethics are wholly based on the welfare of all beings.

*“Sarve bhavantu sukhin, sarve santun nirāmayā  
Sarve bhadraṇi paśyantu mā kaścitdukha bhagbhavet”*<sup>162</sup>

Above mentioned is a prayer in which ‘the happiness and well-being of every being is wished and desired. The welfare of every being is the pathway, which leads to the welfare of oneself helping in the attainment of salvation’. For everyone to lead a balanced and disciplined life in Vedic tradition, there has been laid an ethical code of conduct to follow. There are several virtues prescribed in Vedic texts which are supposed to be followed by. Some of them are as such as directly can be helpful in environment protection.

The philosophical position that everything that exists is an emanation from and is, in essence, *Brahman* leads the Indian Philosophers to use the language of ‘Man is Nature’, ‘Man in Nature’ and not ‘Man against Nature’. Since it is the same divine that is manifested in Man and Nature, the Indians also avoid all issues of domination and subordination in ecological ethics.

What has been noted in this chapter is that the ancient human were fully devoted towards nature. Their attitude towards nature was cordial, loving and caring. They felt nature as their source of destiny. Accordingly they take care of nature from their own heart. The relationship between man and nature was inseparable. In a nutshell it can be said that the attitude of ancient man towards nature is non-anthropocentric. They devoted nature through prayers, through worships and various customary

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<sup>162</sup> Brhadāranyaka Upanishad 1.4.14.

manners. We can develop an ecological paradigm and strategy which is based on the concept of *Vasudheiva Kutumbakam* to formulate a global environmental ethics and sustainable development for future generation.

## CHAPTER –V

### CONCLUSION

One of the challenges of this new decade is that of changing people's behaviour and attitude towards environment. A prerequisite for such change is the promotion of public awareness and understanding of environmental issues. People need to realize that they are part of the whole community of life that depends on earth's environmental resources for subsistence and sustenance. People need to understand that all living and nonliving things are interdependent and interrelated and upsetting the balance of nature will threaten their very own survival as well as nature. All these depend upon the proper recognition of intrinsic value in nature. One need to investigate the role of human beings as such in environmental ethics and in preservation of the environment, and how scientists and non-scientists alike can contribute towards ameliorating the environment for the present and future generations. What we need in this endangered period is not so much a new environmental ethic but a new environmental ethos i.e. an outlook, which is as fully appreciative of the natural world as, is consistent with our need to survive in it, and which registers horror at any activity which causes the needless or unnecessary destruction of non-human nature.

Everyone wants clean air to breathe, clean water to drink, and carcinogen-free food to eat. It can be said that, this attitude is simply an enlightened form of self-interest. Human population is increasingly satisfied when it comes to the rest of creation, and when it comes to issues such as the extinction of non-human species. On a practical level, the possibility has been put forward that environmental protection and economic growth may be incompatible, due to the fact that some environmental indicators, such as carbon dioxide emissions and solid waste, seem to be positively linked to economic growth. However, this issue is open to a significant debate with reference to sustainable development.

Our moral responsibility towards nature and future is of unprecedented significance and urgency, and it is a responsibility that we cannot escape. The natural environment, species and the generations that will succeed us lie in the fate of our hand. In this respect, environmental ethics represents a kind of ethical approach, which considers intrinsic value not only in the interest of individual sentient creature, but also living creatures in the world. We need to understand that we humans are complex

beings and we make decisions about what to do, about what is right and wrong through thoughts and feelings, rational arguments and intuitions, head and heart, data and gut instinct. These varieties in human nature compel us to think and do accordingly in a responsible manner.

Humans beings need to understand that they live in one world along with the rest of nature. On the one hand, uncontrolled human behaviour and absolute despot like attitude might lead to the destruction of environment and thus lead to the extinction of human beings. Absolute preservation on the other hand, is impossible. By supporting weak anthropocentrism we can say that human interest in survival is the best ground on which to argue for an ecological balance which is good both for human and for the whole biological community, can be established. A cat does not distinguish between good and bad, but we rational beings do. We are gifted with rationality; therefore, we need to use that gift in a rational manner to save our environment. Thus, to a certain extent anthropocentrism in a weak sense as discussed in the second chapter can be acceptable, if human beings' survival is at stake.

So far as the Rolston III, is concerned, nature is intrinsically valuable in itself, apart from its contributions to human well-being. All created things are equal and should be respected as ends in themselves having rights of their own without human interference. Animals, plants, rocks, land, water, etc. are all said to possess intrinsic value by their mere existence without their relationship to individual human beings. According to Aldo Leopold and Holmes Rolston wild nature and healthy ecosystems have intrinsic value, prior to and apart from their instrumental value as resources for humans, and therefore should be preserved.<sup>163</sup> We can't say that nature is intrinsically valuable in the absolute sense. What we can say is that valuing or evaluating nature is anthropogenic i, e. human-generated but not human-centered. Such kind of value is neither self-regarding nor human-regarding, though it is human-generated. It doesn't satisfy human beings' desire, passion and longing.

So far as future generation is concerned, rapid population growth, excessive consumption, climate change, ozone depletion, and loss of biodiversity revealed the fact that humans are destroying Earth's biosphere and thus making both present human life and the lives of future generations at risk. If we are not prepared fundamentally to change our life style, i.e., our way of producing and consuming, we will irreversibly

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<sup>163</sup> [https://en.wikipedia.org/wiki/Value\\_theory](https://en.wikipedia.org/wiki/Value_theory)

damage our foundation of life in a very short time. We need to be careful in not inflicting irreparable losses on the generations to follow us. Most of us would say that we have a duty not to destroy, not only that conservation is morally required but also that it is something due for our descendants, something to be done for their sake that supports the doctrine of sustainable development. We have a duty to conserve the resources of nature because they are essential to all human lives both now and in the indefinite future.

One may say that a baby who is to be born tomorrow is a future person. A baby yet conceived but is very much likely to be conceived is also a future person. A generation to be born constitutes future generation. We may think of generations which might possibly exist centuries ahead of ours and so on. Thus the moral status of future generation may appear that it involves nothing more than a simple extension of or indirect duty to our moral community to include family, animals, ecosystems and persons who will be born after we have departed. Our present actions, decisions may not only have bearing on the well-being of future generation, but also determine whether future generation would exist at all. Our actions may help the proliferation of life in future, as well as help the proliferation of good life for such future beings.

If we have no moral reason to consider the interests of future individuals, then we have few compelling reasons to conserve the environment. This is because the present generation, will not be harmed very much if we continue to destroy the environment. So, if we only consider the interests of the present generation in our moral calculations, we will fail our posterity. In order to advocate environmental protection, we must have moral reasons to look out for future individuals. It is imperative for environmental reasons that we find a way to justify our moral obligations to future generations. The question remains is whether or not we have any obligations to future, and what these obligations are. This may seem like a simple question with a clear answer. Yes, we do have obligations to future generations, including an obligation to leave behind a clean environment. This obligation is expressed in the concept of sustainable development which refers to the development that meets the need of present without compromising the need and interest of future generations.<sup>164</sup>

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<sup>164</sup>The Brundtland Commission Report, World Commission on Environment and Development, *Our common Future*, Oxford: Oxford University Press, 1987, p.8.

In modern times human beings are alienated from nature and one of the causes behind this alienation is the development of science and technology. Today science is necessary in our life and without science we are immobile. But due to the scientific development nature is also degraded. The real fact is that nature was there before human beings arrival and it will remain so even after humans' extinction. So, Environmental ethics suggests that if we want to live in earth, we must take care of nature. Question may be raised that, if science is responsible for natural diseases, then does it mean to say that science has no value in our life? One may say that without science modern life cannot survive. At the same time, it is also true to say that science undoubtedly brings environmental degradation, for which we witness an apparent dilemma. To overcome it a proposal has been given by environmental philosophers stating that we do require a concept of sustainable development which is an outcome of science and ethics. It is claimed that science without ethics has no use, for future generation. Science or scientific development must be encoded with a healthy ethical code of conduct so that we can maintain sustainable development without degrading our mother Earth.

The notion of sustainable development is one of the most influential outcomes of interaction between environmental ethics and development ethics. It has important implications for social justice, especially with respect for future generations. Its core idea is that of a kind of development 'which so treats the natural environment that the process of development, or at least the products or benefits of that process, can continue into the future in a sustainable way, both for ourselves and our children, and for future generations'. It teaches us to be healthy and reciprocal to the global environment and development.

The concept of "sustainable development" as we have described in Chapter-3 (three) is an attempt to balance two moral demands. The first is for "development," including economic development or economic growth. The second is for "sustainability," for ensuring that we do not mortgage the future for the sake of gains in the present. It arises from the interests of people in future generations, who will need, if they need a reasonable quality of life, non-renewable resources, access to unspoiled wilderness, and a healthy biosphere. Though both can conflict, the two moral demands behind the concept of sustainable development have a parallel basis. The needs of other place moral demands on us. Say for example, if someone is ill or in pain, or, more

generally, has a low quality of life, and we are able to improve their quality of life and we have a moral duty to do so. We need to think that we have a duty to produce good outcome for human society, or to prevent bad outcome. Henry Sidgwick held it as a moral axiom and says that “the mere difference of priority or posteriority in time is not a reasonable ground for having more regard to the consciousness of one moment than to that of another.”<sup>165</sup> Jeremy Bentham opines that, “each is to count for one and no one for more than one ,”<sup>166</sup> in the sense that a unit gain in quality of life for one person counts no more nor less than a unit gain for another. Our moral goal should always produce the greatest total of such gains, no matter by whom they are enjoyed.

Thus, a satisfying version of sustainable development needs an ethics of limits. It holds that no one has any claim to more than a reasonable supply of resources, at least so long as the more pressing demands of others are not satisfied. This ethics of limits is very much essential to Brundtland Commission’s belief that the basic needs of the present and the future generations in its ideal are compatible. We can satisfy the needs of both people in the developing countries and of future generations, once we realize that people in develop countries or at least the wealthiest among them have no legitimate claim to share of their resources that is not needed for a reasonable life.

It can be said that one should investigate the role of human beings as such in environmental ethics and in preservation of the environment, and how scientist and non-scientist alike can contribute towards ameliorating the environment for the present and future generations. What we need is not so much a new environmental ethic but a new environmental ethos i.e. an outlook, which fully appreciative of the natural world as, is consistent with our need to survive in it and which registers horror at any activity that causes the needless or unnecessary destruction of non-human nature.

When we have a fruit from the tree for food, or a branch from the tree to make fire, we need to be responsible and dutiful towards the tree, even if we don’t verbalize and articulate it. If we have that sense of gratefulness from the core of our heart, then it is called Spirituality. If we have that sense because of our attitude of reverence, then we will never be able to pollute or destroy or deface nature. The modern industrialized society doesn’t have that sense of reverence for nature, and it results in the pollution and degradation of the Earth. The crisis of environment comes out of a utilitarian,

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<sup>165</sup> Henry Sidgwick, *The Methods of Ethics*, London: Macmillan, 1907, p.381.

<sup>166</sup> <http://www.iep.utm.edu/bentham/>

materialistic, non-sacred, non-spiritual world-view. As a consequence we have taken from nature without knowing its limits. When we have a sense of reverence, we shall take from nature only what meets our vital needs. And when we take something, we show gratitude like we take milk from the mother's breast; the mother is very happy to give her milk in the same way as the Earth is happy to give its fruits as long as we take only what we need. When the baby is full, he or she stops sucking and doesn't go on sucking. Unfortunately, we humans go on sucking the Earth. Mahatma Gandhi once said, "There is enough for everybody's need in this world, but not enough for anybody's greed." Therefore, need and greed has to be differentiated. How can we differentiate them? Government cannot legislate for it. A dictator cannot force it. It has to emerge out of our own individual heart, from a sense of beauty, a sense of the divine. When we have that, then we take things from the Earth and always replenish her for what we have taken.<sup>167</sup>

From Indian philosophical tradition what we have seen in Chapter-4 (four) that every citizen was required to plant five trees and see them to maturity; take care of them, nurture them, look after them, and worship them. That was the *pañcavati* of India. Those five trees were seen as a contribution every citizen was making as an act of replenishment, an act of *yajña*. They were for the children and grandchildren and great grandchildren, and for posterity. The Earth provides enough essence for the humans, animals and birds to eat, but also enough to return to the Earth; the peels, the straw, the pips, the skin, the fruits and vegetables have plenty of good for us to eat and plenty to put back into the compost which goes back into the earth. Thus, the Earth is replenished. A tree stands out naked, there all winter without leaves; the tree is now replenishing the Earth with its leaves; all the leaves have gone back into the Earth; they are rotting, making the soil fertile, so that the roots are nourished which in turn gives life to the leaves and to the fruits, a beautiful cycle of replenishment. Nature is our great teacher, and we must learn how to replenish and not to waste. There is no greater teacher than nature. Even the Buddha and the Christ and Tagore learned wisdom from nature<sup>168</sup>.

It can be said that environment is a great value to human beings as well as to other living organisms. A proper environment is essential to sustain life and regain all

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<sup>167</sup> Kumar, Satish. Five Elements of Ecology in *Man in Nature* Vol. 5, edit. Baisyanath Saraswati, Indira Gandhi National Centre for the Arts, 1995. P.166.

<sup>168</sup> *Ibid.*

the renewable sources such as food, fires, wood, fossil fuel, water and land. Therefore, it is the prime duty of every citizen of the world to think and engage in environmental friendly activities.

The following are the most important steps to be undertaken for a proper environmental awareness:

- ❖ Environmental education is required to improve understanding among general public about the environment.
- ❖ The awareness must be given to understand the relationship between human and their environment. Understanding of basic ecological concept and current environmental issues will help in solving environmental problems.
- ❖ Make the people understand environmental protection and resource conservation are the main advantages to lead a better life.

Environmental Philosophers feel that environmental degradation cannot be blocked by scientific resolution of environment. Deteriorated nature cannot be revived in its natural or original form. Artificial resolution what science actually does cannot rebuild nature when badly damaged. Environmental ethics therefore, tries to change human's attitude towards nature. Science without morality, without metaphysics causes serious damage of natural environment. Western traditions and communities now feel, though it is too late, that excessive torture on nature is detrimental and they are now very much eco-sensitive at least theoretically. But there is a serious problem in the third-world countries, particularly, in the developing and under-developed countries. Because they do require scientific development in order to mitigate the cry of needy people whose per capita income is excessively low. As the third world countries being developing or under-developing are the followers of the west, people of the third world countries adopt modern scientific technologies which alienates them from nature. Thus, environmental degradation stands as a global phenomenon which must be resisted globally for maintaining peace and harmony within the globe. Without proper environment no human peace as such can be sustained.

Gradually a world of civilization is being born, and it has to be born if mankind is to survive in this nuclear age. Although science and technology have given us tremendous power but at the same time we never forget that the worship of power of science is not enough, we also need to recapture wisdom, compassion and understanding. We can now survive only if we have an alternative ideology to the one

which has led mankind to this position and we boldly stand at in harmony with that ideology. The rich tradition of Indian Philosophy provides such an alternative worldview. If at this late hour we can imbibe some of its universal truths, we can perhaps reverse the mad rush towards destruction and begin with a fresh mind in relation to our mother earth. These values provide the basic framework to tackle the problems of current challenges and in the context of globalization. We can develop an ecological paradigm and strategy which is based on the concept of *Vasudheiva Kutumbakam* to formulate a global environmental ethics and sustainable development for future generation.

Environmental ethics can solve environmental problems and problems for future generations and save the world, if we recognise the essential normative nature of environmental problems and their possible solutions. We need to contribute to our comprehensive and effective response to the urgent environmental problems. Humanity will not be able to save the world from environmental catastrophe unless and until the normative nature of environmental problems is recognised. Environmental problems are essentially and irreducibly normative in nature because for the following reasons.

1. Environmental problems are the result of human behaviour, and human behaviour is the result of human values which is usually socially inculcated.
2. Our detrimental behaviour to the natural environment in modern industrial society is the result of the specific modern values, such as, limitless economic growth and competitive materialism, so that changes in these values will be necessary if we are to resolve our environmental problems.
3. Science alone will not be sufficient to solve environmental problems since they involve more than empirical causation and consequences, the foci of science.
4. Since technology applies scientific knowledge without examining or arguing about existing social values, the community's public political process of discussion, debate and decision-making among value alternatives will be necessary to lead to the solution of environmental problems according to such political values as: justice, fairness, equality and democracy.
5. Political theorists who study political values have an important role to play in environmental studies despite the latter are domination by environmental scientists producing the misleading impression that our environmental problems are purely empirical. The other elements of normative discourse environmental

ethics, aesthetics and theology will also be important to the value changes needed to the mitigation, or amelioration of our environmental problems, let alone, their solution.

6. Finally, environmental problems, producing the widely admitted global environmental crisis, will be the catalyst for the transformation of the current hegemonic modern social values, practices and institutions, making normative discourse with its critical and prescriptive functions vitally important to both environmental studies and the aim of saving the world.

We must respond to people's needs however those needs were created, or promote good and prevent evil whenever we can do so effectively. We must think that we are not bound to solve all the problems of the world; our duty is only avoid creating problem. We must not be responsible for evil of others: we must not harm others, and if we have harmed them then we must repair the damage. This is called "Ethics of Responsibility."

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## SOME CRITICAL OBSERVATIONS ON ANTHROPOCENTRISM\*

PANKOJ KANTI SARKAR

Environmental ethics is a kind of ethics in which the moral or ethical dignity of all biotic community, animate as well as inanimate, can be restored. According to Robin Attfield environmental ethics is not only concerned with the issues which finds independent value of sentient creatures, it is also equally concerned about the natural living creatures as well. The central question of environmental ethics is to locate independent value irrespective of valuers. Environmental ethics addresses the interests of future generations and of nonhumans. Environmental ethics, in fact, is not an isolated issue, rather it stands as an 'umbrella term' which incorporates many debatable issues interlinked with ethical traditions from Plato, Aristotle, Mill, Moore to Leopold and Peter Singer.

The objective of environmental ethics is contrary to the traditional or humanistic ethics. Environmental ethics in a sense is relatively a new slogan against the so-called traditional ethics where the domination of human beings over non-human beings has widely been recognized. Traditional ethics is predominantly man-centered. The relevance of anthropocentrism can further be strengthened with the influence of materialism in which, only instrumental values are considered to be moral values. This, in turn, paves the way for technological development in which only instrumental values are being desired. Environmental ethics just opposes traditional ethical approaches and thereby denies materialism, individualism, consumerism, and moral subjectivism which invite anthropocentrism. Instead of anthropocentrism, modern environmental ethics rather pleads for non-anthropocentrism in which the moral dignity of all species of whole biotic community can be restored.

Traditionally there are two basic theories prevalent in environmental ethics, such as anthropocentrism and nonanthropocentrism. Anthropocentrism

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\* This paper is a subsection of my doctoral dissertation for which I express my deep sense of obligation to Dr. Laxmikanta Padhi.

means human centeredness. In environmental ethics the term describes the attitude, values, and practices which focuses only on human interest or position rather than the position and interest of other non-human species in the natural world. It places human being at the center of the universe, and looks upon him as a measurers of all things because only human have a soul, rationality and capacity for analyzing and expressing language. Human species have every right to use and manipulate nature according to their own needs and deeds. From a moral point of view it holds an independent value solely and predominately for human interests. Only human species are the sources of intrinsic value and all other non-human species exist to subserve the purpose of humans. Thus, anthropocentrism is concerned only with human interests, excluding the desire, goal and value of non-human species and interprets everything in the world in terms of human values.

#### **Philosophical Arguments for Anthropocentrism:**

Anthropocentric attitude towards nature was found in a prolonged philosophical and religious background as articulated by early stage of Western philosophy. In the mainstream of the Western cultural tradition, only human beings have been treated morally. John Passmore and Kristin Shrader-Frechette were among the first to advocate a strictly anthropocentric approach in to environmental ethics. Shrader-Frechette finds it "difficult to think of an action which would do irreparable harm to the environment or ecosystem, but which would not also threaten human well-being"<sup>1</sup>. Augustine himself claims that humans alone have a rational soul, the image of God and thus of the trinity. An extreme trend of anthropocentrism is also reflected in Descartes' famous dictum: mind-body dualism. The Cartesian Cogito-ergo-sum suggests, at the end, that the individual alone constitutes himself or herself and that all senses of relation and context remain accidental and external. For Descartes, non-human creatures lack not only rationality, but also even consciousness. Descartes conceived that since non-human animals do not use language, they

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<sup>1</sup> Shrader-Frechette, K. *Environmental Ethics*. Pacific Grove, CA: Boxwood Press, 1981, P.17.

are no longer conscious or sentient. The famous Protagorean view that "Man is the measure of all things" captures the idea that only human can know what reality is for him. Calvin's statement that "God created all things for human's sake"<sup>2</sup> supports anthropocentric attitude. For Kant, Natural objects are incapable of planning, reasoning, analyzing and organizing, using or creating language. For Bacon the aim of science is to master over nature by following the dictates of the truly natural.<sup>3</sup>

Human in any sense rules over nature for which Passmore inevitably presumes that nature is not itself divine. We also witness an extreme form of anthropocentricity in Hegel's writings in which he conceives man as God like. This trend reaches its extreme peak with the hand of Nietzsche who inclines to say that man has become the measure of all things. For him nothing is transcendental, eternal, beyond man's purview. The world, therefore, is a storehouse of raw materials for the enhancement of man's power. Passmore says, ".....for Hegel ....nature in itself is 'negativity'. This does not mean, of course, that it does not exist. But it exists simply in order to be overcome, to be humanized. Man offers it liberty, frees it from its fetters, only by making it human. Nature is made less 'strange', by being converted into a tool, a language, a secret ally, an aspirant after humanity."<sup>4</sup>

In his major work *The Summa Theologica* Aquinas followed the passage from Aristotle and made classification of sins. In the gradation of sins he has room only for sins against god, our neighbors and us. There is no possibility of sinning against nonhuman animals or the natural world.<sup>5</sup> In the religious tradition like the Judaic-Christian tradition a kind of dualistic view is found where it is said that God is a supernatural and spiritual being who shares his spirituality only with human beings. In Roman Catholic, it has been said

<sup>2</sup> Schwetckhe, A. and Bruhn, M. *The Commentaries of John Calvin on the Old Testament* Calvin Translation Society: Edinburgh 1843-48, 1:96.

<sup>3</sup> Keller, Evelyn F. *Reflections on Gender and Science*, Yale University Press, 1995. P.36-37.

<sup>4</sup> Passmore, J. *Man's Responsibility for Nature: Ecological Problems and Western Traditions*. New York: Charles Scribner's Sons, 1995.

<sup>5</sup> Schwetckhe, A. and Bruhn, M. *The Commentaries of John Calvin on the Old Testament* Calvin Translation Society: Edinburgh 1843-48, 1:96.

that 'man is the only creature on earth that God willed for itself.' Man is the only creature that is end in itself rather than a means for others. All these remarks stated above run with the conviction that human beings have the legitimate moral right to dictate nature as well as others non-human beings.

**Some Observations on Anthropocentrism:**

It is often considered that anthropocentrism is a dominant and utilitarian approach towards nature. We can say that if utilitarian consideration dominates human thinking, then proper respect for other creature will not arise. And so long as human's relationship towards nature is valued by considering nature to be our utilitarian source, there will be no place for ethical consideration of the natural ecosystem. According to Mary Midgley, 'we may read the history of Western ethical theory, from Plato and Aristotle to Singer and Leopold, not as a series of formulations of and justifications for competing master principles of action, but as a series of illuminating insights into human ethical experience that can deepen our moral reflection and help us to make wise practical choices'.<sup>6</sup>

Despite the force and support of arguments justifying anthropocentrism, it is not without problems. It is a basic presupposition that human domination over nature is the product of just one sort of cosmology. But there are religions in the world which have a humbler estimate of human place within nature and greater solicitude for other living beings. Say for example, Buddhism, Hinduism and Jainism. According to Jainism, the world is full of life, in which humans, animals, plants, and elements (earth, air, water, and fire) are all considered to be alive.

The rationality and humanity of a human actually differentiates a human from other classes. However, from this it does not follow that human is the architect of whole nature. It is absolutely ignorant or *avidyā* or *māyā* on the part of humans to think that everything in the biosphere should run

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<sup>6</sup> Midgley, M. , 'Beasts versus the biosphere' *Environmental Values* 1(2): 1992, p. 113-121.

according to their dictation or will. Nature has its own order. Humans are violating it for mitigating their greedy needs. It is quite ridiculous to claim that human beings are superior to other non-humans simply for the fact that unlike other non-humans, human beings can take moral decisions, can give moral verdict, can decide what is good and what is ought to be done by virtue of possessing rationality. If it is claimed that human beings by virtue of possessing rationality, a distinctive trait, are supposed to be superior to other living or non-living beings, then, at times, in other context non-human beings can also suppose to be more superior to humans for their distinctive traits absent in human beings. There is no question of doubt that human beings lack the homing ability of pigeons, they also lack the speed of cheetah, the ruminative ability of sheep and cattle. If distinctive traits are supposed to be the only criterion of determining the superiority of one species over another, then it can equally be claimed that there underlies no point of departure in claiming that other beings may be superior to humans at times. Thus, there is no logical ground in claiming that distinctive traits are the criteria of determining one's superiority over other species. What can be said is that the distinctive traits of humans are valuable to humans and the distinctive traits of other non-humans are valuable to themselves as the distinctive traits of each animal is the outcome of biological necessity and it can be acquired genetically. So any attempt to acquire the distinctive trait of one species by other species would not be possible, as it requires a genetic transformation, which could alter the original species. Sterba holds that it would have been possible only in fairy tales and in the world of Disney. Thus, from a non-question-begging perspective, it would be prudent to claim that the members of all species are equal as each of them contributes substantially for the better environment.

Human being as the possessor of rationality ought to realize that we are citizens of nature, logically bound up together through mutual understanding, love, care and respect. If this is to be the case, of course, we think, it ought to

be the case, then why should only humans be morally considerable? Can human beings survive by forfeiting eco-systems? Certainly, they could not. Therefore, it has been justified by saying that like human beings every citizen of the whole ecosystem possesses equal moral worth. Any attempt to degrade nature would change the environmental related systematic process, which eventually leads to human disaster. Environmental related systems, such as, oxygen, carbon dioxide cycle, are more valuable than the so-called instrumental value as desired by classical ethics. Thus, any environmental related systematic process is vital on nature and what is vital on nature should count morally.

Modern science also challenges anthropocentric attitude, which gives less importance of human being within nature. The idea of great chain of being was already revealed to be inadequate in the taxonomy of species put forward by Linnaeus in the 18<sup>th</sup> century. The evolutionary picture of inter species relation is not only more complex but also it is in principle different from the teleological view usually implied by the great chain of being. Darwin provides an argument in *The Origin of Species* that 'natural selection cannot possibly produce any modification in a species exclusively for the good of another species'.

The capacity of reason, language and social relation are not entirely absent in the non-human world. It no longer a matter of serious scientific controversy that some animals like great apes have social relation and are capable of thinking, even manipulating symbols. Also having the capacity of *moral agency* is not a necessary condition for being morally considerable as a moral "patient". There is today a growing tendency to believe that moral consistency requires us to avoid harmful treatment of non-human beings wherever the harm is similar to a harm that would be wrong if it is inflicted on a human being. As scientific evidence of common characteristics undermines the radical differences between human and non human, so the reasons for

ethically privileging humans are also undermined. There is no longer any unavailing reason to assume that only what befall human are matters morally.

Everything in the universe is a part of the natural process. And, this natural process is something that is beyond the control of any species. This assumption provides a cosmic vision that promotes the thinking that human species are not the controlling authority of natural happenings and will give a different picture of nature-human relationship. Once the thinking process is elevated to this broad vision that humans are just a part of the nature, a strong foundation for environmental ethics will be established. Because once we accept that we are part of an integral whole, we will also be able to develop a sense of sharing with others. Deep ecology by Arne Naess in fact looks for a foundation, which is based on this type of thinking. Biocentrism maintains that all life forms are 'moral patients' entities to which we should accord moral consideration. We therefore have a duty towards all forms of life. Albert Schweitzer opines:

The essence of goodness is to maintain and cherish life, and the essence of evil is to destroy and damage life. All living beings have the will to live, and all living beings with the will to live are sacred, interrelated and of equal value. It is, therefore, an ethical imperative for us to respect and help all life forms.<sup>7</sup>

L. W. Sumner argued that environmental ethics must take into account the rights of non-human animals in order to develop a genuine environmental consciousness<sup>8</sup>. Tom Regan goes beyond Sumner's idea of an environmental consciousness and the rights of animals, and argues for inherent value, which requires that the value associated with another-than-human beings must derive from within it, not imposed upon it<sup>9</sup>. Regan and Sumner's principles of environmental consciousness and intrinsic value are articulated through deep ecology, which claims that - all things in the biosphere have an equal right to live, blossom, and to reach their own individual form of unfolding and self-

<sup>7</sup> Schweitzer, A. *Civilization and Ethics*. J. Naish trans. London, A & C Black, 1923.

<sup>8</sup> Sumner, L. S. A Matter of Life and Death! *Nous* 1976, 10: 145-71.

<sup>9</sup> Regan, T. The Nature and Possibility of an Environmental Ethic, *Environmental Ethics*, 1981, 3, 1: 19-34.

realization<sup>10</sup>, Deep Ecology has always asserted that wilderness must be defended for its own sake, not for human gain. Deep ecology argues that a being's value leads to the ideal of biocentric egalitarianism, in other words, the ideal that all beings have inherent value and right to life which results in equality between all beings, where no being is superior or inferior to another. As a result, deep ecology has broadened the domain of discourse between human interaction with non-human nature<sup>11</sup>, allowing nature to take on value for itself which requires respect and protection from human harm.

We can think an understanding of nature is the key of non-anthropocentrism and in this regard the concept of eco-spirituality is mostly desired for understanding and protecting nature. In Western tradition, we can call upon Spinoza, who in his *Intellectual love of God* equates God with Nature and thereby gives a metaphysical or spiritual interpretation of environmental ethics.

The Indian philosophical tradition and civilization provides a solid foundation for adequate concern and deep respect for nature, thus nonanthropocentric in nature. Philosophical thinking in Indian culture has always been associated with spiritual practice. The philosophical speculations that were developed in the Indian tradition were deeply concerned with life in general. The intention was not just to understand nature and intellectual curiosity, but a kind of theoretical speculative thinking was associated with a strong insight that was guiding the ethical and theological aspect of human life.

Eco-spirituality therefore, means that the entire universe is an extended family. It is a means through which one can realize that all living beings in the universe are only citizens of the household. This concept is known as *Vasudhaiva kutumbakam*. It refers to all species on earth as the members of

<sup>10</sup> Devall, B & George, S. *Deep Ecology In Thinking Through the Environment: A Reader*, ed. Mark J. Smith. London: Routledge.1999.

<sup>11</sup> McLaughlin, Andrew. The Critique of Humanity and Nature: Three Recent Philosophical Reflections *Trumpeter*. 1987, 4.4: 1-7.

the same extended family of *Devi Vasundharā*. Thus, only by realizing the entire universe as one extended family, we can develop the necessary maturity and thereby respect for all other beings. Being the members of the extended family, humans do not willfully engender the lives and livelihood of others, instead they first think in terms of caring for others before taking an action. The welfare and caring, love and respect of all would be realized through spiritual understanding and cooperation at the global level. We think that the Hindu heritage of eco-spirituality would certainly control our base characteristics, such as, greed, exploitation, abuse, mistreatment, and defilement of nature. What is mostly required is to culture our inner thoughts and perhaps it is where the religious exhortations and sanctions may come into play for environmental stewardship. Eco-spirituality oriented environmental stewardship can be the mechanism that strengthens our respect for nature, gives rise to new ways of valuing and caring, promotes sustainable development. Eco-spirituality enables us to provide the values necessary for an environmental caring world by forfeiting a blind belief towards materialism, consumerism, individual and corporate greed, instrumental value at all cost. Thus we can achieve and justify the ethical relevance of nonanthropocentric approach on environmental ethics by love, care and respect and above all introspection.

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