RESPECTING NATURE: A STUDY IN ENVIRONMENTAL ETHICS

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This is to certify that the thesis entitled Respecting Nature: A Study in Environmental Ethics submitted to the University of Hyderabad in fulfillment of the requirements for the award of the Degree of Doctor of Philosophy in Philosophy is a bonafied record of original work done by Ms. Sarmila Sutar during the period of her study in the Department of Philosophy, University of Hyderabad, under my guidance and supervision and that the thesis has not been submitted to any other University or Institution for the award of any degree.

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DECLARATION

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TO

BAPA....

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CHAPTER-I

Introduction

It is a fact of recent human history that due to the tremendous development in science and technology and the role it plays is always viewed as an agent of social progress, an instrument that replaces traditional mode of living by modern living. Science then viewed as representing an emancipatory force. Thus it subsequently brought a change in our moral thinking. We felt the need for applying ethical principles to practical aspects of life. The concern for environment was one of such aspects which became the object of our serious ethical concern. The need for an environmental ethics as an independent study to be pursued was never felt so actively. The need to do so was never felt because the human beings did not even recognize that environment itself was a system - an ecosystem which had its own regulatory mechanism. This attitude or ethical stance was partly explainable because in the preindustrial period human beings were thinking that the earth and its wilderness was too vast to be damaged by their voluntary action. But in the present era of post industrial culture this assumption has been proved false. The principle idea that we are putting forward is that just as in society we morally behave with others in a similar fashion we need to behave morally with the environment. That is, we must approach nature or environment from a moral perspective. The same moral principles and moral considerations which are applied to our fellow beings can be equally extended to the environment. A reflection on moral practice will revel how we morally behave.

Human beings are responsible, rational and deliberative persons. Therefore, moral responsibility implies knowledge, capacity, choice, and value. That is to say, if a person is morally responsible to do something, then he (a) knows about this requirement, (b) is capable of performing it, (c) can freely choose whether to do or not to do it, and (d) the actions affect the welfare and liberty of other beings. Only human beings can

fulfill these requirements. Therefore, their actions can be judged morally. As human beings, they have moral responsibility. They are called upon to reflect, act and respond morally with fellow human beings in a society considering the deep crisis that the environment is facing due to our irreparable acts it may be argued that a time has come when we should rethink our stand and our relationship with nature. We suggest that the stand this must be moral which implies the extension of the boundary of moral domain to non-human nature.

The history of our relation with nature is based on the idea of mastery or domination. Till recently the effects of human action upon the nature were regarded as morally neutral. It was assumed that nature was both impersonal and too vast to be injured by our interventions. We were unable to see the harm resulting from our dealings with nature. In the recent years we find that there is change in our attitude and approach. We have now realized that we can cause massive and permanent damage to natural land scapes, resources and there by, disturb the overall harmony of the ecosystem. Today we have not only come to know that we can damage nature, but also we know this This knowledge subsequently lead us to explore the ways damage. through which such damage can be prevented so that the original harmony of nature can be preserved. Knowing all these compel human beings to act with care and foresight while dealing with nature. In this context it is almost universally agreed that we should not unnecessarily exploit nature. We must put constraints wherever necessary, on our behaviour while we use the resources of nature. It is realized that nature cannot be just used as only means. It has an end of its own and it thus deserves respect.

Environmental Ethics

Ethics deals with the realm of human conduct. It means that the ethical realm of human being is within the area of human capacity and choice. The field of environmental ethics offers an extension of this human capacity and choice towards nature. It is an important perspective subscribing to some of the values and duties that man must have towards nature.

Historically, the inspiration for environmental ethics came from the first Earth Day observed in 1970 when environmentalists urged philosophers to turn their attention to nature can be the subject of a serious call for philosophical study. There was a call for philosophers who were involved with environmental groups to do something about environmental ethics, after the publication of two papers in science, by Lynn White's The Historical roots of our Ecologic Crisis (March 1967) and by Garett Hardin's The Tragedy of the Common's (December 1968). Previous to 1970 an intellectual climate was already developed in 1960s. Adding to this, another most influential essay was: Aldo Leopold's, A Sand County Almanac (The Land Ethic). In this essay, Leopold claimed that the roots of all ecological crises were philosophical. Accordingly the first philosophical conference was organized by William Blackstone at the University of Georgia in 1972. The proceedings were published as Philosophy and Environmental Crisis in 1974. In 1973 an Australian Philosopher, Richard Routley, presented a paper at the 15th world congress of philosophy by name Is there a need for a new Environmental Ethics? Reacting to Routley, a year later John Passmore, another Australian, wrote Man's Responsibility for Nature, in which he argued that there was no need for an environmental ethics at all. Until the 1980's, most of the debates among philosophers were focused on refuting Passmore. In 1975 environmental ethics came to the attention of main stream philosophy with the publication of Holmes Rolston, III's paper, Is there an Ecological Ethics? in Ethics.

Traditionally ethics is concerned with the individual's or group of individuals' actions. They may be subjects of action or objects of action. But in the recent past, as we have said earlier, there is a wide spread

feeling that ethics extended to such things like non-human animals, living and non-living things, such as, populations, plant communities, ecosystems, lakes, streams, rivers, and mountains. In this way environmental ethics begins with a paradigm shift – a shift from human to non-human beings. Environmental ethics is a division of main stream ethics which is applied for the evaluation of only human conduct. It is also like ethics preoccupied with the issues concerning right or wrong. The only difference is the domain with which it is concerned with. Instead of human, its main object of concern is with the rightness and wrongness of our treatment pertaining to non-human animals. In this pursuit it seeks to find out the relationship between morally aware subjects and the objects of their environment. This is how our environment or ecology became a field for human moral concern.

The challenge of environmental ethics is to ask questions concerning the value and moral standing of the natural environment. In this respect, the questions are that are asked: is destroying some individual members of an overpopulated indigenous species necessary for the protection of the integrity of a certain ecosystem? Are these actions be morally permissible or even required? Is it morally acceptable for farmers to practice slash and burn techniques to clear areas for agriculture? Consider a case of a mining company. The company has performed open pit mining in some previously unspoiled area. Does the company have a moral obligation to restore the landform and ecology? What is the value of a humanly restored environment compared with the original natural environment? The essential thrust of all these questions is to point out: Is it morally wrong for human beings to pollute and destroy parts of their natural environment? If it is wrong, is it simply because a sustainable environment being essential for the well-being of both the present and the future generations of human kind? Or is it wrong because the natural environment and its contents have certain values in their own right and these values ought to be respected and protected? Our approach to the prevention of environment can be thus

viewed either from the standpoint of practical advantage or from the standpoint expressing the view that protecting nature is a part of moral obligation for human beings. In the language of ethics, the former expresses the utilitarian view of ethics where as the latter expresses the deontological view of ethics.

Considering the view stated above, environmental ethics is a branch of applied ethics which is concerned about the preservation and restoration of the natural environment on moral grounds. It is mostly evolved as a series of debates concerning the value of nature. It discusses how the value of nature can be described. Can nature be morally considered in itself? That is, is nature itself be an object of moral concern? Or is nature to be morally considered, indirectly because humans need it? There are various theories which have been shaped and developed in contemporary environmental ethics which addressed to the basic issue. Environmental ethicists draw their theoretical resources from traditional ethical theories such, as, consequentialism, deontological and virtue ethics. The prominent questions which are frequently asked by environmental philosophers are: What kinds of thing that are intrinsically valuable, good or bad? And what makes an action right or wrong? These questions are frequently asked by environmental philosophers. The same questions have been also asked in the traditional ethical theories in human domain. The only difference is that in the context of environmental ethics these questions are raised in relation to the nature. We will now give a brief summary statement of the above stated ethical theories.

Consequentialism

Consequentialism is the theory which considers the value and disvalue or goodness and badness of an action as the fundamental moral notion than rightness and wrongness. An action is right or wrong by determining the goodness and badness of its consequences.

Utilitarianism known as consequentialist theory which regards pleasure, or the satisfaction of interest, desire and preference as the only intrinsic value. Where as the opposite, such as pain, is the only intrinsic disvalue. Therefore, they say that right actions are those which produce greatest pleasure for greatest number. Now we extend this theory to non-human domain. The utilitarians like Jeremy Bentham, and Peter Singer have argued that the interests of all sentient beings, i.e., beings who are capable of experiencing pleasure or pain, including non-humans should also be taken into moral consideration. They are also affected by human actions. On the other hand, they do not attribute intrinsic value to the beings that do not have experience. Therefore, for them, non-sentient objects in the environment such as plant, river, mountains and land scapes do not have intrinsic value. But at the most they have sentient instrumental value for the satisfaction of beings. Anthropocentric theories which are human centred ethics are based on consequentialist theory. This is the dominant ethical tradition of the western world. It says only human beings have independent moral status. This theory prioritizes those attitudes, values, or practices which give preferences to human interests rather than the interests of beings who are other than humans in the environment. It is the human centred theory which assigns intrinsic value to human beings alone.

Deontology

Deontological ethical theories are the opposite of the consequentialist theories. These theories maintain that the rightness and wrongness of an action is independent of the badness and goodness of its consequences. The observance or violation of moral rules is intrinsically right or wrong in itself regardless of its consequences. The justification of moral rule and duty is given by ascribing intrinsic value to the being to whom it applies. Therefore, deontological theories in environmental ethics ascribe intrinsic value to all components of environment.

Virtue Ethics

Virtue ethics is an alternative to consequentialism and deontology. Both consequentialist and deontological theories consider the concepts such as "goodness" and "right ness" of an action as essential to morality. Virtue ethics, on the other hand it focuses on what kind of person one should be. Virtue ethics proposes to assess the ethical quality of actions in terms of concepts/virtues such as kindness, honesty, sincerity and justice. One central question of virtue ethics is - what is the moral reason for acting one way or another? From the perspective of virtue ethics kindness and loyalty are two moral reasons for helping a friend who is in trouble. This theory is quite different from the deontologist's reason, i.e., the action is demanded by a rule. It is also different from the consequentialist reason, i.e., that the action should give rise the welfare of number of people. From the perspective of virtue ethics, the motivation and justification of actions are inseparable from the character traits of the agent. The focus of deontology and consequentialism is on other people or states of the world. But the central issue for virtue ethics is how to live a flourishing human life. A flourishing human life requires having the moral capacities, such as, capacity to value, to love, to respect and to care for the nonhuman natural world as an end in it self.

In the above discussion we have seen the need for extending traditional ethical theories to non-human environment on a moral ground. To make environmental ethics a more useful as a branch of applied ethics it doesn't require giving up all our theoretical debates in ethics. However this view may not be acceptable to many environmental ethicists. In their opinion to get an ideal environmental ethic we should reject any kind of anthropocentrism. In reply we will point out that if we want to fulfill the needs of our community we cannot keep such dogmas in the field. A careful look will reveal that at some points these two views converge and then these two positions become commensurable. The commensurability of these two positions can be particularly seen with

respect to environmental position. In this study we have argued that environmental ethics is not a mere theoretical study of the environment. It is because of its practical nature it is vitally concerned with the formulation of appropriate policies for the protection of nature. Formulation of policies is thus a part of environmental ethics. In this way, environmental ethics asks philosophers to actively participate in the resolution of environmental problems.

Hence a fully responsible theoretical pursuit of environmental ethics must not reject the anthropocentric reasons for the protection of There environment. are two reasons for not rejecting anthropocentrism. First, the focus in environmental ethics on the search for a description of the non-anthropocentric value of nature separates environmental ethics from other forms of environmental inquiries. The environmental professionals we are not environmental ethicists look at environmental problems in a human context. They do not define the value of nature in an abstract sense being outside of human interaction with nature. The areas such as fields such as environmental sociology and environmental science study environment as the location of human community. This does not mean that these fields reduce the value of nature to just an instrument of resources. Environmental philosophers are engaged with theoretical and valuational questions with regard to environment. By doing this environmental ethicists make themselves different from the rest of the environmental professionals who seek to provide practical solutions to environmental problems. Environmental ethics is not possible with mere description of the value of nature even if it strongly claims for the rights of nature. It also asks whether the description of the value of nature causes human beings to change their moral attitudes towards nature. The inclusion of anthropocentrism in environmental ethics is thus a necessity. The reason is that if we take anthropocentrism into consideration only then there is a possibility of change in moral attitudes towards nature.

The second reason for not rejecting anthropocentrism is that we can empirically demonstrate anthropocentric views. For example, people have positive attitudes towards environmental protection because they think they have obligations to protect nature for future human generations.

A position called methodical environmental pragmatism proposed by Andrew Light which emphasizes incorporating anthropocentrism into the main stream of environmental ethics. As he says:

Environmental philosophy of any variety ought to be pursued within the context of a recognition that a responsible and complete applied environmental ethics includes a public component with a clear policy emphasis" (Environmental Ethics, Light. A, A Companion to Applied Ethics, Edited by, R.G. Frey and Christopher Heath Wellman, Blackwell Publishing, 2003).

Environmental Pragmatism, as Andrew Light means, it does not accept the existence of non-anthropocentric natural value or the relative superiority of one form of natural value to another. According to Andrew Light, the principal task for an environmental pragmatism is not to reengage in the meta-ethical and metaphysical debates of environmental ethics. But, it should rather push environmental philosophers to focus on the questions of what would motivate humans to change their attitudes, behaviours and policy preferences. This ultimately leads to support long term environmental sustainability.

Hence in philosophy the concern for nature has a long history. In this study the expressions like nature, environment and natural environment has been used alternatively or interchangeably to essentially mean that the natural environment may be either conserved by human beings or not being disturbed or exploited by human beings. Further while enquiring into the issues concerning nature/environment the present study does not confine only to either western tradition or to Indian tradition. It goes back to both the Vedic and Upanishadic era, and classical era of the pre-Socratics. In both these traditions nature is

conceived as a living concept expressing a close bond between man and nature. Environmental ethics is a new branch of philosophical ethics expressing the same concern through different theoretical frameworks. The proposed study will be an enquiry primarily concerned with the central issues of environmental ethics. It will suggest a new framework in terms of which we can study and examine these issues. The study undertakes an enquiry in to the relationship between man and nature. In this connection, it particularly goes into the discussion of values that are especially significant for constituting man-nature relationship. Based on the standard theories of ethics, it argues for the possibility of a constructive approach to nature from two different perspectives i.e., from Indian and Western. Its ultimate thrust is to suggest that we must have a more respectful treatment of nature which will subsequently provide the moral foundation for the formulation of policies towards protection of nature. Our approach to nature may be thus to assume two aspects or dimensions. At the first level, we are primarily concerned with the value of nature i.e., the importance that we ascribe to nature. At the second level, our concern with nature is largely confined to policies formulated for the conservation of nature. The two issues to be discussed are not unrelated. In fact one of the basic arguments of this thesis is to put forward the claim that a proper formulation of policies relating to environment must be conceived within a value framework.

In view of this, we can define the two fold nature of our enquiry in the following way. First, an approach to nature must be based on the broader framework of ethics involving the three main ethical traditions, namely, teleological, deontological and virtue ethics. This involves an enquiry into the variety of ways in which human beings can value nature. These three are historically seen as rival theories. However, instead of seeing them as rival, they may be viewed as pointing out the facts relating to the three aspects of morality and thus they may be considered as complementary. The complementary aspect of these theories can be specially seen while understanding nature. Thus in the

present study these three approaches will form a new approach to ethics which together may be applied to explain multifaceted significance of nature. This in turn will show man's many sided relationship with nature.

The second aspect of our enquiry, as mentioned earlier, is concerned with policies. The question that we have raised there is: How these three ethical theories help us in formulating policies towards the preservation of nature? This, in other words, is giving justification for the need of environmental ethics. At a policy level, the need for environmental ethics arises due to the demand arising out of certain practical situation. In this respect the role of science and technology in society is very important. It is true that they played an enormously important role in making our society industrial but the price that the society has to pay for this is equally significant. In the name of development, nature has been severely exploited and mercilessly destroyed. These results into various natural disasters observed in the recent time, such as, the ozone depletion, deforestation, land slides, tsunami etc. All these calamities point out that there is a need for maintaining nature's balance. But how is it to be done? What are the ways to be adopted for preserving nature's balance? In this context, we first need to see our attitude towards nature, particularly, our attitude towards how to preserve nature. This takes us to the study of policies, that is, policies adopted for the purpose of conservation of nature. The value that we attach to nature, to a great extent, influences the policies that we formulate for preserving nature. Values can be viewed through certain ethical theories or perspectives. In this respect, it has been observed that environmental policies are often guided by certain utilitarian considerations. It is felt that nature should be preserved for the purpose of serving our own interest and thus this entire approach, to speak in ethical term, is based on certain instrumental values. Nature is to be nurtured not on any intrinsic ethical ground but on an extrinsic ground since our objective to preserve nature is guided by utilitarian considerations.

In our study we will argue that environmental policies, if they are based purely on utilitarian considerations, they will not have long lasting impact. They will not be based on any sound moral principles assuming the intrinsic importance of values in relation to nature. Respect for nature is what we call the fundamental intrinsic value that should guide the formulation of our environmental policies. This study does not deny the teleological or utilitarian basis of policies, because human interest becomes the crucial factor in the light of which policies are to be formulated. However, as we will argue, the notion of human interest cannot be devoid of deontological notions like respect for nature and our duty towards nature. The teleological perspective in this way will be grounded on the deontological perspective. Finally we address the question: How is the respect for nature to be learnt? In this aspect we bring the perspective of virtue ethics. To be respectful towards nature is to develop certain attitude within us. This attitude can be inculcated among human beings through relevant education. Proper education will build up a new awareness showing the need for being respectful towards nature. On the other hand, policies formulated in the deontological perspective may have their basis on some intrinsic values. Accordingly, policies are formulated on the basis of the presupposition that nature has certain intrinsic rights. These two different human attitudes towards nature's value are the base of environmental policies which is ultimately based on common human welfare. Environmental ethics is concerned with human beings in a wider context. So it asks what virtues a good human being must have in relation to the natural world? It asks the question-what dispositions must one have to live a good human life? Hence we have to think about the various ways in which we relate to the environment in our thoughts, actions and feelings. In order to protect our environment it is necessary for many of us to co-operate. We have to have the virtues that make such cooperation possible: trust, reliability,

self-denial, trustworthiness and environmental virtues like, temperance, sensibility, sensitivity and respect towards nature. So we need cooperation between both intrinsic and instrumental values for protection of nature which virtue ethics suggests. After all we will see how education plays an important role in respecting and protecting nature. At the background of this introductory remark, we can now present the basic problem of our thesis and a proposed line of inquiry following from it. The two basic problems that constitute the two main thrusts of the thesis are:

First: What kind of value should be attributed to the natural environment, to the things other than human beings, living and non-living, with which we share the world? There are two ways to respond to this question. Should we value them because of the ways in which they are useful to us? Or do they have value, which is independent of human interest? The third approach i.e., the virtue ethics theory solves the controversy between teleological and deontological approaches towards environment. Virtue ethics asks the question how should we, as human beings, think of our relationship to nature?

Second: How nature can be protected in a better way from the present environmental crisis? Should we protect nature because of its utilitarian value? Or should we protect nature because of its intrinsic value? Or should we protect nature because of human welfare?

The two problems posed above though different are not conceptually unrelated issues.

Given these two issues forming the basic problem of our inquiry, we may indicate a direction in which the proposed study may proceed. As is evident, the first issue raises a controversy which needs to be resolved in order to develop our constructive thesis. Environmental philosophers disagree with the way the first question is to be answered. Those who think that natural objects like trees or lakes have value in

themselves, independent of human interest, believe that the recognition of this value commits us to a new set of moral principles which are not found in the existing moral traditions. As a result, adopting these new principles will imply a departure from the main moral traditions. In the existing moral traditions, there is no place for such values. Moral principles are all formulated keeping man at the center. They are all human centred and thus in the current ethical theories, morally neutral approach has been adopted in relation to natural objects. The destruction of natural objects is forbidden unless human beings are harmed by the destruction. Opposed to this, the other view says that what is valuable in nature must be determined by human interest. For this we need to adopt an ethical approach to nature and this approach can be developed from within the existing moral traditions. The enquiry to be developed will not take one side or the other of the controversy. In our opinion, the opposition of the two views has been misconceived. The main focus will be to show that there are varieties of ways in which human beings can value nature. In the course of this argument a conceptual distinction will be made between valuing things for what they can do for us and valuing them for what they are.

The strategy to be adopted, as indicated earlier, will be a holistic approach to ethics involving the three major traditions in terms of which we will delineate how we ought to deal with nature. For this, we will use conceptual resources of utilitarianism, deontological ethics and virtue ethics. In the light of utilitarianism, we will study about nature's instrumental value. In the light of the deontological perspective we will talk about the intrinsic value of nature. This approach will focus on valuing nature in an absolute sense. These two perspectives are concerned with the value of nature. But in addition there is an issue concerning the relationship between nature and man. This takes us to the perspective of virtue ethics.

The third approach to be addressed is: What should be our relationship with nature? The answer to this question will be given in the light of virtue ethics. The discussion will mainly concern with, what sorts of virtues a person must have to treat nature with care and respect. This idea essentially says that we are part of nature and thus it removes those false beliefs like we are superior to nature and hence are entitled to exploit nature. This approach solves the controversy between teleological and deontological approaches towards nature. The virtue like "respect for nature" is itself deontological. It can also be perceived as teleological. Due to this belief, we respect and protect nature and this is mainly because of human wellbeing. For example, you ask me to post a letter for you. I agreed to do it. True, I have a duty to post the letter, but it is not because I have a duty to the letter itself. On the other hand, it is you towards whom I have a duty. Considering this in the context of nature, it means that when we are respecting and protecting nature, it is not only that we do it because of our duty towards nature, but also we do it mainly for the purpose of human welfare. The reason is that protecting and respecting our environment is ultimately based on the consideration of human welfare.

The second problem deals with the central problem of environmental ethics, i.e., the protection of nature. Environmental ethics is the code of behaviour which ensures human progress without jeopardizing the ecological balance. Man has to learn to live in harmony with his fellow beings. But that is not enough. He has to be in harmony with nature, animate as well as inanimate. Man should take care of nature and do nothing which is not sustainable economically as well as ecologically. Man is a part of nature and he has no existence outside nature.

The present environmental crisis has accompanied the progress in science and technology. Hence science and technology opens multiple options which need a strong value system to control the choice of options. If one wants to control technology one needs a strong value system. Technology becomes disastrous when it is adopted by a society with a weak value system subscribing to very little sense of collective welfare. Science and technology is value neutral and cannot be called upon to decide between preferable and pleasurable to them. Science can tell us what can be done and what cannot be done but it certainly cannot tell us what ought to be done. That decision falls within the realm of ethics. It deals with the moral principles, moral duty of man, and with the question of right and wrong, standards of conduct, etc. Ethical values and jurisdiction provide the framework as well as the basis for human action. When these two coincide the results are optimum from all the spheres. Laws and rules are followed only if they are rooted in the cultures and ethical values of the people. Hence if environmental protection laws and policies are based on the moral ground then it will definitely help in a better way to protect nature. Our second problem tries to show how deontological, utilitarian and virtue ethics help in conservation of nature as the base of environmental protection policies. Therefore, more and more international and national laws are tending to conform to the ethical valuers that protect the nature without jeopardizing the right of the people to use nature for survival. For example, fundamental rights in USA include the right to clean environment. In India we have put it as a fundamental duty, i.e., duty to protect and improve the environment (1976-2nd amendment of the constitution providing for environment protection as a fundamental duty of a citizen). It is based on the deontological value of nature because it is only a duty to protect nature for the sake of duty towards nature. Similarly there are many other environmental acts which are based on the utilitarian value of nature. For example, 1978- prevention and control of water pollution Act, 1981-prevention of air pollution Act. These acts are made for protection of natural resources because these are useful to us. We need both these basic attitudes to protect nature. These two are not totally different, one is the base of the other. So virtue ethics

does that in which the focus is on the agent rather than the action. For deontologists virtue is purely a trait that can act as a handmaiden to the doing of duty. For utilitarians virtues are traits of character that further helps in pursuing the general happiness. The character of a person is important than the rules or principles to be followed. Hence ultimately everything is based on the human welfare and interest.

Hence we need a strong value system which will help us in solving present environmental problems. It can be done only through individual moral consciousness. It can never be done only through the environmental policies, because policies and laws are only constraints on human passion and greed. Where there is law, there is also violation of law and punishment. It is very difficult to force anything on people, particularly in countries like India which have a democratic system of government. Because of this our environmental policies fail. Yet it is true that environment can be protected through these laws but it can not be done fully. We conserve our environment out of fear of punishment. This is the main reason why our environmental laws fail. It is through moral awareness and action it can be done in a better way. Hence ultimately education can provide an important insight in our dealing with environment. This thought only helped to conserve our environment from the vedic period. Both living and non-living were considered as different forms of the same Divine power. They assigned value to nature intrinsically. Nature has value on its own. Hence education plays a major role in restoring environmental crisis. Man's attitude towards nature depends on the type of education he receives.

These two issues will be discussed in the light of both Indian and western philosophical traditions. In the Indian perspective the enquiry consists of an idea of the concept of nature in all schools of thought with special reference to Jainism and Buddhism. In the Indian context it is also seen that the important concepts such as *dharma*, *karma*, *sarvodaya* and *satyāgraha* have an important role in establishing good

relationship between human beings and nature. From the western perspective all these issues will be discussed from the point of view of the three ethical traditions such as deontological, utilitarian and virtue ethics.

In the first issue the three aspects together will form the normative study of environment. In relation to environment these approaches are neither mutually exclusive nor alternative. They are, on the other hand, complementary forming a holistic approach to nature. The second issue deals with different moral bases of environmental policies. This is ultimately based on human welfare. At last we have said how education plays an important role in providing a proper insight in respecting and protecting nature.

In the light of our introductory remarks regarding ethical issues involved in environmental studies, we give a brief description of the structure of our enquiry undertaken in the present study.

The Structure of the Thesis

The second chapter discusses the relationship between human beings and nature. Is human being a part of nature? Or is nature separate from human beings? Here we have suggested two main approaches to the above questions. The first one is materialistic-technological and scientific approach. This approach says human being is superior to nature. The second approach is a unified approach to nature. Here we try to show that man is part of nature and they both complement each other.

The third chapter goes into the debate over the questions concerning the deontological perspective of nature i.e., the intrinsic value of nature. We discuss the questions like: Does nature have value in itself, excluding its usefulness for human welfare? Or does nature have intrinsic value whether only with respect to some of its parts or as

a whole? That is, or does nature have intrinsic value only with respect to living beings or does it also include non-living entities? This chapter is divided into two parts based on the above questions. The first part is concerned with the biocentric outlook of the deontological value of nature. The biocentric theories ascribe the intrinsic value to nature in so far as the living beings are concerned. In this context we discuss the theories of Albert Schweitzer's "reverence for life" and Paul Taylor's "biocentric egalitarianism". These are the theories that say all life possess of intrinsic value. This part mainly focuses on Taylor's theory of respect for nature. The second part discusses the ecocentric outlook of nature. This approach towards nature is based upon the assumption that all life is interdependent and human beings are parts of a wider whole. It gives value to the systems such as species and ecosystems. In this part we have discussed Aldo Leopold and J. Baird Callicott's land ethics and deep ecology of Arne Naess.

In chapter four we discuss the value of nature only as an instrument of human welfare for life support. Here we will be preoccupied with some of the issues regarding whether nature has any interest or significance as such independently of human concern.

The virtue ethics perspective is discussed in chapter five. Virtue ethics perspective gives us the platform to evaluate our conduct towards the non-human nature in the same way it focuses on non human nature with having the same attitude and inclination. It approaches nature in the same way as it approaches human beings. The way it focuses on human excellence and flourishing. We include this approach because environmental ethics is incomplete and unbalanced without an environmental virtue ethics. It gives us a better interrelation with nature. It is like the classical virtue ethics theory providing a strong self-interested reason for treating other individuals with respect.

In the sixth chapter we try to look at the value of nature and the relationship between human being and nature from Indian philosophical point of view. The Indian philosophical approach towards man and nature relationship is always interdependent. We find the attitude of respect towards nature. According to the Indian philosophical tradition every element, non-living object and living being in the universe is created by the same Supreme Being i.e., *Brahman*. Therefore, man has no domination over nature. Indian philosophy, thoughts, values and ethics always have reverence for all that which exists in nature.

It may be specially mentioned here that in the seventh chapter of our thesis we have shown how the three approaches to nature can be combined in order to study the value of nature in its three aspects. In this way these three approaches turn out to be complementary. All these theories primarily agree on the point that nature has value. The value of nature makes it worthy of moral consideration. In this connection we have specially elaborated the idea of complementarity by discussing the relationship between environmental ethics and environmental law. In this context a claim is made since all environmental policies are based on the instrumental value of nature and most of them are not fully effective in preserving nature. We may thus hold that the policies could be based on deontological values then we can preserve nature in a better way. Hence "respect" is the concept with which all the three theories agree upon. If the attitude of respect can be cultivated in people then the result would be definitely positive and constructive in our approach to nature.

The conclusion of the thesis as drawn in the last chapter is that, through education we can cultivate the attitude of respect towards nature. This will enable us to see in what way the attitude of respect for nature could be an instrument for protection of nature. In this connection, we have taken help from O.P Dwivedi's idea of basic principles and environmental codes on the basis of which, as he argues,

environment can be better preserved. He has also suggested certain guiding principles for environmental management. The environmental codes are voluntary instruments and they require support from governmental bodies. Hence human beings can become good stewards of nature with the attitude of respect for nature.

CHAPTER-II

Man - Nature Relationship

Introduction

Research in the field of environmental studies reveals that human is part and parcel of his environment. He cannot exist apart from it. Besides the four elements, (air, fire, earth, and water) animals, humans, trees, plants etc., all of them combine to make ecology. Nature keeps its balance with each and every part of it on its own.

Environmental ethics is concerned with the moral relations that hold between humans and nature. The ethical principles which govern this relationship between human beings and nature, determine our duties, obligations, and responsibilities towards the natural world. It is an universalized code of behaviour that produces an ecologically sound development process. In the past each culture had its own environmental code to maintain a harmonious relationship between human and nature ensuring continuing material and cultural enrichment of the society. However there is a radical change is noticed in the post-industrial era. Earlier values towards nature were thus replaced industrialism and consumerism. This results commercialization of both man and nature. Man became a factor of production, and nature as a resource for exploitation. The production of farms and factories increased but at a great ecological and human cost. Science and technology have given an enormous power in the hands of man. But, without a moral code of conduct, its creative potential has remained inactive. Therefore, the possibility of an autonomous environmental ethics would be realized only when man grants moral standing to all living entities other than humans.

Some of the philosophical traditions of both Western and Indian believe, in the oneness of nature and human. Nature and humans are of the same origin and like humans nature too is alive and intelligent. Nature is divinized and humanized. The distinction between man and nature thus appears superficial at the behavioural level.

The main focus of this chapter is to discuss the relationship between human and nature. In this chapter the human and nature relationship is discussed. Here we discuss, what is the relationship between human and nature? Is human a part of nature? Or nature is totally separate from human? Various philosophers and philosophical traditions have suggested various alternatives. Here we have suggested two main approaches to the above question. The first one is materialistic- technological and scientific approach. In this approach we discuss how man is superior to nature. The second approach is a unified approach to nature. Here we try to show that man is part of nature and they both complement each other.

Materialistic-Scientific and Technological Approach

From ancient times on wards there have been constant attempts made by philosophers to understand the nature of relationship existing between human and nature. We start with Pre-Socratic philosophers. They are called "Investigators of Nature". The general tendency of pre-Socratic philosophy is that is seeks to find a principle of the explanation of nature. To search for such a principle becomes natural because these philosophers find that it is nature with which they encounter first. It is the one which is immediately given in our perceptual field. This is how it first attracts the sprit of inquiry. Nature is an organized physical system governed by law. It is constantly is rearranging, changing and renewing itself in a patterned way. But the question is what precisely is it that is renewing itself and yet still continuing to be what it was and what it is? The seasons, vegetations, and things in general come and go and comeback again in a new form. The universe continues to be as it is despite any change. It is reflected in the pre-Socratic thought that under

all these changes and transformation of forms and in the presence of multiplex phenomena there must be a fundamental principle. So what is this principle? Or more precisely what natural element is the basic element? Different answers are given by pre-Socratic philosophers. We start from Thales.

Thales holds an important place in the history of philosophy because of the philosophical question he raised. He is the first one who asked the question regarding the interpretation of nature. He suggested that the fundamental reality which is ever changing but still renewing itself is "water". This is the first primitive ground of all things. All comes from water and all returns to water.

His hypotheses must have led by the observation that moisture constituted the germ and nourishment of things generates heat. In general, it is the formative, life giving and life possessing element. Hence, water is the construction material which is forever changing itself and recycling and renewing itself in nature.

Anaximander hold that the primal substance from which all things come is the "unbounded", and the "indeterminate". Indeterminate reality is not particularly this or that. It is not any definite substance such as earth, air, fire or water. It is the compound of all contrary elements. It is neutral in the cosmic strife which exists between the elements i.e., earth, air, fire, and water. All things originate from it and return to it.

Anaximenes suggests that the fundamental, boundless, and self-changing substance in nature is air. All things are formed from air through the process of condensation (water, earth, and stone) and rarefaction (fire). This is the same as when contemporary astronomers speak of our universe as originating in hot gases. The earth itself was formed through the condensation, together of air. Air is the principle of life. Life is warm breath. The fact of the air surrounding the whole world and of the breath being the condition of life, seem to have led him to this

hypotheses. Breath and air surround the whole universe and hold it together. Air or gas can take any form by condensation or expansion. Pythagoras says that all things are numbers. All things are made of numbers, points, lines and surfaces. These numbers give the measure of each thing. Numbers can account for the wide range of different natures of different things. The order and harmony of the universe is explainable in terms of numbers. Numbers constitute the essences of things. Number is the key to nature.

Permenides says that nature is uncreated and imperishable. Being or nature did not come out of that which is not, nor will pass away into that which is not nature. For him being is and always is. It is immovable, it does not change. It cannot be added to. The being is always completely what it is. It is one, and it is evenly distributed. It cannot be more here and less there. It is not unlimited. It is bounded and limited on every side.

Heraclitus says all things pass, everything flows on and nothing remains. Everything is in a state of flux. All is becoming. Matter is ever moving, changing and developing. All things are one. The cosmos is an ever-living fire, there is unity in diversity and identity in difference. Heraclitus accepted the fact that there is a plurality of interdependent beings in the universe and that the whole of reality is both one and many. Reality changes, it becomes other, but it does not change into another. Reality is always what it is. Therefore, there is unity in the diversity, just as there is diversity in the unity.

Anaxagoras taught that there are many ultimate units or wholes. These ultimate units or wholes are such as gold, silver, iron, tin and organic materials such as wood, ivory, cotton, and so forth. When these wholes or units cut into parts, they become smaller units of the original units. But these smaller unites are qualitatively same as the original units. In any concrete object of our experience there is an intermingling

of many qualitatively different particles or units. But among all, there is only one particular kind of particle which predominates. Therefore, there is a mixture of all things in everything. New products are merely new mixtures or combinations of the pre-existing ultimate units. Changes in the world can be explained in terms of the intermingling and separating of these indestructible materials or particles.

Anaxagoras said that, in the universe an omniscient entity called mind is present. Mind as a reason of some kind underlies the movements of the cosmos. Mind is infinite and self ruled. It is the finest and the purest of all things. It has all knowledge about everything. It is present in all living things and is the same in all.

Democritus held that all things are made of atoms. The atoms are physically indivisible. They were not created, and they are also indestructible. Each physical object is an aggregation of several different atoms. The cosmos originated from the movement of atoms. Due to this movement world generated.

The pre-Socratics viewed nature as an organized cosmos. Their emphasis is certainly on nature. In the different doctrines of the pre-Socratic philosophers, we find certain scientific hypotheses of various kinds as solutions to the problem. Some of the answers are materialistic. Some are mechanistic, and some are deterministic. Heraclitus had emphasized the dynamic, ever-diverse oneness of being. But Parmenides had emphasized unchanging being. **Democritus** presented deterministic account of the changes occurring in the universe in terms of a random mechanical intermingling, interlocking and separating of different kind of material atoms. This study of pre-Socratic philosophers shows certain influence on our modern environmental thinking. Following we discuss that.

The Influence of Pre-Socratic Philosophy on Environmental Thinking

In the preceding discussion we saw the Pre-Socratic Philosophers interpretations on nature. It is evident that Greek philosophers approached natural phenomena in a very different way. This philosophy was concerned with speculation about the natural world. The attention was on biological matters such as water, air, atoms and so forth. It also prepared the way for the attitudes towards nature, i.e., the attitude that is incompatible with modern environmental thinking. It prevented the development of an ecological perspective. It discourages the aesthetic appreciation of the natural world. It also promoted a conception of reality that made the idea of nature preservation conceptually difficult. In this context we will only discuss some of the issues related to their ecological perspective that considerably influenced us in our attitude towards nature.

(a) The knowledge of ecological relationship is not knowledge.

The pre-Socratic philosophers do not consider the knowledge of understanding of ecological relationships in nature to be qualified as knowledge proper. For them the objects of knowledge are believed to be permanent, eternal, and unchanging like the ultimate objects of reality. But in contrast the ecological relationships are concerned with the objects that are impermanent, perishable, and in constant state of change. Therefore, the understanding of such objects may be rightly characterized as good opinion but not knowledge.

(b) The structure of the world is rational.

The Greeks thought that only by reason we can know about the first principles. They believe that we deduce all other knowledge from the ultimate first principles by reason. They say the world has a rational structure. Therefore, they discourage an ecological awareness of the world by firsthand observation by sensory organs. Sensory organs are hindrances to the existence of reason.

A good example of this rational approach is found in Greek conceptions of earth, air, fire, and water. The Greek philosophers frequently discussed these phenomena and attempted to investigate their interrelationships. These Greek philosophers were not really interested in these phenomena. But they were not really interested in these phenomena as the ultimate substances or elements. As they always thought matter is something outside immediate experience, and therefore their study is always a suspect. In other words, the study of the physical elements in nature is considered as superficial, peripheral and consequential. The study of the physical elements in nature is perceived through the sense. Therefore, it is superficial because knowledge can only be drawn by reason.

(c) The rational structure of the world is simple.

The structure of the world is simple and this assumption encouraged the Pre-Socratics to ignore the complex relationships among the members of the environment. This contributed to the development of a method of investigation, i.e., the reductionist method. The method is concentrating on parts in isolation from the complex whole. The idea on which the reductionist method is based is the complex interactions and relationships which could be broken down into a series of simple one. This approach is essential for the development of the scientific method and discoveries of physics and chemistry. But this approach is not suitable for ecological investigation of the world as a whole. As we know today almost all ecological interactions and relationships are too complex to be studied in isolation as simple and independent parts.

An ecological perspective is impossible with the pre-Socratic Greek philosophers approach i.e., with their search for a rational structure. The Greek method of inquiry involved a step by step deductive procedure. These philosophers focus on relationships that are necessary and universal. Then all kinds of relationships cannot be other than the above kinds, i.e., necessary and universal. Therefore, they are true in all times and places. This kind of relationship can be discussed in deductive arguments. Deductive arguments are true always irrespective of their circumstances. But most of the ecological relationships are not like this. The ecological relationships are the products of a specific evolutionary history. The process of evolution could have happened in many other ways and therefore, they are contingent and accidental. They are dependent on the circumstances. Such kinds of ecological relations cannot be discovered by the use of reason alone. We need extensive observation and experimentation. The Greeks do not believe these approaches.

The Pre-Socratic philosophers do not have an eco-friendly approach towards the environment. There can be no relationship established between human and nature. Nature is irrational and unintelligible and only human beings have reasoning capacity. With this account we now move to the discussion on the influence of modern philosophy on environmental thinking.

The beginning of the seventeenth century which we call modern era has been dominated by scientific worldview. According to this world view human is regarded as the central player. In 1687 the old idea of the universe faded with the publication of Isaac Newton's book, *Philosophiac Naturalis Pricipia Mathematica*. The Newtonian view of matter as inert substance formed roots to western thought and culture. Industrial revolution had its bad direct consequence on western thought and culture. The impact that it created was bad. It is true that technological development created a new confidence in man. But the darker side of this turning point was the disintegration of a coherent cosmology and the danger of a catastrophe. Machine age started and earth was altered drastically. Man began to look at himself as the master of nature. Earlier

human being had established a balanced relationship with nature. Human beings were close to nature. However with the rise of science the entire relationship was changed. It became empirical, materialistic and positivistic in nature. Science taught man to use nature as a means to an end and that in turn harms nature directly or indirectly. Human no longer believed nature to be divine. He or she started believing that science and technology was the parameter of development. In this connection it may be instructive to note that this materialistic approach to nature initiated by modern science got, support from the Christian belief on nature. The Christian view regards nature as created by god. Human has been given the authority to use nature for its survival. This provides the ideal conditions for natural science and its associated technology to emerge and to dominate nature. This is the legacy of the "scientific revolution" of sixteen and seventeenth century. Francis Bacon was one among the figures who had the view that human beings stood over and above nature. Nature was there solely for man's use. Nature existed only to satisfy human needs and wants. Darwin's account of natural selection confirms the above view. As Darwin points out, species exist as ends in themselves. If it is so, then it is only natural for man to behave in a manner that helps towards his own survival. In other words, man has the freedom to exploit nature for his proper ends.

As pointed out in the previous paragraph the scientific attitude towards nature has its basis on the Christian attitude towards nature. However, Christian attitude towards nature also makes provision for man's responsibility towards nature. In this context, we can clearly distinguish the two strands that Christianity holds. The one is that the natural world is regarded as being there essentially for man's instrumental use. The other one is that in which we have duties of stewardship to the natural world. In the former view, nature is regarded as something to be exploited for its materials. This is a source of knowledge leading to power and control over nature which is the scientific attitude towards nature. This may be called the materialistic

approach to nature. In below we will give a brief description of this approach by highlighting the different trends and aspects that constitute this attitude.

First, John Passmore, in his book *Man's Responsibility of Nature* (1974), recognizes that the dominant western traditions "denied that man's relationship with nature is governed by any moral considerations whatsoever". In this tradition, the human being is the "despot" who rules nature with arrogance. He/she treats nature as mere wax to be moulded in whatever manner humans' desire wants it to be. There are two possible interpretations of this view about man's domination. First one is that he is an absolute ruler of nature. God has made him the only subject who rules over nature and he can do so as far as he profits from doing so. Nature is not sacred. The second one is that in which human takes care of the living things over which he rules for their own sake. They govern them not with force and cruelty.

Similarly, Immanuel Kant agreed on anthropocentric dominance. His view is based on the fact that only rational creatures are ends in themselves. Therefore, they have intrinsic moral worth and deserve moral consideration. Animals are not rational and consequently not part of the kingdom of moral worth. The rational creatures morally owe nothing to animals. As a result, human moral duties to non rational individuals are simply indirect duties to other humans. As Kant says:

We should treat animals kindly, even though they always remain a means to an end, as exercises that develop good character in humans (Immanuel Kant, Lectures on ethics, trans Louis Infield, Indianapolis: Hackett publishing, 0, 1963, pp 239-241).

Hence, within Kantian Perspective there are clear priorities of rational individuals. Nature, as a whole, is subject to be used by rational creatures, qualified only by indirect duties. Therefore, nonhuman nature is valued only in a functional sense for humans, without any moral standing.

Second, the inherent superiority of humans over other species was implicit in the classical Greek definition of a human being as a rational animal. This definition of human being differentiates humans from all other animals. The capacity of reason was seen not only as defining what is essential and unique to human nature, but also as a mark of special value or worth. Reason gives a kind of nobility and dignity to humans that is lacking in creatures without reason. Within human nature it is the reason that controls and gives order to the passions and desires of the animal side of human nature. Thus, the very function of reason places human beings in a higher position than other non-human beings. As the master of our animal nature, reason enables us to live on a more superior place than other animals.

The philosophical outlook of classical humanism is linked up with the idea of the human good. That is it is linked up with the essentialist definition of humans as rational animals. Man is living a fully rational life in the realization of our truly human potentialities. Thereby we achieve our highest goal or true good. Reason guides our conduct in choosing means and ends. It is inherent in our nature to pursue this rational good. Hence, our superiority over non-rational beings is inherent in our essence. It is the very essence understood as reason that makes us human.

Third, the chief historical roots of the idea that humans are inherently superior to all other living things are found in the concept of the great chain of being. This is the concept that shaped the whole metaphysical outlook of the middle ages. The great chain of being is the view that every existing thing has a certain place in an infinite hierarchy of entities. This chain of entities extends from the most real and perfect to the least real and most imperfect.

This chain begins with God at the top and ends with matter at the bottom. After God, humans are placed in the hierarchy. They are

followed by animals and plants that are hierarchically arranged among themselves. This is a metaphysical or ontological order. All things fall into a continuous degree of inherent worth. This reflects the world of God in which there is every possible grade of existence and value. This shows the very superior place of human beings above all other nonhuman entities.

The major historical source of the idea of inherent human superiority may be traced back in Descartes, particularly in his theory of mind-body dualism. According to this view, human beings are superior to animals and plants because humans have souls or minds as well as bodies. But animals and plants are only bodies. It is the human mind that gives us reason and freewill, without which we would be nothing but automata, i.e., mere physical mechanisms. Animals are precisely that since they are only material substances. Therefore, they have only the properties of matter such as, extension in space, motion, rest, size, shape, and weight. Hence, animals and plants, are therefore, essentially, not different from inanimate objects. Their being alive only means that certain complex processes such as, metabolism, reproduction, and growth etc. take place in them. They remain physical things and incapable of conscious experiences. Because they are devoid of conscious experiences, they can be treated like machines. Human beings belong to an entirely different category of entities. A person is a physical body plus mind. The mind gives direction to the body whenever a person performs an intentional action. The mind also possesses the powers of thought, imagination, and moral judgement. In fact, the mind includes all the variety of conscious experiences about which mind is immediately aware such as having ideas and images, feeling pleasures and pains, emotions and desires, perceiving colours, hearing sounds, remembering past events, and so on. It is our minds that differentiate us from all other living things. At the same time it is our minds that enable us to exist to the level of conscious awareness. Thus, it is the fact that we as human

beings have minds as well as bodies that accounts for our inherent superiority to animals and plants.

Fourth, the dominant scientific view of nature in the modern period is called reductionist materialism. On this view nature is a machine. It has no values and no purpose. Human beings have ends and act in the light of mere objects, i.e. matter in motion.

All kinds of alteration we do with nature with the help of science and technology may be claimed to be the result of certain underlying philosophical ideas. This can be seen historically from the time of the pre-Socratic philosophers who consider nature as something irrational, unintelligible and objective. This gives rise to the idea that nature can be exploited for the benefit of man-kind. The ideas like (as discussed earlier) the essentialist view on man, the idea of great chain of being, mind-body dualism of Descartes, and reductionist materialism make materialistic-scientific and technological approach towards nature possible. All these ideas show that man is superior to nature and he is different from nature. The impact of this idea is far reaching. It leads to of such crucial theories me development like possibilism, anthropocentrism and shallow ecology in environmental studies. In the later part of our inquiry we will go into these theories in detail. Presently, we will give a brief review of these theories with a view to show how the materialistic approach to nature has dominated our thinking in environmental studies. But these theories would be discussed in a very broader way in our further chapters.

According to a view called possibilism man dominates nature and acts according to nature. He can bring alteration in it and therefore, is more powerful than it. This theory believes that even though man is governed by nature, man has the power to alter it according to his purpose. He uses nature to fulfill his needs. He conquers natural forces

and converts them to make them beneficial for him. Hence, this view says man can fully conquer nature.

The fundamental anthropocentric assumption is that only human beings can have direct moral value. We can value other natural things only in relation to human purposes and goals. Gilbert Pinchot says nature is a resource to be conserved to meet human welfare. The anthropocentric view of nature also could be found in Aristotle's teleological theory of nature. Aristotle believes that everything in nature fulfils a purpose and that the ultimate purpose of nature is a satisfaction of human needs.

Shallow ecology views humans as separate from their environment. Thus it views humans as the source of all value and describes only instrumental value to the non-human world. Humans use the source or ground of all value and he is the measure of all things. It accepts the dominant metaphysics of mechanistic materialism. It also tends to accept the social, political and economic projects of mechanistic materialism. It views humans and their environment as separate entities. It institutes a dualism between man and nature. Man is the centre of value and nature seems to be the other of man and therefore has only instrumental values.

The scientific and technological approach shows that man is separate from nature and he has the freedom to alter and use nature according to his needs. This approach is the main reason behind all kinds of environmental disasters and problems. But there can be a better kind of relationship between man and nature which says that both man and nature are complementary to each other. That is called the unified relationship between human and nature.

Unified Approach to Human Being and Nature

This approach discusses what would be the ideal situation between human and nature relationship. Human being and nature must have a proper relation. There must be the right balance between the two, and only then can man actually progress without harming nature much. The view that either man is the master of nature or nature is the master of man is not proper. Man is blind, selfish, and greedy regarding his own benefits which ultimately harm nature. By doing this he is only harming and destroying nature and ultimately he invites his own destruction. The increase of industries, factories and other infrastructures which involves progress is fast making nature an enemy of man. Therefore, there is a necessity of bringing man and environment close to each other. To keep the ecology in order it is necessary to maintain and keep ecological balance in order. Now human being is careful in protecting nature. Ecological philosophers believe that there is unity in nature. They are searching for that unifying force which binds everything together. Hence, we will be now discussing the unifying aspect of man and nature.

We start with the naturalistic view, A naturalistic view is one which denies the existence of supernatural beings of any kind. In the following we will give a brief elaboration of this standpoint.

(a) We, as human beings, have immense capacity for thought. The ability is much greater than that of any other creature. We are also language users which is unique to the human beings. Among all other creature human beings are endowed with high degree of mental power and capacity. This enables humans to see the far-reaching consequences that follow from the events. These events include even man's own doings and the consequences that he derives from it. We can forecast the possibility of alternative futures and accordingly we act in order to achieve these possibilities. As said earlier we are language users and language plays an important role in shaping our complex nature of our

mental activities. Further, with the help of language we can engage with others in gathering information and making plans. In view of these possessions of mental powers, a question arises with regard to the very conception of human beings, that is, whether human beings can still be regarded as part of nature or independent of nature? The answer may be, - if we accept a Darwinian account of evolution, we are bound to suppose that the powers that we now have are the results of a long series of transformations. Through this process of transformations the brains of pre-humans and proto-humans were successively acquired. We did not suddenly have all the unique capacities. Many of the functions of our brains are similar to animals. So we are continuous with other animals both by similarity and by the continuity of evolution. So difference doesn't mean discontinuity. Hence, we are not apart from nature but a continuity of nature.

- (b) We have intellectual capacities as well as bodily appetites and emotions. All these capacities are integral parts of us. We are very much similar to other animals especially to other mammals regarding our bodily appetites and emotions. So there is a thread of continuity among humans and animals.
- (c) There is another characteristic of humans i.e., their ability to manipulate their environment. With this manipulative characteristic, there is a division between humans and other animals. But it is obvious that there is great difference in the scale of the changes that humans can bring to the environment when we compare it to any other species. The application of scientific knowledge to technology is the cause of this extended ability. This ability is the consequence of the development of the human mental powers. But do these differences put us apart from nature? The answer is no; because, first, other species provide some examples of using tools and building structures. That means we learn it from nature. Secondly, a more fundamental point is that the mental powers that enable us to transform our environment are due to the

highly developed brain that human's posses. The possession of these developed brains is due to the evolutionary development from animal to human. Hence we cannot hold the view that we cannot hold that the human beings are radically different from animal. Thirdly, our ability to control natural force is extremely limited. The natural forces like winds, tides and earthquakes wipe away all constructions of human beings within few seconds during natural disasters. It gives the strongest possible proof that we are part of nature and thus cannot conquer nature fully.

The concept like "ecosystem" is an association of plant, animal populations, and inorganic elements. They are bound together by the relation of interdependence. Each population depends for its existence on other elements of ecosystem. Every species such as living and non-living thing performs its own function in maintaining the system. A human population and its members belong to an ecosystem and can not live in isolation from it. We not only live along with other species such as, plants and animals, but also we have features in common with them. So we are part of the same system of life.

Neo-determinism

There is another perspective on man and nature relationship which is characterized as neo-determinism. It is a perspective which says that neither man is superior to nature nor nature is superior to man. It holds that there is a dialectical relationship existing between man and nature. Neo-determinism constitutes the basis of the relationship between man and environment which it claims ultimately provides the basis of scientific progress. The reason is scientific progress will not be possible unless such a relation exists. This theory is propounded by Griffith Taylor. He says man by his knowledge changes nature to suit himself. For him neither man is the master of the nature nor is nature the master of man. Both have a functional relation with

each other. Man and nature should have a unified relationship for the sake of progress. Humans can increase or decrease the speed of evolution but they cannot interfere with the direction of natural progress and evolution. Neither can human break or change the norms of nature. With this we go to the next approach.

Ecological Approach

This theory is the latest one and perhaps the most easily acceptable one. This view is of the opinion that man is a part of environment itself. The environment is a triangular system where man on one point, environment is on another point and the third point is that of progress, namely economic, social and cultural. Man and environment complement each other. His action is influenced by his experience of nature. His experience of nature and actions alter nature and affect it. If man exploits nature without thinking about the consequences, then, the effect is mostly harmful for human beings only. Excessive use of water, land, and air is causing pollution which seems to lead man to his ultimate downfall. Urbanization and industrialization have destroyed the balance of nature. Therefore, man and his relationship with nature are dependent upon his interaction with nature. The idea of deep ecology is thus proposed in order to explore man's interaction with nature.

Deep Ecology

Norwegian Philosopher Arne Naess is one of the pioneering figures of deep ecology movement that grew in the 1960s. Ecosophy-T is an ecological worldview first mapped out by Naess. This provides an example of his philosophical underpinnings for supporting the deep ecology movement through a holistic approach that is a synthesis of spiritual, political, and environmental values and perspectives.

Deep ecology is a "relational, total field perspective". It rejects the anthropocentric "man-in-environment image". This is a more holistic and

non-anthropocentric approach. As a philosophical movement, deep ecology criticizes the "dominant worldview". As for deep ecologist, the dominant worldview is responsible for environmental destruction. This based on two positions, i.e., ecocentrism and non anthropocentrism. Therefore, their philosophical worldview is holistic and it is not human-centred. It says both human and non-human life on earth has intrinsic value. The value of non-human life is independent of the usefulness. Naess uses the term "life" to refer to the things which biologists may classify as non-living, such as rivers, landscapes, and ecosystems. Deep ecology traces the roots of our environmental crisis to fundamental philosophical cause. The solutions can only come from a transformation of our fundamental worldview and practices. These fundamental questions include, what is the human nature? What is the relation of humans to the rest of the nature? What is the nature of reality? These questions are traditionally identified as metaphysical questions. Deep ecology, therefore, is as concerned with questions of metaphysics and ontology as it is with questions of ethics.

Deep ecologists trace the cause of our many environmental problems to the metaphysics dominant in our prevalent metaphysical thinking. But it is concerned with a metaphysical ecology. The dominant metaphysics is fundamentally individualistic and reductionist. According to this view only individuals are real. This view also sees humans as fundamentally different from the rest of the nature. But deep ecology rejects such kind of metaphysics. It denies that individual humans are separate from nature. It supports metaphysical holism. Humans are a part of their surroundings, not distinct from them. Humans are constituted by their relations to other elements in the environment. For them Environment means both biotic and abiotic constituents.

Self realization plays an important role in deep ecology. For deep ecologists, the underlying self is the self which is one with the natural world. Self- realization is a process of self-examination in which people

come to understand themselves as a part of a greater whole. In this process a person comes to understand that "there is no firm ontological divide between humans and non-humans, i.e., between self and other. It is the process through which we come to know ourselves not as individuals separate and distinct from nature; but as a part of a greater self. In the Indian perspective particularly in Buddhism this unified relationship between man and nature is found very prominently. We now thus go to the Buddhist perspective as a solution to the man-nature dichotomy.

Buddhist Approach

Buddhism is an ecological philosophy. Their view on environment is life-centric, or anthropo-independent. Both subject and its environment have a mutually interdependent and interconnected relationship. The doctrine of "dependent origination" shows that everything in the ecosystem is equal in value, as everything is related. There is a continuous chain which holds everything in nature in a single thread. All living beings and non living things have equal dignity and intrinsic value. Human is a part of nature and therefore, no sharp distinction can be drawn between human being and his surroundings. For Buddhists everything is impermanent and subject to the same natural laws. All the factors of existence including human being are interconnected by the law of causality. Human and nature are bound together in a reciprocal causal relationship. Change in one necessarily brings changes in the other. Therefore, human being is a part of nature.

Buddhism provides all the essential elements for a relationship to the natural world characterized by respect, humanity, care and compassion. Buddhism is ecocentric rather than anthropocentric, because it views humans as an integral part of nature. It is unlike the traditional western tradition that presupposes the priority of the individual from the whole. A Buddhist approach does not separate the individual from the whole because the individual is understood as existing within the ontology of interdependence. In Buddhism reality is both, as individual and as a whole. This relation is interpreted and understood in terms of interactive and interconnected process. In Buddhism there is no definitive hierarchy between individuals or between the individual and the whole. It says particular individuals are different. But they are not separate from each other and from the whole. The oneness of reality is seen in and through the parts that make up the whole. It's like the parts of an organism which are distinguishable, as head from feet or hand from leg. But all parts are interconnected as the organism. Hence, reality is like an organism where one can differentiate particular individuals within the organism. But ultimately all parts are interconnected within the same reality. So both the parts and the whole have integrity. Therefore, they are subjects of moral consideration. Therefore, in Buddhism man and nature relationship is based on unity and interdependence rather than on subject-object duality. Through this kind of approach the orientation to the environment comes down to the dominant species to the member of a community. This kind of approach also helps us to see humans as part of a process rather than any differentiation. Buddhism transcends the separateness from nature and instead, identifies with the welfare of all beings. There are similarities between deep ecology and Buddhism. Deep ecology acknowledges its dependence upon Buddhism for conceptualizing "self realization". Hence, Buddhism offers some insights for the problem of man's relationship to the environment.

Starting from the Pre-Socratics Philosophy to the twentieth century philosophy there is differentiation between nature and human beings. They placed human beings at the top of the hierarchy and gave immense power in the hands of the human beings. This particular attitude created a demarcation between human beings and nature. In the late twentieth century environmental problems started and all scientists and social scientists tried to solve this problem. There comes

the part of the philosophers who tried to do their share in order to help all other people in solving environmental problems. This is how environmental ethics came to existence. Through the theories like deep ecology, and bio-centric ethics philosophers tried to change the human attitude towards nature into nature-centric one. This attitude brought out the equality of both nature and human beings.

CHAPTER-III

The Value of Nature: Deontological Perspective

Introduction

In this chapter we debate over the questions concerning deontological perspective of nature, i.e., the intrinsic value of nature. In this discussion we will go into the questions like: Does nature have value in itself, apart from its usefulness for human welfare? Does nature have intrinsic value in some of its parts or in its existence as a whole? Does nature have intrinsic value of living parts only or does it include nonliving entities also? All these questions regarding intrinsic value of nature include two important theories. These are biocentric ethics, and ecocentric ethics. Hence we divide our chapter into two parts. Part one is concerned with the biocentric out look of the deontological value of nature and the second part would discuss the ecocentric outlook of nature. The biocentric theories ascribe the intrinsic value to nature in so far as the living beings are concerned. The ecocentric theories regard the intrinsic value of the nature as a whole including the nonliving things also. Before going to the above mentioned discussion we need to know what exactly is the intrinsic value of nature.

Intrinsic Value of Nature: A Conceptual Clarification

There are many debates regarding the intrinsic value of nature starting from the very beginning of Greek philosophy. Greek philosopher Protagoras said, man is the measure of all things. Humans are only the valuer of all things. They even measure what they are in themselves. In the case of environmental problems only human beings can evaluate what is going on in the environment. They can deliberate about what they ought to do to conserve nature. When humans do this they adopt certain measures and take steps accordingly. All other beings such as animals, organisms, species, ecosystems, and the Earth as whole cannot teach us how to do this evaluation.

The question is what is intrinsic value and where does it exits? Does it exist independently in nature? Or it is the human being who ascribes such kind of value to nature? Most philosophers insist that there are "anthropocentric" or "anthropogenic" values in nature which means values in nature are always anthropocentric or human centered that are generated by humans. As for Bryan G. Norton,

Some of the environmental ethicists look for a value in living things which is independent of human valuing. Therefore he says they have forgotten a most elementary point about valuing anything. They have forgotten that, a conscious valuer always values something and only humans are conscious valuing agents.

This delivers, as, Norton believes, in an objective world where human beings are the only agencies who have the capacity to ascribe value to things which are both living and non-living and human and non-human. There is nothing like intrinsic value existing in natural entities independent of human beings.

J. B. Callicott has a similar kind of view regarding the value of nature. He also says that only human being can value anything. All intrinsic value attached to nature is grounded in human feelings. The values that are grounded in human feelings are projected on the natural objects. Intrinsic value of anything depends upon human beings to value. Therefore value depends on human sentiments. We, human beings, place intrinsic value on natural things, but there is no value in nature prior to human valuability. Value is human construction when the agent interacts with nature. But it is not something discovered from nature. So there is no value independent of the evaluator and therefore, it is dependent on human beings. The idea that values are dependent on humans does not mean that values are our subjective constructions. Values by themselves have certain objectivity. However no ascription of value is possible without human intervention. This thought has been very aptly expressed by Pojman in the following paragraph.

The source of all value is human consciousness, but it by no means follows that the locus of all value is consciousness itself.... An intrinsically valuable thing on this reading is valuable for its own sake, for itself, but it is not valuable in itself, that is completely independent of any consciousness, since no value can, in principle.... be altogether independent of a valuing consciousness.... Value is, as it were, projected onto natural objects or events by the subjective feelings of observes. If all consciousness were annihilated at a stroke, there would be no good and evil, no beauty and ugliness, no right and wrong; only impressive phenomena world remain (1989, pp.133-134,147,2001,Louis P.Pojman, Chapter-III, pp-79, Wordsworth).

These philosophers have such view because, according to classical value theory, only humans can value themselves and to others. Nature can not ascribe value to itself. Therefore it does not have intrinsic value. The anthropogenic approach ascribes value to nature only in association with human participation. Human beings are in the centre of concern. We are concerned about the non-human world only if they matter to us. Nature is valuable to us only when it serves us in all aspects. Nature is not able to generate values on its own, nor do plants and animals have any such value-subjectivity.

But an extended value theory of Peter Singer offers a different account of value theory. He says it is not just the human beings but the higher animals can also evaluate. Animals can also value themselves on their own. Even they try to satisfy their preferences such as; a bat collects insects to feed her young ones. This gives evidence, that a bat values the insects and the pub. The wild animals hunt and howl, find shelter, care for their young ones, flee from threats, feel hungry, thirsty, hot, tired, excited and sleepy. They suffer and lick their wounds. These wild animals live their own life because they have a purpose on their own. Here, we can say non-human beings value things instrumentally. They seek other animals, plants and insects for food. But do they value anything intrinsically? We can say an animal values its own life intrinsically. The deer value its own life and because of this it flees from the threat of a tiger.

In the preceding section, we have seen how human and animals value nature for their own use. There is no problem with the valuation of nature as far as it is concerned to humans and animals. They are conscious beings. The problem is with the non conscious entities such as plants. A plant is not an experiencing subject like living entities which have consciousness. But a plant is neither an inanimate object like a stone nor is it a geomorphological process like a river. Hence, plants are quite alive. Like all other organisms, plants are also self-actualizing. When there is available space and resources, plants photosynthesize. Plants are modular organisms, with a meristeam that can repeatedly and indefinitely produce new vegetative modules, additional stem nodes, and leaves. A plant is a spontaneous self-maintaining system, sustaining and reproducing itself. There is something more than mere physical causes. Hence, the tree is able to value itself. So there won't be any problem if we say the tree has a goal of its own.

In the process of natural evolution an organism picks out some distinguishing qualities or characteristics. It picks out those characteristics that are valuable to it and relative to its survival. It is a valuing organism, even if it is not a vertebrate or a human being. These characteristics it picks out by natural selection and therefore these are innate in the organism. It is valuable to the species according to the natural selection process.

The question is as human beings what are we evaluating? We evaluate everything with our adaptive characteristics. In this process of evaluation we consider our options and accordingly adopt attitudes towards nature with conscious reflection. We, ourselves, decide which, how, and why to save endangered species? In this process humans choose the values because they have the capacity to do so. But the rest of the biological world does not have such capacities. The plants and animals are not capable of such abilities. But it does not mean that

value disappears when human beings do not evaluate it. It only shifts to the biological level.

The deontologist environmental philosophers say human beings have special mental abilities to do things. But particularly at this point we can say that humans are only psychologically joining in an on going process in nature. In this process, there is value wherever there is positive creativity. It's a kind of creativity that is present in subjects with their interests and preferences. It can also be present objectively in living organisms. They have an identity over a particular time, because they are self organizing.

Therefore, an object has intrinsic value, when it is valuable in itself and is not valued simply for its use. Hence, the value of such things is intrinsic to them. In this sense a value is found or recognized rather than given. We don't value all things instrumentally. There is something we value, because while recognizing it we recognize that it has a moral, spiritual, symbolic, aesthetic, and cultural importance. We value them for themselves, on the consideration of what they mean, of what they stand for and not for how they are used. Many of our environmental concerns rest upon the intrinsic value of nature. Life itself is intrinsically valuable. It does not matter in what form it exists and it manifests in various ways. Many wilderness areas, scenic landscapes and national parks are valued by many people and they are preserved in the same way as we preserve our national heritage and history like the historical monuments such as Taj Mahal. As mentioned earlier, in the above we have given an account of what is meant by the idea of intrinsic value of nature. With this conceptual clarification we now go to the discussion of the two deontological theories explaining the intrinsic value of nature. Before coming to these, we would like to offer a brief classification concerning their nature and function.

There are two main theories which accept the intrinsic value of nature. These two theories are the biocentric and ecocentric. We differentiate them because the only difference among them is that, the first one is limited to the beings that have life i.e., the biocentric theory. The second one is the ecocentric theory, taking nature as a whole and therefore it takes nonliving entities in to its consideration. Though the biocentric theory does speak about the intrinsic value of living beings it does not explicitly deny the intrinsic value of nonliving things. We can say it is silent on this point. With this clarification we will go to the two theories emphasizing biocentric deontological aspect and ecocentric deontological aspect of nature respectively.

PART-I

The Biocentric Aspect of Nature

Biocentric Ethics

Biocentric ethics refers to any theory that views all life as possessing intrinsic value. The word "biocentric" means life centred. In this respect Albert Schweitzer's reverence for life and Paul Taylor's biocentric egalitarianism are the two notable expels of biocentric theory. We can describe biocentric theory as an individualistic theory because it ascribes intrinsic value to every living thing. We will now go into the discussion of Albert Schweitzer's reverence for life and P.Taylor's biocentric egalitarianism theory. However these two theories though have the same focus they differ in certain respects. Schweitzer's theory believes in the unified principle of individual living things where the personal, "will-to-live" is extended to universal "will-to-live". Schweitzer asserts an interdependent relationship between all living things. Taylor's biocentric egalitarianism on the other hand ascribes equal value to all living things because a non-egalitarian view would give greater value to certain living things over certain other living things. A hierarchy is thus maintained among living beings by non-egalitarianism approach. Therefore the biocentric ethics is different from the traditional ethical theories since it gives importance to life as such no matter whether it is human or non-human. Its main focus is thus directed on the attitudes and character rather than on moral rules. The biocentric ethics in this way may be viewed as non hierarchical in its approach to the natural world.

Reverence for Life

An early version of a biocentric ethics is Albert Schweizer's reverence for life principle. He says modern industrial society is moved away from a world view which connected the goodness of life with the goodness of nature. With the rise of science and technology the society

became industrialized. Due to this, the previous connection between life and nature broke. Nature turned into an indifferent, and value free mechanical force. Therefore, modern science looks at nature as a machine that is governed by physical and mechanical laws. Therefore, nature does not have intrinsic value. Scheweitzer's theory thus seeks to re-establish the bond between nature and human beings. Schweitzer describes his theory of reverence for life in the following way: the idea that all of life is sacred and that we must live accordingly, treating each living being as an inherently valuable "will-to-live".

He begins by citing Descartes' theory of knowledge. He takes a clue from Descartes theory of *I think*, therefore *I exist*, (cogito ergo sum). Descartes established his whole theory of knowledge on the basis of the isolated self. But, in contrast, Schweitzer begins with an abstract form of isolated self with a deeper sense of self awareness in addition to it. The deep self awareness comes from our understanding that all living things are sacred and independent.

Schweitzer holds along with Descartes that *Cogito ergo sum* cannot enter into the ethical realm, because it is only limited to the self. This prompts Schweitzer to formulate a new argument, which is as follows: *I am life which wills to live*, and *I exist in the midst of life which wills to-live*. Therefore all other living beings have will to live. Thus, Schweitzer's biocentric ethics consists in the practice of the reverence for life i.e., all will-to-live. This implies that we should practice the same reverence towards all other living beings as we do towards our own. Hence, for Schweitzer, reverence for life is the fundamental principle of morality. The moral principle is that, it is good to maintain and cherish life, and it is evil to destroy and check life. It means a man is really ethical only when he obeys the constraints which are laid on him to help all kinds of living beings to maintain the ecosystem and he should not harm or injure any living being.

To Schweizer life as such is sacred. A man is really ethical if he tears no leaf from its tree, breaks off no flower, and he should be always careful not to crush any insect when he walks. Hence, for Schweitzer, a proper environmental ethics is an extended responsibility. Human beings should extend their responsibility to protect everything that has life and not exploiting unnecessarily. This is how reverence for life becomes the ethical maxim for Schweitzer's theory. The feelings such as sympathy and love are summed up in the phrase reverence for life. If a person has this attitude towards all living beings then it drives a man towards the responsibility of considering all other lives.

Thus Schweitzer's ethic of reverence for life is not dependent on the question of how far it is capable of development into a satisfactory view of life. He says it arises out of an inward necessity of a will which is informed by reverence for life and self-sacrifice.

He says we should feel the *universal will-to-live experiences* along with our *personal will-to-live*. In this kind of theory, Schweitzer gives primary importance to the attainment of self-perfection, in which man works on his own and acts according to his interval realization without being guided by external agencies. This theory thus tries to establish the connection and interrelation between the individual will and the universal will.

Schweitzer has an important view regarding the relationship between man and non-human animals. He says whenever I injure life of any kind, I should think more. I should be very clear that whether the particular act of injury to any living being is necessary or not. I should avoid that particular act if it can be avoidable. For example, the cases like, testing of drugs on animals. These experiments though injurious to animals are performed with a view to promote welfare of human beings. Here comes the ethical question concerning our duty to animal.

Schweitzer holds that it is the human beings' duty to see whether it is really necessary to sacrifice an animal for the sake of humanity.

But this does not mean that Schweitzer has given some formula or rule to be applied in conflicting situations. He has not made any hierarchy in order to establish the priorities. According to him such a hierarchy would undermine the foundation of the reverence for life. The difficulty to be found here is that it will suggest that some rule or criterion would become more fundamental than reverence itself.

Reverence for life is an ethical attitude that determines who are we? It can never be replaced by a rule prescribing what we should do. It describes a character trait, or a moral virtue, rather than a rule of actions. A moral person has a feeling of respect towards the inherent worth of each life. Reverence for life is an attitude which makes us reluctant to take a life randomly. In doing this, it helps us to live an authentic and moral life.

Scheweitzer did not offer reverence for life as an ethical rule. Reverence for life would be a fundamental attitude that we should adopt towards the world. Schweizer's ethics focuses on the question of what type of person I should be rather than what I should do? This is not an ethics of rules, but it is an ethics of character. It describes morally good people in terms of their character, dispositions, and values rather than in terms of their actions.

Biocentric Egalitarianism

Although Schweitzer tried to explain what is meant by reverence for life, he never provided an adequate justification for adopting that attitude. Paul Taylor develops another theory on the basis of Schweitzer's life-centered system of environmental ethics. He argues that,

Each living individual has a "teleological centre of life", which pursues its own good in its own way, and possesses equal inherent worth. Human beings are no more intrinsically valuable than any other living thing but should see themselves as equal members of earth's community (Pojman, L.P, 2001, P.P. 100).

As a biocentric environmental ethicist, Taylor gives a systematic and comprehensive account of moral relations that exist between humans and other living things. According to him, this relationship is based upon the inherent worth of all life. At the same time he has given a careful defense of why it is good to adopt the attitude of respect for nature. He said the balance of nature itself is not a moral norm but the moral norm should be the attitude of expressing respect for nature. The goodness of individual organisms is considered as having entities with inherent worth. This determines our moral relations with nature. Taylor's explanation and defense of this theory proceeds through a number of steps.

Taylor begins by asking the question what would justify the acceptance of a life-centered system of ethical principles. In order to answer this question, we need to do two necessary things. First it is necessary to make the fundamental moral attitude clear. Secondly, it is necessary to examine the considerations that would justify any rational agents' adoption of that moral attitude.

The above two concepts are essential to have a moral attitude. The first one is the "good" which means well-being and welfare of a living thing. The second concept is about the idea of an entity possessing inherent worth.

The Concept of the Good of a Living Thing

According to Taylor the good of a being means, to put it in his words if we can say, truly or falsely, that something is good for an entity or bad for it, without reference to any other entity, then the entity has a good of its own. The good of an entity thus means it itself can be

benefited or harmed without any reference to any other entity. In simple terms, it means the good of an entity means what it does for enhancing or preserving its life and well being. For example, a person doing physical exercise daily, is good for him without any reference to anything else. The good health is the good of the individual. We can see how the good of a being is connected with what is good for it. In turn the good for a being is something that promotes or protects it. On the other side what is bad for a being is something that damages its good. In other words, to benefit a being is to bring or preserve a condition that is favourable to it and to avoid or prevent that condition that is unfavourable to it.

Now the question is what sorts of entities have a good of their own? Taylor says that we might think that the entities that have interests are having a good of their own. But he says that there are things like sand, and stones which do not pursue ends because they do not have interests. There are entities that have good of their own but they do not have interests. For example, all forms of plants and the simple forms of animal life. Things that happen to all these forms of life can be judged as favourable or unfavourable. At the same time they are not the beings that consciously aim at ends or trying to achieve such ends. They do not have interests because they do not care about what happens to them.

Here Taylor brings a distinction between, an entity having an interest in something and something in an entity's interest. He makes this distinction in order to clarify the point regarding the possibility of having a good occurring in an entity's life on its own independently of the entity's interests. The distinction made here is for the being's interest that benefits it. However, we may note that the being itself might not have any interest in it. This condition also applies to the entity, such as, stone that has no interest at al. For example, in order to know whether something is really in X's interests, we do not find out whether X has an interest in it. We only enquire whether the thing in question will further

the overall wellbeing of X. We ask the question, does this promote or protect the good of X? This is an objective matter because it is not determined by beliefs, desires, feelings, or conscious interests of X.

In contrast to what is said above human beings have a notion of good of their own because they are consciously aware of what is good for them. From earlier discussion we know about the entities such as inanimate things, plants and lower forms of animal life having good of their own. In case of inanimate things they do not have interests at all. All forms of plants and simple forms of animal life have good of their own and yet do not have interests. Now the question arises: In the absence of interest can non human animals be still considered to be possessing a good of their own? The answer is yes they do have a good of their own. The reason is that they have good of their own because of us. As Taylor puts it we humans ascribe certain objective nature concepts to these categories of life system. This position is distinct from the position held by human beings. Human beings acquire the good of their own due to their capacity to form a system of subjective values. This is possible as Taylor argues that human beings have a subjective nature apart from their objective nature.

In view of this, Taylor proposes that there are two fundamental principles in applying the concept of entity's having-a-good- of-its own. These two fundamental principles are (a) all animals, however, dissimilar to humans they may be, are beings that have a good of their own and (b) all plants like all other wise beings have a good of their own.

The question arises at this stage is, how does we as human beings can take the standpoint of animals and plants, and say what is good for them or not? How does it possible to make objective judgement regarding what is desirable or undesirable from the animal's standpoint? The answer is yes we can do it. For example, as far as we do not have any information regarding a butterfly's life till then we may hesitate to speak

about the interests and preferences of a butterfly. We may also deny that it values anything on its own for its own sake. But once we have information regarding it or we come to understand its lifecycle and know the environmental conditions for its survival then we do not find any problem in speaking what is beneficial and harmful to it. So we can take the standpoint of the butterfly and tell that, it has a good life.

According to Taylor, taking the standpoint of non-human living things and making objective judgments from that standpoint is one of the central tasks of the ethics of respect for nature. Once we come to know what is good or bad for an organism or plant which we see it from the standpoint of their own good then we can make value judgments from the perspective of the organism's life. Hence from this we can conclude that all plants and animals do not have interests in the sense of having conscious aims and desires like human beings.

According to Taylor the particular conditions that make the context of an animals or plant's good is dependent on the kind of animal or plant it is. The well being of one species is different from another. So the species-specific characteristics are the basis for the organism's good.

The species specific characteristics are the cellular structure of the organism, the internal functioning of its various parts, its external relations to other organisms, and to the physical and chemical aspects of its environment. It is important to learn how the organism develops, grows and sustains its life according to the laws of its species specific nature. Unless we understand this we cannot understand what promotes its good and what prevents it from its good.

Now the question arises, whether the concept of good is only applicable to the individual organism or to the whole species-population? According to Taylor, the good of the species population is dependent on the good of its members.

Again the concept of the good of a being can further be extended to a whole biotic community. A biotic community means a set of organisms that are related to one another and to their non –living environment in various ways. The good of a biotic community is dependent on the good lives of its individual members. But what promotes or protects the individual organism may not promote or protect the good of the community as a whole. What harms an individual organism may not do harm to the biotic community. It may actually benefit the biotic community. For example, the predator-prey relationship in a well functioning ecosystem.

According to Taylor the concept of the good of a being is applicable to all living things. Directly it applies to the individual organisms, species populations and biotic communities. Now we turn to the second concept, i.e., the concept of inherent worth.

The Concept of Inherent Worth

To have the attitude of respect for nature requires explication of the concept of inherent worth which means the inherent worth of wild plants and animals. According to Taylor all living creatures- human and non-human have inherent worth. This is an extension of attitude towards non-human world which is based on the idea of inherent worth of human beings.

At this point we should not be confused with the concept of the good of a being and the concept of inherent worth. To bring out the difference we need to discuss the logical gap between the fact and value. In this case the fact is that, a being has a good of its own. Therefore the fact that a being has a good of it own claims that it should or should not be treated in a certain way. The first one is the "is" statement and the second one is the "ought" statement. There is a relationship between the fact i.e., "an entity has a good of its own" and the value statement i.e., "moral agents ought or ought not to treat it in a certain way". A moral

agent has to recognize such a relationship, because according to Taylor the entity not only has a good of its own but also has inherent worth. When an entity is regarded as having inherent worth then it has to be considered as worthy of respect for all moral agents. Therefore the attitude of respect is the only suitable and appropriate attitude towards an entity.

An agent's commitment to the attitude of respect for nature comes from the moral norm which says that all living things ought not to be harmed i.e., one should not interfere with nature.

The question arises concerning what it means for an entity to possess inherent worth? According to Taylor to have a clear idea of the concept of inherent worth, we should separate two other value concepts. These two concepts are the concept of intrinsic value and the concept of inherent value.

Human beings give value to things for many reasons. They give value to a thing to achieve certain end. Except this they also place value on certain things even though they do not have any goal to achieve by it. So according to Taylor, when human beings value an event or condition in their lives they directly experience it to be enjoyable in itself, this is called intrinsic value. They value the experience of certain things only because of its enjoyableness. The value of enjoyableness irrespective of anything else is called intrinsic value. It is intrinsically good. It is also an end in itself.

Inherent value is the kind of value we place on an object or a place that has beauty, or historical importance or cultural significance. The value is not given for the usefulness or for its commercial value of that object or place. In this kind of value to destroy or damage an object or a place is considered to be wrong. Similarly to allow it to detoriate because of negligence is also wrong such as, a work of art and an archaeological site. The value of these things is the inherent value irrespective of its

practical usefulness. Taylor says that this kind of value can be ascribed to flowers, trees, pet animals, wild animals and plants. So he says the basis of this kind of value can be aesthetic, historical, cultural, admiration for something and personal sentiments. But one thing we should consider that the inherent value of anything is relative to and dependent upon someone's valuing it. Hence inherent value is dependent upon a valuer. If people do not want to preserve a work of art, or care about it, or admire it for its worth then it would lack the inherent value. This is same in case of all other things. The value of these things is dependent on the subjective valuing of human beings. Their value is inherent only in the sense that they are valued independent of their non commercial importance and practical use.

Inherent worth is the term Taylor used to attribute the value of the entities that has a good of their own. According to him, an entity has inherent worth, means, that a state of affairs in which the good of the entity is realized is better than similar state of affairs in which it is not realized.

The value of an entity is realized in the highest degree in a particular state of affair. This particular state of affair is different from, two another states of affair. These are,

- (a) The value of an object A is valued by a human valuer either intrinsically or instrumentally. In the above process A is valued independent of subjective valuer.
- (b) Secondly the independent value of A is in fact useful in furthering the ends of a conscious being. The value of A is also used in furthering the realization of some other beings good. The other being can be human or non-human, conscious or unconscious.

According to Taylor, a living thing has inherent worth irrespective of any instrumental or inherent value. A thing possesses such worth without any reference to the good of any other being.

According to Taylor, the assertion that an entity has inherent worth is consisting of two moral judgments. These are,

- (a) An entity is to be regarded as a moral subject. Therefore an entity deserves moral concern and consideration.
- (b) All moral agents have a prima facie duty to promote or preserve the entity's good. The entity's good has to be considered as an end in itself.

For example, when we say particular animal has inherent worth then we should respect its existence in nature as a wild animal. We not only respect its existence but also we should see ourselves as morally related to it. We know that all human beings possess inherent worth irrespective of their different merits and demerits. All persons possess inherent worth as persons. Therefore they all possess the same worth because of the personhood. The personhood is the ground of their worth. Similarly the same concept of inherent worth can be extended towards non-human beings. So this consideration would help us to draw four implications in favour of non-human beings. These are,

- (a) Inherent worth is attributed to each and every wild creature. This value is attributed to all entities as a member of the biotic community of a natural ecosystem. Therefore each wild animal or plant has the same status as a moral subject. So moral agents have moral duties towards all entities as moral subject. Therefore there is no superior or inferior hierarchy.
- (b) Secondly, as a bearer of inherent worth each and every entity can never be treated as a mere means to certain human ends.

- (c) Thirdly, it becomes an ultimate end to protect and promote each one's good. This process should be taken for the sake of the good of the being.
- (d) Fourthly, it becomes a principle that all moral agents should consider the good of a being. Therefore moral agents have a duty of respect towards a being. They owe the duty of respect towards a being independently of whether they love it or not.

The above discussion of the concept of inherent worth shows that it is the basis of the moral duty of the subjective moral agents towards the non-human entities. So according to Taylor all animals and plants in the natural world have inherent worth. Now we see what it means to have the attitude of respect for nature.

The Attitude of Respect for Nature

According to Taylor the central tenet of a theory of environmental ethics is the ultimate moral attitude of respect for nature. He says that the actions are right and character traits are morally good if they express the ultimate moral attitude of respect for nature. When moral agents adopt the attitude of respect for nature then they subscribe a set of standards of character and rules of conduct as their own ethical principles.

The attitude of respect for nature consists of a set of dispositions of moral agents. According to Taylor there are four kinds of dispositions. These four kinds of dispositions constitute four aspects or dimensions of the attitude. These are the valuational, the conative, the practical, and the affective dimensions.

The valuational dimension is the disposition for making certain value judgments or judgments of worth. Therefore the valuational dimension of the attitude of respect for nature is the disposition to ascribe inherent worth to all living beings in nature. Therefore this

dimension helps us to think for the good of the living beings. Hence all of them deserve moral concern and all moral agents should preserve the wild living beings as end in themselves for their own sake. So for a moral agent having this kind of disposition implies having one aspect of the attitude of respect for nature. This is the central aspect and all other three kinds of dispositions come from this one.

The conative dimension is the disposition to aim at certain ends and to pursue certain purposes. A person has a set of wants or desires underneath those end and purposes. According to these wants and desires a person is disposed to set goals for himself to achieve the ends. Here again Taylor says that the general ends and purposes of a person who has the attitude of respect for nature are two fold. These are, the purpose of avoiding and interfering with the natural state of wild living things and the purpose of preserving their existence as part of the order of nature. So taking steps to achieve the above two ends involves adopting policies. This also involves practicing these policies to preserve natural ecosystems. Due to this we can achieve a balanced nature. This dimension of the attitude of respect for nature derives from the fundamental valuational disposition. It is because the valuational disposition means considering wild creatures as having inherent worth. Therefore we aim at avoiding the disturbances of natural state of natural beings and we can preserve them as end in themselves.

In the practical dimension of the attitude of respect for nature a moral agent's practical reason is involved. Practical reason is the capacity to think and decide upon certain reasons. It helps us to decide to do or not to do certain action for certain reasons. An agent's capacity of practical reason helps him in making choices among alternative possibilities of action. It also helps in making judgments regarding whether or why an action ought or ought not to be done. As we have already said that the practical dimension derives from the first dimension i.e., the valuational dimension. Therefore the practical

dimension or practical reason is involved in having the attitude of respect for nature. The practical reason gives us the reason for performing or refraining from certain kind of actions.

The affective dimension is the fourth and final dimension. It is the disposition to have certain feelings in response to certain events in nature. This dimension is closely linked with the other three dimensions of valuational, conative, and practical dimensions. A person having the attitude of respect for nature feels pleasure. With this attitude a person feels happiness by seeing any occurrence that maintains the existence of the wild life. In the same way a person feels displeased about any occurrences that harm living things. So a person is disposed to experience these positive and negative reactions because he has the valuational, conative and practical dispositions. So all these positive and negative reactions are pointing out to the fact that all wild living things possessing inherent worth, i.e., valuational dimension. One has to have appropriate ends and purposes, i.e., conative dimension. A person is disposed to act for the relevant reasons i.e., the practical dimension. Therefore the positive and negative feelings show us the affective dimension. All these four kinds of dispositions together constitute the attitude of respect for nature. We now come to the issues concerning how do we express the attitude of respect for nature.

Expressing the Attitude of Respect for Nature

In the above discussion we discussed that what it means to have the attitude of respect for nature. Now we will see how this attitude is expressed in our conduct. According to Taylor, actions are right and character traits are morally good in virtue of their expressing or embodying a certain ultimate moral attitude, which I call respect for nature. We know having the attitude of respect means having certain dispositions. In this regard the conative and the practical dimension are relevant. The attitude of respect for nature is expressed through these two

dimensions. From the conative dimension the moral agent performs actions and intentionally refrains from them in order to achieve the ends which he targets to achieve. From the practical dimension a moral agent performs certain action and refrains from certain actions for the reasons of practical dimension. So moral agent having the attitude of respect for nature means being disposed to act or refrain from the actions because of certain ends and for some reasons.

According to Taylor when people act out of the concern for the good of wild living things, then only they express the genuine respect for nature. So in practical life expressing the ultimate attitude is not to interfere or harm animals and plants in nature. Therefore to preserve their wild status for their sake is expressing the attitude of respect for nature. In this context, Taylor points out that even if an agent's actions may help in doing good to the wild creatures, it still may not be our expression of respect for nature. That is doing good for creatures is not necessarily connected to the attitude of respect for nature. The former can be performed without the latter. These actions are performed not for the sake of the environment but for some other external consideration. The underlying reasons behind these actions are human centered and then these actions are away from intrinsic concern for nature. Taylor mentions another aspect of conduct associated with the attitude of respect for nature. He holds that actions that we perform for the good of the wild nature must be done as a matter of moral principle. The person should know that it is obligatory for him to protect or preserve the integrity of nature even if he does not have any desire to do that. The good of a living being has to be protected as an end in itself and in this way the attitude of respect is expressed. This is the conative dimension of the attitude of respect. Till now we have been discussing how the attitude of respect for nature can be expressed in a person's action. But now we will see how that attitude can be expressed in a person's character.

According to Taylor a moral agent's character has two aspects. These are deliberative and practical. In the deliberative aspect, good character means, thinking rationally about what actions one ought to do or ought not to do. This kind of decision one has to take rationally in situations where there are conflicts and confusions due to non-moral interests, wants, needs, and emotions. So in deliberative aspect a particular virtue becomes the capacity of a person to avoid confusions which arises due to the above sources. The virtue helps a moral agent to be clear about duties, obligation, and responsibilities.

The second aspect of a moral agent's character is the practical element. It means a person of good character is one who has the capacity to act according to one's deliberative reasoning. Accordingly one judges in the circumstances where the person keeps restrictions on his non-moral interests, needs, desires and emotions.

A person's character expresses the attitude of respect for nature in a particular way, where in all situations a person's virtues deliberate to what actions ought to be done and what ought not to be done. So the virtues deliberate a person to act always in favour of nature. Thus good character always expresses the attitude of respect for nature in the sense that the person's good character accounts his actions in favour of the good of nature.

According to Taylor the attitude of respect for nature can not only be expressed in the conduct and character of moral agents but also it is possible to express that attitude in moral rules within a system of environmental ethics. So there is a link between a person's conduct or character and the normative principles that govern them. The attitude of respect for nature embodied in a persons character trait i.e., in virtue. Therefore it is reflected in a person's character in a certain set of rules. The attitude of respect for nature is embodied in an ethical system which is ultimately based on the virtues of a human being. The rules and

standards of a valid system of environmental ethics must be followed by all moral agents. All moral agents must ascribe inherent worth to the wild living things. Thus, the respect for nature may be considered as the fundamental trait which humans must inculcate while approaching nature.

The Attitude of Respect for Nature as an Ultimate Attitude

The attitude of respect for nature is in itself the most fundamental moral commitment. But to justify this attitude as ultimate attitude is problematic. In order to see this problem we have to first consider certain aspects of respect for nature as a moral attitude.

The first thing we have to see that respect for nature is different from the love of nature. Respecting nature is not a matter of personal caring and affection. Personal care and affection is the love for nature. These personal feelings for animals and plants make one to be concerned with the wellbeing of a particular kind of plant or animal. These kinds of caring and concern come from ones personal affection and love of nature. But the attitude of respect for nature is different from the love of nature. It is not a private relationship like love of nature. It is also not a kind of relationship between the person who has the attitude and towards which the attitude is taken.

The above distinction is important for the rational justification of the attitude of respect for nature. It means we should be impartially concern for the well-being of nature irrespective of their attractiveness or unattractiveness. So the fact that a particular species of animal or plant is attractive to us is not a relevant point to our adopting the attitude of respect for nature. Hence taking the attitude of respect for nature is to adopt a set of moral principles and standards as valid ethical norms. The attitude of respect for nature as a moral attitude is adopted by an individual moral agent. A moral agent who sincerely takes it as the ultimate moral attitude should also consider it as an attitude that all

other moral agents should take. Thus the attitude which I adopt for myself, is to take that to be a legitimate and justified attitude for every other moral agent. It becomes an universal attitude.

Hence the attitude of respect for nature is an universal attitude. Its universal aspect is connected with the valuational dimension of the attitude. The valuational dimension is that aspect of the attitude where the inherent worth of living things is not dependent on the subjective interests and ends of humans. Thus a moral agent who takes the attitude of respect towards the living beings also advocates the universal adoption of that attitude.

At this point Taylor makes a distinction between the moral attitude of respect and many other kinds of attitude towards nature. He says there are many other kinds of attitude human beings take towards nature. These are like, the attitude of scientific curiosity, the aesthetic attitude of appreciation for the beauty of nature, and the hedonistic attitude of enjoying the pleasures of the out-of-doors in nature.

Taylor says, the conduct which is associated with these kinds of attitudes towards nature can never override the conduct expressing the attitude of respect for nature. The reason is moral norms always take priority over any other norms. So according to him actions inconsistent with respect for nature can never be justified on non-moral grounds. So he says, all other actions involved in such activities like the pursuit of scientific knowledge, the appreciation of natural beauty, or the enjoyment of out door recreational activities are violating the higher level principle involved in the attitude of respect for nature on the ground that these kinds of actions harm to wild creatures. The scientific, the aesthetic and the hedonistic attitudes are incompatible in many ways with the attitude of respect for nature. For example, scientists may endanger some kind of rare species when they carry out a research project. But it is not necessary that each and every action involved in the

scientific, the aesthetic and the hedonistic attitude are incompatible with the attitude of respect for nature. So there are certain ways in which we can carry out all these activities without harming nature. For example, we can constrain certain kinds of human activity in ecological sensitive areas such as not allowing any construction of buildings in that particular area. But there are also other examples where the interference and manipulation with nature is compatible with the respect for nature. For example, the process of cleaning a polluted lake or river. This action involves the end i.e., protecting the natural state of the lake or river. So the conclusion we draw from this discussion is that the human interference with the natural ecosystem must be always performed in favour of the attitude of respect for nature. The actions must be performed for the sake of animals and plants in a natural ecosystem and not for the human benefit.

According to Taylor, the attitude of exploitation towards nature is necessarily incompatible with the attitude of respect for nature. We call it the western attitude i.e., the dominant attitude of human beings towards nature. According to this attitude nature is thought of as a vast repository of resources. It is to be developed, used and consumed by humans and human ends. So the exploitative attitude is necessarily in conflict with the attitude of respect for nature. It is contrary to the attitude of respect. So the two kinds of attitudes are in conflict with each other.

Now we turn to the justification of the attitude of respect for nature as an ultimate moral attitude. In order to discuss this we have to make a distinction between two kinds of moral attitudes. These are derivative and ultimate. When we adopt the respect for nature as our own moral attitude then we approve or disapprove of certain policies and actions taken by people regarding the natural world. These approvals and disapprovals of certain actions and policies are based on a set of moral attitude. They are derived from the ultimate attitude of respect for

nature. For example, the government ban on use of DDT and recycling of wastes. If someone approves of these kinds of actions then he has respect for nature in derivative sense. Similarly when someone disapproves the policies which degrade the natural environment then he is expressing the derivative attitude. All these positive and negative moral attitudes are derived from the ultimate moral attitude of respect for nature.

When a person approves some policy or ban in favour of natural world then we say that the person sincerely has respect for nature. The attitude of respect for nature here cannot be explained by more basic and general attitude held by the person. Because the attitude of respect for nature is the highest ultimate attitude on the basis of which a person approves or disapproves some policy. Thus, apart from this attitude there is no other attitude which is fundamental than this. Hence, by being the ultimate attitude it sets the final criteria to show what reasons are good and what are bad with regard to the human behaviour that affect the natural environment. It becomes the universal ground for everybody to approve or disapprove the various ways through which human beings treat living things in the nature.

The Biocentric Outlook of Nature

The biocentric outlook of nature is constituted of four main components. These are as follows.

- (a) Humans as members of the earth's community of life.
- (b) The natural world as an organic system.
- (c) Individual organisms as teleological centers of life.
- (d) The denial of human superiority.

We will now briefly elaborate all these four constituents comprising of the bio-centric view of nature.

(a) Humans as members of the earth's community of life.

As per the biocentric outlook, it is a fact that human beings share a fundamental feature i.e., their existence on earth. They are one among all animal species. Hence, human beings share a common relationship with all other species on earth. This is an essential aspect of the human conditions. But there are so many other differences between human beings and other living species. It is true that we are different from them but at the same time we are related to other species as one among them. Our origin is from the same process that gave rise to all other species. We also face similar environmental challenges which other species confront. The laws of genetics of natural selection and of adaptation apply equally to all of us as biological creatures. In this way we are one with them, not different from them. Each animal and plant has a sense of valuing themselves like us.

(b) The natural world as an organic system

The natural order of the earth is complex but unified. It is a web of interconnected organisms, objects and events. The ecological relationship between all communities of living beings and their environment is an organic whole where each and every entity is interdependent. Each ecosystem is a small universe. It is a woven network of cause and effect relationship among its various species. The systems such as food chains, predator-prey relations, energy cycles are individual networks which are again related to each other. All these structures preserve the equilibrium of the whole earth. The ecological equilibrium must not be destroyed as far as the well-being of humans, plants and animals are concerned. The integrity of the biosphere of our planet is essential to the realization of the good of its constituent communities of life i.e., human and non-human.

The above idea is very important for both humans and non humans. It is the basic condition for the realization of the good of living

things. Our knowledge of this causal connection is essential for adopting the attitude of respect for nature.

(c) Individual organisms as teleological centers of life

Each organism carries out its biological functions according to the laws of its species specific nature. This is the uniqueness of each individual organism. Each organism is a teleological centre of life. It preserves itself and realizes its own good in its own unique way. Both conscious and unconscious organisms are equally teleological centers of life in the sense that each is a unified system in a greater whole i.e., nature. All of their activities are directed towards their preservation and well being.

When we consider and evaluate from an ethical point of view, a teleological centre of life is an entity whose "world" can be viewed from the perspective of its life. We, as human beings, can conceive of a teleological center of life as a being. We can take the stand point of it in making judgments about what events are good or bad, desirable or undesirable. As moral agents we have such a role to play. In making judgments we promote or protect the being's own good. But an entity need not have any conscious interests in what is happening to it. When we take the attitude of respect for nature, those judgments regarding the being are given weight as reasons for our action in our practical deliberations.

(d) The denial of human superiority

This is the most important idea in justifying the attitude of respect for nature. Humans are considered superior to other animals. They have rational thought, aesthetic creativity, autonomy, self-determination and moral freedom. These are the qualities humans have that are higher than some of the animal capacities such as, the speed of a tiger and the vision of an eagle. The point is all these animal capacities are less valuable than human capabilities. But the question that arises is, valuable to whom and on what grounds?

Humans are claiming human superiority from a human point of view. It is a point of view in which the perspective of humans is taken as the standard of judgment. But if considered from the reverse side or non-human side, the level of superiority will be perceived differently. It will go in favour of non-human animals and plants because there are certain special capacities which human do not possess. The idea of human superiority should not be judged from the standpoint of human and the value systems that they adopt.

It is unreasonable to judge non-humans by the values of human civilization. We should judge by the values connected with what it is for a member of that species to live a good life. As we know all living beings have good of their own, so we should judge the merits of non-humans by standards derived from their good.

Humans are superior because they possess the capacities of moral agents. The capacities such as, freewill, accountability, deliberations, and practical reason are those due to which human beings consider themselves as superior. But there are also people who do not have such capacities like a child and a mad person. We do not consider such humans as inferior to other human beings. So animals and plants cannot be said to be morally inferior to humans. All the above arguments were based on the human merits to prove human superiority.

According to another interpretation, humans are superior to nonhumans because humans have inherent worth. All humans have a greater inherent worth than other living things by virtue of their humanity.

In the beginning we have discussed that the inherent worth of an entity does not depend on its merit. To possess inherent worth is to place intrinsic value on the realization of its good. In case of human beings we do not say that, one's inherent worth as a person does not

depend on one's merit or lack of merits. If this is so then why is it applied in the case of non-human plants and animals? Hence Taylor denies the human superiority. He says we should look at our relation to other species in the light of the first three elements of the biocentric outlook. These elements give us a certain overall view of the natural world and the place of humans in it. Humans and non-humans are viewed together as integral parts of one unified whole in which all living things are functionally interrelated.

Finally the third component which focuses on the individual lives of plants and animals, it is evident from its account that each entity is sharing a common characteristic of a teleological center of life. It realizes its own good in its own way. So we can see ourselves as having a certain moral relation with non-human forms of life. We begin to look at other species as we look at ourselves. We see them as beings which have a purpose that they are striving to realize as we do towards ourselves. Accordingly we develop the disposition to view the world from the standpoint of their good as well as from the standpoint of our own good.

Taylor develops the doctrine of species impartiality after rejecting the notion of human superiority. According to Taylor whoever accepts the doctrine of species impartiality, regards all living things as possessing inherent worth. All species have the same inherent worth. This ultimately is an appropriate attitude of respect for nature.

Hence, we can understand that the attitude of respect is rooted in the biocentric outlook of nature. The basic connection is made through the denial of human superiority. Once we reject the claim that humans are superior either in merit or in worth to other living things we are ready to adopt the attitude of respect towards nature.

The Ethical System

We have discussed the biocentric outlook and the attitude of respect for nature. With these two components of Taylor's theory of environmental ethics we need a third component in order to have a complete theory of environmental ethics. The third component is the ethical system which we need for a proper guidance to accept the biocentric outlook and take the attitude of respect for nature. An ethical system is constituted of many rules and standards. So we need to discuss rules of conduct and the priority principles. Then we will discuss the standards of good character and the types of virtues which are associated with the various rules of conduct.

The Basic Rules of Conduct

The basic rules of conduct are the principles which specify different types of duty. The rules of duty tell us about the general kinds of actions the moral agents require to perform or refrain from performing. The rules of duty prescribes that the moral agents are duty bound to perform or not to perform a particular kind of action unless there is a possibility of demand for some other kind of duty.

According to Taylor there are four rules of duty in the domain of environmental ethics. The four rules of duty are (a) the rule of non-maleficence, (b) the rule of non-interference, (c) the rule of fidelity, and (d) the rule of restitutive justice.

(a) The rule of non-maleficence is the duty not to harm to any entity in the environment that has a good of its own. This kind of duty includes not to kill an organism and species population. So here the duty of non-maleficence is understood as intentional abstain. It can be seen as a negative duty in the sense of refraining moral agents from certain kind of actions. In other words the actions which came under such rules benefit a being by protecting and promoting the good of that particular being. So

this rule of non-maleficence prohibits the moral agents from harmful and destructive acts. Therefore it doesn't apply to the behaviour of non-human beings and entities.

(b) The rule of non-interference is constituted of two sorts of negative duties. The first one requires the moral agents to refrain from placing restrictions on the freedom of individual organisms. The second kind of negative duty requires a general "hand off" policy with regard to whole ecosystems and biotic communities and as well as to individual organisms.

The first kind of duty is freedom means absence of constraint. A constraint means any condition that prevents or hinders the normal activity and healthy development of an animal or plant. At this point Taylor has mentioned some constraints such as cages, traps, unavailability of water and food, diseases, ingestion of poison, weaknesses and the incapacities in animals due to injured organs. Constraints can weaken and destroy the ability of the entity to adapt to its environment successfully. Therefore it is said to be free when it is free from all these constraints. Once it is free then the being realizes its good according to the laws of its nature.

We see that we human beings can restrict the freedom of animals and plants by any of the above constraints. The freedom of the individual beings can be restricted by imposing some of the constraints upon them directly. It can be done indirectly also by producing changes in their environment. This works as constraints upon them. So if the moral agents do these things intentionally then they violate the rule of non-interference.

The second kind of duty that comes under the rule of noninterference is the duty to free the wild creatures to live their lives in total freedom. In this case freedom means allowing the wild creatures to carry on their existence in a wild state. Hence this kind of duty recommends the moral agents to refrain themselves from capturing the wild creatures and removing them from their natural habitats.

The rule of non-interference keeps prohibition against interfering with the wild creatures in their wild state. The prohibition means, we should not try to manipulate, control, modify, or manage natural ecosystems. In other words human beings should not intervene in the normal functioning of species population. Freedom means the absence of human intervention in the natural process in which all kinds of wild entities preserve themselves from generation to generation. Hence the duty not to interfere is the duty to respect the freedom of wild organisms by refraining from all sorts of intervention. A second principle is also implicit in the rule of non interference. This is the principle of species impartiality. It is logically connected because, it entails that the human beings should not intervene in the natural course of events to favor the good of certain organisms at the cost of others. So in this light the rule of non interference can be seen to embody the moral attitude of respect for nature.

(c) The rule of fidelity applies only to human conduct in relation to individual animal. The individual animals are in a state of wild and they are capable of being deceived or betrayed by moral agents. The duty that fall under this rule is such as, not to break a trust that a wild animal places in human beings. Human beings should not deceive or mislead any animal capable of being deceived or misled. We should not uphold an animal's expectations which it has formed on the basis of one's past actions with it. We know that we cannot make mutual agreements with wild animals. But we can act in such a manner that we call forth their trust in us. So the basic moral requirement imposed by the rule of fidelity is that we remain faithful to that trust. For example in case of hunting, trapping and fishing the rule of fidelity is violated. In such cases human beings try to deceive animals. They deceive animals with the intention to do harm which is considered bad.

(d) The rule of restitutive justice imposes the duty to restore the balance of justice between a human moral agent and a non-human living moral subject. This essentially implies restoring justice when the agent has done something wrong to the subject i.e., non-human living animals and plants. It may be noted here that Taylor has made a significant distinction with regard to the ethical nature of human and animal. Taylor considers humans as moral agents where as non-human living beings as moral subjects. Since the latter possess certain moral qualities such as inherent worth. However they will remain be moral subjects and not agents because they cannot perform any moral action. Coming back to restitutive justice again, a duty of restitutive justice arises when an agent has broken a valid moral rule. This kind of duty arises in all instances when a person has upset the balance of justice between himself and a moral subject. So to hold a person accountable for having done such an act requires that the person concern must acknowledge the first, wrong doings that he has done and second, the special duty that he needs to perform in order to restore justice. This kind of special duty is the duty of restitutive justice. Further, this kind of duty requires that a person should undertake certain activities in relation to moral subjects in the form of compensation or reparation. In this way only one restores the balance of justice.

The above four rules makes a valid system of ethics. This system of ethics defines the moral relationship between the moral agents and moral subjects. So if a person carries out the duties according to the rules then each and every moral subject also receives proper treatment according to the duties undertaken by the moral agent. The result is no injustice is done to any one.

In the case of violation of duties willingly, the balance of justice is tilted against the moral agent and in favour of the moral subject. In such situation the moral agent has a special burden to bear and the victim is entitled to a special benefit. So to restore injustice the moral agent should pay some form of compensation to the subject.

The four rules of duty define a moral relationship of justice between human and wild living things in all kinds of natural ecosystems. This kind of balanced relationship is maintained as long as humans do not harm wild creatures in any form such as do not destroy the wild creature's habitats, do not degrade their environments, and do not interfere with an animal's and plant's freedom. Human beings should not interfere with any kinds of ecosystem and their interdependency. They should not also betray a wild animal's trust to get advantage from it. In all these ways the principle of species-impartiality is manifested. Therefore they all have equal consideration. In this way human beings express the attitude of respect for nature in their conduct. It shows that all entities possessing of inherent worth.

The above four types of duty are concerned in the ethics of respect for nature. Now we have to see their interrelationship and various degrees in order to show how these four types of duties constitute system of norms. We are now going to see what moral weight is to be assigned to the different types of duty. For this we need certain priority principles.

Priority Principles

The rules of duty provide four sorts of moral requirements for the choice and conduct of moral agents. Thus a rule of duty provides a good reason for or against performing an action. But it does not provide a morally sufficient reason. So a morally sufficient reason is a judgment which says a certain kind of action ought or ought not to be performed by considering all morally relevant properties. It also needs to be compared according to its degrees of priority. The question arises, is how is the degree of ethical importance to be determined?

In order to find out a judgment of morally sufficient reason, we need to first see the sources of conflict among the four rules of duty. In this process we get the priority principles to resolve those conflicts.

There can be conflicts between the acts of fidelity and restitutive justice with the duty of non-maleficence. We have seen in the above discussion that in the attitude of respect for nature the duty of non-maleficence is prior or higher than the duty of fidelity and restitutive justice.

First we would see the conflicting situation between the duty of fidelity and non-maleficence. For example, suppose we have encouraged wild animals to come and live in a park by making a favourable environment for them. By favourable environment we mean introducing certain kinds of rules and regulations that prohibit hunting and the activities that disturb of the wild life. Suppose with the regulation of such kind of activities it lead to an overpopulation of one species. This will lead to the conflict between the duty of fidelity and non-maleficence. The over population of one species would lead to a disorder in the whole ecosystem. Then we might have to remove some members of that particular species from the park to restore the order of the ecosystem. In such case it is necessary to break faith with some of the creatures of the species in the process of not doing harm to other species. According to the duty of fidelity we should not break the faith of the creatures. So removing some members of the species seems to be a justifiable solution to this kind of dilemma. Our respect for nature demands this kind of solution rather than letting the entire ecosystem to be damaged seriously. Hence in such situation the duty of non-maleficence overrides the duty of fidelity.

There is another kind of conflict that arises between the rule of non-maleficence and restitutive justice. For example, suppose there is only one available habitat area as a protected sanctuary for a certain kind of species population which we have harmed in the past. To protect the species we would have to kill some of its natural predators in that particular area. In such case we should not use this method of making restitutive justice to the species population. In doing so we are violating the duty of non-maleficence. In another way we can try to do for the other populations of the same species that exist elsewhere. But according to the duty of restitutive justice we should not favour the given population at the expense of other wild creatures. In such situation the duty of non-maleficence is given priority than the duty of restitution. In such situation we cannot justify the above kind of wild life management where we should try to do for the endangered species population existing some where else.

There are also conflicts between the duty of non interference and the duty of fidelity. We can consider the situations such as, to prevent people from setting fires, throwing out trash, and degrading a forest area. The owners of property have put up a fence around their property, thus they are restricting the movement of some animals who use the area for food. In such instances we are not doing any serious harm to the animals. But they are to some extent constrained by any of these activities. In such situations there is a conflict between the duty of noninterference and duty of fidelity. The rule of non-interference must always guide us in deciding how, when, where, and under what conditions trust should be allowed to develop on the part of animals towards humans. But in some situations like the above mentioned instances human being are confronted with a choice of interfering in their lives in order to keep a trust that has already developed or they have to break the trust and avoid the interference. So the negative duty of non-interference sometimes is preceded by the duty of fidelity.

Taylor says there is no conflict between the duty of non-interference and the duty of non-maleficence. After the discussion of conflicting situations Taylor formulates the priority principles. In this

case of conflicts between the duties of fidelity and non-interference, fidelity takes precedence and the basic principle it provides are (a) no serious harm is done by the interference, (b) a great good is brought about by sustaining the trust, (c) there is no way to sustain the trust without interfering, and (d) the interference is kept to the minimum consistent with these conditions. On the other hand, if any of these conditions are not satisfied by an act of interference, the act is not justified.

In case of the conflicts between the duties of non-interference and restitutive justice, Taylor says it is normally within our power to change the ways of making restitution that do not interfere in the lives of wild creatures. For example, while taking a restitutive measure sometimes we dump of toxic wastes in natural habitat areas. In such situations the places are restricted to the humans but it does not do restrict non human animals. But there can be situations where some constraints on wildlife are necessary to benefit those to whom we have done wrong in the past. In this situation no permanent harm is caused to animals and instead a situation is created which becomes beneficial to them. In this case the duty of restitutive justice is outweighed than the duty of noninterference. For example, the attempt to save birds along with other creatures in a wild life area is done by constructing barriers to prevent them from entering a place where radioactive waste has been leaking into the ground. In this way we are protecting them which mean compensating them for destructing their original habitat due to the building of a nuclear plant.

In the case of conflicts between fidelity and restitutive justice restitutive justice outweighs the duty of fidelity. For example, we may have to use deception, surprise and betrayal in order to trap live animals in the process of restitution to an endangered species. We do such kind of things in order to restitute many endangered species, such as tigers and lions. We have to catch them by using some tricks and this process

is done to save the species. The process of trapping them involves breaking a trust they place on us. Hence this is a direct way of making reparation to the creature's suffering from our own past acts. In this process of attempt to help the endangered species justifies the momentary acts of infidelity which cannot be avoided. So in such kinds of conflict restitutive justice outweighs fidelity.

Hence in conflicting situations among the four rules of duty we have to give priority to some or other priority principle depending on the situation. Taylor says the rule of non-maleficence is at the top in the priority basis. It is our most fundamental duty towards nature. It is the rule of duty that says not to do any harm to wild living things. Taylor says the attitude of respect for nature primarily expresses itself in the rule of non-maleficence. It is possible to avoid violations of another three rules by choosing carefully what to do. But if there are unavoidable conflicts among the other three rules of duty except the rule of nonmaleficence, then the propriety principles would be, (a) Fidelity and restitutive justice override non-interference when a great good is brought about and no creature is permanently harmed by the permitted interference. (b) Restitutive justice outweighs fidelity when a great good is brought about and no serious harm is done to a creature whose trust in us is broken. The first two rules, i.e., the rule of non-maleficence and the rule of non-interference are negative rules. These two rules refrains us from doing harm. To refrain from interfering in the natural world is always possible to perform in ordinary situation.

To these rules of duty and priority principles, Taylor has added another characteristic which is equally essential for having the attitude of respect for nature. This helps us in living the right kind of life in relation to nature. This aspect is the development or cultivation of certain kinds of character traits i.e., virtue.

The Basic Standards of Virtue

According to Taylor the attitude of respect for nature is expressed through the character of a moral agent. A moral agent's character has two aspects. These two aspects are, deliberative and practical. The deliberative aspect is a steady disposition to think clearly and rationally what action is right for a moral agent to do in a particular situation. The second aspect of a moral agent's character is the practical aspect. The practical aspect of good character is having the firm disposition. The dispositions are the power of will that helps us to resolve and carry out one's decision. By doing so a person performs that which the person has concluded as right thing to do in a particular situation.

Taylor says, the attitude of respect for nature is expressed in a person's character when he has developed firm, steady, and permanent disposition that enables him to deliberate and act consistently with the above four rules of duty. These dispositions are the good character traits or virtues. These character traits help in expressing the attitude of respect for nature in the conduct of the moral agent according to the four rules. Taylor has made a distinction between two types of character traits. These are general virtues and special virtues.

The general virtues are those character traits that we need for deliberating and acting in the right way. These kinds of virtues are deliberated and acted irrespective of any particular moral rules. It is open to all kinds of circumstances. At this point we would see the different kinds of general virtues connected with the ethical system of respect for nature. Taylor says that the general virtues consist of two kinds of fundamental character traits. These are, "moral strength", and "moral concern". The moral strength consists of the following elements of Conscientiousness, courage, character: integrity, patience, self-control, disinterestedness, temperance, perseverance, steadfastness-in-duty. These character traits make the moral strength.

We need all these to lead an ethically good life. These character traits help the moral agents to lead a good life in any circumstances of life irrespective of what particular kinds of duties and responsibilities are imposed on moral agents in any situation. So the general virtues help the moral agents to have the strength to meet the demands of morality in their deliberation and action. But Taylor says that each of these constituents of the general virtue of moral strength is an ideal one that no character can fulfill at once. Such standards of character cannot be the normative guides to practical life. These virtues constitute a model moral agent that each individual should endeavour to become. The second problem is, they establish very specific goals on which the moral agent should aim at and the ends should be truly worthy for which the person is striving for. All these virtues are valid criteria of moral merit and these are the grounds on the basis of which all moral agents should evaluate their own strengths and weakness in their characters. For all these reasons the virtues related to the moral strength of general virtues should be considered as important part of a normative ethical system as rules of duty.

The second kind of fundamental characters which consists the general virtue is the moral concern. In this kind of character we have different and compatible set of dispositions and capacities than the virtues related to moral strength. According to Taylor moral concern is that aspect of character which is directly connected with a moral agent's consideration of the inherent worth of all kinds of wild living things in nature. This presupposes the attitude of respect for nature in the context of the ethics of respect for nature. Hence moral concern is the ability and disposition to take the standpoint of animals and plants. It is also the ability to look at the world from the perspective of the good of all kinds of wild creatures. It is because the willingness to place ourselves in the place of animals and plants or regarding an organism as an entity that possess inherent worth.

There are a set of dispositions and capacities that make up the general virtue of moral concern. These are four basic constituents, such as, benevolence, compassion, sympathy, and caring.

Benevolence is the capacity and disposition (a) to feel pleased at the realization of another's good, whether due to one's own action or to some other cause, (b) to place intrinsic value on the realization of another's good, and (c) to act so as to promote or protect another's good as an end in itself and for the sake of the being whose good it is.

Compassion means, (a) the disposition to feel sad or disheartened at another's pain, and suffering whether due to one's own action or to some other cause, (b) the disposition to consider intrinsically bad to any kind of harm that comes to another, (c) the disposition to refrain from doing harm to another. So benevolence and compassion are made up of three dispositions, and these are, to have certain feelings, to place value or disvalue on certain things, and to act in the ways which is appropriate to those feelings and valuations.

Sympathy and caring are the dispositions to consider what is good for an entity as good in itself and to consider what is bad for an entity as bad in itself. Thus, to develop the virtues of benevolence and compassion in one's own character means to have the disposition to express sympathy for others and to care about their well-being. Sympathy and caring are found in the feelings that motivate one to act benevolently and compassionately towards others.

So Taylor says, when we develop the character traits of benevolence, compassion, sympathy, and caring with regard to the wild creatures then only we are disposed to take the standpoint while making ethical judgments concerning how they should be treated.

Therefore moral concern is the general virtue because it is a set of character traits which would show when an individual has taken the attitude of respect for nature sincerely. The moral concern thus becomes central because it formulates the emotive and valuational background for all kinds of actions which expresses the attitude of respect for nature. They also motivate an agent to be morally committed to the ethical system as a whole.

A special virtue is a disposition or set of dispositions that enable moral agents to fulfill a particular kind of duty such as fidelity. The special virtues are the specific character traits which are associated with four types of duty. Possession of a special virtue gives a person the capacity to deliberate clearly and accurately about the course of conduct which a particular kind of duty requires in a particular given situation. It also provides the capacity to carryout that particular kind of duty by doing the right thing in the right way for the right reasons in that situation. So we need special virtues in those situations when people become confused about what kind of duty they need for them in many complex situations. Hence Taylor says special virtues are the character traits we need for acting in accordance with a single or some rules of duty but not with others. So Taylor discusses special virtues that are related to the four kinds of rules of duty.

The Special Virtue's Related to the Rule of Non-maleficence

First we discuss the special virtue with reference to the duty of non-maleficence. Considerateness is the disposition we have as a kind of concern for others and this concernedness is shown in the wellbeing of others. Considerateness is related to the particular beings which we could harm if we acted in a particular way. Thus being considerate is directly related to the disposition of not harming any creatures. But we could harm them also if we are not attentive to the effects of an action. This particular special virtue is not only seen in the disposition of not to harm but also in the disposition of not to be negligent. Here Taylor says considerateness is little different from compassion. He says that

compassion is one of the foundations of considerateness, but compassion is a broader and a more general disposition than considerateness. It is a broader concept than considerateness because a person who lacks compassion for others tends to be inconsiderate towards others. So in contrast the considerate person tends to refrain from any action which involves a risk of doing harm. So the deliberative aspect of the virtue of considerateness means the importance of not being negligent about the welfare of others.

The Special Virtue's Related with the Rule of Non-interference

Regard and impartiality are the two character traits related to the rule of non-interference. Taylor uses the term "regard" in a different way. It is the kind of respect for living beings when one condemns the placing of constraints upon them. Regard means to feel antipathy towards any action which interferes with the freedom of individual organisms, species population directly. It also involves not to impose artificial constraint on their way of living. In this sense regard means, the consideration of the wholeness and integrity of nature as an independent realm of reality existing in its own right.

Impartiality is another virtue that is associated with the rule of non-interference. It is the disposition to be free of bias with reference to different species. This special virtue recommends us to remain neutral in the conditions not controlled by human beings. In conflicting situations the good of one living thing is in conflict with the good of another. In order to achieve such impartiality one's personal feelings for or against any particular species should not be allowed to influence one's judgment or conduct.

The Special Virtue Related to the Rule of Fidelity

Trustworthiness is the special virtue related to the rule of fidelity. It means wild creatures should not be deceived or tricked or betrayed in their wild state. A trustworthy moral agent should have a steady, firm disposition not to take advantage from the animals by deceiving, or using any tricks.

The Special Virtues Related with the Rule of Restitutive Justice

Fairness and equity are the two special virtues related to the rule of restitutive justice. Fairness is the disposition to want to restore the balance of justice that is upset by an individual's wrong doing. It means compensating the damage by making amendments for them who has been treated badly. The virtue of equity is having a sense of the proportionate weighting of different claims of justice. This is also having the disposition to make restitution in accordance with those relevant claims.

When equity and fairness are combined together in a character then it becomes a foundation to achieve the proper restitutive measures to restore the balance of justice between agents and subjects.

Hence the above discussion has the general and special virtues that constitute the character of a moral agent through the four rules of duty for the attitude of respect for nature.

Are Virtues Morally Obligatory?

Taylor says virtues are morally obligatory. It is because we need virtues for right conduct and they are also obligatory in themselves. He says there are two grounds on which the duty to develop and cultivate good character rests. The first ground is, both general and special virtues are necessary for the agents to act morally. The second ground is that there is a sense of duty to become a moral being. In every case the moral requirement involved in the obligatoryness is that the agent feels not only to be virtuous but also to develop and cultivate virtue. So the first ground of the obligatoryness of virtue is the general nature of good

character. The general nature of good character is that a person needs virtues regularly and consistently in doing the right thing for the right reason in the right circumstances. A person having the feelings, desires, motives, and ends makes up a virtuous character. This character trait helps a person to gain the capacities that are necessary for deliberating clearly about the action that he ought to take. In conflicting situations between one's duty and self interest the general virtue's and special virtue's are helpful for right kind of action. In our practical life we have obligatory ness of virtue. This need is the conjunction of our duty according to the valid rules of conduct. In this process we need virtues in our practical life. Therefore it is morally obligatory to develop and cultivate those virtues.

In the case of second ground for the obligatoryness of virtue, it is a primary and direct duty of a moral agent to develop and cultivate good character. In this case we need a perfect harmony between our inner character and external practice. Therefore the duty to develop and cultivate general and special virtues becomes important to become a moral person in both inner character and external practice. So here we need harmony between the character and conduct of a moral agent to acquire virtue. It is because we must adopt valid rules of conduct as our own normative principles at the same time we must also adopt valid standards of character. According to Taylor each standard states an ideal for every moral agent for which the moral agent should strive. It is an obligatory end to be excellent in achieving a good character. So it becomes a duty of a moral agent for self improvement and moral growth. Then only we have a harmony between our inner and outer lives. As a result the harmony will be established between conduct and character of the agent.

According to Taylor, the duty to develop and cultivate virtue is also a duty to help others to pursue this as an end in their lives. In case of others Taylor says this aspect of duty is only most applicable in situations where moral agents have influence on others, such as our own children, and students. Teachers are very effective in the process of character development. But ultimately the children and students can only acquire virtues only through self-determination, and autonomy. So we need our own effort for this. Here we see the role of autonomy of will, because the rules of conduct should be first prescribed to the moral agent himself. The standards of good character can only be considered as obligatory ends for all moral agents only when the individual moral agent places himself under the guidance of those standards by accepting them as his own normative principles. The validity of these general principles depends on all moral agents who subscribe it autonomously. So in the context of environmental ethics the universal principle should embody the moral attitude of respect for nature. The general virtues and the special virtues are the various standards of character which should be adopted by any moral agent who has respect for nature. The dispositions of feeling and desires that are involved in all the kinds of virtues are always embodied in the inner life of an individual who has the attitude of respect for nature. Hence different rules of duty and standards of virtue make up an ethical system for having the attitude of respect for nature. This kind of ethical system gives practical and concrete meaning to the attitude of respect for nature.

In this part of the chapter we discussed the biocentric aspect of the value of nature. Biocentric means life centered. Both Schweitzer's theory of reverence for life and Taylor's theory of respect for nature talks about similar point of view. They more or less agree on one viewpoint that we can say, a deep respect for nature. This is an attitude moral agents adopt or cultivate on their own. Both these two non-anthropocentric environmental ethicists suggest to make a connection between the individual self and the universal self. Here the universal self includes everything we can say nature as a whole. They both again pronounce the categorical imperative of Kant. The only difference is, Kant's categorical imperative is applicable to human beings alone but

the kind of categorical imperative Schweitzer and Taylor dealing with includes every life on earth. In the next section we are going to discuss the ecocentric aspect of nature. We thus suggest extending the categorical imperative further i.e. to the non-living entities.

PART-II

The Ecocentric Aspect of Nature

Introduction

Ecocentric ethics along with biocentric ethics forms another new dimension of intrinsic value of nature. This approach towards nature is based upon the assumption that all life is interdependent and human beings are parts of a wider whole. It also looks at nature intrinsically and it develops non- anthropocentric values. Ecocentric ethics gives value to the systems such as living and non-living entities. It includes all ecosystems or the whole biotic community including its relationship with non-living things such as rocks, rivers and landscapes. Individual entities are valued according to the role they play within the environment. Therefore endangered and rare species are valuable but only if they contribute to the well being of the community as a whole. In this part we will be discussing Aldo Leopold and J.Baird Callicott's land ethics and deep ecology of Arne Naess.

Aldo Leopold and the Land Ethics

Aldo Leopold is considered as the father of ecocentric ethics. He says our traditional ethical domain only considers the relationship between the individual and the society. But he says there is no ethics that deals with man's relation to land, animals and plants. We still consider land as a property only. The relation of individual and land is strictly economic which only entails privileges but not obligations. He says the extension of ethics to land in human environment is an ecological necessity. In philosophical terms Leopold's view is similar with the science of ecology in which ecosystems are understood as complex, integrated and interactive units.

He talks about the concept of community in land ethics. Leopold says all ethics are based upon a single premise. The premise is that the individual is a member of a community of interdependent parts. Human being is a member of human community. Therefore he always competes for his place in the community. But at the same time he also cooperates with other members of that community.

Based on the above concept of community of human beings Leopold extends the boundaries of the concept of community to land, in the land ethic. Leopold says land as a community includes soil, rivers, plants, and animals. These collectively formulate the community of the land. He says that we consider soil, water, plants, and animals as only resources for our use. According to him, a land ethics cannot prevent the alteration, management and use of these resources. But on the other hand, it does affirm their right to continue their existence. At least they should continue to exist in their natural state to some extent. In other words, a land ethic changes the role of human beings from the conqueror of the land to the members and citizens of it. It implies respect for his fellow-members, and also respect for the community as such.

For Leopold conservation is a state of harmony between man and land. But he says the process of conservation is at a very slow pace. Conservation is only limited to obey certain law. We only conserve those things which are profitable and useful to us. This formula is so easy to achieve anything. The rules of conservation define no right or wrong, and it does not assign obligations. It never calls for any sacrifice and therefore it implies no change in the current philosophy of values. He says such kinds of strategies of conservation will not help us. So land use ethics is governed by economic development. A system of conservation based on economic self-interest is not helpful to us greatly. Therefore it ignores many elements in the land community. It eliminates many elements that do not have economic value. But these elements are also essential for the healthy functioning of the ecosystem.

In view of these difficulties, Leopold suggests that a better ethical theory would help us to improve our economic relation to the land. This theory is the presupposition of the existence of land as a biotic mechanism. We should see land as a biotic community and a self mechanism system. There can be an ethical relationship between humans and land only if we can see, feel, understand, and love it. Leopold says land mechanism is consists of a biotic pyramid. He first discusses the pyramid as a symbol of land and later he develops some of its implications in terms of land use. Leopold says land is an energy circuit and it conveys three basic ideas. These are as follows.

- (1) The land is not merely soil.
- (2) The natives of land such as plants and animals always keep the energy circuit open.
- (3) The man made changes are of a difficult order than evolutionary changes. It has effects which are more comprehensive than it intended.

These ideas collectively raised two basic issues. These two issues are: Can the land adjust itself to the new order? And can the desired alterations be accomplished with less violence?

When we see the evidences from the history of ecology we can see that it supports the general deduction of land ethic. It means the less violent man made changes leads to the greater adjustment in the land pyramid. Other wise the more violence with the land leads to more dangerous disasters. The intensity of exploitation depends on human population density. A dense population requires a more violent conversion in land.

Therefore, a land ethic reflects the existence of an ecological conscience. This, in turn, reflects a connection between an individual's responsibilities on human beings as he says for the "health" of the land.

According to Leopold an ethical relation to land cannot exist without love, and respect for the land and its value. For him,

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 (Pojman, L.J., 2001, pp.125).

Land ethics does not favour rare or more diverse ecosystems over common or simpler. It implies three values, i.e., integrity, stability and beauty. These three values should be preserved in each and every ecosystem. Land ethic forms a basis for the protection "wholes" such as species and habitats.

The American philosopher J. Baird Callicott has written in defence of Leopold's Land ethic. Philosophers criticized Leopold's land ethic with naturalistic fallacy and holism.

The problem found with land ethics is that it commits the naturalistic fallacy. The consequence that implicitly follows from its position is that it denies the age-old ethical or normative principle regarding the non-derivability of ought statements from is statements. Facts are independent of human judgment and therefore, they are objective. On the other hand Values are subjective and therefore, values are dependent upon human judgments. Facts themselves are thus never sufficient for drawing normative conclusions.

Callicott has given a solution for this gap by locating Leopold within an ethical tradition extending from David Hume and Charles Darwin. According to Callicott, the above mentioned two philosophers place moral sentiments at the centre of ethics. The moral sentiments arise out of human sentiments. The sentiments are like feelings, attitudes, dispositions, and affections. For Hume, sympathy is one of the most fundamental sentiments. Human beings can identify themselves with the feeling of sympathy for other human beings. So for Hume, the origin of ethics is based on this feeling for others. Thus the concept of

"ought" in ethics does not arise from simple facts about the world but they arise from the facts concerning human emotions, sentiments, feelings etc. Consider the case of murder committing deliberately or intentionally. To figure out the moral wrong committed in a deliberate murder we should look within ourselves and we will find a "sentiment of disapprobation". The evil is a matter of fact which lies in oneself not in the objective world. Thus, judgments of value are rooted in fundamental element of human psychology/ subjectivity.

Callicott believes that this approach is further developed in Darwin and Leopold picked up the idea and incorporated it in the Land ethic. Darwin says parental affection is common to all mammals. The bond of affection and sympathy between parents and offspring is also natural. This ultimately permitted the formation of small social groups. This can be extended to other populations also. According to Darwin this is called social sentiments.

Thus the sentiments of affection and sympathy bridge the gap between facts and values. The sentiments can be extended from the individual to include a wider social universe. Leopold extends the boundaries of the community to include soil, water, plant, and animals and collectively the land.

In Callicott's opinion Leopold is part of the Hume and Darwinian tradition. Leopold encourages us to extend our family and community bonds to include all other members of the biotic community.

Thus, the reasoning from "is" to "ought" is possible. From the facts of ecological destruction to the "ought" of environmental activism is possible.

Another problem is sentiments are unstable foundation to build an ethics. Humans act out of sympathy, affection, or cooperation and similarly they can act out of selfishness, hatred or compulsion. Human

psychology is capable of building bonds. The question which still remains open is that why should I extend my sympathy rather than animosity to the land? There are cases in which humans destroy the integrity, stability and beauty of an ecosystem in the name of the family and community's well-being. For example, people destroy many areas in the world, for a basic living of their family. In such case moral sentiments provide a reason to destroy the ecosystems rather than to protect it. If the basis for land ethic is sentiment then it does not have any answer for those who destroy the land in the name of sentiments.

Kant raised such problem against Hume's ethics. Kant says human psychology is an insufficient basis for ethics because it can offer only hypothetical imperatives. Imperative such as, if you care about others, you should not harm them. For Kant ethics must be based on categorical imperatives. Therefore, "ought" must not depend on the feelings, attitude, or sentiments of the individuals.

Callicott has offered another thoughtful account of the ethical foundation of the land ethic. Callicott said we can start from an ethic based on sympathy, compassion and love although western philosophy has asked for a more categorical imperative.

Another challenge to Leopold in his land ethic is the concept of holism. Callicott offers a metaphysical holism for land ethic. Ethical implications follow from the metaphysical holism.

Guided by modern ecological science Callicott says that relationships are prior to the things related. Ecosystem wholes are logically prior to their component species. The nature of the part is determined by its relationship to the whole. Ecological holism points us toward the underlying nature of reality. From an ecological point of view individual organisms are modes of a continuous chain. Therefore, there is no demarcation between oneself and the environment. The world is one's extended view of self... and it transforms egoism into

environmentalism. We are one with nature. Thus it is for our self-interest (egoism) that we preserve and protect the natural world (environmentalism). Hence, may be they considered extending egoism to environmentalism as a reason that bridges ecology to metaphysics and finally to ethics. The outcome of this move will be to reduce the gap between ecological facts and ethical values.

Deep Ecology

"Deep ecology" or ecophilosophy which is characterized in the literature as "ecosophy" means ecological wisdom is an environmental movement. It calls for a deeper questioning and demands a deeper set of answer to our environmental concerns. Specifically, it calls into questions some of the major assumptions about consumerism and materialism and there by suggests to have a simpler life style. In this respect the motto that it spells is quite significant which says life to be. simple in means, rich in end. I seek self realization through oneness with all things (Pojman, L.P., 2001, pp.447).

Deep ecologist says that the solutions to the environmental crisis require more than a mere reform of our personal and social practices. They say it requires a radical transformation in our world view. So Arne Naess and Gorge Sessions developed the idea of deep ecology as a framework constituting of a set of common principles. The principles provide reasons that can explain and justify the movements' activity. These principles are discussed as follows.

(1) Rejection of the man-in-environment image in favour of the relational, total-field image

Deep ecologists rejected the idea of man's domination of nature. They say individual organisms including human beings are the knots in the biospherical net. Biosphere, as a net, is the field of intrinsic relations. The relation between two things is intrinsic. Therefore without this relation, two things, suppose A and B are no longer the same thing.

Man is related to nature as a biospherical knot. This assumes that everything is related which gives rise to a holistic picture concerning the relationship between man and nature.

(2) Biosperical egalitarianism-in principle

Deep ecology does not encourage any hierarchy in nature. Human being as a member of the whole nature has to have deep respect for all forms of life. He should have an understanding from within. The deep respect for all living and non-living beings is a kind of understanding that human beings reserve for fellow human beings in a society. So that to an individual, the equal right to live and blossom is an intuitively clear and obvious value axiom. The restriction of this axiom to humans only turns this towards an anthropocentrism which has adverse effects on the life of humans and all other life forms too.

(3) Principles of diversity and symbiosis

"Live and let live" is a more powerful ecological principle than "either you or me". Different forms of life in an ecosystem enhance the potentialities of survival, the chances of new modes of life and the richness of life in different life forms. Therefore, the struggle of life and survival of the fittest should be interpreted in the sense of ability to co exist and cooperate in complex relationships. This cooperation is better than ability to kill, exploit and suppress. Therefore "live and let live" is a more powerful principle than "either you or me".

(4) Anti-class posture

The above three principles support anti-class posture. The reason behind this is, according to deep ecology, there is no hierarchy in nature because every thing is woven in a net as knots. Without a single knot the net i.e., nature is incomplete. This ecological attitude favours the extension of all three principles to any group i.e., "live and let live".

(5) Fight against pollution and resource depletion

An ethics of responsibility implies that ecologists should follow the principles of deep ecological movement. The flourishing of human life and culture is compatible with a substantial decrease of the human population. Therefore, the flourishing of non-human life also requires such a decrease.

(6) Complexity, not complication

The theory of ecosystem contains an important distinction between what is complicated without any unifying principles. Multiple factors operate together to form a unity or a system. Therefore, the organisms' way of life and interactions in the biosphere in general exhibit complexity of a unified system.

(7) Local autonomy and decentralization

Now-a-days foods and many other products are exported and imported in shipping at a great environmental expense. Long distances have to be covered by sea routes and this leads to many environmental problems. This kind of transportation generates many environmental problems such as oil spills and pollution. To avoid oil spill kind of disaster in the environment, Naess advocates strengthening local self government and self-sufficiency. This strengthens the local autonomy of people.

All the above seven principles are the significant tenets of Deep ecology movement. These are clearly and forcefully normative. Deep ecology relies on the science of ecology for a variety of purposes, because ecology provides much information about the function of natural ecosystems. Ecology helps us to know about environmental problems and prescribes policies that can solve the disorders. Thus, the scientific ecology provides a model for thinking about the fundamental issues that underlie the environmental crisis. Hence, deep ecologists seek to develop world views that have ecological insights into the issues as diversity, holism, interdependencies, and relations. But deep ecology traces the

roots of our environmental crisis to fundamental philosophical causes. So the solutions can only come from a transformation of our fundamental worldview and practices. These fundamental questions are what is human nature? What is the relation of humans to the rest of nature? What is the nature of reality? These questions are metaphysical questions.

According to Arne Naess, the causes of the many environmental problems are based on the metaphysics of the dominant philosophy of modern industrial society. The dominant metaphysics is individualistic and reductionistic. Only individuals are real. The individual objects can only be reduced to the more basic elements and they are related according to the physical laws. According to these laws human beings are very different from the rest of the nature.

First of all deep ecology rejects the dominant metaphysics. It says the individual humans are not separate from nature, i.e., the man-in-nature perspective. On the other hand, deep ecology is committed to the metaphysical holism. Human beings are parts of their surroundings and not distinct from it. So for deep ecologists both the biotic and abiotic constituents of the environment determine what human beings are. It is a kind of relational and total field image of the environment.

Here we can see a link between scientific ecology and deep ecology. In terms of scientific ecology the energy circuits of solar and chemical energy flow, we can see that individual organisms are less important, and less real. The chemical and biological process is more real than the individual organisms. Individual organisms come and go, but the process goes on so long as the environmental conditions permit. Individual organisms are constituted by their relations to other entities.

Deep ecologists believed that the subjective and objective distinction has a very important influence on both of our understanding and valuing nature. In ethics the subjective ("ought") judgments of value cannot be derived from objective descriptions of fact ("is"). But according to deep ecologists as long as we maintain a strict distinction between individuals and nature, we have to make an equally strict distinction between objective and subjective judgments. But deep ecologists challenge the strict distinction between individual and nature, at the same time they are also challenging the strict distinction between objective and subjective distinction.

Naess says that mere spontaneous feelings or emotional reactions are not rational arguments. Mere expression of a feeling does not have rationality. But we need to recognize that the evaluative judgments "motivated by strange feelings" do have "a clear cognitive function". For example, the feeling of anger when arises as a result of destruction, we express the judgment, such as, i.e., "stop that destruction" which is neither true nor false in itself. The reason is that this judgment is just a bare expression of our emotion of anger. It thus appears to be more like an emotive judgment. But when we go beyond it and be concerned with just the judgment that we make, such as, "this mountainside has been destroyed and ruined" it can be rationally evaluated and it might become true. It is possible to do this because it qualifies to be a factual judgment in contrast to the earlier emotive judgment.

Self-realization and Biocentric Equality

At abstract and philosophical level, the ethics of deep ecology focuses on two "ultimate norms". These two ultimate norms are self-realization and biocentric equality. These two norms are ultimate in the sense that they are not derived from any further or more basic principles or values. Ethical justifications cannot be thus further carried out because it ends with these norms.

Self-realization is a process through which people come to understand themselves as existing in interconnectedness with the rest of the nature. Biocentric equality is the recognition that all organisms and beings are equal. They are all equally members of an interrelated whole. Therefore, they all have equal intrinsic value.

The concept of self-realization is derived from the old Greek philosophy. This concept is originally found in Socrates who identifies the notion of worth living with realization of one's own self or as Socrates say *know thyself*. It means a good life involves a process of self-examination and self-fulfilment. The suggestion from these traditions is that through self-examination we are able to separate trivial, superficial, and temporary interests from deeper and more central interests.

To understand the concept of self realization, we have to make a distinction between needs, interests and wants. Needs are those elements that are necessary for survival such as food, clothing, shelter etc. A person's interests are those which contribute to the well-being of the individual such as friendships, education, and good health. Wants are the immediate desires and goals toward which a person is inclined temporarily. As expressed through such desires like, I want a vacation, I want a glass of juice, or I want to go to movie etc.

In deep ecology, self-realization is the realization of self with the natural world. Self-realizing is a process of self-examination in which people understand themselves as a part of a greater whole. The realization is to understand that there is no division between humans and non-humans. Human beings are the part of a greater "Self", the "oneness". So their holistic and relational view of the self is very different from the individualistic model. Deep ecologists use "Self" to refer to the holistic view and "self" for the individualistic view. Thus, self realization is a process through which "self comes to understand itself as Self" and "self interest" come to be seen as "Self-interest".

The concept of biocentric equality in Deep ecology is more or less same as, the concept of biocentric ethics of Taylor's respect for nature, which is based on the equal inherent worth. Taylor's biocentric equality develops from the individualism which views organisms as centers of intrinsic value. But the biocentric equality of deep ecology grows out of metaphysical holism which has its root in the western civilizational tradition. Individual entities possess equal moral worth, not because of having intrinsic worth, but because they are members of that community.

According to deep ecologists when human interests conflict with non-human interests they kept human interests at the top. It is a more democratic and less hierarchical equality. Deep ecology allows human beings to reduce biocentric richness and diversity in order to satisfy vital needs. But the question is how vital needs are explained. For example, Naess suggests that vital need of human beings should not violate a vital need of any other non-human living being. Thus, the ethical and practical implications of biocentric equality within a deep ecological perspective are very different from the implications generated by a more individualistic philosophy which ascribes importance only to individual as such.

There are two practical implications. First one is deep ecology prescribes simple life styles. It means humans ought to live in a simple, relatively non-technological and self-dependent communities. Our life styles should be very simple with a minimum consumer and material desires. To quote deep ecologists "we should live with minimum rather than maximum impact on the earth in general". For deep ecologists, the ideal situation would be, the local communities existing in a harmonious and self-regulating relationships with their surroundings. This ideal situation is called *ecotopia* which means a community which seeks harmony with nature rather than dominating nature.

With all these discussions we can see that the ecocentric ethics of nature includes land ethics and deep ecology. Biocentric ethics is limited to the living beings only but ecocentric ethics goes one step further to include non-living beings also. Everything in nature is the bearer of intrinsic value. Leopold considers land as a whole community and human beings are one of the components of land. It is also same with the view of deep ecologists who consider human being as an important knot in the nature. Both these theories ascribe intrinsic value to all natural components of nature. Man is in the nature and there is no differentiation between human beings and nature.

CHAPTER-IV

The Value of Nature: Utilitarian Perspective

Introduction

Environmental ethics may be defined as a study that gives us understanding regarding how to act rightly in respect of nature. This understanding of environmental ethics is to help us to deal with the conflicts between competing interests and values. In the process of doing this, it identifies the problems within the framework of law. Environmental ethics provides tools for the decision makers to identify what factors they should take into account so that it directly helps them to make a balanced choice. It also raises the question of why should we value nature? There are different answers to the above question. In the previous chapter we had a detailed discussion on the argument that, we are part of a wider community of all living things. Accordingly, we must value nature for its own sake irrespective of human interests.

In the present chapter we will be discussing the utilitarian perspective which adopts a different approach for to valuing nature. We value nature only as an instrument of human welfare. The values that we ascribe to nature are purely for human use. In this sense these values become no longer the intrinsic values of nature; they are, on the other hand, regarded as the instrumental value of nature. This involves assuming that nature doesn't have "interest" in any intelligible sense independently of human concerns. Therefore, nature is indifferent to us and it cannot communicate with us. According to this perspective suppose we ascribe moral interest to animals and natural objects such as ascription of interests will imply that they are intrinsic to them. Nature, on the other hand will be treated as remains dummy to which we attribute values. The ethical values are thus not intrinsic to nature. They have meaning only in relation to us i.e., human beings.

The view discussed above expresses the dominant western to philosophical position on nature which subscribes the anthropocentric approach to nature. In the dominant western philosophical view ethics is conceived as human centered. It supports the traditional belief that all other living things exist for the use of human beings and they do not have value except their instrumental value to us. But even if we ascribe such kind of value to nature, we often do see that nature is ruthlessly exploited for harmful purpose. It is due to this reason human beings must be made aware of this harmful treatment on nature. They must be aware of the ethical implication involved in this. Considering this, ethics which is though largely human centered cannot be indifferent to man's approach to nature. We have to be considerate for nature for the sake of future human beings. Because for the fulfilment of our basic needs we need our natural resources and the natural surrounding. There are many ways in which the natural things and natural process matter to human beings. At the same time there are also many ways in which the changes that human beings bring to nature by their actions ultimately affect the wellbeing of human beings. In past we have many such examples such as, tsunami that hit the costal towns of Southeast Asia in December, 2004. We get cyclones such as Katrina, Rita and Willmar that hit USA and Japan. In India we have experienced many natural disasters. We should not simply describe all these as "natural" disaster. These are the results of our merciless attack on nature. It is a very long continuous process in which human being deliberately tried to tamper the basic natural laws of nature. Instead of working in parallel with nature man has chosen to exploit nature beyond the normal limits. Here we mean to say that it is for the sake of human beings only we should be rational and careful while using our natural resources. This point's out that instrumental value of nature cannot be ignored even within the framework of human centered ethics.

In this chapter, we will be discussing instrumental value and existence value. Instrumental value comprises of the value of nature as a human resource. The existence value of nature means the value of the mere existence of something. It has value even if it serves no other purpose which is also related to human beings, for example a beautiful landscape. Ascribing the instrumental value to nature has a long history. It is started with the use of natural resources for human survival on earth. But the use of natural resources turned into the exploitation of nature through a rapid changing process which includes the science and technological revolution. Science and technology is the greatest achievement of human mind which many of the philosophers of the present generation identify with reason itself. Reason is the only unique capacity which human beings have. It differentiates human from nonhumans. This is a point of view which we find since Aristotle. The distinction made between human and nonhumans on the basis of reason is responsible for ascribing the instrumental value on nature. In this chapter the ideas of Aristotle and Kant are discussed in order, to show the foundation on which the anthropocentric theory of nature is based.

The Teleological (Natural Law) Tradition

The anthropocentric view of nature can be traced back to the Aristotle's teleological theory of nature. Aristotle believed that everything in nature is for the satisfaction of human needs and he says:

Plants exist for the sake of animals... all other animals exist for the sake of man, tame animals for the use he can make of them as well as for the food they provide; and, as for wild animals most though not all of these can be used for food and are useful in other ways; clothing and tools can be made out of them. If we are right in believing that nature makes nothing without some be end in view, nothing to no purpose, it must be that nature has made all things for the sake of man (Environmental Law and Ethics, John Alder &David Wilkinson, Macmillan, 1999, London).

Aristotle develops and explicates the concept of teleology systematically. The concept of teleology advocates that all the natural

phenomena are determined by an overall design or purpose in nature. Teleology is thus viewed as the study of ends, purposes, and goals. The ends of things or processes are seen as providing the meaning for all that has happened or that occurs. Aristotle's thought is teleological, i.e., everything which is always changing and moving has some goal or purposes. This idea of teleology can be expressed in the language of Newtonian physics which says that everything has potentiality to be some thing and, therefore, it may be actualized. For example, an acron is potentially an oak tree. The acron undertakes a process of change and motion. In this process of change and motion the acron is directed to realize the potentiality of becoming an oak tree. Therefore Aristotle believed that things in nature occur because they serve a purpose. All living organisms and non living things develop as they do because they have a natural goal or teleos in nature.

This tradition is called the teleological or natural law tradition. For Aristotle, to understand a thing fully is to understand the causes for its being and its nature. So Aristotle talks about the four causes of an object's existence. These are the material, formal, efficient and the final causes.

The material cause of an object is what an object is made of, that is, the stuff out of which it has came. It thus refers to the matter. The formal cause is how that matter is organized or structured so that this material is what it is. For example a tree, and a table have the same material cause, i.e., wood. Wood exists in two different forms. An efficient cause explains how something comes to be what it is. A carpenter is the efficient cause for a piece of wood, of becoming a table. The final cause is the purpose or characteristic activity of the object. The final cause of the table is to provide a place at which to sit and eat. Hence the final cause of a tree is the activity which the tree does and which other living things do not. He believed that all things do have a

natural and distinctive activity. We understand some object fully only when we understand its natural function or activity.

Aristotle distinguishes two basic types of natural objects. These are, living and non-living. The living things are called, "the principle of life", or "psyche" which is later translated as the "soul". Thus it has the "powers" or "fundamental activities of life". These are nutrition, sensation, and thinking. Plants are living things which possess only nutritive soul. It means that their characteristic activities include only the powers of nutrition, growth, and reproduction. Animals possess appetitive powers in addition to nutrition. These material activities include the powers of sensation, desire and motion. Finally, it is the humans who possess the three life activities of nutrition, appetite, and thought.

The teleological theory of nature could be applied to all natural objects including humans. All living and nonliving things have a natural activity or function. Things are viewed as good when they fulfill this function or actualize their potential. Every living thing is to attain its natural activity in order to realize its full potential. The purpose of a plant is to accomplish the nutritive functions such as taking nutrition from soil, growth, and reproduction. The purpose of an animal is to attain its desire and fulfill its appetites that include the nutritive function. In the case of humans the notion good becomes a comprehensive notion since it includes not only those above mentioned ends but more importantly it includes the idea of a contemplative life i.e., a thoughtful and deliberative life.

The modern environmentalism is based on this teleological theory of nature. Environmentalists assume that natural ecosystems are well ordered and harmonious. All parts of an ecosystem have a unique and distinctive place in the ecosystem. Each contributes in its own way to the natural order of the ecosystem. Undisturbed ecosystem is good. All

ecological problems arise only when human being interferes with the natural objects. According to this view the way the world is, is the way the world should be without the interference of human beings.

In this context we can talk about Thomas Aquainas who says nature exists only to satisfy human needs. Accordingly the resources of nature should be fully utilized for the service of man kind. This is the way how nature assumes its perfection. Descartes was one among the philosophers who influenced the western thought of domination of nature by humanity. According to him animals are like machine without consciousness. Hegel considered nature to be totally lacking value in its untransformed state. Nature is only worthy of admiration when converted into some form of garden and farm. Hobbes and Locke thought that only human beings have value. According to Marx nature is having value as an instrument to humans. At this point we discuss Kant's view regarding the value of nature little elaborately.

Though Descartes provides a major historical source to the idea of inherent worth of human beings, Kant made it more explicit in his theory of categorical imperative. Kant says rational beings only have moral worth. According to Kant's first formulation of categorical imperative, human beings are only rational beings. They are only ends in themselves and therefore they should not be used as only means for certain ends. Only human beings are having intrinsic moral worth. So animals are not having the worth of a person because they are not rational. They are not self conscious beings and they do not have also the capacity of grasping the moral law. Therefore Kant excluded them from the moral domain. Only humans are the member of the moral domain therefore we as human beings do not owe anything for them. But at this point Kant says human beings should be kind to them because this helps us to develop good character in us. The kindness towards animals as Kant observes also helps us to treat our other fellow human beings with greater consideration. It means according to Kant,

the duties of human beings towards animals thus turned out to be indirect duties for the purpose of serving human beings.

According to Kant the will is the faculty which enables a person endowed to act in accordance with certain laws. He further says that only human beings who are rational beings are endowed with this faculty. The autonomy of the will has certain ends which is achieved through certain means. Kant characterizes this as the hypothetical imperative. Apart from hypothetical imperative Kant claims that there is something whose existence has an absolute worth in itself. This he calls an end in itself or the categorical imperative. As he puts it only rational being exists as an end in himself. He must be always regarded as an end in himself and regards other rational beings as end in themselves. All other objects are only having a conditional worth. So at this point he says the beings whose existence does not depend on our will but on nature are not rational beings. These beings have only a relative value as means. Therefore Kant called them as irrational beings. On the contrary he called the rational beings as persons. It is because they are ends in themselves and they should not be used merely as means. Therefore they are subjects of respect. The foundation of categorical imperative is based on the rational nature of the individual person that exists as an end in itself. A rational being has duties towards other rational beings as to treat them as an end in themselves which in turn becomes an universal principle.

According to Kant as far as animals or any other entities of nature are concerned, human beings do not have any direct duties. It is because animals are not self conscious and they are not rational. Therefore they are regarded by Kant merely as means to certain ends. The end is to serve man. If we question the purpose concerning the existence of animals then the answer is their existence is only to satisfy certain ends of human beings. On the basis of the utilitarian thinking Kant assumes the idea of ascribing value to animals. Kant's explanation

to the question why should we give value to animal thus presupposes an utilitarian answer. In Kant's reflection: Animal nature is similar to some extent with that of human nature. But the only difference is that they are not rational. The idea of rationality plays a crucial role here since it influences our behaviour towards animals. Thus, as rational beings we strongly feel in understanding duties towards animals. By doing our duties to animals we manifest our human nature. The duty that we perform for the wellbeing of animals has an impact on our moral nature. Our realization that we ought to be kind towards animals is in turn helps us to be kind towards our own fellow beings. By doing our duties towards animal we thus in a sense do our duties towards humanity indirectly. To give Kant's example of a dog. He says if a dog has faithfully served his master for long then the dog's service deserves reward. When the dog has grown old to serve then his master ought to keep him until he dies. Kant says that such actions towards animals enable us to develop a moral character with in us. As a consequence Kant holds that humans realize the need form performing duties towards other human beings, i.e., serving others. Like wise any animal behaviour that is analogous to human actions may be claimed to spring from the same principles as human actions do. Therefore we have duties towards the animals because we have to cultivate the corresponding duties towards human beings like the case of a dog. A person must practice kindness towards animals because for Kant a person who is cruel to animals also becomes cruel in his dealings with other human beings. As Kant observes, our duties towards animal thus essentially are the indirect duties towards mankind. On the basis of such kind of value ascription to animals and nature independently of teleological tradition becomes the basis of the utilitarian approach to environment.

Utilitarian Theory

Utilitarianism is a form of consequentialist ethic. Consequentialist ethics identifies the goals or outcomes which each and every rational agent ought to attain. Actions are considered right on the basis of the production of the specific consequences. The actions are considered wrong when they do not produce the specific consequences. Hence, utilitarianism is a form of consequentialist ethics elaborated by Jeremy Bentham. According to Bentham:

An ethical act is one which increases "utility", utility being equivalent to pleasure (happiness) or absence of pain. "Nature has placed mankind under to sovereign masters, pleasure and pain. It is for them alone to point out what we ought to do (Environmental Law and Ethics, John Alder and David Wilkinson, Macmillan, p.g.no -38, 1999).

This passage brings out explicitly the utilitarian standpoint on morality. In the utilitarian account, morality is viewed essentially to be meant for human beings. In its moral concern, utilitarianism thus does not have any place for nature. The concern for nature is accordingly seen from an utilitarian point of view, that is, the utility that it serves for human beings. The same idea we have found while discussing Kant's position on the value of nature. Following this line of thinking our duty or obligation to nature becomes indirect. Objects of indirect duty in nature are animals, plants, and any other entity in nature. Therefore the direct objects of duty are only the other human beings. The nonanthropocentric value of nature is unfit in the utilitarian perspective. The utilitarian theory allocates moral value in terms of the overall benefit of actions. It says that an action is right when it maximizes the good for maximum number of people. This theory has two important reasons for its contribution to the theory of environmental ethics. The first reason is, it does justice to the fact that some of the remote consequences or expected consequences do matter in moral thinking. The reason is any moral position must take into its consideration of the account of the consequences of actions in its assessment of their rightness. Therefore the utilitarian theory says that an action is right when it maximizes the good for maximum number of people. The second reason is more compelling than the first reason. The utilitarian theory lends itself to the theoretical development in a way that other moral accounts do not. It provides a principled means of arriving at decisions in the case of moral problems. It evaluates with the moral problems in terms of the principle of measurable utilities like pleasure and pain. This theory also helps us to provide solutions by using mathematical and graphical models in our moral deliberations. Therefore we can say that the utilitarianism is an influential theory today. Utilitarian reasoning is influential in the areas of economics, public policy and government regulations. It has also played a significant role in environmental policy. It promotes how to maximize the good. It's ethos is to produce the greatest good for the greatest number. Thus this theory is based on two basic elements: The concept of "good" and a rule for judging all acts and decisions in terms of that good. This rule helps us to judge the ethical status of a particular act in terms of its consequences.

Hence, utilitarians distinguish between two basic types of values. These are, first, the concept of "intrinsic good" which is valued for its own sake, second, the value of all other things are related to the concept of "good". We explain this in the following way. For utilitarians there are two kinds of values, i.e., intrinsic value and instrumental value. The examples of intrinsic value are the concept of good, pleasure or happiness. These intrinsic values express the notion of intrinsic good. All other things and activities are said to have instrumental values. On the basis of our discussion we can now claim that environmental ethics needs the inclusion of both anthropocentric and teleological perspective. These two perspectives together spell out that nature exists for the sake of humans and the significance of nature lies in serving humanity. This we have seen while discussing Kant and Aristotle. We may thus conclude that environmental ethics is not possible independent of human beings. In other words, environmental ethics needs anthropocentric perspective. With this observation we now come to anthropocentric perspective.

Anthropocentric Perspective

Anthropocentrism is a stream of thought which is basically based on the utilitarian theory of ethics. This theory is based on human wellbeing or human rights. This theory is more like traditional ethical theories. Its main justification to give primary value to human beings is that, human beings are intrinsically more valuable than any other living and non-living beings. It is because man is the sole bearer of values. It is due to this man alone has the capacity to give value to everything including nature. Human beings give value to nature because they need ecology for their survival. Nature as such is outside the purview of ethical discourse because it is only physical or objective. Hence the anthropocentric theory argues that ethics is not concerned with the entities of nature. We cannot pass a moral judgement on the activities of non-living beings and animals. In view of its position the anthropocentric ethical theory thus holds that nature should be preserved because it is useful for human existence. The biotic entities like forests, rivers, mountains, animals and the biospheric atmosphere are subservient to human purpose. They are only the providers of basic needs and vital breath to human beings. Accordingly the forests should be preserved because they provide many products for human survival. The natural resources including both biotic and abiotic are essential for human life. Human beings have greater capacity for all kinds of experience. It is thus evident that the anthropocentric theory does not extend its moral domain to other living and nonliving objects. Its moral domain remains limited to human beings only.

The fundamental anthropocentric principle is that only human beings can have moral values. We value all other natural things only in relation to human purposes and goals. Nature is a resource to be conserved for to meet the requirements of human welfare. The view that humans as masters of nature is popular with policy makers. As human beings we owe moral duties to the rest of the nature, because we have

social and moral obligation towards other fellow human beings. By conserving nature we are performing moral duty towards nature which ultimately fulfills the obligation towards the welfare of man kind. Anthropocentric theory can be said of two kinds according to its orientation or presupposition. These two are strong anthropocentrism and weak anthropocentrism.

Strong anthropocentrism says all and only humans have moral nature possessing a set of intrinsic values. Nonhumans are mere instruments to human benefits and ends. Nature is only a resource. We have no duties to nonhumans, but only duties to other human beings. Our approach to non-humans is thus influenced by our moral concern for human welfare. In this way strong anthropocentrism can give rise to a particular conception of environmental ethics which does not assume the fundamental moral value concerning respect or having care for other creatures. It thus holds that it is important to protect the environment for the sake of environment. It is due to this intsrumentalistic attitude anthropocentrism does not give any thought over negative or destructive consequences that human actions may have on nature. This stand of anthropocentrism is sharply different from weak anthropocentrism or stewardism. With this note we come to weak anthropocentrism.

Weak anthropocentrism is a liberal kind of anthropocentrism. As we have already said, "anthropocentrism" literally means morality should be central to humans. Weak anthropocentrism has peripheral moral concern for nonhuman beings to the extent to which they are concerned with human beings. However it does not deviate from its basics position which says that humans are superior and they matter more than other beings and they are the caretakers of nature. Humans are important but other creatures also have value in themselves. Further it holds that nature exists for God and it is the role of humans to look after God's creation as His steward. As stewards human beings should look after nature for the benefit of the future generations. Considering

this it appeals that nature should be conserved on the basis of general description of weak anthropocentrism we will now go in to some of the varieties of weak anthropocentrism.

Enlightened Anthropocentrism

Today many people do not accept the view that only humans have moral status. The modern view says that at least some non-human animals must be given moral status to some extent. Unconstrained anthropocentrism has lead to the current environmental problems. So we can say that there is a need for constrained anthropocentrism for the purpose of better environmental management. This theory is called enlightened anthropocentrism. Enlightened anthropocentrism is the view which holds that humans should give moral consideration to nature but the consideration it gives is always secondary to human needs. It is similar to anthropocentrism because it takes into account the benefits of nature towards human beings. Nature provides number of benefits to humans such as medicinal plants, recreational utility natural beauty This kind of anthropocentric theory appeals to the human selfinterest for exploiting nature. At the same time it is also moderated by the fear of inviting natural destruction for humans through their own activities. Human beings get cautioned by the nature's disasters. Enlightened anthropocentrism facilitates the protection of natural entities from excessive human intervention. It is due to this particular kind of characteristic enlightened anthropocentrism is found to be widely accepted among liberal governments. Our day-to-day human concern with nature is guided by enlightened anthropocentrism in practice. For example, we make laws to protect nature for human use and by protecting nature we indirectly protect wild animals.

There are two other kinds of enlightened anthropocentric theories that are not despotic or exploitative. Such theories go into the discussion on the relationship between environmental protection and non-material human concerns. These theories emphasize that we are parts of nature and as parts of nature human beings should respect nature for its existence as such and as a ground for resources. But we should do it in our own interest as a part of nature.

Utilitarianism claims that, maximizing human happiness and minimizing pain is the ultimate principle of morality. In the context of human happiness environment has an important role to play. Human happiness requires the maintenance of an environmental life-support system. Apart from the basic necessities of human existence human happiness is dependent on medicine, economic benefits, aesthetic experiences and other instrumental values possessed by nature. According to J.S. Mill, human beings develop more intellectual or virtuous kinds of happiness, when they come in contact with wild nature. This kind of view is also reflected in G.E. Moore's ideal utilitarianism. It is well known that Moore defines the ethical principle of good not in any utilitarian term such as happiness. For him "good" is an irreducible non-natural property that cannot be further analyzed. "Good" is not composed of any other properties such as happiness. He says "beauty" is the most important form of "good". Therefore, we have a moral obligation to act in such a way so that we can make the world beautiful. Hargrove has extended this principle further. He argues that we should preserve the natural beauty of the environment because everything in nature is beautiful. Thus, the whole nature is worthy of protection.

In this context we bring the discussion of John Passmore. According to him there are traditions which do not view man essentially as a despot out to exploit nature ruthlessly. The first is the tradition which sees human being as a "steward", or a farm manager. Man is responsible to take care of the nature. The second tradition sees human being as co-operating with nature in an attempt to perfect it. According to the first tradition, it is the responsibility of the human beings to look

after the inanimate things. Man is sent to the earth by God to take care of nature. Man is the master of nature and his role is not simply to contemplate it or to preserve it in its original condition. His power does not entitle him to use nature according to his will. He cannot exploit its resources without any consideration regarding the consequences of his actions on nature. He is at liberty to restrain fierce animals, but he should protect non-dangerous and useful animals. Like a farm manager he can cut down trees to make new farms only if, in doing so, he does not destroy the beauty and usefulness of nature. In this context we see that modern conservationists conserve natural resources based on this idea of responsibility of human beings.

In the second tradition it is maintained that man's responsibility is to perfect nature by co-operating with it. Here the word "nature", derives from the Latin word *nascere*. It means to be born, or to come into being. This etymology suggests the potentiality of nature. The etymological meaning of this expression implies that an area which is still in its original condition, as "not yet developed". In this way man's relationship to nature is to develop various natural resources, such as, land in order to actualize its potentialities. This means to bring out what it has in itself to become and this is the way how human beings perfect nature. This tradition is applicable to the attitude among modern developers for whom the potentialities of an area of land consist solely in the profits they can make out of it. So man's duty in respect to nature is to perfect it by bring out its potentialities.

The question is how is perfection to be judged? The answer may be given in Aristotelian manner i.e., the teleology of nature. Nature is at its best when it fulfils man's needs. The potentialities are the reason for the existence of it. To perfect nature is to make it useful for human beings. For man's purposes we have to make nature more useful, more intelligible to our reason and more beautiful to our eyes but at the same time we should respect it.

There are, according to Passmore, two traditions in western civilization which think of man as having responsibilities towards nature. The first is called the conservationists. It emphasizes the need to conserve the earth by effective management. The second one is the perfection of nature by man. Perfection means taking account of nature's own resources which, man has already achieved in the process of civilizing the world.

According to Passmore through our familiar and established ethical principles, we can preserve our environment. These principles thus serve the purpose of preserving the environment. They give us a new moral awareness about environment. As a result we adopt certain attitude towards environment which includes attitudes like compassion fellow creatures, aesthetic appreciation of natural beauty, for psychological need for contact with nature, and our awareness of disturbing the harmony of nature by our own deeds that pollute nature. These are based on the two fundamental principles we should have reverence for other forms of life and, second, we should respect value diversity. However, inculcating such ethical attitudes do not suggest that we should give more priority to the interests of other species than our own interests. This attitude comes due to our basic belief that man controls nature and not other way.

Enlightened anthropocentrism argues that the different kind of environmental problems can be solved in the ways suggested above. This helps us to recognize the deontological stand that nature is having its own interests other than what human beings impose on it is not reasonable. Since we know that we are similar to nature in certain respect we know what is good for us is also good for nature. For example, the enlightened anthropocentric theory has influenced many conservation laws. This theory also helps us to conserve useful and attractive things, such as, elephants and lakes. So when it comes to law making for our future human needs, efforts to save nature outweigh our

other immediate needs such as limiting the use of vehicles since they cause pollution. The well being of future generations and the survival of an endangered species are the items which environmentalists must seek to preserve since they are remote and speculative. On the other hand there is the other objective which is opposite to previous one. It prescribes the one that is most immediate and concrete such as restriction on using cars. In order to preserve nature for future generation we should restrict the use of vehicles to maintain a less polluted environment. This brings us to the conception of another kind of anthropocentric theory know as extended anthropocentrism: the concern for future generations.

Extended Anthropocentrism: Concern for Future Generations

The main concern of extended anthropocentrism lies on the welfare generation. Its basic argument is that we should protect environment for the welfare of future generation. In this respect it points out the evil impact of environment on us, such as, global warming, climate change and various other environmental problems arising due to our abuse of nature. It will take many generations to rectify these environmental problems. Similarly the effects of environmental exploitation, such as, marine pollution, nuclear pollution, green house gases and global warming are long lasting and will be felt most severely by people of several generations in the future. Therefore we should refrain from using the sea for the disposal of hazardous waste and radioactive contaminants. On land also the hazards associated with nuclear power installations are as important for future generations as they are for the present generation.

Scientists and policy makers from leading national and international institutes for environment call for a declaration from all nations to give priority to the conservation of plants, forests and marine species than to hunger. Here we see the principle of hypothetical

imperative as the basis of anthropocentric approach towards nature. Either we should try to keep the equilibrium of nature or we face hunger and other related environmental problems for our present and future generations. It is because the custodians or stewards of biodiversity resources are the human beings. The more we abuse the environment the closer we are in putting question mark to our existence. The nature is not a non-living entity with resources. It is on the other hand a living entity that has its own mechanisms. Human beings try to protect nature with the sole purpose of increasing our longetivity.

In view of these above considerations it is felt that anthropocentric ethics must be extended to future generations for its protection and welfare. This becomes an important move in the direction of our ethical concern for environment. It is due to this new thinking that all concepts and theories of ethics have been applied to future generations. The principle on which the concern for future generation is based is called intergenerational equity that is the benefits that we as present generation is enjoying the future generation to must be enjoying the benefits of nature in the same way. This suggests that a balance must be struck between our own interests and the interests of descendants. This principle of intergenerational equity is supported by the utilitarian theory. It is the principle of maximizing happiness for maximum people. But the condition is that maximizing the welfare of maximum people should be indifferent to time.

For example, a forest is the product of millions of years. If we cut it down then the continuity has been broken. The natural life cycles of plants and animals are disrupted in this process. The forest will never be the same again. Once the forest is cut, the link with the past will go for ever. Nature as a whole is a store house of many different kinds of knowledge. If a jungle is destroyed then many plants and species will disappear for ever on which different researches could have been done. This is a cost that will never be borne by every generation that succeeds

us on earth. Therefore environmentalists say wilderness is a world heritage. It is something that we have inherited from our ancestors. We must preserve all these for our descendants. Human-centered or anthropocentric theories are based on such kind of consideration for future generations. Such an ethics does not imply that economic growth is more important than the preservation of wilderness for the future generations. On the contrary, a human centered ethics concerned strictly to the benefits of the present generation as for example it gives more priority to economic growth. Unconcerned economic growth will lead to a lop sided development. Growth is thus achieved at the cost of destroying nature. The impact of it though may not be felt by the present generation its evil effects will be most acutely observed in the life of future generation.

Light Green or Shallow Anthropocentric Ethics

This theory holds the two basic positions first nature has instrumental value and second our concern for nature is restricted to put it negatively as long as nature as it does not harm our existence. In this way our concern for nature becomes indirect.

Its chief characteristic is that it gives direct value to human beings like all other anthropocentric theories. Except human beings, all other living and non-living entities have no independent moral status. Human beings give them value in so far as they matter to humans. Hence, the consequence is, any part of non-human nature that has no utility value can be destroyed.

Natural diversity is valuable to humans as a resource. Any kind of plant or animal species should be saved because they are valuable as genetic resources for human agriculture and medicine. Shallow ecology is based on utilitarian theory. According to this theory nature has only instrumental value. So, for example, pollution should be decreased because it threatens the health of human beings. Hence it defines an

ecological problem as one that poses difficulties for humans. It might be having its effects on the rest of nature. But we should not bother about it as far as it is not affecting us.

The shallow ecological argument is more useful in modern environmental conservation. Its roots lie in the dominant view of western philosophy. It is the dominant philosophy where nature is conceived as the only source of resources. In government departments ministries, corporations, research laboratories environmental research institutes nature is considered as a resource. The followers of this theory see non-human nature as a resource which is to be exploited for human ends. Therefore, this view is used in resource management and conservation, human welfare ecology. All of them comprise of what is broadly called environmentalism. This theory serves well in an immediate crisis. It is fairly a good theory as long as humans ascribe utilitarian value to the natural resources like plant, animals, species and place. Environmentalists though consider nature as having instrumental value it does not stop with it. The concept of instrumental value or use value is extended beyond its normal boundaries. For example, we can argue that an entity or a piece of landscape is useful because it meets our aesthetic or spiritual needs. In these cases we are not using nature for having benefit. Their value lies in our experiencing of it, now by, its beauty. However, in our overall assessment shallow ecology is inadequate to defend nature.

The principles that it prescribes are,

- (a) Natural diversity is valuable as a resource for us.
- (b) There is no other value except the value for human beings.
- (c) Plant should be saved because of its value for human agriculture and medicine.
- (d) Pollution should be decreased if it threatens economic growth.
- (e) Third world population growth threatens ecological equilibrium.

- (f) The concept of resource has its meaning only with reference to human.
- (g) Economic growth gets maximum priority because it is held that we should not compromise with our standard of living for the conservation of nature.
- (h) Nature is cruel and necessarily so.

In this anthropocentric theory, the relationship between human and nature can be balanced only by assuming that the concern for nature is dependent on the concern for human beings to whom values can be ascribed directly. Shallow ecology thus prescribes only instrumental value to nature.

Instrumental Value

The theories which we have discussed in this chapter are supporters of the use value or resource value of nature. Nature is valuable on the basis of its use value. Environmental philosophers call this kind of value as instrumental value. The word "instrumental" is derived from the Latin word *instrumenterm*, which means tool or equipment. In this respect the approaches or the theories they have suggests that, the nonhuman world is having instrumental value and therefore, all are human-centered expressing an anthropocentric approach. The instrumental approach does not necessarily mean that it is a destructive approach or an exploitative approach. Here we make three kinds of instrumental value approaches. These are as follows.

- (a) Unrestrained exploitation and expansionism.
- (b) Resource conservationism and development.
- (c) Resource preservation.

In the first two approaches the non-human world is considered valuable only in so far as it is of instrumental value to humans. The particular instrumental value in these two kinds of approaches is the physical transformation of the non human world. That value is called the economic value. The economic value is realized by physically transforming the non-human nature by adopting (such as, damming, farming and mining) measures through which natural resources are utilized for the purpose of earning profits.

The point where the first two approaches differ is that the first approach, i.e., the unrestricted exploitation and expansionism does not recognize that there are limits to the material growth and limits to resource exploitation. The second approach i.e., resource conservation and development, on the other hand, does recognize the limitations of the use of natural resources and says that there are limits to the material growth.

The third approach i.e., the resource conservation approach suggests that the non human world should be preserved. We should preserve it on account of its instrumental value to humans. Environmental philosophers like, William Grey and George Sessions, have given nine arguments in support of the resource preservation approach. These are as follows.

- (i) The life support system argument states that we ought to preserve all aspects of the non-human world because it is vital to our physical wellbeing. We should preserve natural plants and species because we can do research on them for medicine. Almost all drugs we use are made either from plants or from animals. When a new drug is made we first use it on animals for testing the effects of that particular drug.
- (ii) The early warning system argument states that we ought to preserve all aspects of the non-human world because it is an early indicator of ecosystem determination.
- (iii) The silo argument states that we ought to preserve some aspects of non-human world because it represents a repository of

- potentially valuable genetic information for use in medicine and agriculture.
- (iv) The laboratory argument states that we ought to preserve the non human world because it is relevant for scientific study. For example, the study of human origins.
- (v) The gymnasium argument states that we ought to preserve the non-human world because it is good for physical recreation. People can go for a pleasant walk or picnics.
- (vi) The art gallery argument states that we ought to preserve the nonhuman world because we need it for our aesthetic pleasure and experiences.
- (vii) The cathedral argument states that we ought to preserve it because we may need it for spiritual inspiration.
- (viii) The monument argument states that we ought to preserve nonhuman nature because it has a symbolic or instrumental value of some kind e.g., the eagle as a symbol of freedom and pigeon as the symbol of peace.
- (ix) Finally, the psycho developmental argument states that we ought to preserve nature on the grounds that contact with non-human nature is essential for healthy psychological development. This last argument is effectively the psychological counterpart to the physically based life support system argument.

Following this discussion we can see that the first two approaches emphasize the value of physical transformation nature. The first two approaches while restrict the notion of instrumental value to a limited field, the third approach widens the scope of instrumental value and thus in addition to physical benefits that we derive from nature it includes various other benefits. The nine arguments as stated above bring out this wider meaning of instrumental value. It will be wrong to consider the wider meaning of instrumental value as mere semantic. The wider meaning of instrumental value point out in practical terms how

different ways we derive benefits from nature. A brief elaboration may be of some help to put argument in perspective.

The life support system argument emphasizes the physical nourishment value of the nonhuman world to humans. For food we are dependent on nature. The early warning system management, the laboratory argument and the silo argument emphasize the informational value of the nonhuman world to the human world. The gymnasium argument, the art gallery argument and the cathedral argument emphasizes the experiential value of the nonhuman world to humans. The monumental argument emphasizes the symbolic or instructional value of the nonhuman world to the humans. The last, i.e., the psycho developmental argument emphasizes the psychological nourishment value to the non human world.

The above three approaches argue that we can exploit, conserve, or preserve the nonhuman world. We can exploit it on the basis of purely instrumental value of the non human world.

The value of nature is instrumental. It can be used as we have discussed above, as an instrument for human welfare in various ways. The instrumental perspective of anthropocentric theories show that nature is irrational and it does not have interests like human beings have. Further anthropocentric theories hold that it is only human interests and not nature that should be given priority. Started from Aristotle and Kant nature is meant for the use of human beings. Every thing in nature has a purpose and therefore nature is only teleological. According to the purpose that the individual entities have Aristotle made a hierarchy in which human beings are placed on the top of the scale. But it is not true that all anthropocentric theories give prima facie importance to human beings. This will be found from the claims made theories like enlightened anthropocentrism, by anthropocentrism and shallow ecology where the idea of human beings

having the duties to taker care of nature is prominently found. However in spite of their revised or enlightened stand, these theories confirm to their ultimate instrumentalistic position. That is, the concern for nature is ultimately for the benefits of human beings of future generation. Man is thus conceived as steward or caretaker whose supreme duty to take care of all the values (recognized as instrumental values) that nature exhibits which are vital for human beings. Taking care of these values is thus meant to be indispensable for the survival of human beings. Hence serving nature for them will thus mean serving the future generation of mankind.

CHAPTER-V

The Value of Nature: Virtue Ethics Perspective

Introduction

Man is a natural being and therefore, he is subjected to the natural laws of nature like all other natural entities. Thus we are, as human beings, dependent on nature. This remains as a fact, irrespective of whether we are aware of this dependency consciously or unconsciously. Sometimes we knowingly do not recognize this dependency. As a result it is believed from a very long time that human being is a special kind of creature. Therefore, he separates himself from nature. In the last three chapters we have discussed these two perspectives i.e., whether we are dependent on nature or independent of nature? And, again, whether nature has intrinsic value or having instrumental value only?

From the very beginning of environmental ethics we find that there is a considerable discussion focused on the intrinsic and instrumental value of nature. The intrinsic value approach considers the destruction, and also excessive exploitation of nature to be morally wrong. The instrumental value approach on the other hand talks about the use and abuse of nature from the point of view of the use value of nature. True, it talks about the protection and preservation of nature but it does solely from the anthropocentric point of view. All these perspectives together constitute the reasons to extend moral considerability to nature beyond our own. This results into evaluating our conduct towards the nonhuman nature. In contrast, to the above two perspectives, the perspectives laid by virtue ethics does not occupy a significant place in the contemporary discussion on environmental ethics. The most striking feature of virtue ethics in relation to environmental ethics is that the way it focuses on human excellence and flourishing in the same way it focuses excellence and flourishing of nature. That is the way human beings must flourish on the basis of certain character traits in the same way nature should also flourish and acquires excellence. It started with the philosopher Arne Naess's discussions concerning, joy and fulfillment to be found in a more environmentally conscious life. Gradually the concepts like respect for nature emerged. In this conception nature is not seen as the mere opposite or the other. The interest which we have about ourselves or human interest is now extended to nature. This attitude is expressed in its stand regarding the importance of giving protection to nature. In its approach, the virtue ethics thus includes enlightened self interests as the primary motivation for its preoccupation with environmental ethics.

The need for this aspect of an environmental ethics is based on three main reasons. First, an environmental ethics is incomplete and unbalanced without an environmental virtue ethics. We can understand this point in a better way if we take ethical theory in general. Consider a case where an ethics which concentrates only on rights and responsibilities and thus judges our actions accordingly to evaluate whether the actions performed are according to moral duty or not. An ethics for human beings is incomplete if it ignores the crucial ethical questions like-what is the best life for a person and how can a person live a life in a better way? What is a good society and how can we achieve it? It may be noted that these questions are equally significant for environmental ethics as in ethics in general. It is because the action which affects the environment also affects us. Therefore, any environmental decisions we make- makes us a better or worse person and ultimately this leads to create a better or worse society. Hence a complete evaluation of our actions and lives must include a virtue ethics as a component. A complete environmental ethics must include an environmental virtue ethics.

The second reason is, an environmental virtue ethics gives us a better account/ picture of interrelations with nature. In this respect environmental virtue ethics is like the classical virtue ethics which provides a strong self-interested reason for treating other individuals with respect. A self-interested reason means, reasons based on a person's concern for his own virtue and development. So this kind of self-interested reason can be a base for an environmental virtue ethics that provides a strong ground for environmental protection for human beings. Ultimately the theory of environmental virtue ethics refrain us from adopting any destructive/exploitative approach towards nature. Environmental ethics in this sense emerges as a more positive, sustainable and respectful position on nature.

The third reason is, in a situation where we go back to the theory of evolution, we can see that our natural origins are in the same process out of which all other living beings have been originated. But with the remarkable growth of scientific knowledge and technical power we believe and announce that we are independent from all non-human communities of nature. But the hard fact is that we are not independent of nature totally. At this point we bring the phrase Responsibility for Nature employed by John Passmore in his book Man's Responsibility for *Nature.* This book brought a great change among moral philosophers. In traditional moral theories, we have only responsibilities towards human beings. But with Passmore's book the concept of "responsibility" is extended to the non-human nature. This became the nerve of environmental ethics. The phrase "Responsibility for Nature" indicates reflective, normative rules of action and forbearance towards the entities and regions which exists "on their own". They are independent of human management and therefore, maintained by the natural laws and processes. At the same time the word "responsibility" also implies that all the non-human entities and regions too are vulnerable to be affected by human action and policy. The word "Responsibility" implies (a) knowledge, (b) capacity, (c) choice, and (d) value significance. As all of us know that science has increased our knowledge, and technology has increased our capacities to modify the natural environment and its

entities. Due to this the quality of the standard of living present and future generations has also gone up. Like this the burden of moral responsibility on us is also increased and hence we should take care of nature. We need to focus on ourselves (individuals) and our attitudes towards nature. The discussion on virtue ethics helps us here. In the previous two chapters we have a discussion on two contrast the views on the value of nature. In this chapter we will be discussing virtue ethics. Virtue ethics might help us to resolve the disputes arising from the incommensurable nature that anthropocentric and non-anthropocentric ethics represent.

Virtue Ethics

The deontological value approach towards nature focuses on the right act and the utilitarian approach focuses on the right consequences. Virtue ethics focuses on the individual and his or her attitude. In virtue ethics the outcomes of our actions are less important than the right attitude. The right attitudes are those which help us to do things for the right reasons. In this theory the notion of "virtue" is primary. It is a view regarding the concept of "good" which sets the goal of our action. Virtue ethics also gives primary importance to virtue than the concept of "duty", "law", and "reason" which provides the rules for an action. In case of virtue ethics, virtue provides the concept with which we elucidate happiness, duty, and practical reason.

Virtue ethics is the oldest among deontology and utilitarian ethics. It is started by Plato, but developed by Aristotle. Its central focus is on developing a virtuous character. It means, a good or a right action results naturally from its dispositions or a person's natural qualities of character. So the exercise of virtue is to produce a good person. According to Aristotle a virtuous person is that person whose character possesses of the four classical virtues: Temperance, justice, courage, and practical wisdom. The four virtues constitute *eudaimonia*. According to

Aristotle *eudaimonia* means happiness, and wellbeing. Wellbeing means not only living well but also doing well. According to Aristotle this kind of emphasis on character is not at all individualistic. According to the virtue ethics tradition, human beings are seen as social and political animals and the character of *eudaimonia* cannot be developed in isolation. At the same time if a person embodies it then he should also promote it to others. Virtue ethics seek to identify and explain morally praiseworthy personal characteristics. It tries to answer the questions such as, what is the life of worth living? Or what kind of person should I be?

Virtue ethics is the theory which emphasizes on the importance of acquiring virtues, or having moral character in our life. This theory is different from the other two theories i.e., the deontological and the utilitarian theories. The deontological theory emphasizes duties or rules. The consequentialist theory emphasizes the consequences of actions. For example, let us take the concept of "help" and see how these theories approach to this concept. Suppose, we should help someone who is in need. A deontologist's response to help a person in need, means the agent acts in accordance with a moral rule, i.e., we should help a needy person so that it becomes a universal rule. To the same, an utilitarian points out to the fact that the consequences of helping a person is to maximize the well-being. Virtue ethics on the other hand emphasizes on the very act of helping the person on the ground that it is a charitable and benevolent act. To help a person is itself a moral virtue. In view of this the question arises: What sort of a person should I be and how should we live?

Virtue ethics constitutes of three central concepts. These are *arête* (excellence or virtue), *phronesis* (practical or moral wisdom), and *eudaimonia* (usually translated as happiness).

Arete or Virtue is a character trait. It is a disposition which is entrenched so well in its possessor, so that it becomes very difficult to change. Virtues such as honesty and generosity are not only a tendency to do what is honest or generous but also specified as desirable or morally valuable character trait. It is concerned with many other actions as well. It is also concerned with emotions and emotional reaction, choices, values, desires, perceptions, attitudes, interests, expectations and sensibilities. Hence to possess a virtue is to be a certain sort of person with a certain complex mindset. The most significant aspect of this kind of mindset is the whole hearted acceptance of a certain range of considerations as reasons for action.

Phronesis or practical wisdom is the knowledge or understanding that enables its possessor to do just act in any given situation. Now-adays the deontologists say that the action guiding rules cannot be applied correctly without practical wisdom. Because correct application of action guiding principles requires situational appreciation which means the capacity to recognize the morally salient features of any particular situation. So virtue ethics says that practical wisdom has two aspects. The first aspect is that the practical wisdom comes only with experience of life. It means with experience a person could know the consequence of a certain kind of action in a particular situation. With the help of his experience a person could come to know the consequences for the people involved. It is a part of practical wisdom to be wise about human beings and human life. A virtuous person should be mindful of the possible consequences of actions. The second aspect of practical wisdom is regarding the situational appreciation. It means that the practically wise agent should have the capacity to recognize some features of a situation as more important than others.

According to Aristotle, a practically wise person has the above two aspects. Therefore, he understands what is truly important and advantageous in life. It means a practically wise man knows how to live

well. Therefore, in Aristotelian terms, a practically wise man has a true grasp of *eudaimonia* or happiness.

The concept *eudaimonia* is a key term in ancient Greek moral philosophy, especially in Aristotelian philosophy. It is translated as happiness, or well-being. The concept *eudaimonia* is a moralized or value-laden concept of happiness. It is something like true or real happiness or the sort of happiness worth seeking or having. Living a life in accordance with virtue is necessary for *eudaimonia*. *Eudaimonia* is conceived as the supreme good. It is not conceived of as an independently defined state of life. In virtue ethics it is conceived of as a constituent of what is morally good. Virtue ethics insists on the conceptual link between virtue and *eudaimonia*. Living a life in accordance with virtue is necessary for *eudaimonia* or "happiness". It is the supreme good.

According to Aristotle the virtue ethics theory says that the concept of virtue is central. The concept of virtue is not only concerned with living a moral life but also living a good life. According to this theory, a good human life constitutes of developing a good character along with the right character traits. It involves developing and using the capacities of human beings i.e., the capacities of human mind which distinguishes human beings from other living beings. Aristotle makes a distinction between the virtues of character or moral virtues and virtues of intellect.

According to Aristotle human personality is a wholistic concept and thus it should not be developed on the basis of any absolute value which leads to extremities. In this context Aristotle's suggestion is that we should adopt a middle path while approaching human personality. Adopting a middle path for Aristotle is to arrive at a point which represents the average or mean value of the totality of different moral values. A person thus should not be too bold or too timid, neither too

kind nor too hard. It is in this sense that Aristotle characterizes his approaches as a middle path. A follower of middle path gets well-being and happiness i.e., *eudaimonia*. A person who achieves this should also promote it among others.

This gives us a clue to extend this approach to nature. It can be argued that Aristotelian approach has the potential ecological importance. In an environmental context, we can interpret the Aristotelian notion of mean or the middle path as indicating the need to pay attention to resource conservation without exploiting the resources. It also holds that we should have an attitude of respect for living beings. Keeping virtue ethics in a wider perspective we can now put forward the claim that virtue ethics implies that we must have a respect for the environment and further emphasizes the need to take note of the implications of our activities on environment.

According to virtue ethics for a thing to have virtue means that it enables the object to carryout its function adequately, for example, the sharpness of a knife. The same notion is applicable to the powers and capacities that we human beings have. For example, the capacities to experience fear. In our lives fear has a function. It makes us avoid danger. At the same time it can also make us avoid things that are wrongly perceived as dangerous. So there are right and wrong ways to feel fear. Courage is the character trait that enables us to fear what we should and when we should not. It is therefore a virtue and called a character virtue.

Intellectual virtues are different from character virtues. For example, humans have the extraordinary capacity of constructing logical/rational arguments which other living beings do not have. We have capacity to construct arguments, to draw conclusions, give reasons, and recognize inconsistencies in an argument. These kinds of

developed ability to perform these operations are also considered to be virtues and hence they are qualified to be called intellectual virtues.

We need intellectual virtues in theoretical thinking as well as in practical thinking. There is an important division among intellectual virtues. We have two kinds of intellectual virtues and these are theoretical intellectual virtues and practical intellectual virtues. In case of theoretical virtues we aim at arriving the truth from a set of beliefs. In case of practical intellectual virtues our aim is to find out whether or not the action is correct. For example, if I am thinking about whether it is true that cutting trees causes environmental damage, it is called theoretical thinking. If I am thinking about whether to take part in an anti-tree cutting demonstration then that is practical thinking. So in both cases we need intellectual virtues to judge. Making a good judgment is to make a correct moral decision. This is also a very important intellectual virtue.

A person may have a good character with the virtues such as justice and compassion. But in a particular situation it may be difficult to a virtuous person to decide which action is just and which action may be regarded compassionate. Taking decision is difficult in the situations where justice seems to demand one action, but compassion suggests a different action. In that situation two different virtues demand two different actions. But there are some people who are better at making such decisions than others. They are wiser and they have better capacity for making judgements. The ability they have for better judgement includes many other capabilities. They have the ability to assess the situation, to grasp the features that morally significant, and to judge among them which are the most important. This ability is necessary for a person for to exercise the virtues such as justice and compassion. But this ability in itself is not a character trait. So this kind of intellectual virtue in Aristotelian terms is called "practical wisdom" or phronesis. This is expressed in our day to day life differently by the use of such words

like, "judicious", "having good judgement", "prudent" and "sensible" etc. This feature shows that we need both, character virtues as well as intellectual virtue in our dealings with nature.

Traditionally we need those types of virtues that enable a person to do the right things and have right feelings towards other people. For this reason our traditional ethical theories focused on our relations with other human beings. Hence virtues involve actions and responses appropriate to subjects of those actions and responses. In our earlier discussion we have already argued the need for extending the moral domain to non-human beings. In view of this our task now is to spell out what virtues enable us to act and respond appropriately to nature. This is how the need for environmental virtue ethics is felt in the recent time.

Environmental Virtue Ethics

According to virtue ethics, to be a good human being one should have certain virtues. This theory was developed certainly in relation to other human beings. The role of virtue ethics in the context of environmental ethics is however different. Environmental virtue ethics is also in an important way concerned with the involvement and responsibility of human beings in relation to the environment. The question that it asks is what virtues a good human being must have in relation to the natural world? The answer that is given is from the human point of view. Because it asks the question-What dispositions must an individual have towards the environment in order to lead a good human life? Environmental ethics, as a field of enquiry, is an attempt to understand the relation of human beings with the environment. It determines the norms that should govern the interactions of human beings with nature. These norms can be either norms of action or norms of character. Hence the study regarding the norms associated with character in relation to human-nature relationship forms the basic thrust of environmental virtue ethics. It is engaged in studying about a

particular account of the character dispositions that humans ought to have regarding the environment.

The Need for an Environmental Virtue Ethics

Environmental ethics is an ethics concerned with humanenvironment interactions and relationships. In this respect an adequate environmental ethics may be said to require both an ethics of action and an ethics of character. An ethics of action is one that provides guidance regarding what we ought to and ought not to do to the environment. This we have discussed in the third and the fourth chapters respectively. An ethics of character provides guidance on what attitudes and dispositions we ought to and ought not to have regarding the environment. A proper environmental virtue ethics asks the central ethical question i.e., how should one live? A complete answer to this question comprises not only what we ought to do but also what kind of person we ought to be. An account of right actions, such as, a set of rules, or a general principle, or a decision making procedure does not answer it entirely. A complete answer will inform us not only what we ought to do but also what kind of person we ought to be. An adequate ethical theory must provide an ethics of character where an individual's character is determined by the sum of his actions. People having character traits, attitudes, and dispositions perform actions. They perform actions, promote policies and formulate laws. How an individual interacts with the environment is largely determined by one's dispositions towards it. For example, the cause of environmental exploitation comes from the attitude that nature is merely a resource for satisfying human wants and needs. Hence, any significant change in our environmental practices and policies requires a substantial shift in our dispositions towards the environment. In this way the need for an environmental virtue ethics is gradually felt. This results into a widespread realization that a proper character is indispensable for facilitating right action and behaviour towards nature.

Environmental virtues are not only valuable for instrumental reasons but they are also valuable in themselves. These values serve the instrumental end because they are the dispositions which enable us to identify the right actions and to perform them accordingly. They may be characterized as life - affirming and life enhancing virtues. The persons who possess these virtues are better than those who do not have these. The individuals who have these virtues are able to find satisfaction and comfort from their relationship with nature. It is their character which includes their capacity to appreciate, respect, and love for nature. In the words of Carson,

Those who dwell, as scientists or layman, among beauties and mysteries of the earth are never alone or weary of life.

In the words of Muir,

Everybody needs beauty as well as bread, places to play in and pray in, where nature may heal and give strength to body and soul a like.

From the above two phrases we understand that we are related to the environment in our thoughts, actions and feelings. We need environmental virtue because our actions affect human and all other sentient beings through the effects on their environment. We need those virtues that help us to deal appropriately with all human and non-human beings. In order to protect our common environment it is necessary to have co-operation among ourselves. For this co-operation we need to have the virtues such as, trust, reliability, and self-restraint. We need to have environmental virtues because we are dealing with natural things directly. In such situation we need to be concerned with their effects on other human and sentient beings. This raises a question: What are the attitudes and dispositions that constitute environmental virtues? In order to answer this we require to specify the appropriate role of virtue in an environmental virtue ethics.

Strategies to Find Out Environmental Virtues

The environmental virtues are the proper dispositions or character traits for human beings required for their interactions and relationships with the environment. The environmentally virtuous person is disposed to respond both emotionally and also through hi/her action towards the environment as a whole. The question which arises is how does one establish which dispositions regarding the environment are constitutive of virtue? There are certain strategies to specify environmental virtues. These are as follows.

The first and most common strategy for specifying environmental virtue is done by extending the standard interpersonal virtues that human beings cultivate. It means extending the applicability of virtues that are used in human relationships to non-human entities. Each interpersonal virtue is normative for a particular range of items, activities and interactions. That range is the field of applicability of that kind of virtue. For example, the field associated with the virtue "honesty" is the revealing or withholding of truth. Similarly for "temperance" the field that may be identified is bodily pleasures and pains. For "generosity" the field of activities includes giving and withholding of material goods.

The above description points out the strategy to be adopted for extending the range of ascribing certain interpersonal virtues to nature. The virtues when applied to environment should be considered to be equally normative. For example, compassion is the appropriate disposition to have towards the suffering of other human beings. From the point of view of suffering it may be claimed that there is no difference between human suffering and the suffering of non-human beings. Following the logic it may be now argued that if one is compassionate towards the suffering of fellow human being then on the same

consideration one should be compassionate towards the suffering of the non-human beings too.

Gratitude is another appropriate disposition that an individual has towards other human beings. It is a well accepted ethical practice in human society that we feel grateful towards those from whom we have got benefits. Now the argument is given that in a similar way we can extend this disposition of gratitude towards the natural environment because we get benefited from the environment. Thus extending interpersonal virtues to natural environment can lead to the creation of environmental virtues and environmentally virtuous person.

The second strategy is based on the idea of how an agent can be benefited on the basis of possessing a set of environmental virtues/dispositions. An environmental virtue forms a particular character trait. By virtue of that trait a person can be benefited. The environment not only provides material goods but also it has its own aesthetic and recreational value or important. The environment provides material goods such as water and air. It also becomes the means for all round development of person that includes physical, intellectual, moral and aesthetics. The environment directly provides benefits to the individuals in several ways. All these benefits justify cultivating the kind of character traits that allow one to enjoy the various products and aspects of nature. For example, the natural environment provides an opportunity for aesthetic experience. But a person can be benefited from this only if he possesses the disposition to appreciate the natural environment. Nature also provides the opportunity for intellectual challenge and reward but a person can be benefited from this if he has urge to explore to understand nature.

Hence the natural environment provides many opportunities to have meaningful relationships with its inhabitants. These relationships are possible only when the individuals are willing to have them. There are religious and environmental thinkers who claim that nature provides opportunities for spiritual and divine experiences. However such experiences will be available only to those who are having the adequate dispositions. In this way, through the process of human behaviour that we become aware of the importance of environmental ethics in its several dimension and not just on the issue of understanding nature.

The above discussion shows that there are certain environmental virtues which emphasize the role of enlightened self- interest in promoting or motivating environmental consciousness and its corresponding behaviour.

A third strategy for specifying environmental virtue is to argue from the considerations of human excellence. In this approach a character trait which constitutes an environmental virtue is that which makes its possessor a good human being. It means a flourishing life is judged in terms of the characteristic feature of the life of members of the human species. For example, human beings are social beings. Therefore, as a human being the excellence involves character dispositions that promote the good functioning of social groups. As human beings we should have dispositions to encourage an individual to maintain healthy relationships with members in the group. But there are individuals who are disposed to undermine the social cohesion, disrupt the conditions that make co-operation among individuals possible. This disposition ultimately disrupts the relationship with others. So they are deviant human beings. Hence such a person fails to be a good human being because of his anti-social disposition.

Many environmental philosophers said that a proper understanding of the naturalistic situation of human beings will show us that they are socially as well as ecologically good people. Socially they are members of the human community and ecologically they are members of a broader biotic community. Hence there is an extension of

human excellence to the biotic community. But now-a-days the harmony observed in ecology is threatened badly. It is threatened particularly by habitation and bio-diversity loss. Hence a disposition to oppose these kinds of ecological threats would be the constituent of environmental virtue.

A fourth strategy for specifying environmental virtue is to study the character traits of individuals who are recognized as environmental role models. So by knowing and examining the life, work and character of exemplars of environmental excellence, we would be able to identify particular traits constitutive of that excellence. For example, the lives of John Muir, Rachel Carson and Aldo Leopold instruct us how to improve ourselves and our approach to the natural world. It is not necessary that the environmental role models must be confined only to such renowned persons like as Leopold. We can find exemplars of environmental excellence even in local communities. We can find them in organizations working for environmental protection and improvement. We all get benefited by such people. We are benefited not only by their accomplishment but also by the guidance, inspiration and example they provide.

Environmental Virtues

One of the earliest books in modern philosophy devoted to environmental issues is Passmore's *Man's Responsibility for Nature*. In this book Passmore argued in favour of nature in terms of virtue and vice. He argued that we have brought ecological disorders primarily through our vices such as greed, self-indulgence and short sightedness. The vices were not questioned by environmentalists then. Therefore, they defended human-centered utilitarian approach. In this approach most of our practices are found to be short sighted since they are considered from the point of view of our own interest. This position was readily accepted by every one on the ground that it defended against all the

ethical issues intrinsic to the environment in general. Utilitarianism in this respect, leaves all the environmental problems to government to resolve it. But at the same time it is not unconcerned about the role of government in relation to environment. It is said, for example, that government should pass any legislation regarding environment strictly from the point of human interest. As a result to protect our own interest many of the compromises that seriously disturb the harmony of environment have been thus admitted. But this is a fallacy based on the short sightedness nature of utilitarianism. There is no quick fixed solution that would help us to solve environmental problems in a short period of time. All environmental problems have arisen due to our abuse of nature over a long period of time. There is no way in which all environmental problems can be stopped immediately. All the environmental problems have come from the vice such as greed. To avert these problems we need to avert the old fashioned procedure and actions. We are compelled to adopt certain new virtues such as the virtue of prudence, practical wisdom and compassion. Hence there are different kinds of environmental virtues proposed in this connection and these are (a) virtues related to pleasures of the senses, (b) virtues related to emotions, and (c) wonder and associated virtues.

Virtues Related to Pleasures of the Senses

The environmental virtues which come under this category are described in terms of the traditional virtue, i.e., temperance. In the literal sense it means abstinence or restraint. But we have to find out a word that describes it in terms of correct indulgence. The traditional description of temperance is described in terms of the bodily appetites. It means the practice of this virtue moderately is not bad. A person is good if he has the disposition of not doing anything that is excess. This kind of virtue tends to influence a person to behave moderately in each and every aspect of life. The virtue called temperance can be extended towards nature as a whole. In this kind of virtue the emphasis is on

excess. We have seen in the contemporary world that in rich and developed countries the consumption is so excessive that they have ignored their environmental impact. The use of natural resources along with the use of technology is so excessive that due to this they face many natural disasters. They result into earth quakes, global warming etc. The other side of the story is in the poor countries where the access to nature is less. Due to the absence of sufficient natural resources people die of poverty, malnutrition and hunger. There are very few people who can over-consume. In such societies necessity takes its position in place of virtue. It is out of sheer necessity that people use nature for their survival. On the contrary the rich country's excessive consumption can be restrained only through the practice of temperance. People in rich and developed countries can bring down the excessive use of natural resources through moderate attitude.

Temperance is not the only kind of environmental virtue in this category. Aristotle also draws our attention to the fact that the enjoyment of sights, sounds, tastes and smells can be a kind of sensuous pleasure. The examples are the sound of good music, the smell and colour of flowers and forest lands. Aristotle says that the notion of excess does not apply to this kind of sensuous pleasure. So it is not bad to indulge in this kind of sensuous pleasure. Hence in this case it may be suggested that it is a virtue to have a developed capacity for responding to these beautiful things. We should develop the capacity to respond and enjoy the enormous variety of forms, colours, sounds, textures and smells that we find in nature. Nature is the only source that presents many different kinds of sensory pleasures to our senses. In the case of appetite related pleasures we need to restrain. But in this case we need to train ourselves to see and enjoy the beauty of nature. We can name this kind of environmental virtue as sensitivity and sensibility.

Virtues Related to Emotions

Fear is an emotion that is related to human beings. It also relates human beings to the natural phenomena. Courage is another virtue which is related to fear. Courage is not being immune from fear or disregarding danger. It helps us in making a correct assessment of the danger. Courage helps us not to allow fear to prevent taking appropriate action, be it avoidance or resistance. Human beings practice this among themselves. But we can extend this virtue to include nature also. Nature is formidable to some extent and to have an awareness of its destructive power is rational. We should not be over confident about our ability to contain these powers. For example global warming is a threat to human beings and it is a serious problem for the planet earth as a whole. The scientists tell us that average temperature might increase over six percent by the end of the century. Research shows that even an increase of four percent could destroy hundreds of species, and it can cause devastating shortage of food and water. It can also lead to floods which would displace millions of people. So these problems are caused by the actions of people and governments and this shows the destructive powers of nature.

Awe is an emotion related to fear. But it is not the same as fear. Fear arises due to the apprehension of danger. We fear by the threat that there may be harm to those for whom we care. Awe is a response to something which is great. Awe can be produced by any physical object and awe may involve recognition of a kind of feeling which is evoked by an object. In this way it is a humbling experience towards physical objects. But it can also be an elevating and exhilarating experience in which consciousness of self is overwhelmed by what is outside the self.

We apply terms such as grandeur, magnificence, sublimity and majesty to awesome things. These terms acknowledge values in the objects. But in the case of fear the safety of a person who has been threatened is valued. We do not value the object which poses the threat. So it is a virtue to cultivate the capacity for awe because we know nature is more powerful. Therefore, a proper sense of the grandeur of nature is a virtue and indifference is a vice.

Wonder and Associated Virtues

Wonder is a kind of concern for self-implicit in fear. It is related to awe but it is different from it in the sense that it is not confined to transient intense experiences. This kind of emotion does not evoke only by nature through its beauty. Wonder is a form of experience that is important in several areas of life. This is important in the scientific, religious and aesthetic spheres. In all these spheres wonder is a response to the natural world or to a particular aspect of it. The response to the natural phenomena is one among the scientific sphere. In the sphere of aesthetics we respond to the natural phenomena for themselves. According to the religious aspect we think that nature has more power than its natural powers.

The nature and value of wonder has been discussed by the Ronald Hepburn. In his essay *wonder* he says that wonder has affinities with several virtues that are relevant to our attitudes and behaviour towards the non-human nature. First of all we need to see the difference between wonder and such related experiences. According to him there is difference between the experience of wonder and the related experiences such as amazement, astonishment and curiosity.

In the same essay *wonder* he further discussed the possibility of wonder as more than an ephemeral emotional response to some baffling phenomenon. Hepburn suggests that the appropriate attitude of wonder is that the phenomena must be seen or understood for what they are and they should be worthy of our attention. But there are certain phenomena about which we are ignorant as to their explanatory happening. This ignorance however should not prevent us to have the

attitude of wonder just because we are unaware of their explanatory origin. Hepburn suggests some sources regarded as conditions that give rise to wonder. Among these some disclose themselves to the reflective mind only and there are some that make an immediate impact on the senses. In nature there are natural phenomena that are of extravagantly spectacular kind, such as rainbows, sunsets, and waterfalls. These things are immediately present to the observer's eyes. These are not the things subjected to scrutiny. Apart from immediate impact that they make on sense they stimulate a desire in the observant to understand.

There are also less obvious objects of wonder in nature. For example there are many varieties of living things that astonish us. They have astonishing kind of intricacy of their structures and complexities of their behaviour. From the beginning such things are taken for the evidence of design in nature. So it explains the second kind of condition or source of wonder. Because the fact that-things are like this-is a source of wonder. The additional source of wonder is that the apparent design is the result of a process that operates without any intention.

The third source of wonder is the fact that the world is intelligible. It is possible to explain a vast variety of sub-systems in the world within a whole system in a coherent way. All of them function through the laws of nature. So it gives the proof that there are natural laws and it is only the human beings who discover them. The entire world itself is a source of wonder because of the way the world is. The very existence of it is the greatest source of wonder.

Having discussion on what makes something an appropriate object of wonder, now we discuss how the experience of wonder relates to the virtues that may be exercised in our dealings with natural things. At this point Hepburn makes a distinction between wonder and curiosity on the ground that wonder has un-possessive nature. This has a very

important role with the virtues that are to be exercised in our dealings with natural things.

According to Hepburn the appropriateness of wonder is not amenable to proof. It is also not rationally demanded to be proved. But we can give reasons for preferring wonder than any other alternative responses to the world. So he says wonder is life-enhancing, appreciative and open. It is opposed to the self-protective and consolatory. It is an attitude towards the objects and the subjects - both human and nonhuman beings. Here we may distinguish wonder from other acknowledging attitude. It is an attitude towards both human and nonhuman beings and is recognized as being separate from wondering self. Wondering self should be recognized mainly in terms of its intrinsic nature and value. As a result, wonder as an attitude may be considered as open to all in the sense that it lets others to develop an objective consciousness towards things. It prompts us to look at all things as they are. It is also open in the sense that it does not project the human fantasies and desires on other non-human entities.

It may be argued that this particular concept expressing the attitude of wonder can be extended to the non-humans. According to Hepburn disinterested or impersonal attention is to understand what things are in themselves. It also means to refrain ourselves from looking at them as useful to us. According to Hepburn wonder involves disinterested attention. Therefore it implies that the attitude wonder is non-exploitative, non-utilitarian and un-possessive. Wonder looks beyond the instrumental value and that is the non-instrumental value of nature. The message conveyed here is that the value other than instrumental value of nature is to be appreciated. This is a necessary condition of the appropriateness of wonder.

Hepburn associates *respect for other things* as the first moral attitude with the environmental virtue called wonder. All of us know that

the concept of respect as a moral attitude is central to the western moral thinking. For the first time Kant, formulated a moral principle on the basis of this moral attitude of respect. The first principle is called categorical imperative. Kant formulated it in this way, i.e., act in such a way that you always treat humanity, whether in your own person or in an end. It means if I treat a human being as a means and only as a means to an end then I treat him as having no value that is independent of me and my needs and desires. In other words, I do not treat him as an autonomous moral subject.

Hepburn extends this analysis to non-human nature. The concept of respect associated with Kant's first principle is limited to human beings. Human beings have a conception regarding themselves. They have their ends and these ends they themselves pursue. But Hepburn says having ends does not mean that it is a necessary condition that they deserve respect. Respect means ruling out the acts of vandalism and thoughtless manipulation.

According to Hepburn the concept of "respect" involves the disinterested attention to things. This disinterested attention allows a correct appreciation of things. The appreciative attention allows recognition of their value. This is not only an intellectual matter but involves enjoyment, absorption, delight, fascination and all other feelings with which we respond to the vast variety of the natural world.

Hepburn says compassion, gentleness and humility are also related virtues that involve the feeling and sufferings of others. Here he limits the virtue of compassion only to those who have feelings. The concept of "others" includes only those who have feelings. We cannot have compassion for trees because they do not have feelings. Gentleness is another virtue that can be related to compassion, because it has a wider scope to extend to nature. According to Hepburn gentleness means

we should not manipulate or damage the existence of other things. This will help us to restrain ourselves from dealings with nature at large.

Hepburn also says that the existence of the whole world is, to quote his own expression, a gift underserved. This view is based on the virtue of gratitude. Gratitude as a virtue has close affinity with wonder. We show the virtue of gratitude to those persons from whom we get benefits. This attitude can be extended towards nature as an appropriate attitude to nature. We feel thankful to nature, for the beauty of a spring morning and many other things. We express such feelings towards nature because we have similar kind of feelings towards a person when we receive something good fro him/her. So this feeling of gratitude can be extended towards nature as a whole for some of its wonderful and beautiful things.

The Role of Environmental Virtues in Environmental Ethics

In the preceding discussions we have discussed certain basic virtues in the light of Aristotle's theory which a person needs to inculcate in his character in order to live a good life. On the basis of it we then discussed some environmental virtues that we need in environmental ethics for to maintain a good relationship with the natural world. A complete environmental ethics includes both an account of how one ought to interact with the natural environment and an account of the character dispositions that one ought to have regarding the natural environment. The question is what is the proper relationship between these two? What is the appropriate role of virtue in ethical theory?

The virtues are the dispositions to do the right thing. In the context of environmental ethics the role of environmental virtues are the dispositions to act according to the rules, principles, or norms of action of environmental ethics. In this way environmental virtues can be seen as instruments to do the right actions. Accordingly a person first determines the right ways to act towards the environment. Then the

person determines which character dispositions tend to produce that behaviour. Those dispositions are regarded as the environmental virtues. The environmental virtues thus become the instruments to the individuals for to do proper action towards the environment. An environmentally virtuous person will always be disposed to recognize the right thing and accordingly he acts for the right reasons. He always tends to act like this because of his virtues. It is not always true that all these virtues form rules, principles and guidelines of moral action. An environmentally virtuous person may not act strictly according to the rules and principles. While performing his action he can go beyond them for example, it is not morally required that one should always appreciate the beauty of the natural world. We can not make a rule such as, every body ought to appreciate the beauty of nature and thus we cannot make it a rule. But a person who is disposed to appreciate the beauty of nature benefited and therefore he is in a better position than those who are not like him. Except such limited contexts, the environmental virtues provide the kind of sensitivity and wisdom that are necessary for the application of action guiding rules and principles to concrete situations. We come to know which rules and principles are applicable to which situations. This also helps us to decide what actions we should adopt in conflicting situations. Virtues play a more fundamental role in ethical theories because according to virtue ethicists an ethic of character is theoretically prior to an ethic of action. According to this an action is right if and only if it is the virtuous thing to do.

It may be observed further that in the context of environmental virtues, the character traits and behaviour of environmentally virtuous people inform us how we ought to behave with the environment. This shows that environmental virtues play multiple roles i.e., both instrumental and foundational within a complete theory of environmental ethics.

At this point we discuss Paul Taylor, Henery David Thoreau, Aldo Leopold, and Rachel Carson. They are the most well known environmental writers whose theories can be seen as environmental virtue ethics. We bring their theories to see how environmental virtues play instrumental and foundational roles in building up a complete environmental ethics. All of them have contributed their theories in environmental studies. Especially Taylor and Leopold have contributed important theories in environmental ethics. Above we have discussed the attitudes and dispositions that constitute the environmental virtues. Now we will be discussing how some of these virtues can be found in the above mentioned environmental theorist's account. First we would see that, how Taylor's attitude of respect for nature can be formulated as a kind of environmental virtue. For to do this we will discuss briefly Taylor's theory of respect for nature. Then we will be discussing Thoreau, Leopold, and Carson as virtue ethicists. They have given importance to the role of virtues in building human character as pronature. According to these environmental writers there are certain ethical positions which may be interpreted as forming positions in environmental virtue ethics. These positions are: (a) putting economic life in its proper place i.e., to consider economic life as a subordinate place within human life as a whole, (b) We should cultivate scientific knowledge while appreciating its limits, (c) We should extend moral considerability to the non-human world and finally (d) we should support wilderness protection.

Taylor's Theory of Respect for Nature

There is a possibility of a new kind of environmental virtue, called *respect for nature*. The term was originally brought into environmental ethics by Paul Taylor. Taylor used the phrase *respect for nature* as an ultimate moral attitude rather than a virtuous character trait. We have discussed Taylor's concept of respect for nature as an ultimate attitude in the third chapter. According to him, any living thing has a telos. It

means a living being has a purpose to attain what is good of its own. Any living being can be benefited by that which enables it to achieve its telos. On the other hand a living thing is harmed by that which interferes with its telos.

All living being possess inherent worth. They have inherent worth as members of earth's community of life. According to Taylor to conceive all living beings as having inherent worth is to adopt the attitude of respect for nature. This is only extending our moral attitude towards nature. For this according to Taylor we first need to understand two concepts before having the attitude of respect for nature as our ultimate moral attitude. Those two concepts are the idea of the good of a being and the idea of the inherent worth of a being. As we have already discussed these two concepts in chapter three, we would only refer to these concepts and analyze the moral attitude of respect for nature.

We start from the question-why should moral agents regard wild living things in nature as having inherent worth? The simple answer to this is that they have the attitude of respect for nature. It means when rational agents subscribe to the principles of moral consideration and intrinsic value on wild living things, they ascribe intrinsic moral worth to them. In this process moral agents are adopting a certain ultimate moral attitude towards the natural world and this particular attitude is called "respect for nature". It is like the attitude we have in traditional ethical theories as "respect for persons".

Similarly, when we adopt the attitude of respect for nature as an ultimate moral attitude, we make a commitment to live by certain normative principles. These principles constitute the rules of conduct and standards of character which govern our treatment towards nature.

First, the attitude of respect towards nature is an ultimate commitment. It is ultimate because it is not derived from any higher norm. It is not grounded on any other more general or more fundamental attitude. All our responsibilities towards nature are based on this single attitude. Second, this commitment towards nature is a moral one. It is to be understood as disinterested principles. Disinterested principle means the attitude of respect for nature is very different from the set of feelings and dispositions which constitutes the love of nature. Love of nature comes from one's personal interest in the same way when we have affectionate feelings towards certain individual human beings. Hence love of nature is a similar kind of feeling that we have about natural environment and its wild inhabitants. Our love for an individual person differs from our respect for all persons independently of whether we love them or not. Similarly, we should have respect for nature no matter whether we love it or not. We should respect nature simply as moral agents. Here Taylor sounds like Kant. To adopt the attitude of respect for nature is to take a stance that one wills to be a universal law for all rational beings. This is a categorical imperative and it should be applicable to every moral agent without exception. Hence, the attitude of respect for nature is a disinterested and universalizable attitude.

Taylor says any one who adopts this attitude has certain dispositions. There are three kinds of dispositions constituting the attitude of "respect for nature". The three dispositions are (a) dispositions to seek certain ends, (b) dispositions to carry on one's practical reasoning and deliberations in a certain way, (c) Dispositions to have certain feelings.

- (a) The first kind of disposition is to aim at certain ends which are final and disinterested ends. The ends are like promoting and protecting the good of all organisms and life communities in nature. These ends are final because these are not pursued as means to achieve some other ends. These are disinterested because they are independent of the self interest of the moral agent.
- (b) The second disposition is to act in such a way to achieve those ends as a primary obligation because they are final and disinterested.

(c) The third disposition is to experience positive and negative feelings towards the states of affairs in nature. Because they are favourable or unfavourable to the good of all living entities in natural ecosystems.

From this we can see the logical connection between the attitude and the duties of a life-centered system of environmental ethics. According to this theory moral agents have rules of duty such as non-interference and standards of character such as fairness and benevolence that determine the obligations and virtues of moral agents with regard to the wild living things of nature.

According to Taylor the attitude of respect for nature is expressed through the character of a moral agent. A moral agent's character has two aspects, namely deliberative and practical. The deliberative aspect is a steady disposition to think clearly and rationally what action is right to do in a particular situation. The practical aspect of good character is having a firm disposition and the dispositions are the power of will that helps us to resolve and carryout one's decision. Taylor says an individual expresses the attitude of respect for nature when he has developed firm, steady and permanent disposition that enables him to deliberate and act consistently with the four rules of duty. The four rules of duty are the rule of non-maleficence, the rule of non-interference, the rule of fidelity and the rule of restitutive justice which are discussed in the third chapter. So Taylor says these dispositions are the good character traits or virtues and they give rise to two types of virtues. They are called general virtues and special virtues respectively.

The general virtues are deliberated and acted in the right way irrespective of any particular moral rules. General virtues are consists of two kinds of fundamental character traits. These are moral strength and moral concern. The moral strength consists of the virtues such as, conscientiousness, integrity, patience, courage, temperance, self control, disinterestedness, perseverance and steadfastness in duty. These virtues

we need in order to lead an ethically good life. In this chapter we are not dealing with all these virtues because these are only concerned with the human life. So here we need the second kind of fundamental virtues which consists the general virtues expressing the moral concern. According to Taylor it is due to this moral concern the moral agent consideration recognizes of the inherent worth of all wild living things in nature. Hence general virtues forming the moral concern of agents consists in the ability and disposition to take care of the well-being of animals and plants. It is also the ability to look at the world from the perspective of the well-being of all wild creatures. There are four general virtues of moral concern and these are benevolence, compassion, sympathy, and caring.

Benevolence is the capacity and disposition of an agent to feel pleased at the realization of another's good. In this respect it does not matter whether the good achieved is due to agents own action or by some other action. In this process an intrinsic normative principle that emerges is that we should act in a way that will promote or protect another's good as an end in itself and for the sake of the being.

Compassion is the virtue by which we feel sad at another's pain and suffering. It is also the disposition which makes us realized that any kind of harm is intrinsically bad and we should thus refrain from doing harm to others. Taylor further says that to develop the virtues of benevolence and compassion in one's own character will mean to have the disposition to have sympathy for others and to care about their well-being. Sympathy and care are the two virtues that motivate one to act benevolently and compassionately towards others.

Taylor says when we develop the virtues of benevolence, compassion, sympathy and care for the wild creatures then we are disposed to take moral account of the standpoint of non-human living creatures and there by we are able to make ethical judgments

concerning how they should be treated. These virtues formulate the emotive and valuational background for various actions that express the attitude of respect for nature.

According to Taylor special virtues are the character traits which we need for acting in accordance with a single rule of duty mentioned earlier. Hence a special virtue is a disposition or a set of dispositions which helps a person to fulfill a particular kind of duty, for example, a duty such as fidelity, or non-interference. These are the special virtues we need in a confusing or uncertain situations where a moral agent is confused about what kind of duty he needs to judge. By possessing of this kind of virtue a person possess the capacity to deliberate clearly and accurately which kind of duty he requires in that particular situation. The special virtues that are important in relation to nature are discussed as follows.

Considerateness is the special virtue which is related to the rule of non-maleficence essentially implies not to interfere with nature. It is the disposition for being concern for others which leads to the wellbeing of others. Otherwise it means not to harm any living creature by acting in a particular way. It is also the disposition of not to be negligent.

Regard and impartiality are the two special virtues which are related to the rule of non-interference. Regard is the kind of respect for living beings which according to Taylor means showing a strong feeling of dislike towards any kind of action that interferes with the freedom of living creatures. It also says not to impose any kind of artificial constrain on their natural way of living. Ultimately it means we should consider nature as an independent whole existing in its own right.

Impartiality is the special virtue which prescribes to have the disposition to be free from any kind of bias with regarding to any kind of species. Impartiality as a virtue recommends us to be remain neutral in the conditions which are not controlled by human beings. We see many

conflicting situations where the good of one living being is in conflict with the good of another living being. So human beings should be neutral by controlling their personal feelings and emotions while formulating any kind of judgments.

Trustworthiness is a special virtue related to the rule of fidelity. It means wild creatures should not be deceived or tricked or betrayed in their wild state. A trustworthy moral agent should have a steady, firm disposition not to take advantage from the animals by deceiving, or using any tricks.

Fairness and equity are the two special virtues related to the rule of restitutive justice. Fairness is the disposition to want to restore the balance of justice that is upset by an individual's wrong doing. It means compensating the damage by making amendments for them who has been treated badly. The virtue of equity is having a sense of the proportionate weighting of different claims of justice. This is also having the disposition to make restitution in accordance with those relevant claims.

Hence we can consider Taylor's theory of respect for nature as a part of virtue ethics. From the above discussion we can see how important the role that virtues play in order to build a theory of environmental ethics. In order to have the attitude of respect for nature we need to develop certain virtues i.e. general virtues and special virtues. The general and special virtues constitute the character of a moral agent on the basis of the four rules of duty that ensure the attitude of respect for nature. Taylor argues that virtues are morally obligatory because we need virtues for right conduct. He discussed an ethical system through which we can have the attitude of respect for nature. It is a system consisting of three components which are the basic rules of conduct, priority principles and the basic standards of virtue. According to him virtues have very important role to play in an environmental ethics. His

theory is thus not only viewed as a deontological theory but also a theory that has contributed to virtue ethics greatly. In continuation to our previous discussion we will now discuss the three following authors namely Thoreau, Leopold and Carson who proposed in their own respective ways a perspective in environmental virtue ethics.

Thoreau, Leopold and Carson

In the words of Henery David Thoreau in Walden:

I went to the woods because I wished to live deliberately. ... to front only the essential facts of life, and see if I could not learn what it had to teach, and not, when I came to die, discover that I had not lived... I wanted to live and suck all the marrow out of life... to know it by experience, and be able to give a true account of it in my excursion(Philip Cafaro, Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics, www.umweltethik.at, Environmental Ethics , vol.23, spring 2001, pp.5).

In Walden Thoreau describes that an individual's personal development is based on the knowledge of self and nature. It is because the knowledge of self and nature advocates ethical, intellectual and creative striving in an individual. Thoreau uses the terms, such as, flourishing, and living well in order to describe the highest human goal i.e., *eudaimonia* or "happiness".

For Thoreau a good life is constituted of health, freedom, pleasure, friendship, which forms a rich experience, knowledge (i.e., the knowledge of self, nature and God) concerning self-culture and personal achievement. For Thoreau virtue means personal excellence. Therefore, according to him moral virtues are sympathy, honesty, justice and generosity. The intellectual virtues are curiosity, imagination, intelligence, and alertness. Physical virtues are health, beauty and hardiness. For him the environmental virtues are temperance, integrity, sensitivity to beauty, and simplicity.

According to him simplicity is the most important environmental virtue. Simplicity in the context of environment means the minimum use of natural resources. It thus prohibits any extravagant use of resources available in nature. Simplicity in this sense may be justifiably called environmental virtue which plays an important role in stabilizing the lives of human beings and the nature as a whole. This virtue allows us to understand the effects of our actions on environment and it points out certain ways to act accordingly with the environment. Therefore, living simply decreases harmful impact on other living things. If we are able to think ahead and put nature ahead of us for the sake of posterity by living simply then we will be doing our service to nature. Simplicity as an environmental virtue includes living simply and living simply includes certain activities that will restrain our irresponsible behaviour to nature. In this context the questions that will arise are for example, can we switch off the unwanted electric lights in our house for one hour a day? Can we make a conscious effort to make a maximum use of sunlight during the day? Can we walk when we can walk in a situation when driving is not necessary? Can we keep the same mobiles, desktops and laptops for a longer period of time to reduce e-waste? If we can answer these questions affirmatively then our day to day living will help us towards creating a balanced nature.

Aldo Leopold who we have mentioned at the beginning of this discussion could also be seen as an environmental virtue ethicist. Leopold's theory of land ethic prescribes an extension of our ethical attitude of land. If we adopt such an attitude our approach towards land will be changed. We will thus no longer see land as an object to be exploited for our benefits. Land in this new ethical perspective will be then seen as a part of our community which deserves showing of love and respect from us. In his, *A Sand County Almanac*, he shows the opportunities for knowledge and self-development which is possible through a greater attentiveness to nature. In the words of Leopold:

We abuse land because we regard it as a commodity belonging to us, he writes in the forward:

When we see land as a community to which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanized man, nor for us to reap from it the aesthetic harvest is it capable, under science of contributing the culture (Philip Cafaro, Thoreau, Leopold, and Carson: Toward an environmental Virtue Ethics, www.umweltethik.at, Environmental Ethics, vol.23, spring 2001, pp.7).

From the above paragraph we understand that Leopold talks about aesthetic and intellectual extension along with ethical extension towards nature. If we extend the moral domain to the non-human nature then we start perceiving land as an individual entity by ascribing values to it. Therefore, it ultimately improves our life. For Leopold a truly good life is not defined in material terms. So he speaks about a formula for conservation.

It defines no right or wrong assigns no obligation, calls for no sacrifice, implies no change in the current philosophy of values. In respect of land use it urges only enlightened self-interest (Philip Cafaro, Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics, www.umweltethik.at, Environmental Ethics, vol.23, spring 2001, pp.8).

According to Leopold we need only an enlightened self interest to use land intelligibly. In this case he brings a dichotomy between the altruistic moral action and hedonistic action. He defines people who can never better their lives through increased wealth or possession i.e., hedonistic action. With this he says that on the basis of a foundation of material sufficiency people should try to live their lives that is rich and full of perception and knowledge of their surroundings. Therefore, we need to praise and appreciate the aesthetics of plants, animals, and places. Human beings should always have those activities which are beneficial for both human and non-human beings. Human being's life is always dependent on the natural communities. Therefore, human beings are parts of the natural communities. According to Leopold, the very foundation of land ethics is,

A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community, and it is wrong when it tends otherwise (Philip Cafaro, Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics, www.umweltethik.at, Environmental Ethics, vol.23, spring 2001, pp.9).

Leopold identifies three qualities of environmental virtues. These three virtues are integrity, stability and beauty. These are the virtues by inculcating of them we can continue to have a proper balance between human and nature. This gives us a very strong reason to preserve nature for the sake of nature and for the human beings.

In 1962 Rachel Carson published a book called *Silent Spring*. After this book was published, she has been called the founder of modern environmental movement. In *Silent Spring* Carson writes about many factual and scientific accounts of the use and abuse of agricultural and industrial chemicals. Carson talks about the ethical restraint on the use of pesticides for the considerations of human health, preservation of non-human beings, and the importance of preserving wild nature by man. According to Carson the use of chemicals and pesticides in our agriculture are potential to cause cancer and human birth defects. The use of pesticides also harms wild life and its habitat and therefore ultimately endangers the human life.

Rachel Carson shows concern for all life forms including human and non-humans in *Silent Spring*. This is evident from the following paragraph in her book *Silent Spring*.

These creatures (birds, rabbits, domestic pets) are innocent of any harm to man. Indeed by their very existence they and their fellows make his life more pleasant. Yet he rewards them with a death that is not only sudden but horrible" (Philip Cafaro, Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics, www.umweltethik.at, Environmental Ethics, vol.23, spring 2001, pp.11).

These insects (honey bees, wild-bees and other pollinators), so essential to our agriculture and indeed to our land scape as we know it, deserve something better from us than the senseless destruction of their habitat

(Philip Cafaro, Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics, <u>www.umweltethik.at</u>, Environmental Ethics, vol.23, spring 2001, pp.11).

According to Carson the creatures like birds, rabbits, domestic pets and insects such as honey bees, wild bees and many other pollinators play an important role in maintaining the equilibrium of nature. When we use pesticides and insecticides we harm all these creatures and insects. For example the use of DDT in agriculture is harmful. DDT is a pesticide that pollutes the environment. It concentrates in living organisms. It is a chemical that is soluble in fat but insoluble in water. It degrades very slowly by natural process. When the organism consumes DDT in some forms, the chemical becomes concentrated in the fatty tissue of the animal and degrades very slowly. When a large fish consumes plankton or small fish consumes pesticides the chemicals become more concentrated. Therefore, sufficient level of these chemicals in an organism can harm them. High DDT levels in birds cause a calcium deficiency in their egg shells. So the shells are much thinner than normal. These shells break easily and so it fails to protect the chicks inside the egg. Hence, such pollution was responsible for the extinction or drastic decline of so many bird species.

Carson says this kind of inappropriate use of poisons would lead to a total destruction of nature. There will be no spring because there will be no bird. The poet's delight will then aptly be a distant echo. Keeping this in mind she calls her book *Silent Spring*. Her movement against the use of pesticides led to a ban on the use of DDT. But other pesticides are still in use which are harmful for human beings and other kinds of species.

Carson also talks about the attitude of preserving wild nature which helps to promote human happiness and development. Nature is a complicated whole with interrelationships and connections. We should appreciate and celebrate the life's complexity and interconnectivity. According to her, the increased knowledge about nature is more precious

than increased material wealth. A more widespread knowledge of nature would motivate people to protect it.

For Carson humility is the environmental virtue. It is the traditional virtue that is opposed to the vice of arrogance. We should feel humble in relation to nature. We should not assume that we are superior to nature and being authoritative in our dealings with nature.

In the words of Carson,

The "control of Nature" is a phrase conceived in arrogance, born of the Neanderthal age of biology and philosophy, when it was supposed that nature exists for the convenience of man... (The) extraordinary capacities of life have been ignored by the practioners of chemical control who have brought to their task... no humility before the vast forces with which they tamper (Philip Cafaro, Thoreau, Leopold, and Carson: Toward an Environmental Virtue Ethics, www.umweltethik.at, Environmental Ethics, vol.23, spring 2001, pp.12).

By discussing the above three environmentalists we have tried to establish that the respective theories that they have offered can be seen as forming an environmental virtue ethics. Therefore, human beings can live their lives with a harmonious relationship with and within nature. So they have certain common positions regarding the relationship between human beings and nature.

Three of them tried to put economic life in a subordinate place. It means, they put the economic aspect of human life only as a support for comfortable and decent human life. They do not place economic conditions prior to all other conditions. So the environmental virtues such as simplicity (Thoreau) stability, integrity and beauty (Leopold) and humility (Carson) are the examples that show the subordinate nature of economic life in relation to thee environmental virtues. These virtues do not encourage more acquisition and more consumption. They encourage less acquisition and less consumption. The result is a state of achieving a harmony with nature.

Thoreau, Leopold and Carson's theories show that science should be supplemented by personal acquaintance, and appreciation for nature. They developed their theories against the dominant approach that tries to transform nature for human benefit.

All of the theories are non-anthropocentric in nature. So their love and continuing interest in the non-human world led them to recognize its moral worth. All the three theories bring a radical change in man's role in nature from a conqueror of land he now becomes a member and citizen of nature. Because of environmental virtue ethics they have appreciation for the nature and support for protection of wilderness. Thoreau, Leopold and Carson's approaches are always in favor of the protection of wilderness. Hence their approach helps us in protecting both wilderness and preserving individual species and organisms. Therefore Thoreau, Leopold and Carson had a common belief that all life is good including both human and non-human.

In this chapter we have seen the use of virtues with for the impact of environment. Aristotle developed his theory of virtues only in connection with the human moral domain. But his concept of virtue as a character trait can be used as well in our concern for preserving and protecting nature. The virtue ethics can provide a better kind of relationship between human and nature. The virtues that we develop for the concern of the environment are called environmental virtues. Environmental virtues such as temperance, sensitivity, awesome, wonder, respect, compassion, gentleness, humility and gratitude have a major role for formulating an adequate environmental virtue ethics. Environmental virtue like respect has a great impact on an individual's attitude towards nature. For Taylor respect for nature is an attitude towards nature. But this attitude could only be built if we try to inculcate this as a character trait along with the other general and the special kinds of virtues. He says if we take respect as an environmental virtue rather than a simple attitude then it would be very effective in developing the attitude of respect for nature even among children. Thoreau has given much importance to simplicity as an environmental virtue. This environmental virtue is the most needed thing in our modern day-to-day life. In practicing simple life we are helping directly or indirectly in protecting nature or to put it alternatively, helping in restraining our behaviour towards exploiting nature. Leopold tried to show land as a community not as a commodity which can be exploited. At the same time Carson talk's about nature as a complicated whole that has interrelationships with all other individual entities belonging t nature. She thus says that we should appreciate and celebrate this interwoven complexity. According to her increased knowledge regarding nature and its operation is much more precious than increased material wealth. She while making this point, there by, indirectly suggests educating children so that the wide spread knowledge of nature would motivate people to protect it. We now see the role of virtue ethics in environmental ethics in order to have a more balanced relationship between human beings and nature. This aspect of valuing nature shows that the economic aspect of human life is only a support for comfortable and decent human life. We should not place economic conditions prior to all other conditions. So the environmental virtues do not encourage more acquisition and more consumption. Ultimately all these encourage less acquisition and less consumption. Hence the result is a state of integrity among human beings with nature as a whole.

CHAPTER-VI

Indian Philosophy and Environmental Ethics

Introduction

The Indian philosophical approach towards the man and nature relationship is always interdependent. This relationship interdependence is being continuously established with nature through culture, religion, value system, philosophy and ultimately with the life of the Indian people. But it has been realized that the sense of interdependence that exits between man and nature has been disturbed in the recent time. The continuous process of industrialization has left polluted rivers, contaminated soil, depleted wildlife and exhausted natural resources. As a result nature was thoroughly exploited and the idea of interdependence between man and nature became a far cry. People thus gradually realized that we must renew our contact with nature which would lead to a state of interdependence between man and nature. People also find that science and technology became the greatest hindrance in creating a harmonious relationship between man and nature. The scientific revolution man himself brought this revolution to make his life comfortable became the source of his own destruction. He forgot to keep balance with nature and in the process he adopted the attitude of dominance over nature. But the Indian philosophical traditions always maintain the man-nature relationship from the very beginning of civilization. We find that the attitude towards nature was respectful. Nature is the sustaining source of life on earth. In Vedic period we see that people valued the role of trees, plants and forests in their life. In Rg-veda it is mentioned that nature has potentialities of controlling the climate, increasing fertility and improvement of human life. Therefore, the disruption in one part of the ecosystem leads to the disturbances in other parts of nature. The harmony among each and every part leads to the overall environmental equilibrium. According to

the Indian Philosophical tradition every element, non-living object and living being in the universe is created by the same Supreme Being i.e., Brahman. Therefore, man has no special domination over nature. Indian philosophy, thoughts, values and ethics always have reverence for all that which exists in nature. From this the concept of Vāsudhaiva Kutumbakam has evolved. It means all that is alive from plants to human species belongs to a single family. Every thing has originated from a common source i.e., Brahman and therefore they are interdependent. Except *Chārvākas* all other schools of Indian philosophy accept the existence of Brahman. Brahman reveals Himself in two ways, such as, unconscious matter or jada and conscious life jīva. Therefore, according to the Indian philosophical traditions, all that which exists in the universe including both organic and inorganic are consisted of five elements such as air, water, fire (heat/energy), earth, and space. Everything comes from the different combinations of these five elements and everything returns to them ultimately.

The idealist, realist and materialist philosophers in ancient India recognized the existence of objective reality independent of man's consciousness. Vedic, Upanishadic and the orthodox philosophical systems like Vedānta acknowledged life as a great reality. The value of life contains a close affinity with the sacred and mysterious power which underlies the material world. The individual self and the material world are the reflections of the Devine. The materialist like Chārvāka and realist like Nyāya-vaiśeṣika and Sārikhya-Yoga are of the view that each and everything in nature is the result of the combination of same gross elements such as air, water, fire, earth, and eather (the last one is not acceptable to Chārvākas). In Indian philosophical view there is no sharp distinction between human and nature, because human is in nature and nature contains humans. But at the same time they both are the parts of the same reality i.e., Brahman. For Indian philosophers everything in the world functions according to the supreme divine will. In view of the

above presentation we will now give a brief account of the man-nature relationship as held in different Indian philosophical system. In this respect we will particularly emphasize on the Buddhist and Jaina account of this relationship.

The cosmology in the *Vedic* and *Upanishadic* tradition recognizes an omnipotent intelligent being. It also recognizes Him as the supreme author of the universe. Vedas have an integrated view of cosmos. There exists a correlation between the cosmic order and the human order of ethical, social and religious life and i.e. *ṛta*. The order of the human life is dependent on the maintenance of the cosmic order. Vedic seers are of the view that *ṛta* is the cosmic order according to which everything in the world functions, including God, living and nonliving beings. It is the cosmic law which governs ethical, social and religious life of the individuals and natural laws in natural world.

The Vedic man believed that the best way of harmonizing the cosmic order and the human order is by reproducing the cosmic order of things, and events in his own thoughts and actions through sacrifices and other religious ceremonies. Therefore, there emerged the tradition of rituals and sacrifices. Individuals performed rituals and sacrifices in order to please nature-God. Sacrifices were also attempts to please the deities and thus it ensures the good order of the universe. Vedas contain hymns which are in praise of Gods such as fire, wind, trees, etc. These hymns indicate a primitive belief of super natural powers that presided over the natural phenomena and respect for nature in every sphere.

Vedic tradition had great respect for nature because they worshiped nature. Respect for nature will brings being for every one i.e. for nature as well as for human beings. There is a single cosmic law i.e. *ṛta* which governed everyone's life including the divine, the living and the

nonliving. In Vedic tradition nature and human being are interdependent and interconnected. Nature is not different from humans.

The Upanishadic seers asked questions about the origin and nature of the universe and of humans. The answer to this question is that the human self is an expression of the universal self and it is also identical with the universal self. The material universe is the manifestation of *Brahman*. The absolute or *Brahman* is the ultimate ground of the objective world and the human beings. Hence there exists a relationship between man's conscious self and creative activity on the one hand and nature on the other hand. Nature and humans are not different from each other, because they are the manifestations of the same ultimate reality.

In Vedas and Upanishads we find that there are several references regarding the use of natural resources based on a deep sense of ethics. They prevented over exploitation of land, forest and water resources and they worked towards the sustainability of these resources. Looking at the world we find that we are far away and far removed from the Upanishadic ideas of nature. Currently we face many environmental problems due to the imbalance between the development and preservation of our resources. We are facing many adverse impacts of the over exploitation of resources of nature. Due to massive industrialization there is a steady erosion of many non-renewable resources which would take millions of years to generate again. This situation clearly points out to the need for maintaining a balance between growth and the preservation of our resources. According to the *Upanishads*, resources must be utilized to create wealth but this should not lead to excessive exploitation of the earth. It says:

Wealth must not be despised-that should be the vow Wealth must not be wasted-that should be the duty Wealth must be developed manifold-that should be the determination The earth should be treated as the wealth by itself". (Taittiriya Upanishad, 3/7-9)

The teaching of Upanishads further pronounced:
"Whatever is there on this ever-changing world of ours, which is always in motion.
All that is considered as being pervaded by a single controlling factor.
Therefore, you should nurture yourself With only that portion of resources
Which has been showered upon you.
Must you not covet anything more than that, for after all To whom do all these natural endowments really belong? (Isoponisad, verse 1)

The first verse explains the process of evolution and life sustaining system. The second verse states that a person must try to sustain his life with self-restraint and sacrifice. Therefore, the exercise of self restraint is essential to ensure the sustainable use of natural resources.

In the above verse we saw the importance given to the natural resources and at the same time the emphasis is also laid on their conservation. The Vedas and Upanishads also have described the importance of natural resources such as water, energy, and all other living natural resources. For instance the *Atharva Veda* says:

Which has ocean, abounding rivers and flowering streams where all these are sustaining, flowing and shadding. Let that earthly nature make us worthy for our first drink of divinely flow (Atharva Veda:Bhumisuktam, 12/1/3).

In relation to the Upanishadic view of nature, one of the major problems the modern day world facing today is the inadequate availability of water to meet the different needs of all living beings. There are many reasons for this problem such as, mismanagement of water shed areas, overexploitation of surface water, unplanned use of ground water, and pollution on land. Therefore, water is vital for the survival of life and it should be considered as sacred. Another verse in *Rg-veda* states that, water constitutes a vital natural resource. It states:

the water that pour down the sky or flow on the surface or else which is available from canals, tanks, wells dug onto the ground or else which are gushing out spontaneously. And those rushing down to oceans which are pure and sanctifying. May all such water-bright and beautiful protect me in this world (*Rg-veda* 7/49/2).

The Vedic people also made choices regarding the energy sources. From the Vedic age onwards till now there is debate and discussion regarding the energy options available to man. Presently almost all countries in the world depend on the fossil fuel for energy. This is the major dependable source of energy. It is also true that water, wind and solar energy provide energy. These are called the renewable energy and there are many researches carried out on all these areas. But it is yet to be sufficient to meet the energy needs of billions of people in the world. We find many verses in Vedas, regarding the importance of harnessing natural sources of energy. It states that:

May Ye, O wise ones, harness all around the energies held fast by the stars and the earth. Collect all over the available nutrition inherent in the trees and make use of all energies available in running waters. Hold on and utilize the power of the thunderbolts of the sky and that of the crafts flooded with rays (Rig Veda, 6/47/27 and Yajur Veda, 29/53).

In the period of *Rg-veda* people realized the tremendous potentiality of the Sun as a source of energy. The sun was considered as the supreme power and therefore it was worshiped by the people. This kind of emphasis is found in the following verse:

May we, with the help for bright solar energy be free from all wrongs committed against the inviolable earth, so that wealth can be produced (*Rg-veda*, 5/82/6).

The interrelationship between the living and non-living components of nature is found in the following verse:

To wise, pieces of rock turn out to be friends Trees in the forest become near relations Even in the midst of a forest, the wild animals along with their siblings become thy kith and kin (Yogavasistha, 6/2/102/3).

All developmental programs are based on the conservation and sustainable use of living natural resources. It forms the basis of the development of a society. It is only successful when it is based on the principle of equity. The principle of equity should be maintained between the living and the nonliving beings in nature. The perception of such kind of society is described in the following verse:

That nature which exists in the grass, shrubs and creepers during the height of their seasonal flush, but without any feeling of mine-ness or other selfish pride is what is known as pure consciousness (Yogavasistha, 6(2)/106/8).

The interdependence of different living components in nature is necessary for the well functioning of the environment. Where as the present tendency to exploit nature is bad because it rules out the possibility of having interdependent relationship among living components in nature. Realizing this people have introduced the notions like earth day and caring for earth in order to show respect for nature as a whole. But this kind of concepts can be traced back in many verses of Upanishads.

This earth is helpful to all beings and all beings are helpful in this earth. The same is true with shining immortals embodied being which is this earth (Upanishad, 3/5/1).

The relationship between the living natural resources and human beings is explained in *Rig Veda* as follows:

Let the herbs be pleasant to us; May the outer space, the waters and the atmosphere be kind. Let gracious be to our land's protector whom we may follow unhindered (*Rq-veda*, 4/57/3).

There are many different kinds of herbs in nature. These are the symbols of living natural resources and they help human beings in healing ailing humans in addition to purifying water and the atmosphere.

The balance between man and nature was the important thought in Vedic period. The conservation of resources was considered as the most important prerequisite for the welfare of each and every individual in a society. It is mentioned in the following verse:

Let clouds shower upon us rain waters in plenty at the right time. May our plants grow in great abundance, laden with ripened fruits, may we win enough treasures unacquired so far and conserve the resources properly for the well-being of all (Yajur Veda, 22/22).

In Vedic period the ethics of conservation gives emphasis on the equal sharing of the benefits of natural resources. Only through the path of righteousness the objectives of resource development and resource conservation can be achieved. The right attitude towards nature i.e. the attitude of respect combined with the knowledge of the natural world and the benefits of conservation of natural resources are the basis of the code of environmental ethics in Vedic and Upanishadic period. This is found in the following verse:

May thy earth, supporting and sustaining diversity of human race and multiplicity of voices, traditions and customs, varying in accordance with natural habitats envelop us with overflowing cascading resources like an unmoved milch-cow of extreme gentleness (Atharva Veda, 12/1/45).

Chārvākas are called the Indian materialist who did not recognize any ultimate divine reality behind anything. For them whatever is there, is directly experienced or perceived. Matter is the only eternal and permanent principle which is the basis of everything. All sense data and even consciousness are the changing manifestations of matter. According to them, the basis of the whole universe consists of four eternal, uncreated, and self existing elements, such as water, air, earth and fire. There is no consciousness inherent in any of these elements. Consciousness is produced from these elements when they combine with each other.

Hence *Chārvākas* treat "Nature" as independent from any subject. For them nature is material and everything is constituent of nature including human beings. Both nature and humans are the results of the

same material elements. Nature is given to the human beings which is the result of the same material elements i.e., the four basic elements.

Nyāya-Vaiśe**s**ika are the two schools which are realistic schools. For them reality is pluralistic and nature is given to mankind. The physical world is constituted by the same earlier mentioned five physical substances. The ultimate constituents of these five substances are the eternal and unchanging atoms of eather, earth, water, fire, and air. They have atomic theory of the world. But it does not ignore the moral and spiritual principles which govern the process of composition and decomposition of atoms, because everything happens according to the Devine will. For Nyāya-Vaiśesika nature contains nine kinds of substances, such as, earth, water, fire, air, eather, time, space, soul, and mind. They are of the view that the last five substances cannot be reduced to material atoms, though all other things may be reduced to these substances. The creation and destruction of the world has its starting point in the will of the supreme God. According to them, the universe is a system of physical things and living beings. They exist and interact with one another in time and space. Living beings enjoy or suffer in this world according to whether they are wise or ignorant, good or bad, and virtuous or vicious. Moral order governs the order of the world. In this order the life and the action of all individuals are governed by the physical laws of time and space. Individuals are also governed by the moral law of karma, and the simplest form of this law means "as you sow, so you reap". Hence the Nyāya-Vaiśesika view of nature is an integrated view of nature and of human being. Human beings either suffer or enjoy the fruits of their behavior with nature, because both natural and moral laws govern the whole universe. Human beings are not different from the nature. They are the parts of nature or constituents of nature. For Nyāya-Vaiśeṣika self is the one among the

nine substances. The self is a constituent of nature like all other eight substances. Hence for them, physical things are atomic in nature and they can be ultimately reduced to four ultimate physical substances. But ultimately both physical things and mental beings are united in the ultimate reality, i.e. God. Creation and destruction took place according to the God's will. Therefore there is no concept like domination over nature.

For Sānkhya school of Indian philosophy, causation means a real transformation of the material cause into the effect. Hence for them the world is Sārikhya the transformation of the material cause i.e., prakṛti. All objects of the world, including our body and mind, the sense, the intellect are the effects of prakrti. Prakrti is intelligent principle which is uncaused, eternal and all pervading. It is the first cause of all things. The world of objects evolves from prakti when prakti comes in relation with purusa. There is a contact or samyoga between purusa or spirit and prakrti or matter. It is not an ordinary relation between two finite material substances. It is a sort of effective relation through which prakṛti is influenced by the presence of puruṣa in the same way in which our body is sometimes moved by the presence of a thought. Evolution is not possible due to the self or puruşa alone, as it is inactive. It is also not possible due to matter or prakṛti alone, as it is non-intelligent. The activity of *prakṛti* must be guided by the intelligence of *puruṣa*. As we can see, for Sānkhya school, "Nature" is the product of samyoga between purusa and prakrti, i.e., spirit and matter. For them man or self is also a part of nature who is also a product of evolution. Body, mind, sense, and the intellect are the real transformations of the matter prakrti. Therefore

human beings are in nature and nature contains human beings.

According to the *Advaita Vedāntins*, it is the one and the same spirit that is present both in human beings and the material universe. According to them human beings and the nature are the expressions of the same divine sole and i.e., *Brahman*. The one and the same *Brahman* transforms itself into different objects. Therefore there is no difference between human self and other thing as they have same essence in them. Hence man and nature are the same. They are not different from each other as they share same essence, i.e., *Brahman*.

For Viśista Adavaitins, Brahman is a synthetic whole in which both the individual souls and the material world are modes or parts of Brahman. Therefore nature and human beings are different parts of the same whole i.e., Brahman. This shows that there is no difference between humans and nature, as they are the real transformations of Brahman.

Jainism and Environmental Ethics

Jainism in Indian philosophical tradition is the philosophy of ecological harmony. It formed a vital part of the ancient Indian life. The Jaina perspective towards nature includes the reverence for all kinds of life forms and preservation of the natural environment. Jainism does not acknowledge a first cause as the creator of the universe. It says that the universe has no beginning and no end. But still it suggests an environmental ethics for a harmonious relation with nature because the global ecological crisis cannot be solved completely until a spiritual relationship is established between human beings and nature. Jainism has a code of conduct that establishes a harmonious relationship with nature. Jainism since does not believe in the creator of the universe or the universe as the reflection of the creator, it talks about a hierarchy of

lives. The concept of the hierarchy of life in Jainism has a very important concept in Jaina concept of ecology. We see it as follows.

In the Indian philosophical traditions the individual person was regarded as a reflection of the world itself. An individual sees himself as a part of the greater whole not as an isolated unit. So the Indian theory of cosmology considered the human being within the world. As Jainism does not believe in any creator it develops its theory of cosmology without a creator. Jainism believes in the eternality of each life force not being created by any creator. Therefore each life force is ultimately responsible for its own destiny.

Jainism attempts to have a comprehensive worldview where there is an integrated relationship between human being and nature. The place of human being is within the universe. Human beings and all other different species of life are all parts of a beginning less round of birth, death and rebirth. Jaina ecology is based on spirituality and equality. Each kind of life form i.e., plants and animals have inherent worth and therefore each must be respected. Jainism speaks about a different philosophy of man and nature relationship. It accepts that every soul is autonomous and independent irrespective of whether it is the soul of a man or of a mono-sensed insect. It also believes in the presence of soul in both animate and inanimate things. Soul is present not only in animate beings such as human beings, animals, and insects but also in inanimate things such as water, air, fire and earth. The entire world is possessed of life including plants, trees, birds, animals and water.

In Jainism there is a hierarchy of life according to the number of senses a particular being possesses. Life articles ($j\bar{\imath}va$) in earth, water, fire, air, microorganisms, and plants have only the sense of touch. They experience the world through the sense of touch. Worms have the sense of taste and touch. All crawling bugs can feed, taste and smell. All flying insects have abilities to taste, smell, see and feel. All higher level animals

are fish, such as, all kinds of mammals feel, taste, smell, see, hear, and think. The Jain theory of evolution is based on a grading of the physical bodies having souls and according to the degree of sensory perception. At the lowest level, the form of physical body has the sense of touch, i.e., trees and vegetations have the sense of touch. Therefore, they are able to experience pleasure and pain and they have souls. The highest grade of animals and human beings only possess rationality and intuition (mānas). They are the highest evolved form of life and therefore they have greater moral responsibility of their relationship with the rest of the universe.

Jainism views all kinds of life in a different perspective. The structure of cosmos that it exhibits is very different from any other schools of Indian thought. They perceive a living cosmos and this living cosmos is the basis of an ecologically sensitive response for a better relationship between human and nature.

Jainism asserts that the apparently inert and unconscious world is actually full of consciousness. They say that all living beings starting from a drop of water to animals and humans possess one thing in common, that is, the capacity for tactile experience. They signify the concept of "living world" in Jaina philosophy. Because for them the world is a combination of subjects not a collection of objects. The concept of life in Jainism is very different from the common definition of the concept "life". The Jaina concept of life is not compatible with the common conception of life as available in our society the common definition of "life" is, to quote:

That property of plants and animals which makes it possible for them to take in food, get energy from it, grow and adopt themselves to their surroundings, and reproduce their kind: It is the quality that distinguishes a living animal or plant from inorganic matter or a dead organism (Victroria Newfeldt, ed., Webster's New world Dictionary; New York, 1988, pg.no 846).

The Jain definition of "life" goes beyond the common definition of life, i.e., all parts of nature including the five elements of nature contains touch, breath, life and bodily strength. The Jaina world view cannot be separated from the notion that the world contains feelings. The whole nature that is surrounding us can feel our presence, because Jainism says that everything has sensation. The entities such as water and air etc. feel us through the sense of touch. At the same time human beings have been given the special responsibility to cultivate his awareness and ethical behaviour. He should acknowledge that we live in a universe that is full of living, breathing and conscious beings who are interdependent on each other. The Jaina system talks about an interdependent living cosmos in all aspects of worldly existence. It is a non-anthropocentric theory which gives emphasis to all elemental, vegetative and animal forms. Therefore, in this kind of conception of life, human beings have ethical responsibility for environmental protection and harmony. Jainism has certain code of conduct for human beings that can be practiced in order to maintain environmental protection and harmony. In the words of Mahāvīra:

One who neglects or disregards the existence of earth, air, fire, water and vegetation disregards his own existence which is entwined with them.

Like modern science of ecology, Jainism recognizes the mutual interdependence among all entities. It believes in the fundamental natural phenomenon of mutual dependence. Jainism speaks regarding parasparopagraho jivanam, it means all life is bound together by mutual support and interdependence. It says all entities living and non-living of nature belong to and are bound in one physical and metaphysical relationship that we see through the doctrine of anekāntavāda.

The Doctrine of Manifold Aspects or Anekāntavāda

The concept of universal interdependence is based on the doctrine of manifold aspects or *anekāntavāda*. According to the doctrine of

anekāntavāda, the world is ever changing and multifaceted. It has many different viewpoints that are dependent on time, place and nature. It is also dependent on the state of the viewer and the viewed. Anekāntvāda leads to the doctrine of syādvāda or relativity. According to the doctrine of syādvāda the truth is relative and it is different to different view points. It means what is true from one point of view is open to be questioned from another point of view. The absolute truth cannot be grasped from a particular view point because of all the different viewpoints that make up the universe.

On the basis of the doctrines of anekāntavāda and syādvāda Jainism does not believe in the anthropocentric concept of the universe. It does not say that human being is independent of nature and it is only meant for human beings. The nature as such is consisted of many independent living and non-living entities. Nature is the whole that is the constituent of many beings. As the doctrine of anekāntavāda says, reality is manifold and all aspects constitute the reality. Nature is the reality that has many constituents. Each constituent is real and necessary for the maintenance of nature. Therefore, Jainism takes into account the viewpoints of other species and nature as such along with human beings.

The discipline of non-violence, the recognition of universal interdependence (anekāntvāda) and the logic of the doctrine of manifold aspects (syādvāda) help Jainism to avoid dogmatic, aggressive and harmful attitudes towards the nature. It encourages an individual to have equal behaviour towards both living and non-living beings. It encourages to cultivate the attitude of "live and let live". It shows the mutual interdependence in nature. Equanimity helps to preserve the balance of the universe.

The Jaina Code of Conduct

(a) The principle of Ahimsa or non-violence has been given much

importance in Jaina ecological philosophy. For them non-violence is the supreme religion, "ahimsā paramo dharma". Jainism says that,

There is nothing so small and subtle as the atom nor any element so vast as space. Similarly, there is no quality of soul more subtle than non-violence and no virtue of sprit greater than reverence of life.

In Jainism non-violence is the first and primary vow. The five vows that come under non-violence are: (a) Non-violence in thought, word and deed. (b) To seek and speak the truth. (c) To behave honestly and never take anything by force or theft, (d) To practice restraint and chastity in thought, word and deed and (e) To practice non-acquisitiveness. Non-violence is the primary vow, and the other vows are the aspects of non-violence. These together form an integrated code of conduct of an individual. The above vows assert that the individual has responsibility towards one and all.

- (b) Kindness is another aspect of Jainism's vow of non-violence which includes to refrain from all forms of cruelty towards animals and human beings. They condemn the practice of animal sacrifice to the gods as evil. They say it is also an act of violence, towards animals by keeping the animals in captivity, to whip, to injure, to overload them with luggage and deprive them of adequate food and drink.
- (c) Self-restraint and the avoidance of waste is another code of conduct of Jainism which prescribes to live a life of moderation and restraint. They say wants should be reduced and consumption should be within reasonable limits. The use of any resource beyond one's needs leads to the misuse of any part of nature. Therefore Jainism also says that creating waste and pollution are acts of violence. They also said that the accumulation of possessions for the personal enjoyment should also be minimized. Non-violence should not only be visible in physical acts but also in the hearts and minds of human beings. There should not be

thought for violent actions or it means violence should not enter our thoughts.

(d) Jīva-dayā or compassion, empathy and charity are the higher form of the attitude of non-violence or Ahimsa. Non-violence is an aspect of jīva-dayā. Jīva-dayā means caring for all living beings and sharing, protecting and serving all living beings.

The fundamental Jaina teaching and codes of conducts are deeply rooted for holistic environmental protection and harmony in nature. Hence the relationship between man and nature was friendly. Man also had deep respect towards nature. Jainism establishes a spiritual relationship between humanity and nature. Spirituality is essentially an individual endeavour. Therefore, individuals can only create collectivity discipline and practice. Each and every basic reality of the universe is integral. By the doctrine of anekāntavāda and syādvāda Jainism recognized the parts of reality with the whole by means of the relativistic approach. So we can say Jainism establishes an eco-spiritual relationship between human being and nature. The basic tenets of Jainism that establishes such kind of relationship are:

- a. injure no creatures,
- b. do not command any creatures
- c. do not own any creatures, and
- d. do not employ any animal as the servant.

Jaina ecology is based on spirituality and equality. According to them all life forms plant, and animal have inherent worth and therefore all should be respected. The entire world is one because of the interconnectedness of different aspects of the world. Jainism accepts that every soul whether the soul of a man or the soul of a mono-sensed insect is autonomous and independent. They also believe in the presence of soul in inanimate things such as water, air, fire and earth. These are called "Sthāvara jīva" or immobile soul. The philosophy of Jainism inspires people behave sensitively not only with living beings but with the material things also. It does not allow anyone to exploit the non-living beings. It tries to shape our attitude towards nature by prescribing non-violent approaches to our everyday behaviour. Jainas practice all these principles even today and these principles are even prescribed for the protection of nature. The Jaina philosophy seeks to create a society founded on love and concern for all creatures. It presents a world view that stresses the interconnectedness of life forms.

Buddhism and Ecology

The life of Buddha himself was very closely associated with nature. His birth, enlightenment, the first sermon and his *nirvāṇa* are the four major events that are very closely associated with the natural surroundings of nature. From various Buddhist texts and the teachings we find that Buddhism seeks to offer explanation of the natural state of things than conceived as a religion in the usual sense of the term. Great emphasis is laid on the understanding of the realities, such as objects and subjective minds.

In Buddhism while trying to solve the problems of suffering Buddha has said that the basic cause of suffering is the desire of man. It is the nature of man that is responsible for the problems man faces in all spheres of his life. By extending this insight to ecological crisis, we can say that it is the nature of man or desire of man that is responsible for all environmental crises. Most of the various ecological problems that we face now-a-days are due to the lack of holistic approach. Man's uncontrolled and unlimited desire is the basic cause of suffering. The desire gives rise to greed and ego. These are responsible for an imbalanced relationship between human beings and nature. Earlier

human being's needs were limited. He was eating what ever was available in nature. But gradually he started to produce food and learnt to store it. Therefore, gradually his need turned into wants. In this way he began to exploit nature. The thought that that he is superior to nature came to his mind. He treated nature as a means for the satisfaction of his desire.

Buddhism accepts that man's uncontrolled and unlimited desire is the cause of ecological imbalance. At the same time Buddhism also provides a solution to this problem through proper knowledge. Buddhism gives us a world view that is influenced by scientific thought. The main reason for Buddhism to be influenced by scientific thought was that it did not presuppose the existence of God.

According to Buddhism, human being is part of nature. We cannot make a sharp distinction between human being and nature. Everything in nature is transient and everything is subject to the same natural laws. Every thing in nature is interconnected by the law of causality. Change is inherent in nature. Therefore, they are interdependent. These principles promote a scientific thought that helps human beings while dealing with nature.

Though Buddhism says that change is inherent in nature, it also says that natural processes in nature are affected by human morality. The reason is human thinking determines the moral standards in the society. Human being and nature are bound together with a reciprocal causal relationship. The change in one necessarily brings change in the other sphere. If there is degeneration in morality in the society then both human beings and nature also degenerate. The result of greed, hatred and delusion produce pollution within human society and nature. On the other hand, if morality dominates our thinking then the quality of human life and nature improves. Generosity, compassion and wisdom

produce a better balance among human beings themselves and between man and nature. Human being and nature are interdependent.

According to the Buddhist doctrine human beings must try to satisfy their real needs not their desires. The resources of the world are limited where as the human beings' desires are not limited. Buddhism says that happiness should be found by restoring human desires rather than proliferating desires and the goal of enlightenment should be through renunciation and contemplation.

The Buddhist world view is inherently eco-friendly. The nature is an infinitely interrelationship among all the members of nature. Each individual is the cause for the whole and at the same time it is caused by the whole. In Buddhism the individual is not separate from the whole because the individual is understood as existing within the ontology of interdependence.

Morality and Nature

According to Buddhism the world itself passes through many cycles of evolution and dissolution. It shows that change is inherent in nature. But at the same time it says that man's moral behavior affects the natural process in nature. Man's moral deterioration brings certain changes in nature which is adverse to human wellbeing and happiness. Therefore, there is a very close link between man's morals and nature. This idea can be seen in the theory of five natural laws. According to this theory there are five natural laws or forces which work in the cosmos. These five laws are physical laws, biological laws, psychological laws, moral laws, and causal laws. The first four kinds of laws work within their respective spheres and the law of causality operates within each of the first four laws and among them.

Therefore, the causal law that works in the physical environment of a particular area conditions the growth and development of its flora and fauna. So Buddhists say that this also influences the thought pattern of the people who interact with that particular physical environment. That particular mode of thinking determines the moral standards. But there is also another possible way of interaction i.e., the opposite process of interaction. The morality of man not only influences the psychological make up of the people but also the biological and physical environment of the natural world.

Thus the five kinds of natural law say that man and nature are bound together. They have a reciprocal causal relationship. It means changes in one necessarily bring change in the other. Thus man and nature are interdependent. When moral degeneration is due to hatred then widespread violence is the outcome. On the other hand when mankind realizes that all these devastations have taken place due to the human moral degeneration then a change in morality takes place. So with moral regeneration conditions improve in nature. He brings back prosperity to nature. This shows that nature and mankind stand or fall with the type of moral force at work. If immorality prevails in society man and nature deteriorate. If morality prevails the quality of human life and nature also improves. Thus man and nature are interdependent.

Nature is Beautiful and Dynamic

In Buddhism nature is considered as the most beautiful phenomenon in the world. It considers the natural beauty as a source of great joy and aesthetic satisfaction.

"Changeability" is one of the most important principles in nature according to Buddhism. Not a single thing is static and therefore every thing keeps changing itself in nature. There is a constant process of change. Nature is that which disintegrates. It is because nature is

always dynamic and kinetic. There are no stable and static things. The *Pañcabhūta* are also in constant change. The elements of solidity, liquidity, heat and mobility are the basic materials of nature. Even these are also in ever changing processes. Thus change is the essence of nature.

All phenomena arise from conditions; The fact that it encompasses many conditions, Is because it is non-existent in nature. (Ecological Perspectives in Buddhism, Edited by K.C Panday, Readworthy, New Delhi, 2008, p.g no-131).

The dependent origination or *pratītyasamutpāda* thesis of Buddhism shows that each and every event in the universe is dependent on so many factors. Nothing arises on its own or by itself with out depending on other factors. This is the central doctrine of Buddhism. It provides a foundation to an environmental perspective towards the present day environmental crisis.

Therefore, Buddhism does not presuppose the priority of the individuals. It does not separate the individual from the whole. The individual exists within the ontology of interdependence. Everything is interdependent. Buddhist environmental ethics assumes the priority of the whole both in terms of morally and ontologically. They have an ecoholistic approach towards nature. The ontology of interdependence claims that the individuals are different but they are not separate from each other and therefore they are also not separate from the whole.

All the practices in Buddhism have one ultimate purpose. That is to attain *Buddhahood*. There are six kinds of practices by which a bodhisattva attains *Buddhahood* or *Satpāramitāh*. The six kinds of practices are (a) giving donations or *dāna-pāramitā*, (b) keeping the precepts or *sila-pāramitā*, (c) being forbearing or *ksānti-pāramitā*, (d) being assiduous or *virya-pāramitā*, (e) practicing meditation or *dhyāna-pāramitā*, and (f) cultivating wisdom or *prajña-pāramitā*. These are the six virtuous practices that a human being needs to become a good

human being. According to Buddhism living with wisdom and upholding the precepts are the essential ethical norms and these two practices as we will see helps us in constituting a basis for an environmental ethics.

Wisdom or *prajňa-pāramitā* is the attainment of wisdom and is a part of the six kinds of practices by which a bodhisattva attains enlightenment or the attainment of absolute wisdom. Here we would discuss the idea of wisdom as a way to solve the environmental problem with the help of two other Buddhist concepts. These two concepts are "dependent origination" or "*pratītyasamutpāda*" and "the middle way" or "*madhyama Pratipāda*".

The concept of dependent origination means, an entity does not exist generate independently. It is interdependent interconnected to all phenomena. This indicates a relation of space and time among all entities. All living things in nature are related to one other including the organic and inorganic matter. Related in time means not only relation between one generation and the next but also a historical relationship such as the process of evolution. This shows that it is only through the doctrine of dependent origination everything is connected with time and an entity generates from its predecessor. So the transmigration of life exists in relation to time based on the concept of dependent origination.

The second concept is the concept of *madhyama pratipāda* or the wisdom of the middle way. The principle of the wisdom of the middle way is, "the middle way of pleasure and pain". According to Buddhism the "pain" of the penance principle indicates that, it is true that this is useful for developing strength of mind but it does not lead to attain the absolute spiritual wisdom. On the other side, the "pleasure" of hedonism we also need for to attain the absolute wisdom. Therefore, the concept of the middle way of pleasure and pain denies a deterministic stand towards either hedonism or austerity. The middle way demands a

harmony between the two and does not accept an inclination to either side. The knowledge of these two doctrines of Buddhism gives us an ethical framework that can be used for environmental problems.

Keeping the precepts or *sīlā-pāramitā* consists of five kinds of precepts. These consist of the precepts of "not killing living things", "not stealing", "not committing adultery", "not telling lies", and "not drinking intoxicants". This concept of keeping precepts is an important ethical norm for solving present environmental concern. We need to discuss only two particular precepts. These two are the precept of "not killing living beings" and "not stealing".

(i) The precept of "not killing living beings"

According to Buddhism a disciple of the Buddha should not kill himself. He should not also encourage others to kill, or witness killing. An individual should not create the causes, conditions, methods of killing. He should not kill intentionally. An individual should nurture his mind with compassion and piety. He should always rescue and protect all beings. This precept forbids the killing of any living thing. They say that killing itself is an offence but at the same time the state of mind of the person at the time of the killing is decided by considering whether a person kills intentionally or for no proper reason. It is a major offence if a person fails to restrain himself and kills sentient beings without mercy or out of pleasure. Therefore this can be set as an ethical standard that can be used as the basis for solving environmental problems.

(ii) The precept of "not stealing"

According to this kind of precept an individual should not steal himself or encourage others to steal. He should not create the causes, conditions, methods of stealing. A person should have a mind of mercy, compassion and piety. He should always help people to achieve happiness. Therefore, this precept forbids stealing intentionally or unintentionally or with any reasons. Stealing is considered as a gravest

consequence. In today's world it is necessary to interpret this precept more widely because we should consider it as an offence to not only steal from other human beings but also from nature or the ecosystem.

From the above discussion we know that the precepts in Buddhism are not absolute. Does that mean that any justification is acceptable? If we kill living things in order to support our own survival it is in fact justifiable. Because it is the minimum requirements that human beings need for survival. At the same time there are some reasons that prohibits killing living beings. Certain kind of human behavior which destroys relations in ecosystems is considered as offence. It disrupts the concept of dependent origination.

The Value of Life

According to Buddhism killing living things is a crime. It asserts that all living things including animals and plants deserve respect. Non-injury is one of the five precepts that an individual is expected to practice. In its negative sense it means abstention from any injury to life and in its positive sense it means the cultivation of compassion and sympathy for all kinds of living beings. The Buddhist attitude towards animals and plants is non-violent. Even a person should abstain from the practices which involve unintentional injury to living creatures. This becomes a reason for not digging the ground.

Buddhism prescribes to practice love and kindness towards all creatures of life. We should cultivate loving-kindness towards all creatures irrespective of their nature, such as, timidness or steadiness, tallness or shortness, etc. It does not matter whether they are small or great, visible or invisible, or near and far. The life of other living creatures is precious to themselves in the same way as the life of one's own is precious to oneself. Reverence should be practiced towards all life forms.

Buddhism also expresses the same non-violent attitude towards the vegetable and plant world. One should not break the branch of a tree. Plant provides us all basic necessities of life. Buddhism also extends a sense of reverence towards all natural phenomena such as mountains, forests and trees.

The Use of Natural Resources

A gentle non-aggressive attitude towards nature is advocated in Buddhism. According to Buddhism a house holder should accumulate wealth as a bee collects pollen from a flower to make honey. The honey bee neither harms the fragrance nor the beauty of the flower. It gathers pollen to turn it into honey without harming flower. Similarly a human being should use natural resources for his survival so that he would not harm nature. Human being is dependent on nature for his food, clothing, shelter and other things. Man has to live harmoniously with nature. The natural resources are limited but man's greed is unlimited. Buddhism advocates the virtues of non-greed, non-hatred and nondelusion in all human pursuits. A man should lead a simple life with few wants. Miserliness and wastefulness are considered as two degraded extremes in Buddhism. Contentment is considered as the highest virtue in Buddhism. We get many examples in Buddhism regarding the economic use of resources. For example, when new clothes are received the old clothes are used as coverlets, the old coverlets as mattress covers, the old mattress covers as rugs, the old rugs as dusters, and the old tattered dusters are kneaded with clay and used to repair cracked floors and walls. Thus nothing is wasted.

The Non-violent Ecology

Violence and non-violence are relative concepts rather than absolute conditions. A non-violent ecology means a society that is ecologically sustainable and that includes taking and compassionate attitude towards environment. This results into non-killing of animals.

Buddhism is an attempt towards establishing a non-violent ecology. There are certain principles in Buddhism which elaborate non-violent ecology. These are as follows.

(a) Unity and interdependence

Buddhism says human beings are integral part of nature. It is always an eco-centric philosophy than an anthropocentric one. It also explains that it gives emphasis to the interaction of mind and nature. Mind and nature interaction is possible on the basis of three practices. These practices are practices of direct knowing, discriminating, and deep compassion. By cultivating these three practices human beings can establish a relationship of interconnectedness with nature. There would be no subject and object differentiation. In this process human beings are not a dominant species but a member of a whole community. There is no separateness of human beings from nature and human beings identify themselves with the welfare of all beings. Since there is unity of human and nature the laws of nature apply to both human and to all other living beings at the same time.

(b) Limits and sustainability

Now-a-days all kinds of environmentalism of all varieties emphasize that natural resources are limited. The same trend is observed in Buddhism long back which encourages individuals to limit their consumption of resources. All individuals should limit their consumption to the satisfaction of the four basic needs of food, clothing, shelter and medicine. At this point the concept of *madhyamapratipāda* or the middle way helps us. By following the middle way an individual lives his life and progresses in accordance with the principles of detachment and moderation. *Madhayamapratripāda* avoids the extremes. It avoids the extremes of denial i.e., asceticism and overindulgence i.e., consumerism. By implicating the middle way in day to day life we can bring moderation as well as the economic production and consumption. In this way Buddhism contributes to ecological sustainability.

(c) Compassion for divinity

Buddhism advocates reverence and compassion for all life. It shows reverence and compassion for all invertebrate and vertebrates. For meditation we need a natural and peaceful environment and this kind of environment we get only in the forest. At that time temples were built in forests. As the temples were built in forests the surrounding forest of the temple was considered as sacred space. That place was preserved rather than being exploited. Therefore, it ultimately tends to promote conservation of all different kinds of species within the surrounding ecosystem of the temple.

(d) Existence and rights

Buddhism gives intrinsic value to nature that includes both humans and non-humans. It prescribes that an individual should limit the personal use of natural resources. He should try to limit the use of natural resources only for the satisfaction of basic needs. The Buddhists were more concerned with the contemplation of nature rather than the in favour of using the nature. The Buddhists say we should deal with nature in the same way we deal with ourselves. We don't like to harm ourselves, so we should not harm nature either. As Buddhists say humans and nature are interdependent, and, therefore, harming nature means indirectly we are harming ourselves. If human beings have the right to live or exist, then all life forms in nature have the natural right to exist as the component of nature. Thus the Buddhist says that we should not use pesticides or other means to unnecessarily destroy other life forms existing in nature.

(e) Thought and action in relation to responsibility

According to Buddhism, mind is nothing but the result of what we think. They say positive consequences come from the positive actions and positive actions come from positive thoughts of human beings. Negative thoughts give rise to negative actions and negative actions give rise to

negative consequences. Buddhism also says that the positive and negative action of an individual in his present life can also influence his next life. Because the source of suffering and happiness is the individual himself. The qualities of thoughts and actions are linked and accordingly they influence the surrounding environment. Therefore Buddhism says the root cause of all environmental problems is in the mind. Ignorance is the main cause. Buddhism encourages the cultivation of environmental understanding through education. Non-violent ecology is the basis for the practice of environmental ethics. Buddhists recommend to practice non-violent, universal companion and kindness towards all life forms.

(f) Individual dependence

For all environmental crises we blame science, technology, industry, business, advertising and government. But Buddhism views eco-crisis as the product of the collective behaviour of the individuals. Eco-crisis is the result of an individual's behaviour who is driven by ignorance and greed rather than driven by wisdom, need, moderation, compassion and non-violence. As in the previous paragraph we discussed that the locus of happiness and suffering is in the individual. If an individual cultivates positive thoughts then positive actions follow from it which ultimately gives rise to positive consequences. This kind of cultivation is dependent on the realization of the four Noble Truths and Noble Eight fold path. A human being needs to follow the middle path of detachment and moderation. Only by following the middle path an individual adopts detachment and moderation while satisfying the basic needs by avoiding greed. Everything depends on the individual's thought process.

Buddhist Ethics for Deforestation

Now-a-days deforestation has become a serious environmental problem. Deforestation has very adverse impact on wildlife and climate change. With deforestation many wildlife species get extinct. It is a kind of pillaging living things from the ecosystem. If we look at this problem

from a Buddhist's point of view these acts are breaking its two percepts, namely, the not-killing-living-things, and not-stealing. If we go according to the dependent origination doctrine of Buddhism then we can see that destruction of life and pillaging of living things becomes a problem which we need to take seriously.

As it is discussed above it is forbidden in principle to take or steal life of any living being. We should forbid such behaviour because by performing such behaviour we destroy the relationship among living things, secondly we are destroying the future potentiality of being born again. In this process many rare species got extinct.

According to the ethics of the middle path the destruction and capturing of living beings is acceptable as far as the balance of the ecosystem is not destroyed. We need to use natural resources for our survival. By following the middle path human beings can survive and at the same time the ecosystem is not destroyed totally.

Buddhism does not deny comfort and wealth. But it rejects desires to be the basis of our life. It is when human beings involve in overindulgence then life according to Buddhism is governed by desires. It says excessive and unnecessary destruction of living things is considered to be an offence. It is an offence because human beings fail to restrain themselves and kill living beings unnecessarily without mercy. A person having a comfortable or profitable life should have self-control to prevent himself from becoming greedy. According to Buddhism this should be the basis of a Buddhist ethical norm.

Buddhist Ethics for Eco-protection Management

From the view point of dependent origination it is allowed to capture and exterminate of some animals. It is allowed because it is done to protect the ecosystem without disturbing the ecological relations.

It is because the ecosystem may be destroyed if no intervention takes place.

Ethics for Using Chemicals

Within Buddhist framework how should we view the use of chemicals, such as agricultural chemicals? According to Buddhism one who is a disciple of Buddha should not store weapons such as knives, bows, arrows, and spears. An individual should not store any weapons or any other devices that can be used to kill sentient beings. According to this principle we should not produce artificial chemical that aims at killing living beings and agricultural chemicals are of such kind.

According to the doctrine of dependent origination, the use of agricultural chemicals was considered as the cause of destruction of ecological relations. Hence it should be forbidden. Killing living beings deliberately without any reason is not permitted in Buddhism. But in case of using agricultural chemicals now-a-days, it is difficult to secure enough harvest of crops to supply enough food without using chemicals. Therefore, the use of pesticides can be justified. Except this method we should also develop alternative methods to increase the field of crops. But if we go strictly by the viewpoint of dependent origination then it is certainly evil to kill living being by using agricultural chemicals. But at the same time by using this process the food production increases and accordingly the supply of food also increases for many people who would have starved otherwise.

In Buddhism all living things are worthy of respect. But when there is a comparison between the human life and the life of other living things then the life of human beings is given priority. In the present case priority should be given to food supply to human beings who would have suffered from starvation. However, if there is any other way to increase the food production by the use of chemicals then we should do that means. Buddhism considers plants also have sentiments because a plant changes the direction of a leaf to light and stretches its root to water and nutrients. Plants recognize the environment and act accordingly as animals recognize the environment by their five sense organs. The five sense organs are eyes, ear, nose, tongue, and body. A plant is also considered to have sentiments. Therefore, Buddhism regards that the existence of human beings and living things as well as the future life of human beings and other living things are of equal importance.

Buddhism provides all the essential elements for a better relationship between human beings and nature. The relationship is characterized by respect, care and compassion. It says all entities in nature including human beings are conditioned by the interconnectedness and interdependence. It says happiness is found in the restraint of desire. The above principles are the basis for a non-violent environmental ethics. It promotes the ethic of non-injury and boundless loving kindness for all beings.

All measures for the present ecological problems should be based on the basic causes. Man has to search for certain very radical solutions for the eco-crisis he is facing today. Here the basic causes means the solutions must be determined by our value systems, proprieties and choices which we make for the use of nature. Man has to go back to his value system, because the materialism that man followed has created very serious environmental problems. According to Buddhism mind is supreme and it influences all the actions of man. If a person acts with impure mind i.e., with greed and hatred then suffering is the result. On the other hand if one acts with a pure mind i.e., with compassion, wisdom and contentment then happiness follows. The environmental pollution and all other ecocrisis are the result of man's greed to over exploit nature. The solution is also within the human mind. If human being wants a better environment then he has to adopt a life style based

on moral and spiritual dimension. Buddhism offers the doctrine of middle path that is the basis of a simple and moderate lifestyle. It avoids both extremes of self-indulgence and self-deprivation. It recommends for the satisfaction of basic human necessities, reduction of wants to minimum and contentment with the minimum wants. By practicing this human being adopts a simple moderate life style. If all human beings try to practice this then only mankind can stop polluting the environment. As a result man's attitude towards nature will be non-exploitative, non-aggressive and gentle. Human beings can live in harmony with nature. The Buddhists ask people to utilize nature in the same way as a honey bee collects pollen from a flower. While taking pollen from a flower a honey bee neither pollutes the beauty of it nor does manipulate its fragrance. In a similar fashion human beings should be able to feel happy and contentment in life without harming the nature.

The Concept of Dharma and Environmental Ethics

The concept of *dharma* is one of the most important concepts in Indian philosophy. The word *dharma* is derived from the root *Dhri. Dhri* means to uphold, sustain and support. The word *Dhri* denotes *that which holds together the different aspects and qualities of a being or an object into a whole* (Environmental Ethics: Our Dharma to the Environment, O.P. Dwivedi, Sanchar Publishing House, New Delhi, 1994, p.g. no-7).

In the commonsensical term the term *dharma* has been translated as a religious code. However, *dharma* is translated in several ways and accordingly it assumes different meanings. *Dharma* is thus translated as righteousness, as duty and as a system of morality. Except this the term *dharma* also means the essential nature of any object. It is the essential

nature of an object without which the existence of that object does not have any sense. It may be thus said that the true nature of a human being is to act in accordance with *dharma*. Similarly it is the true nature of a tiger to kill and eat another animal to satisfy its hunger and the true nature or *dharma* of water is to flow downwards.

As it is derived from the Sanskrit root *dhri*, it means to sustain, support and uphold. Therefore the term has many meanings. The meanings are:

- (a) It is the basic foundation of all moral pronouncements. Therefore, it signifies the truth.
- (b) It implies an individual's duty and responsibility towards other individuals, and other animate and inanimate beings.
- (c) It connotes right conduct.
- (d) It also symbolizes authority. Therefore, it implies the behaviors that are permitted by the society.

The oldest sense of the word *dharma* in the Vedic period is *ṛta. Ḥta* stands for the cosmic order. The term explains the natural laws, cosmic order, rightness and the universal harmony in nature in which all things in the world have occupied a proper place and function. But there is a difference between the word *dharma* and *ṛta. Dharma* characterizes the personal actions that either disturbs or maintains the cosmic order. But *ṛta* is a cosmic and impersonal law of nature. So there is a relationship between these two concepts. Therefore, dharma is the system of activity that guides the world in such a way that *ṛta* is not violated.

Types of Dharma

There are five types of *dharma* and these are as follows:

(a) Sanātana dharma means that which is not handed over by any particular person. It is not established by any particular group. Therefore, it means the dharma which is eternal and constant. In Indian philosophy the Vedas and Upanishads are eternal and what ever is

prescribed in that is sanātana dharma. Sanātana dharma that the Vedas and the Upanishads prescribe are truthfulness, forgiveness, practice of charity, self-control, non-violence, sacrifice, renunciation, compassion for all living beings and aspiring for *mokṣā*.

- (b) Sāmānya dharma is meant for the general public. It consists of the general duties prescribed for all general people. It is expected that these duties should be practiced by all irrespective of the caste. So sāmānya dharma is the combination of four Cardinal virtues. These are truth, self-control, non-violence and purity.
- (c) Sādhārana dharma is related to everyone. It says all people irrespective of age, social class should observe some common moral obligations. So telling the truth, living ethically, non-violence, forgiving, the practice of goodwill, and exercising patience all the time are some of the responsibilities that come under the sādhārana dharma. So these rules are sādhārana or applicable to everyone. Sāmānya or common to everyone and sanātana or eternal in scope.
- (d) Mānava or global dharma is that human beings have certain duties towards humanity and the world. Mānava dharma or global dharma prescribes an individual to consider the entire universe as his extended family. It extends from individual human beings to all living beings in this universe as the members of one family. From this concept of global Dharma the concept of human rights, animal rights and the rights for other living beings have emerged. Hence this concept is called Vasudhaiva Kutumbakam. Vasudeva means the member of the one extended family. The extended family includes all human beings, animals, and all other living beings. An individual develops the attitude of respect for all other living beings only by considering the entire universe as an extended part of our family.

Since according to the concept of global dharma all beings are the members of one extended family then, human beings as the members of the extended family should not endanger the lives of others willfully. The essence of global dharma is compassion for all living beings and cultivation of non-violence and contentness.

(e) Varnāshrama dharma and svadharma are the duties according to an individual's profession towards the society and similarly there are certain duties according to the stage of an individual's life. Therefore, varnāshrma dharma is the duties determined by an individuals social class i.e., varna. For example, a soldier protects the people of his society from enemies and a priest ensures the health of the society by securing the good will of the God through rituals. At the same time the gurus educate the people. It is also the svadharma or one's own obligations to prefer their duties that are given to them to perform. An individual's svadharma and varnāshram dharma together constitute the global dharma. Global dharma is the sum total of a person's obligation that unifies an individual with natural and social world. These different kinds of dharma support one another. Therefore, a person's imperfect performance of his responsibilities brings negative impact in the society and the world ultimately. Dharma comes from an individual's true nature. A person cannot refrain from performing it. Hence, the role of the concept dharma is very important in the concern for nature. It helps a person to control his greed and passion from harming and exploiting nature and natural phenomena.

The Concept of Karma

The term *karma* comes from the root *kri*. It means "to do". So Karma means action. But in its broader sense it also applies to the effects of an action. The law of karma is that, each action that is performed willfully has its consequences. It is also possible that the effect is not seen immediately. Every action creates its own reaction. A

good action gives rise to good effect and a bad action gives rise to bad effect. The law of Karma says that every action performed creates its own chain of reactions and events. Some of the reactions are immediately visible and some are visible after some time. Accordingly the present day ecocrisis is the result of the actions of past and present people. The concept of Karma says that there is interrelatedness between the action and the result of that action. Although we do not face reaction of our action, there is a possibility that someone else is going to face from that same action. In the context of ecocrisis the concept of *karma* is important as a guiding force to protect the individual.

The Ethics of Interconnectedness

The concept of *dharma* provides a vision and a method for a better world. It gives us a goal, model and structure to transform our attitudes towards an environmental consciousness. The manifestation of dharma presupposes the law of Karma. The concept of dharma and karma are the two fundamental ethical concepts. These two concepts can be considered as prerequisites for an environmentally conscious world. Dharma and karma are two imperatives in Indian ethics.

According to the Indian philosophical perspective when an individual identifies himself with the nature then he/she perceives himself as one among all other entities. So he/she naturally tries to treat all other beings with the ethical principles with which he relates his self-interest. This leads man to manage the natural resources properly and, he tries to establish ecological relationship sensitively. This gives rise to a balanced economic-ecological relationship. The ultimate achievement is that the human being establishes a partnership with nature to protect the complex life-system of nature.

The self-realization conception of ethics says that in nature we should not disturb or kill any life abruptly. It affects the further growth of all individually and collectively. This ethics is the necessary condition against dominant attitudes among individuals and the society.

The concepts of dharma and karma entail both the ecological and self-realization ethics. These two concepts are very much useful for environmental protection. It helps to change our view of nature from the attitude of dominance to the attitude of co-existence and interdependence. The principles upon which dharma is based are truth, moral obligation and duty. These principles can be used to mobilize people to change their attitude towards nature by being respectful towards nature. The development of the society should be based on the sustainability. Now we see how the concept of dharma is related with sustainable development.

Sustainable Development and the Concept of Dharma

First we need to know the concept of sustainable development that meets the needs of the present without jeopardizing the ability of future generations to meet their own needs. According to the Brundtland Commission Report it consists of two concepts. These are (a) the concept of needs and especially the essential needs of the world's poor. The priority should be given to the essential needs of the poor. (b) The second concept is the limitations that are brought by technology and social organizations on the environment's ability to meet present and future needs. Through this we get progressive economy and society so that the living conditions of the world improve.

We can establish a link between *dharma* and sustainable development. *Dharma* can make the consciousness of sustainability possible. The concept of *dharma* can be used as a common strategy for the implementation of sustainable development for a better environmental management.

The *mānava dharma* or global dharma and *sāmānaya dharma* are useful in perceiving a common future for society because the *sāmānya dharma* is meant for the general public. According to *mānava Dharma* a person has certain duties towards other human beings and the world as a whole. Both the types of dharma are helpful in perceiving a common future for the society.

Varnāshrama dharma and svadharma are useful to the people to act both individually and as a group towards the achievement of a common future. Ultimately the development strategy for a sustainable development is the attitude of respect for nature and accordingly the satisfaction of human needs can be achieved. Thus sustainable development should meet the basic need of all and it should also be able to extend all the opportunities to each and every individual and it is expressed in the concept of sarvodaya in Indian Philosophy.

Sarvodaya and Environmental Protection

The concept of *sarvodaya* means awakening of one and all. It means the development, progress and welfare of all. It is the concept that aims at achieving the highest level of self realization where an individual sees himself or herself manifested in all others. This is explained in the following verse:

Sarve bhavantu sukhinah, sarve santu niramaya Sarve bhadranin pashyantu, ma kaschit dukhbhog bhavet.

It means:

Let all living-beings be happy and at peace, let all beings be free from afflictions. If one realizes this and perceives it in all living beings, there would not be any suffering in this world (Environmental Ethics: Our Dharma to the Environment, O.P Dwivedi, Sanchar Publishing house, New Delhi, 1994, p.g.no-22).

It describes that the individuals have duty towards themselves as well as towards others. They have duties beyond their immediate families i.e., to the whole universe. We can use this concept for environmental protection because it is based on the spiritual awakening of an individual. The goals *sarvodaya* sets for economic development have a spiritual base. The economic development not only includes production for profit but it also considers the conservation of material resources and the use of natural resources wisely. Hence the production patterns based on greed and envy are avoided. The over consumption of resources is also avoided due to that reason. If the development procedure is based on *dharma* and *sarvodaya* then the sustainable development is less materialistic but more equitable in its impact for all beings. It focuses on the "total-wellbeing" that includes moral, cultural and economic development of people.

Satyagraha and Environmental Protection

The concept of satyāgraha is another means by which we can have an impact on the environmental policy process. Satyāgrah literally means persistence and endurance for truth. It excludes the use of violence because human beings are incapable of knowing the absolute truth, therefore, they are not allowed to punish. Punishment is violence. The word satyāgraha is first coined by Mahatma Gandhi. This is a technique to achieve freedom by non-violent resistance. It embodies five basic elements. These are, purity of (a) motive, (b) means to be used, (c) suitability of place, (d) time, and (e) the mental status of the agent. Satyāgraha means the truth force and all the above five basic elements ought to be followed by those who want to use this technique. Gandhi says that the pursuit of truth does not entail inflicting violence on one's opponent. But at the same time he says to convince the adversary of their error by patience and sympathy. In his words:

For what appears to be the truth to one may appear to be error to the others. And patience means self-suffering. So the doctrine comes to mean vindication of the truth not by the infliction of suffering on the opponent but on one's self (Environmental Ethics: Our Dharma to the Environment, O.P Dwivedi, Sanchar Publishing house, New Delhi, 1994, p.g.no-22).

Satyāgraha is a force that can be used by any individual on any community. It represents the struggle of the people in opposing unjust laws. We can see a relation between *Dharma* and satyāgraha. Truth and the perfection of man are the basis of *dharma* and satyāgraha and these two are necessary for the proper development of society. satyāgraha is a means by which certain precepts that are associated with the concept of *Dharma* are manifested for the betterment of the individual and society.

The two concepts, satyāgraha and sarvodaya together express Dharma. Through this the protection of the environment can occur. satyāgraha for conservation can be used as a force against governments and business. It is a means by which the common people can bring change on the environmental policies. Due to global ecological crisis now- a-days there are many environmental groups which are coming up in favor of a better environment. These groups can use the concept of satyāgraha for conservation. Through this also they can disrupt the policies that support the environmental degradation. The benefit of such kind of activity is two fold. Firstly, with such activity the environmental groups can fight in courts with the producers and manufacturing associations. While doing this they also promote and monitor the environmental issues. This act of satyāgraha broadens the scope of environmental education by producing the necessary information to the people. More and more people are involved in the environmental policy process. Secondly the acts of satyāgraha for conservation produce crisis. This crisis demands governmental and public attention and intervention because it affects the economic growth and production.

In the movements like *Chipko*, people acted in a certain way and this we can call *Forest Satyāgraha*. Broadly we can say *Satyāgraha for the environment*. The movement was used against the government forces for better environmental protection. The *Chipko* movement started in March 1973 in a place called *Gopeshwar* of *Chamoli* district of Utter Pradesh. The people of that village mostly women and children formed a

human chain and hugged the trees to keep them from being cut. The trees were supposed to be cut for a near by factory that was producing sports equipments. The same kind of action was taken in another village when forest contractors wanted to cut trees and they have license from the Government Department of Forests. People protested against cutting trees by hugging trees and such actions forced the contractors to leave.

The Chipko movement is based on the ecological, economic and religious beliefs. Vilagers knew by that time that the industrial and commercial demands have destroyed their forests. They were dependent on the forests for their livelihood. If there is no forest how are they going to sustain their livelihood? So they tried to save their forests by Ahimsāor non-violence. Therefore, people once survived due to a value system that maintained the resources, because they believed in the presence of God in trees and forests. By protecting the trees they are the protectors of forests and at the same time the values inherent in dharma are also protected. This is the practical impact of Satyāgraha for the environmental protection. In such cases the government is forced to act in such a manner that leads to make a balance between the workers and the protestors. The government has to see that the natural resources are used rationally and the economic developmental activity should respect the local socio-cultural pattern. Therefore, the non-violent resistance should be used to check the environmental policy process. Governments would be forced to formulate the economic policies of sustainable development in the following manner.

(a) The concept of *Dharma* and *Satyāgraha* has contribution to the environmental protection programs. These two concepts can be used to stop environmental degradation. The concept of *Satyāgraha* also helps us in educating people concerning the ecocrisis. It also forces the governments to think again on the policies. All environmental problems have now become so big that it is impossible to solve these problems only by society and

- governments. Ultimately the attitude of people towards nature should be changed from exploiting attitude to the attitude of respect for nature. Therefore the spiritual basis we get from the concept of dharma should be used while dealing with nature.
- (b) The concept of *Dharma* is the basis of Indian culture, religion and philosophy. The role of *Dharma* in all spheres of life in India is very important. It is because according to Indian Philosophy it is essential to discipline our inner thoughts before changing the exploitative tendencies of people. The concept of *dharma* can only do this. It leads to get mastery over all our negative characteristics such as greed, exploitation, abuse, mistreatment and defilement of nature. It prescribes the domain of *dharma* to extend towards other living and non-living beings in the world.
- (c) We should try to separate the concept of *dharma* from any particular religion. The separation is necessary because without this we cannot make it a universal concept to be used in changing the attitude of human beings towards nature. The separation of the concept from being only affiliated to Hinduism is necessary because without separation people from other culture and religion would not accept this as a means to achieve better environment. It will help us to work towards the protection and conservation of natural resources. The concept of *dharma* should be used as a mechanism to achieve the attitude of respect for nature. Irrespective of the religion it should be thought that there is a cosmic order that should be maintained.

The concepts of *Dharma*, *Karma*, *Sarvodaya* and *Satyāgraha* can give us a framework for the actions to be taken for a better environment. These can help us in the preparation of policies of sustainable development. These concepts if highlighted globally can provide the values that are necessary for a better environmentally conscious society. It does not permit the economic growth on the basis of greed, poverty, inequality and environmental degradation.

Indian Philosophical perceptive believed in the concept of Vasudhaiva Kutumbakam. It means all that is alive belongs to one single family including plants to human beings. Everything originates from Brahman and goes back to Brahman. All schools of Indian Philosophy believed in the interdependence relationship between human being and nature. Therefore the value of life has a close affinity with the sacred and mysterious power that underlies both the subjective and objective world. In Indian Philosophy it is accepted that each and everything including living and non-living are the result of the combination of same gross elements. Hence there is no sharp distinction between human and nature.

We get many verses in Vedas and Upanishads discussing the importance of eco-ethics and the ethics of conservation of resources. In Jainism we see a hierarchy of living and non-living entities and they are depending on each other at the same time. This dependence among themselves constructs a whole i.e., nature. Buddhism has concepts, such as, dependent origination and the middle path for environmental conservation. Both Jainism and Buddhism have provided a code of conduct for people to practice so that a better balance is maintained. In that code non-violence is the common and very important concept. Through this a sacred relationship is maintained with nature. Except this, the classical concepts like Dharma, Karma, and two other contemporary concepts such as Sarvodaya and Satyagraha can be seen as very eco-friendly concepts. These concepts are helpful in maintaining an interconnected and interdependent relationship with nature. The concept of Satyagraha is very much useful in bringing environmental movements. The movement like Chipko movement is called forest Satyagraha. This movement was used against the government forces for environmental protection. In such movements we see the reflection of the western concept of "stewardship" where people take care of the trees, forests and the natural resources so that they can use them for their livelihood. They are dependent on nature and at the same time they take care of the natural resources. In the contemporary time people realize that the industrial and commercial demands have destroyed their natural resources. They know that if there is no forest they cannot sustain. So they try to save their forest by non-violence i.e., through the movement of $Saty\bar{a}graha$.

According to the Indian perspective there is a sacred, interconnected and interdependent relationship between human beings and nature. The middle path of the Buddhist moral code of conduct is to be practiced for environmental management. This code of conduct allows the individuals to use nature for the purpose of their basic necessities but it never removes constraints from its moral code. The middle path avoids two extremes of pleasure and pain. It avoids the extremes - denial i.e., asceticism and over indulgence i.e., consumerism. By implicating the middle path in our day-to-day life we can bring moderation in the economic production and consumption. In this way Buddhism contributes to ecological sustainability. Indian philosophical perspective establishes an interdependent, interconnected, and sacred relationship with nature. It establishes a non-anthropocentric relationship between human beings and nature.

CHAPTER-VII

Respecting Nature

Introduction

Environmental ethical thinkers agree upon one thing i.e., "nature" has "value". The "value" of nature makes it worthy of moral consideration and the human community has to take necessary steps concerning nature in order to sustain on earth. This is the reason based on which the question regarding the value of nature has been raised. It is raised in terms of an instrumental value concern or intrinsic value

concern towards nature. This has been discussed in the last five chapters. The second chapter discusses the man-nature relationship. In the third, fourth and fifth chapter the value of nature is discussed from the deontological, utilitarian and virtue ethics perspectives respectively. These perspectives involve an enquiry in to the variety of ways in which human beings can value nature. These three theories are historically seen as rival theories. In our thesis they are viewed as the three aspects of morality and therefore they are considered as complementary approach towards nature. The complementary approach of these theories can be seen while understanding nature. Thus in the present study these three approaches formed a new approach to ethics which together may be applied to explain multifaceted characteristics of nature and its significance. In turn it shows that human being's have many sided relationship with nature. In order to establish how these three approaches form a complementary approach towards nature we need to discuss first the problems which each of these theories have. The reason is that none of these theories is sufficient in itself to establish a holistic relationship between human being and nature.

Problem's with Taylor's Theory of Respect for Nature

According to Hursthouse, we can see at least three related problems with Taylor's theory of respect for nature. The problem is with his consideration of respect for nature as an ultimate moral attitude.

(a) The first problem is, how is it possible to say that someone has respect for nature in Taylor's sense. According to Taylor, any living thing possesses inherent worth as a member of earth's community of life. To ascribe inherent worth to the living things is to adopt the attitude of respect for nature. This formulation of attitude of respect for nature is

based on Kant's theoretical framework of the attitude of respect for persons as persons. According to Kant, to consider persons as having inherent worth means to adopt the attitude of respect for persons as persons. When this attitude is adopted as an ultimate moral attitude this involves having the disposition to treat every person having inherent worth or human dignity. On the basis of Kan'ts theory Taylor conceived his bio-centric theory in environmental ethics. But the problem here is, adopting the attitude of respect for persons in Kantian sense and respect for all other living beings in Taylor's sense should be defined. disposition here is just more than a tendency of intension. It is an efficient tendency to treat people as having inherent worth. The question is, how adopting the attitude of respect for persons and other living beings will help us in terms of practical knowledge. The problem is, there are different people from different cultural and social backgrounds. We cannot know each and every person, their culture and society. In view of this how does this attitude bring the capacities and emotional sensibilities that are needed to make a particular choice, namely, between treating one person or living being as having human dignity or inherent worth and others' without these. No one can have all these just by adopting an attitude of respect for individual persons and all other living beings. From the childhood, a person has to be trained through moral training so that these dispositions and capacities are inculcated.

Taylor prescribes to take up or adopt the attitude of respect for nature. But all of us know that this cannot be done overnight through a rational process suddenly. According to Taylor, to adopt the attitude of respect for nature means to acquire a set of dispositions and capacities treat an individual as having human dignity. At this point Taylor has only extended the Kantian approach of categorical imperative towards all living beings. His approach is totally nature oriented. He calls for a change in action, emotion, perception, sensibility and understanding towards nature. It demands for a complete change in character. He demands for a complete change in someone's character to see himself as

sharing a common bond with all living things. This is an individual's emotions and perceptions and the whole way of perceiving and responding to the world. This kind of complete change in one's character will not come overnight by simply reading a philosophical book and deciding to bring a change to adopt the attitude of respect for nature. The above problem can be solved if we construct the attitude of respect for nature as a virtue because virtues can be acquired through moral training that begins in a person's childhood and the training continues through self-improvement. Virtues are not developed in a person overnight, and it cannot be acquired theoretically by attending lectures or reading books. It is a process which starts from one's childhood.

- (b) The second problem is with Taylor's concept of inherent worth as he ascribes inherent worth to living things. The concept of inherent worth demands to consider the facts about a living being to see whether a particular course of action benefits it or harm it. According to Taylor to see the inherent worth of a living being is to adopt a character trait i.e., the virtue of respect for nature or as Hursthouse calls it "being rightly oriented to nature". According to Hursthouse the above reasons can be used to train children for inculcating a virtuous character trait that is oriented towards nature. When parents see that the child pokes or hits or tears at the living thing then the parent says "don't do that, you will kill it", or "you have to water the plant because it needs water". In this way the child is taught how to look after a plant or an animal. Parents or teachers can explain to the child regarding the teleology of a living being. This moral training helps a child to bring out a particular way of perceiving acting, feeling and thinking about the natural world. Such training helps a child to recognize the inherent or intrinsic worth for living things. This can be called nature-loving rather than respecting nature.
- (c) The third problem with Taylor's account is the ascription of inherent worth to individual living things. He limits the inherent worth to living

beings only and therefore the attitude of respect for nature can be said as respect for living nature. According to Taylor things have inherent worth only because they are members of the earth's community of life. He identifies the characteristic out look of someone with respect for nature as follows:

One sees one's membership in the Earth's Community of Life as providing a common bond with all the different species of animals and plant that have evolved over the ages. One becomes aware that, like all other living things on our planet, one's very existence depends on the fundamental soundness and integrity of the biological system of nature. When one looks at this domain of life in its totality one sees it to be a complex and unified web of interdependent parts. (Taylor, P.W, 1986, 44).

In the above paragraph Hursthouse gives emphasis on the word "biological" than the words "system of nature". The other terrestrial entities such as the sun, the moon, the sea, the mineral in the earth, and the ozone layer also have roles to play in maintaining the domain of life in earth and these are the inanimate things. We can see both the animate and the inanimate are unified in a web and they are interdependent. But the author questions the need of stressing interdependency among animate and inanimate objects because many inanimate things are independent of animate things for their existence. If at all we are making a difference then this distinction between animate and inanimate becomes inappropriate in the context of environmental ethics.

Taylor has made this distinction in order to give a foundational premise to the concept of inherent worth. He says things have inherent worth when they share a common feature i.e., being a member of the earth's community of life. But Hursthouse says if we think of ourselves as rightly oriented towards nature as a character trait arising from our childhood training but not as an attitude founded by an adults rational recognition, then this gives us many particular reasons for doing actions towards nature. The reason is the inculcation of right orientation towards living nature starts from the very beginning of childhood. The

childhood moral training helps a child to behave in a certain way in certain contexts and shapes the emotional response of wonder towards nature. Here the distinction between the animate and the inanimate becomes insignificant. The children are trained not only not to harm and kill the living but also not to destroy natural inanimate objects. We should tell them how important they are in so far as the geological workings of our planet are concerned. They should know that each and every cycle in earth is inseparable from the workings of different life forms. Now-a-days we see the concern about the environment and the virtue of being rightly oriented towards nature is more widespread amongst children than adults. The virtue ethics approach will be right if change comes through actions and practical reasoning of people in who have inculcated the relevant virtues. The current task must be to develop the relevant virtues in us and our children.

Problem's with Deep Ecology

Deep ecologists consider that humans are not outside nature. They are the one among all nature's constituents. Therefore, humans cannot be independent persons who ascribe value to nature. It is because the concept of biological egalitarianism demands that human beings must value and respect all living and non-living entities. From this kind of thesis it can be drawn that nature has rights. For example, just like people, rocks, mountains and rivers also have rights for themselves. It is the rocks interest that is protected. It is not the human beings interest in the rock which is protected. Due to such sentiments there was a rush of legal action in USA in 1970s on behalf of threatened species and land-scapes. We will now go into the discussion relating to the various problems that are found in connection with deep ecology.

(a) The notion of intrinsic value

According to O'Neil we must believe that nature has intrinsic value in order to have an environmental ethics. Intrinsic value means non-

instrumental value. Nature is not a means to an end but it is an end in itself. Nature has value in terms of its own properties irrespective of its relationship to other entities. Intrinsic value is an objective value in the sense that value resides in nature independently of subjects. The notion of intrinsic value has been criticized when the deep ecologists say that non-human nature has objective value which is not dependent on human valuation, and then we are making a distinction between humans as a subject and nature as an object. This kind of conception contradicts the deep ecologists own conception of interdependence of human and nature.

In this connection we point out another related objection which says that the notion of intrinsic value by itself cannot be ascribed to nature without any reference to human beings. The reason is that since values are creations of human beings they cannot be thought of apart from human beings. In the earlier paragraph we said that the intrinsic value is the objective value and it can be justified because objective values exist independent of human beings. The objective value exists even if there is not a single human being on the earth. But the very idea of value, worth, and rights are human ideas. These are the human concepts and valuations which are imposed on nature. It is only human beings who value nature. Except human beings the concept of value has no meaning for the rest of nature apart from the very basic survival instincts of other beings.

(b) Interests in nature

Another objection for deep ecology may be raised from the point of view of interests. If nature requires right and protection intrinsically then it must have interests. Because these things can be demanded only when he has interests in himself that is, he thinks about himself. Deep ecology is criticized for assuming that plants and non-living entities have their own interests. The interest which deep ecologists give to nature such as growth, survival, and balance are actually the human interests. Deep

ecology seems to be misanthropic which means hating humanity. It says humans are no better than other living things. Therefore human well-being is not a moral priority.

(c) Hierarchy of vital needs

Deep ecologists have to work out a clear hierarchy of vital needs. If there is not a clear hierarchy of vital needs then, what is to be done when there is a conflict between the interests of various entities of the non-human natural world and human interests? This often happen in the case of environmental issues. In such situations if we favor human beings then we are abandoning the non-anthropocentric holism. On the other hand if we favor the non-human nature then we take the misanthropic standpoint. Therefore deep ecologists need to make out a clear hierarchy of needs.

(d) Overgeneralization of anthropocentrism

Another critique against deep ecology is, it has over-generalized in its criticism against the human-centeredness and the dominant worldview. But the critics say not all humans or all human-centered ethics are responsible for environmental problems. Thus deep ecologists failed to acknowledge that many human beings are not the part of dominant perspective. Ramachandra Guha, Indian ecologist, who has raised a similar kind of criticism against deep ecology. He says deep ecology is an American ideology. It is essentially a part of wilderness preservation movement. It is true that deep ecology claims universality. Hence according to Guha if deep ecology is put into practice then it would lead to disastrous consequences. The consequences of the practice would be adverse for the poor and agrarian population in underdeveloped countries. Guha says that if the basis of policies is biocentric equality then the result would be direct transfer of wealth from poor people to rich people, and a majority of poor people would be displaced. Deep ecology is not very helpful for the people of underdeveloped and developing countries.

Problem's with Land Ethics

(a) The problem of naturalistic fallacy

In ethics the central challenge is to ground ethical values in natural facts. It is a claim that there is a logical gap exists between statements of fact and judgments of value, i.e., "is" and "ought". It is called the naturalistic fallacy. The critics of the land ethics say that, in Leopold's famous dictum- 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 is exactly an example of naturalistic fallacy.

We can see in Leopold's theory that, he presents nature as an organic model. The organic model presents the whole ecosystem as distinct wholes and they maintain a stable equilibrium in nature. Leopold's description is a natural scientific description and development of an organic whole. With the integrity and stability of that organic whole we can say what is good and bad, right and wrong, healthy and unhealthy for the particular elements of that system. According to Leopold's theory predators are also good for the ecosystems and they ought to be protected because they have a role in maintaining stable populations within the ecosystem. Leopold's attempt to adopt the organic model may be said to be type of teleological reasoning of Aristotle. This can be seen as a way of bridging the gap between the "is" and "ought" problem. But the difficulty is, why should we value the overall integrity or stability of the system itself?

The answer may be all particular ecosystems have a role to play in maintaining the overall stability and integrity of larger organic whole. For this reason human beings ought to preserve the integrity and stability of an ecosystem because in doing so we are helping in maintaining the good of larger whole and ultimately the earth is an organic whole. But again the question comes back i.e., why should we value the integrity

and stability of earth as a greater whole, because the instrumental and individualistic reasons are not included in the land ethics.

There is another point in land ethics where the leap between the ecological fact and ethical value remains open. Land ethics says an ecosystem like an individual organism goes through many developmental stages. The normal developmental progress would provide a basis for evaluation of the health and well-being of that system. This evaluation is correct if we assume the validity of the organic modes. But in fact most ecologists' do not accept this, because this is a weak point. Land ethics also talks about the community model. In the community model all individuals are related to each other functionally such as, a food chain. All members of a food chain are related to each other functionally. We can evaluate the roles of individual organisms and species in a food chain but there is no reason to assume a function for the food chain itself without any human concern. There is not enough reason why the food chain itself should be valued in itself. Hence why is the preservation of the integrity and stability of a food chain or energy circuit good or right?

Hence all the above criticism are derived from Leopold's normative conclusion, a thing is right when it tends to preserve the integrity, stability, and a beauty of the biotic community, is derived from the facts of ecology in some or other way. From Leopold's land ethics we can assume that a factual and meaningful basis exists for attributing integrity, stability and beauty to the ecosystem. But still the connection between ecological facts and value conclusion is open for questions.

(b) Criticism of the holistic ethics in land ethics

The most important criticism of land ethics is towards its holistic ethics. In the holistic ethics it gives priority to the good of the whole and therefore it undermines the good of the individual. For example the good of the individual human being is sacrificed for the good of the greater

community i.e., called nature. It seems Leopold allows hunting of individual animals in order to preserve the integrity and stability of the greater whole i.e., nature. In the same way he seems to allow hunting of humans if needed. He allows this on the ground that if doing so would preserve the integrity, stability and beauty of a particular community. It is because, Leopold describes human beings as only members of the nature. Many critics consider it as, "environmental fascism" because it subverts respect for individuals. The individual prospect is sacrificed for good of the greater biotic community. Therefore to place the right notion of the individual is difficult.

Another criticism against land ethics is we cannot justify treating the good of the biotic community as the only or necessary source of right and wrong. Such positions are extreme positions where human beings are treated as biological entities only. Humans are much more than just a biological entity.

Another challenge to Leopold's holistic ethics regarding his meaningful account of ecological wholes is not defensible. We have seen that Leopold adopts an organic model of ecosystems. He says land itself can be seen as a living organism. In land ethics we are able to make a connection between the facts of ecology and the values such as integrity and stability, health, and wellbeing only when we treat ecosystems as organic wholes. But this kind of holism is refuted by many ecologists as we saw in the previous discussions. Ecologists have refuted the organic model, because ecosystems can be seen as organisms only in a metaphysical way and it does not happen actually. Ecosystems are not viewed as organisms literally. Individuals within an ecosystem can exist outside the ecosystem. The individual members are not like the organs of a body which cannot exist outside the body. Ecosystems do not have the "unity and definiteness" like a real organism. On the other hand the constituent parts of ecosystems are capable of moving into other ecosystems. The constituent members in an ecosystem are quite independent. Therefore the members of ecosystems are different from the organs of a body.

Problem's with Utilitarian Approach

There are a number of challenges raised against utilitarian approach towards nature. Utilitarianism involves a process of measurement and comparison. The phrases such as "maximize the overall good" and "the greater good for the greatest number" necessarily express a process of measurement and comparison. These phrases require measuring, comparing, and quantifying. The problem arises when we attempt to quantify the one which is qualitatively primary. Utilitarians have taken the concept of "good" which has only intrinsic value. But intrinsic value is not a thing which can be easily counted and measured. These considerations give rise to many problems.

- (a) The first problem is the measurement problem. It is regarding quantifying the concepts, such as pleasure, happiness and desires. The question arises can we consider that all pleasures and desires are same in quality? Are they equal? If the answer is no then how can we measure them, and through what scale? Utilitarians say that these problems can be solved by preference utilitarianism. It is because preferences are rank-ordered than desires. But in the case of desires this does not help in making a comparison among two people's conflicting desires.
- (b) The second problem of measuring is that it is difficult to quantify the concept of good. Utilitarians substitute the concept good by the one that can be quantified. For example, good health. Suppose we want to maximize good health as a social goal. In order to achieve this goal how can we measure and compare the consequences of various pollution control measures on health? In practice we use some quantifiable considerations such as life expectancy, injury rate, infant mortality etc. for health. Critics say that although it is true that it may give us some idea about health but they do not give us the whole number. So critics

say that in the case of environmental regulation the above problem occurs. It happens when environmental regulation is analyzed by cost-benefit analysis which we measure by various economic factors associated with health. Then we decide by comparing the cost of health and the costs of closing down the sources of pollution.

- (c) Another measurement problem arises when we consider the scope and range of a person. It means the scope of the people to be considered and the range of what counts as a person. Critics say that if we go by the theory of utilitarianism then it should only be concerned with all the pleasure or happiness which is produced by any particular act. But in practice it is impossible, because we can never come to know all the consequences of any act. The theory of utilitarianism is restricted to the immediate people. The effects of an act on the future generations is ignored. In the case of environmental problems the impact of an action is related to all people who are in remote and in future. The problem in how can we predict the consequences of our actions? Environmental issues are problematic because the consequences of interfering with the environment may take a long term and it is very difficult to predict because of scientific uncertainties.
- (d) Another problem with utilitarianism is, it treats individuals as units of pleasure. It does not consider them as valuable in themselves. It does not recognize any absolute rules such as right to life. It allows a situation where killing someone might produce the greatest happiness. For example, kill a person so that the bodily organs could be used to keep alive twenty individuals who would have died otherwise.

Critics also say that the nature of utilitarian judgments is provisional. It is because according to utilitarianism any particular act is never right or wrong in itself. Therefore the ethical status of any action is always dependent on its consequences. The rightness and wrongness of an action is always dependent upon the context. Therefore it is always

dependent on the factors that are outside an individual's control. Therefore it missed a very important ethical concern where we act upon a principle regardless of the consequences. Critics say this theory is incomplete.

Problems with Virtue Ethical Approach

(a) The application problem

The virtue ethics approach is called "anti-codifiable" thesis, because it cannot be organized into a system of rules. It is directed against the common normative theories which are systems of rules. Other ethical theories such as utilitarianism and deontologists say the task of ethical theory should be to come up with a code consisting of universal rules or principles. The principles can be one or many, but these principles should have two features and these are.

- (I) The rules should help us in determining the right action in any particular case of decision making process.
- (II) The rules must be stated in simple terms so that any non-virtuous person can understand it and accordingly apply them correctly also in any conflicting situation.

But the problem lies with virtue ethics. Virtue ethics maintains that, it is impossible to imagine such a code of rules. It does not accept the above two features of a principle. Utilitarians and deontologists say that moral sensitivity, perception, imagination, and judgement which we know from our experience are needed to be applied by rules and principles correctly. Virtue ethics fails at this point. It does not produce codifiable principles and therefore it is unable to provide action-guidance. Therefore virtue ethics is desirable as, "what sort of person should I be?" But not "what should I do?" It is concerned with being rather than doing. It called as "agent- centered" rather than "action-centered".

(b) The charge of cultural relativity

The virtue ethicists say that we can get guidance for doing an action from the rules which employ the terms of virtue and vice, such as, "do what is honest". Such rules are called "V-rules". But the problem is, different culture embodies different virtues. So the "V-rules" are not universal and they say only a particular action is right or wrong in that particular situation. This is relative to a particular culture.

(c) The conflict problem

Another problem with virtue ethics is, what does virtue ethics do in the case of dilemmas? There can be a situation where we require two different virtues which are conflicting with each other because they prescribe two different actions. For example, charity prompts me to kill the person who is in a very critical illness and thus it would be better if he is dead. But we should not think in these terms because justice forbids us to conceive of a situation where we desire the person to die.

(d) The justification problem

The justification problem says that, how we justify our ethical beliefs. It is the only problem which is faced by all the three ethical approaches to spell out at the meta-ethical level. For virtue ethics the problem of justification is which character traits are to be identified as virtues. In meta-ethics, the disagreement is about the possibility of external foundation of ethics. External foundation means in the sense of objectivity of ethical beliefs existing in the external world. Virtue ethicists' do not ground virtues in the external world.

(e) The egotism objection

This kind of objection comes from a simple confusion. According to virtue ethics fully virtuous agent characteristically does what he should do without his inner conflict. The other ethical theories on the other hand, find this to be a selfish action, because the person is doing what he wants to do. This may be thus seen as acting on the basis of self-interest. Therefore he is doing it only by being selfish. The critics say a

person forces himself to act in that certain virtuous way in a particular situation so it will help him to achieve *eudaimonia*.

(f) Virtue and social setting

This is the most recent objection to virtue ethics. The "situationist" social psychology says that there are no such things as character traits. Therefore there are no virtues as such for virtue ethics. According to them what we take to be virtuous character is in fact a reaction by certain specific social settings.

The discussions above show that each ethical approach is problematic. No ethical approach is capable of giving a problem free approach to study man-nature relationship. But they individually do give very important partial insights to study nature. We need a complementary approach in order to have a wholistic approach to study the value of nature and the relationship between man and nature.

Complementary Approach

In all discussions of environmental issues and public policy making the approach to ethics is the traditional human focused. In such cases the nature is regarded as only having instrumental value. The elements of nature provide resources for their basic necessities and luxurious needs. But the problem arises when people exploit these resources rather than using it. In the previous five chapters we have been discussing the relationship between man and nature and the value of nature from three different ethical approaches. But there are many problems with each of these approaches. None of this theory is free of problems. We need a complementary approach to look at nature for a better relationship between human beings and nature. At the same time this approach will also help us to protect nature in a better way. Now we see how it is possible.

First of all we know that all the three approaches to study the man-nature relationship and value of nature are the ethical theories. At least at this level they are similar. But they are different at the level of studying the relationship between man and nature and at the same time it involves an enquiry into the variety of ways in which human beings can value nature. The three principle approaches to environmental ethics namely the anthropocentric, non-anthropocentric and virtue ethics may be regarded as representing the three aspects of morality which justifies the value of nature. The anthropocentric approach is human centric and it evaluates the value of nature on the basis of consequences of our actions. The non-anthropocentric approach gives emphasis on the concept of "duty of human beings" towards nature and the intrinsic value of nature. The virtue ethics studies the value of nature and man-nature relationship on the basis of the virtuous dispositions of human character. Though their approach is different but they are common on one aspect, i.e., they ascribe value to nature either instrumentally or intrinsically.

At this point we would try to see that all the three approaches are not totally contrary to each other. These are rather complementary to each other. The three approaches are the most morally defensible versions of valuing nature but at the same time they lead to the same practical requirement i.e., how to valuing nature so that a better relationship between man and nature can be established.

Discussions in the field of environmental ethics are regarding the human and environment interactions and relationships. A complete theory of environmental ethics requires both an ethics of action and an ethics of character. An ethics of action provides guidance regarding what human beings ought to do and ought not to do to the environment. So the ethics of action are the deontological and consequentialist approaches towards nature and that has been discussed in our third and fourth chapters. In the fifth chapter an ethics of character is

discussed. The virtue ethics perspective provides guidance on what attitudes and dispositions we ought to and ought not to have regarding the environment.

These three approaches construct a complementary approach to wards nature. For a complete environmental ethics we not only need an ethics of actions, i.e., deontological, and utilitarian approach but also we need an ethic of character i.e., the virtue ethics which answers the question how should one live? The deontological and utilitarian approach talks about the right actions such as a set of rules, or a general principle or a decision making procedure but this alone is not sufficient. A complete answer consists of not only what we ought to do but also what kind of person we ought to be. The complementary nature of these three approaches can be seen from the point of human character. Virtue ethics as we have said is solely concerned with human character and human character is reveled through individual's actions which constitutes the subject matter of deontological and utilitarian approach. The concept of human action or practice becomes the focal point on which this three divergent trends of ethics co-inside. We will elaborate this further by saying. An individual's action towards environment is determined by his dispositions towards nature. Environmental virtues are not only instrumentally valuable but at the same time they are also valuable in themselves. Environmental virtues are instrumentally valuable because these are the dispositions to identify and perform actions and they are also intrinsically valuable because these are the virtues which are life enhancing.

There are many debates between the first two contrary approaches towards nature, i.e., the deontological and utilitarian approaches. But there are certain common set of principles which both anthropocentric and non-anthropocentric approaches propose while dealing with nature. It is because they do lead to one practical requirement i.e., environmental justice. With the help of three principles we will see how

both anthropocentric and non-anthropocentric approaches lead to the same environmental requirement. These three principles are:

- (a) The principle of human defence.
- (b) The principle of human preservation.
- (c) The principle of disproportionality.

We will now briefly explain these principles.

(a) The principle of human defence

Actions that defend oneself and other human beings against harmful aggression are permissible even when they necessitate killing or harming animals or plants. The principle of human defence allows human being to defend themselves from other human beings and harmful human aggression. Similarly in the case of non-human aggression human beings are also allowed to kill a lion in the case of life threatening situation. This kind of aggression is allowed for human beings. In this case human beings are being preferred than any other non-human beings.

(b) The principle of human preservation

Actions that are necessary for meeting the basic needs of human beings are permissible even when in order to protect them we need to go against the interest or welfare of animals and plants. This principle says that if the basic needs of human beings are not satisfied then it would lead to many deficiencies of a standard human life. In order to survive, human beings need a principle of preservation that permits indulging in aggression against the basic needs of non-human living beings. From the point of view of human survival it is thus absolutely necessary to meet the basic human needs. Hence from the point of view of survival human beings cannot afford to protect the interests of non-human species entirely. The reason is that such an action will make human beings extinct from the earth. The very fact of human existence largely depends on our use of nature and that is why in order to protect our basic needs

we cannot completely safeguard the interests of non-human species. Thus for the preservation of human species we need to give preference for our own species even if we adopt a non-anthropocentric perspective.

(c) The principle of disproportionality

The third principle says that though we need to use nature for to satisfy our basic needs, this tendency can-not be extended beyond our basic necessities. That means we cannot go against the welfare of nature in order to get luxuries of life. A distinction should be thus maintained between the basic needs and luxuries needs with respect to ma-nature relationship. According to our argument the former is permissible where as the latter is not. The same ethical precept is found with respect to our dealing with other human beings. Actions that violate against the fulfilment of basic needs of other people in order to fulfill the luxury of our own are never been permissible.

In the context of our enquiry in the environmental ethics the need to accept the above principle is absolutely ethically necessary, because the violation of this principle will destroy the very harmony between man and nature which forms the basic thrust of environmental ethics. Considering this we hold that the members of other species are equal to us. We thus rule out the non-equal relationship between human and non-human species. From the consideration of equality it follows that we cannot be aggressive in our approach towards the animals and plants in order to satisfy our non-basic or luxurious needs. For to maintain the species equality, the basic needs of the non-human species must be protected against the aggressive action of human beings performed for the requirement of luxurious needs.

The above three principles show that both anthropocentric and non-anthropocentric perspectives have some practical aims. We will now elaborate how these needs do arise and how ultimately thus form a mannature continuum.

In case of both anthropocentric and non-anthropocentric approaches we need a principle of human defence which allows us to defend ourselves from harmful aggression. This principle we need no matter we consider human beings as superior to other non-human species or equal to them. We need to defend ourselves at any cost from the dangers coming from other species.

Secondly we need a principle of human preservation in both the perspectives. This principle permits the actions which are necessary to meet our basic needs of the entire human species. It does not matter even if we need to aggress against the basic needs of animals and plants.

The third principle of disproportionality is a restriction on the human use of animals and plants for the sake of meeting luxuries. In the case of non-anthropocentric approach non-human beings are considered as having equal status with human beings. But at the same time the principle of disproportionality puts restriction on the unnecessary use of other species. But in the case of anthropocentric approach, can we still have grounds to protect the basic needs of non-human species against the human aggressive actions to fulfill the luxurious needs of human beings? The answer is no we cannot. The principle of disproportionality is helpful in both anthropocentric and non-anthropocentric perspectives. Even if human beings assume superiority he can not by any means be permitted to exploit the basic needs of non-human species for the sake of his luxurious wants. Because, to consider the claim that human beings are superior to the members of other species means, in a competition, a person called A, comes first and other persons such as B, C and D came second, third and fourth respectively. From this case we can draw the following conclusion with respect to human beings relationship with non-human beings. The person A in the competition may be regarded as human being with having intrinsic values where as in comparison B,C and D may be regarded as belonging to non-human species who has intrinsic value but not having the same intrinsic value as human beings have. However to say this does not mean to deny non-human species having any intrinsic values. Hence it implies that the members of other species are as valuable as humans are. In this respect it may be further noted that the worth of non-human species in some respect can excel the qualities of human beings. We particularly mention here the sight of an eagle and the photosynthetic power of plants. These powers or aptitudes point out how animals and plants can be claimed to have superiority over humans in certain matters. Due to this reason we thus put forwards the suggestion that the human superiority instead of ignoring should recognize some of the excellences that no-human species possess.

At another point we can see that the three approaches are not totally different from each other. The deontological perspective and the virtue ethics perspective are well connected. As we have seen while discussing virtue ethics, the virtues like respect can be very well extended to nature. In this way virtue becomes an important component in the case of environmental ethics. Taylor for example, has taken "respect" as the ultimate moral attitude towards nature. He has also given importance to cultivate certain virtues in human beings in order to have the attitude of respect for nature. Leopold also can be seen as the environmental virtue ethicists. In his theory of land ethics he talks about the aesthetic and intellectual extension towards nature. Leopold talks about three virtues, such as integrity, stability and beauty. All environmental theories pertaining to virtue ethics anthropocentric in nature and all non-anthropocentric theories are based on the environmental virtues. Hence all the three approaches are taken together forms a complementary approach that gives us the reason of why and how we should value nature.

Is it Still Human-Centered?

From the above discussions the question arises that can we still say that the study of environmental ethics is human centered? Traditionally the domain of moral relations consists of human beings. But in the last few decades the domain of moral relation has been extended to accommodate the relationship between human and nature. The theories like deontological, utilitarian and virtue ethics tried to accommodate the man-nature relationship. The deontological theories ascribed intrinsic value to the nature and it makes it as nature-centric approach. The utilitarian theories ascribe instrumental value to nature and made human beings as the stewards of nature. The virtue ethics perspective appeals to human beings to develop certain virtues among themselves towards nature to establish a good relationship between human and nature. Virtue ethics does not speak clearly about the value of nature either instrumentally or intrinsically. But it seems to support both, because virtues are intrinsically valuable and they can be used like instruments to establish a better relationship with nature. The question arises, though the deontological theories ascribe independent value to nature except their instrumental value, but it is true that the three approaches are ultimately human oriented or human-centered? We can see that there is nothing wrong in saying environmental ethics is basically anthropocentric with flexibility and extension towards nature. With the help of this we can establish a better man-nature relationship and value nature. In the following we give a description of some of the aspects which revel human-centered nature of environment. They show that our relationship with environment is never alien. The large part of our expressive nature is closely associated with our relationship with environment.

(a) Establishing a conscious relationship

To judge the moral worth of a thing is to adopt an attitude towards that object. This can be an attitude of approval or disapproval commendation or condemnation, or it can be praise or blame. Therefore the adoption of this attitude can itself be morally defensible or indefensible. The above

three approaches towards nature is an extension of the attitude from human domain to non-human nature. In other words judging the moral worth of a thing is to do something intentionally. This process of judging or valuing the worth of nature does not occur accidentally. This kind of process has to involve self-consciousness of moral agents. Therefore it cannot be accidental.

(b) The relationship established by the ability of judging

The relationship which is established between man and nature can be only held by one who possesses the ability of judging. It is only human beings who have the ability of judging. Human beings have some idea for judging the moral worth of non-human nature. Ultimately rationality is the basis. Only human beings can judge the moral relation with reasoning ability. Therefore plants and animals cannot establish a moral relation with human beings because they do not have the power of rationality. There is no participatory relation, because non-human animals, plants, and any inorganic object, like a rock cannot participate in the process of establishing a moral relationship with human beings. It is the human being who establishes the moral relationship and ascribes value to it.

(c) No social transaction

We all agree that, human being can have a moral relation with another human being. A moral relation is a kind of social relation and it exists between one man or group of men with another man or a group of men. A moral relation is established only between two beings who can communicate with each other so that for some moral reasons, we can condemn, appreciate, admire or forgive to one another. Holding a moral relation is entering into a social transaction. This cannot be hold between human beings and non-human beings.

One may raise objection to the above claim by saying that we cannot establish a moral relation with children's and a mentally challenged person because they cannot communicate with us. But still the relationship does exist because we have duties towards them. Children's have rights on us but no duties towards us. Children's do not have duties towards us because they do not possess the level of maturity which being dutiful requires. Like this the human beings have only duty towards nature and nature has rights. It is the duty of human beings to take care of nature but not vice versa. It is because nature cannot deliberate on the desirability and undesirability of certain events. It is the human being who has the capacity of deliberation and due to which he can only know which events are desirable and which are undesirable. So human beings only have duties towards nature.

(d) The utilitarian approach

The human beings can only know that the plants, animals, mountains, forests and rivers etc. occupy a large part of the earth and these are useful to human beings in many ways. Human beings ought to take care of nature. He should not destroy forests because they are the cause of rain fall and he ought to keep rivers unpolluted because they provide water. Therefore the obligation of human beings towards nature arises from the fact that, nature is useful to him. It satisfies his interests and desires. Nature has instrumental value because it satisfies some human interests. Human beings have obligation towards non-human beings arising from the fact that non-humans serve his interests or needs.

The answer to the above question is yes all the environmental ethical studies are more or less human-centered but with the moral consideration of non-human nature. It claims that environmental ethics independent of human beings is not possible. On the basis of our brief discussion on the human centered nature of environment we can logically put forwards the claim that environmental ethics two can not be constructed independently of man. Hence from the human centered nature of environment we go to the human centered nature of environmental ethics.

Human Centered Nature of Environmental Ethics

Man is the sole bearer of values and nature serves human purpose mainly because of two reasons. These are as follows:

(a) Environmental ethics should be anthropocentric

Ethical attitude is only meaningful with reference to man. Environmental ethics cannot be dissociated from this human attitude. Environmental ethics is thus characterized by an influential school of thinking that it is anthropocentric. It is anthropocentric due to the reason that it is only man's attitudes and values which are linked with nature. We cannot draw any water tight compartment between anthropocentric and ecocentric ethics. Man is the moral agent and the ecological behaviour of human beings can only be assumed having certain significance.

(b) Values are only with human beings

The one sided approach of considering human interest has brought many environmental problems. In other words nature became a resource and man the consumer. We need another approach which considers a position that nature is to be respected because it is our duty to do so. And human beings need to develop certain virtues towards nature. The virtue ethics talks about developing certain virtues in relation to human beings and the environmental virtue ethics also talks about developing some virtues in relation to nature and not otherwise. From the standpoint of virtue ethics environmental ethics may be rightly characterized as human centered because it is concerned with those character traits and dispositions that are appropriate for adopting an ethical attitude towards environment. It specifies right and wrong action in terms of virtues and vices. As Arundhati Roy most significantly observes: *Nature needs to be saved from the humans for the humans*. For achieving this it is extremely important to establish a relationship

between environmental ethics and environmental law since it is only with the help of the latter that our ethical stand on environment can be defended.

Environmental Law and Environmental Ethics

Human action is always based on ethics and law. Ethical values and laws provide the framework for our actions. We can say morality is the fundamental source from which laws and values have originated. They form respective system of evaluation because of their different nature. However it may be noted that these two notions though different are not contrary. The reason is that both of them offer perspectives which are overlapping against the general background of morality. The ethical values are there to tell us that each one of us should perform our duties towards other individuals in the society. The law is enacted and enforced to protect the rights of individuals. Values are concerned with the duties and laws are concerned with the rights. The relationship between law and ethics is a complex one. It is also more complex to establish relationship between environmental ethics and environmental law, because it brings the conflicts between the legal rights of individuals and societies on one side and to maintain nature's balance for the survival of life on the other side. From the history of humanity we have got many instances where, the powerful people exploited the weak by using their power. Racism and slavery are the results of those conflicts. The same concept of power has also been used to exploit and consume nature. The results of this exploitation are deforestation, desertification, and ozone layer depletion etc. These are the outcomes of the modern science and economics which are devoid of ethics. Man with the help of modern science and technology have exploited nature to the extent where the life sustaining capacity is been endangered. The question arises, does an individual or a nation have any rights to exploit nature? Do the human beings have any rights to deprive others of life? Each and every individual being have equal rights

to live. Human being as a rational being has an extended duty to see that he does not destroy nature. He can use nature but not exploit it. The rights of other's must be balanced by the individual's duties. Can we give rights to nature? Can we ascribe the right of self-preservation to nature? Can we take nature to the court? One way of establishing this kind of relationship was first suggested by Professor Christopher Stone in his book *Earth and other Ethics*. According to Stone, technology provides a framework of possibility concerning what society is able to do. Ethics provides a framework of morality which says why societies collectively decide what they ought to do. He says law provides a tool which enables societies to implement their ethical decision making in practice.

The environmental law rests on the values which are held popularly. It says in which way humans should act in their natural and living environments. But most of the environmental values on which environmental laws are based are very different from the values regarding which the environmental ethicists discuss. This is because we do not ascribe the concept of right to the non-human nature. According to human beings nature is the human property. Therefore natural entities are related to law as the property or resource of human beings. Most of the environmental laws are concerned with the human use of nature but not the nature itself. We can say that the environmental law only reflects the anthropocentric approach to environmental ethics and it does not reflect the other two ethical approaches of environmental ethics. But all established relationships cannot be contractual or anthropocentric. There cannot be contractual relation between humans and nature. All human relations are not fully contractual and most of the relations are based on ethical principles. Therefore the human and nature relation also cannot be fully contractual. Most of the relationship should also be ethical. From our culture and history we can see that man-nature relationship was governed by a set of ethical values. Again we need to continue with them with the present state of culture and life.

There is a need which the environmental laws should see that man and nature are related on the basis of environmental values. It should also see that man is a part of nature otherwise environmental problems will continue to grow.

The point that we are raising here is that human beings have right to use nature for their survival. Any other use except this may be justifiably viewed as exploitation. According to Gandhi, as long as man used nature to meet his needs till then no harm to nature is done. But at the moment man used nature for the satisfaction of his greed then he becomes destructive of nature. But as we have said earlier that most of the modern laws are based on consumerist concepts which promote human greed. Thus there is a need of change in lifestyles and development models which are not greed-promoting rather than need satisfying. In this kind of model, development has a different meaning. First we would see how anthropocentric values are the basis of environmental laws. Therefore we bring the concept of "sustainable development" at this point. This can be enforced by two kinds of ethical obligations. The first obligation is human beings should not use more than their share of resources and secondly they give back to nature those things which maintains the life-supporting balance of nature.

Environmental Policies and the Concept of Sustainable Development

All environmental policies are based on the concept of sustainable development which is an anthropocentric concept. The word "sustainable" means, either "worthy of support" or capable of "keeping going indefinitely", and development means progress towards a goal. It is a value-laden concept. According to the Brundtland commission sustainable development is: development that meets the needs of the present generation without compromising the ability of future generations

to meet their own needs (J. Alder & D. Wilkinson, London, 1999, pp-120-121).

According to the above definition, broadly development means, achieving human welfare and meeting human needs. Brundtland defines combination of the interests of growth, development as the environmental protection and social justice. Development is inclusive of all aspects of human welfare as well as the protection of the natural beauty. The economic growth and environmental protection can be discussed in terms of costs and benefits while planning and evaluating projects. Sustainable development is, providing for the needs of the present generation without compromising the ability of future generations to meet their needs. The decisions and policies are only sustainable when they take into consideration of economic growth, ecology and social equity. Above all the concept of sustainable development does not give absolute rights to any individual.

We can make a distinction between strong and weak sustainability. Strong sustainability says we should leave the same environmental resources which we have inherited from our past generation for the future generations. But this is impossible because the resources such as natural gas and oil are non-renewable. We cannot leave the same amount of resources for the future generations.

According to weak sustainability, distributive justice between generations requires each generation to pass on an equivalent or better stock of overall resources to the next generation. It includes infrastructure, knowledge and technological capacity. It says that provide better resources to the future generation than the resources enjoyed by the present generation as inherited from its past generation. For example if we use natural oil then we should provide a better alternative energy resource to future generation. This concept of

sustainable development focuses on human needs and therefore it is based on the anthropocentric perspective.

The concept of sustainable development is an anthropocentric perspective because it values environment for its utility to human beings. It does not value nature on the ground of its intrinsic value. At the same time it values the equity among human beings while using nature. The benefits we get are economical. Firstly, this concept takes care of the right based valuing of human beings. It is consistent with the utilitarian approach because many environmental policies are based on this concept. It takes the challenge of extending the ethical domain which includes a longer time frame. In such kind of concern the future generations of human beings are provided with central importance. Secondly, the concept of sustainable development demands for the employment of scientific tools and knowledge of ecology to understand the consequences of environmental exploitation. This concept can only do this because of its explicit focus on the impacts of environmental exploitation up to a long time horizon i.e., to future generations.

Sustainability suggests the need for counteracts to the present practices in three ways. Firstly, it emphasizes on the environment as one of the three equal factors of consideration such as economic growth, social equity and ecology. Due to this the importance has been given on the environmental impacts. Secondly, the idea of sustainability takes into consideration of the integrated decision making process that includes economic growth, social equity and ecology. Therefore it always enhances to take ecology into consideration while making decisions. Thirdly, social equity is another aspect of sustainability. By including social equity, sustainability introduces a human value that makes it anthropocentric. There are many environmental justice movements which demonstrated the importance of social equity while allocating environmental benefits and burdens. Benefits are the products we get by using natural resources and burdens are making agreements among the

nations on how and under what terms the actions should be taken for environmental problems. The problems like global warming and climate change affects every one and must be solved by everyone. The concept of sustainability development is based on the utilitarian justification for caring about the environment. This concern for future generations makes it anthropocentric. In the above we have argued that how environmental policies must be based on anthropocentric and utilitarian consideration. The argument that we have so far given is theoretical in nature. From this theoretical stance we would now like to give a practical direction to these policies. The best way to do it will be to take some of the specific policies as adopted both in west and India. Now we will see how, environmental policies are based on the utilitarian perspective. Here we analyze some of the American and Indian policies.

(a) American policies

1. Wilderness Act, 1964

It was aimed at establishing a system of wilderness preservation in the United States. The purpose of this act was, "to establish a National Wilderness Preservation system for the permanent good of the whole people." This act defines wilderness as "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain."

By the first look on this policy we can see a conflict. The conflict is between wildernesses as a place which is not disturbed by humans. Humans have no place in this. It is restricted and kept aside for the permanent good of the non-humans. But the actual underlying ethical reason for preserving the wilderness is only for the good of the human beings. Because human beings believe that wild areas are the places for recreation and spiritual enrichment. Therefore the act does not speak that the wilderness of that particular area should be preserved for the sake of non humans living in them. It shows that this particular environmental policy is an anthropocentric one.

2. National Environmental Policy Act (NEPA), 1970

After the publication of Rachel Carson's *Silent Spring* the national environmental policy act became the corner stone of America's environmental policy. The act included many reasons for environmental concern, such as: "The Federal Government shall use all means and measures to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social economic and other requirements of present and future generations of Americans." This act also ensured, "safe, healthful, productive and aesthetically and culturally pleasing surroundings for the wide range of beneficial uses of the environment without degradation risk to health or safety, or other undesirable and unintended consequences."

This environmental regulation came in USA in response to the environmental concern during 1960's. The purpose of the policy was all Federal agencies should take environmental protection in to account while performing any action which might have an environmental impact. In these circumstances the Federal Agency is bound to produce an environmental impact statement.

The above act included the environmental concerns such as: "The Federal Government shall use all means and measures to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic and other requirements of present and future generations of American's". The act also had the objective of ensuring safe, healthy, productive surrounding for esthetics and cultural enrichment.

Hence this piece of American environmental policy talks about an ethical position and values which are the basis of this particular environmental policy. It says about the harmony between man and nature which also suggests the difference between man and nature. Man and nature are separate from one another. It also talks about the

concept of productivity. Both the passages are emphasizing the productivity of environment. The question is for whom the productivity of nature meant? The answer is the productivity is for present and future generations of America. This environmental policy extends the ethical responsibility to the people of future generations. It is only meant for the human beings not for the sake of plants, animals and nature as such. The foundations of the above environmental policies are the human values such as human health, aesthetic experiences, social, economic and cultural benefits.

This act is also based on the anthropocentric approach to the environment. Because, the above statements in the act are no doubt indicating ethical positions and values. It talks about to maintain a harmonious relationship between human beings and nature and this shows human and nature are two separate entities. Therefore it takes the position of anthropocentrism. It also talks about the concept of productivity of the environment for human beings. The above two policies are based on the concept of sustainable development which takes into consideration of the present and future generations. Hence all these regulations are made only for the human beings not for the sake of plant's, animals and ecosystem. Nature is seen as a resource to be used for the benefit of human beings. The ethical foundations of this environmental policy are based on human values such as, the preservation of human health, safety, social and economic requirements, etc. Nature is regarded as an instrument for human benefits.

(b) Indian environmental policies

Government of India has enacted several policies for the protection of environment. There are many laws for the prevention of environmental pollution. At this context we discuss two Indian environmental acts.

1. The water (prevention and control of pollution) Act, 1974

This law was enacted to control the water pollution and maintenance of wholesomeness of water. The purpose of this act is not to allow water bodies to be polluted. It is to ensure that the rivers, streams, and other sources of drinking water are not polluted by any domestic and industrial discharges.

2. The Indian Forest (conservation) Act, 1980

This Act is enacted to check indiscriminate degeneration and diversion of forest land for non-forest purpose. The State Governments have to submit a formal proposal to the Ministry of Environment and Forests for the approval to use reserved forest land for non-profit purpose. The act has been amended in 1988 to incorporate stricter penal provisions against the violators. Some of the important amendments are as follows:

- (i) Without prior approval of Central Governments no State Government or any other authority can issue orders to lease any forest land to any private person, corporation or any other organizations.
- (ii) Without Central Government's approval no forest land can be cleared of trees which have grown naturally, for the purpose of using it for afforestation.
- (iii) The "non-forest purpose" also includes the cultivation of tea, coffee, spices, rubber, palms, oil-bearing plants, horticultural crops and medicinal plants.
- (iv) If the provisions of the act is violated the punishment is imprisonment of fifteen days including the officials who are directly in charge at the time the offence is committed.

The above two acts are the examples of environmental policies which are based on the anthropocentric environmental values. In present day we see more and more environmental problems are arising despite of environmental policies. It is because our environmental policies are based on the utilitarian values and it is not self sufficient in order to maintain a harmonious relationship between human beings and

nature. We need to look into the other two value approaches is environmental ethics which will help and motivate people to move from the ethics of human centered utilitarianism. We should look forward to the deontological or non-anthropocentric and virtue ethics value approach towards nature. These two value approaches demands a need of change in life-style and development models which are only need satisfying.

Can Environmental Policies be based on Deontological Values and Virtues?

In the previous discussion we saw that in the eyes of law natural entities are only human property. The law is concerned to them so far as they are related to human interests of any kind. Therefore environmental policies only reflect the anthropocentric approach of environmental ethics. All leading theories such as utilitarian theory, enlightened anthropocentrism, extended anthropocentrism and shallow ecology are the proponents of anthropocentric values that makes the basis of most of the environmental policies.

The environmental policies do not reflect the views of other two perspectives of environmental ethics. With the growth in discussion of such views there is possibility of bringing change in the approaches towards nature. The question which arises is, do non-human animals, plants and in-animate natural objects have any value except utilitarian value? The answer is affirmative, as they have intrinsic value according to the non-anthropocentric environmental ethicists. But can they have any legal right to go to a court of law? Yes, because we have some cases related to such kind of controversies. There are many court cases in India and America which says that the inanimate objects like hills, water falls, vegetation and animals are as good as human beings in the eyes of the law. Therefore they have right of protection as human beings. In this

context we refer to some of the legal controversies as discussed in American and Indian law courts regarding environmental issues.

- (a) American court cases
- (I) Sierra club v. Morton, Supreme court of the United States, no.70-34

This case is concerned with Walt Disney's proposal to build a sky resort at Mineral King. Mineral King's valley is a remote area of the southern Sierra Nevada and it was owned by the U.S Forest service. The development was worth 35 million dollars. It needed to build a complex covering 80 acres of the valley. It also involved the construction of a high way through Sequoia National Park. This project was opposed by the Sierra Club.

The Sierra club filled a case in the federal district court to prevent the Forest Service from selling the land for the Mineral King Valley development to the Walt Disney. The district Court accepted the injunction, but the Forest Service appealed on the grounds that the Sierra Club did not have any legal standing for opposing the development. The court also upheld the appeal on the basis that, "the right to sue does not incur to one who does not possess it, simply because there is no one else ready and willing to assert it." Then the Sierra Club again appealed in the Supreme Court to review the decision concerning the legal standing of Sierra Club in this case.

Justice William O. Douglas issued a minority opinion on the basis of Christopher Stone's article, *Should Trees Have Standing?* According to Christopher Stone, we can give legal standing to the natural object or area by itself. For him the natural object should be treated as a legal "person". It possesses legal rights, and therefore it is able to sue for wrongs concerning it. Lawyers could act as its representative in courts. In this way a natural object or area could be represented as "legal persons" in courts without any corporations. According to him the case

can be called Mineral King V. Morton. It was the Mineral King's valley which would have harmed directly rather than the sierra club.

In the words of William O. Douglas:

The critical question of "standing" would be simplified and also put neatly into focus if we fashioned a federal rule which allowed environmental issues to be litigated before federal agencies or federal courts in the name of the inanimate object about to be despoiled, defaced, or invaded by roads and bulldozers and where injury is the subject of public outrage. Contemporary public concern for protecting nature's ecological equilibrium should lead to the conferral of standing upon environmental objects to sue for their own preservation (Palmer.C, contemporary Ethical Issues: Environmental Ethics, ABC-CLIO, Santa Barbara, 1997, p.p-118-119).

Douglas went on to argue that if the inanimate object it-self has legal standing,

There will be assurances that all the forms of life which it represents will stand before the court-the pileated woodpecker as well as the coyote and bear, the lemmings as well as the trout in the streams. These inarticulate members of the ecological group cannot speak. But those people who have so frequented the place as to know its values and wonders will be able to speak for the entire ecological community. Ecology reflects the land ethic; and as Aldo Leopold wrote in A Sand County Almanac (1949), "The land ethic simply enlarges the boundaries of the community to include soils, waters, plants and animals, or collectively the land." This, as I see it, is the issue of standing in the present case and controversy (Palmer.C, contemporary Ethical Issues: Environmental Ethics, ABC-CLIO, Santa Barbara, 1997, p.p-119).

During 1966 in America a case had shown that, legal interests could be established in an environmental case on the basis of human recreation or aesthetic pleasure. Along with these kinds of threatens we can also make a case where economic interest is also threatened. This was a usual kind of environmental case, but the Sierra Club V. Mineral Kings Valley case extended a kind of environmental value beyond purely economic value. It is because Douglas's opinion was that the public concern for protecting nature's ecological equilibrium should lead to the support of environmental objects to sue for their own preservation. But the members of the ecological groups cannot speak. He says the people

who know the values of these entities can speak for the entire ecological community. Here he brings Aldo Leopold's land ethics, where Leopold enlarges the boundaries of the community to include, soil, water, plants and animals and collectively the land. Therefore Stone and Douglas's stand goes a step further of anthropocentric approach, by suggesting the legal standing of the natural objects themselves. In this way the natural object itself can be represented as an injured party without any need for injury of a human being.

(II) Tennessee valley Authority V. Hill et al., Supreme Court of the United States, no-76-1701, 1978

This case was based on the Endangered Species Act, 1973. The Act was, the "preservation of species of fish, wild life, and plants that are of aesthetic, ecological, educational, historical, recreational and scientific value to the nation and its people." But the act had one requirement i.e., the federal departments should "take such action necessary to ensure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitat of such species."

The court case was, in 1975, a fish called the snail darter was listed under endangered species act. It was only found in the Little Tennessee River, but that area was about to be flooded when a dam called Tellico was opened. But a case was brought to prevent the completion of the dam. Otherwise the endangered fish called snail darter would extinct. The district court turned down the case by saying that the dam is near completion. But many reversed appeals suggested that, "it is conceivable that the welfare of an endangered species may weigh more heavily upon the public conscience, as expressed by the final will of congress, than the write-off of those millions of dollars already expended for Tellico in excess of its present salvageable value."

It is an instance where the ethical concern about the environment outweighs a substantial amount of public money. It is concerned for a species which has no benefits to human beings immediately.

(b) Cases in India

During 1970's there were many socio-ecological movements started in India. Such movements are the *Chipko* movement, the Silent Valley case and the *Narmada bachao andolan*. Basically these movements are socio-ecological movements. In this context of our thesis we bring these movements to discuss and to see them from a new perspective i.e., the ethical aspect of these movements from environmental point of view.

(I) The Silent Valley case

Silent Valley is an ever green tropical forest in the *Palkkad* district of Kerala in India. *Kuntipuzha* is one of the major rivers that originated from the forests of Silent valley. This valley is also home for lion-tailed monkeys and many other rare species of vegetation and rare animals. Most of them are the rarest and most threatened animals and plants.

Save Silent Valley was a socio-ecological movement that aimed to protect the Silent valley. This movement started in 1973 to save the Silent valley reserve forest from being flooded by a hydro-electric project. Before this in 1928 the location at *Sairandhri* on the *Kuntipuzha* river was identified as an ideal site for electricity generation. In 1958 the area was chosen for a hydro-electric project of 120M.V by Kerala State Electricity Board. In 1973 the Kerala State Electricity Board decided to implement the Silent valley hydro-electric project across the *Kuntipuzha* river. The reservoir would have flooded many kilometers of rain forest. Then the National Committee on Environmental Planning and Coordination suggested 17 safeguards in case the project is implemented. But even then within one year a very large number of trees were felled in the valley. The Kerala State Electricity Board announced to begin the construction of Dam in 1973. After this the valley became the subject of

discussion to "save the silent valley." The debate surrounded on the concern for the endangered lion tailed monkeys and the issue was brought to the public opinion. In 1977 the Kerala Forest Research Institute carried out an ecological impact study of the Silent valley area and proposed that the area should be declared a biosphere reserve. In 1979 the Government of Kerala passed legislation regarding the Silent Valley Protection Area (Protection of Ecological balance Act of 1979) and issued a notification declaring the exclusion of the Hydro-electric Project area from the proposed national park. People like Dr. Salim Ali, eminent ornithologist of the Bombay Natural History Society, visited the valley and appealed in the high court of Kerala to cancel the hydro-electric Project, and to stop cutting of the forest in hydro-electric project area. The court ordered to stop the clear cutting of forests. Dr. Swaminathan, the renowned agricultural scientists, suggested to make the silent valley in to a National Rainforest Biosphere Reserve with the aim of "preventing erosion of valuable genes from this area". In January 1980 the high court of Kerala lifted the ban on clear cutting the forest. But Mrs. Indira Gandhi the then Hon. Prime Minister of India requested the Government of Kerala to stop further works in the project. In December 1980 the Government of Kerala declared the Silent valley area as a national park excluding the hydro-electric project area. But ultimately hydroelectric project was stopped. In 1984 the Silent valley was declared as a national park.

(II) The Chipko movement

The *Chipko* movement is a socio-ecological movement. It started in 1970's in the *Garhwal Himalayas* of Uttarakhand state. This movement started with the growing awareness of deforestation. It is a socio-ecological movement that practiced the Gandhian methods of *Satyagrha* and non-violent resistance as method of protecting trees through the act of hugging the trees to protect them from being cut. This movement started in 1974 with a group of female peasants in *Chamoli* district of Uttrakhand. They hugged the trees to prevent them being felled against

the contractor system of the State Forest Department. They fought for their traditional forest rights that were threatened by the government. By the 1980's Chipko movement spread throughout India and the result was the formulation of people sensitive forest policies. The result of those policies was stopping of open felling of trees in regions of Vindhya's and the Western Ghats. This movement was a livelihood movement primarily than a forest conservation movement. The impact of this movement was widely accepted method of protection of trees by the non-violent tree hugging movement. The Chipko movement achieved a 15 year ban on tree felling in the Himalayan forest by the order of India's then Prime Minister Mrs. Indira Gandhi. Sunderlal Bahuguna a Gandhian activist and Philosopher is among the prominent Chipko movement figures, and he coined the Chipko slogan: ecology is permanent economy. A feature published by the United Nations Environmental Program reported the Chipko movement thus: In effect the Chipko people are working a socioeconomic revolution by winning control of their forest resources from the hands of a distant bureaucracy which is concerned with selling the forest for making urban-oriented products.

"The solution of present-day problems is the re-establishment of a harmonious relationship between man and nature. To keep this relationship permanent we will have to digest the definition of real development: Development is synonymous with culture. When we sublimate nature in a way that we achieve peace, happiness, prosperity and, ultimately, fulfilment along with satisfying our basic needs, we march towards culture." (Sunderlal Bahuguna)

(III) Narmada bachao andolan

Narmada Bachao Andolan is a non-governmental organization that mobilized tribal people, farmer, environmentalists and human rights activists against the construction of Sardar Sarover Dam across the Narmada river, in Gujrat. Medha Patker the social and human rights activist led the Narmada Bachao Andolan and filed a written petition to the Supreme Court of India for its legal intervention in order to stop the

construction of the Sardar Sarover Dam. It is pointed out that the construction of the dam would lead to the wide spread destruction of man and nature like submerging of large number of villages which resulted people of that area homeless. This movement is though basically a social and human rights movement it can be seen essentially as an environmental movement i.e., "the price of development is the death of a river".

Shripad Dhammadhikary was an activist with the *Narmada bacaho* andolan. He says:

"The *Narmada* was a free-flowing, living entity, as much as a part of the community as any other person. Now, it will neither flow nor live" (Dharmadhikary. S, Requiem for a river, The Hindu, April-16, Sunday Magazine, Hyderabad, 2006).

Shripad says the river Narmada has been on a slow, painful and continuous march to death. He asks, have you ever seen a river die? Not a small stream but as mighty as the Narmada? According to him damming a river means killing it. He considers river as a living entity because it offers water to drink, for farming and fishing. Shripad says a river is a living entity because "it gives, it takes, it loves, it hates. It is calm and tranquil, it is wild and furious. It is munificent, and it is merciless. Above all it is alive." It is living because it was free flowing. He says that the two words free and flowing are the identity of the river as a living entity. The development of the river basin disrupted the flow of the river. The dams constructed on the rivers like Tawa, and Bargi stopped the free flow of the rivers. When the reservoir is full with stored water then down stream the river became dry. The dams killed the rivers by obstructing the free flow of water. On the other side the rising water of the reservoirs drowned the homes and livelihoods of many people. In that process also many forests submerged in water and with that all kinds of wild-life forms also extinct. Like this the river Narmada is also dying. Many rational arguments are given for the justification of building up a dam, as river needs to be dammed to bring irrigation and power. But ultimately we get all these benefits at the cost of the death of the river and many other wild lives. We can say that it does not matter if one river dies but sooner or later all the rivers would die. The world commission on dams notes that dams and similar interventions have already fragmented 60 percent of the world's rivers. Hence a time will come when there would not be a single free flowing river on the earth.

The above three movements are basically socio-ecological movements. There is no literature talking about all these movements from the environmental ethics point of view. These movements took place either from the socio-economic point of view of the people affected by these projects or from the ecological point of view. If we try to look at these movements from the environmental ethics point of view then immediately from the surface of these movements we can see these are only anthropocentric aspect i.e., we should protect our ecology to get benefits from this. But we can go little deeper into these movements and try to see it from the non-anthropocentric perspective. There are no documented evidences from the sources of the movements which indicate any influence of the non-anthropocentric approach. But still we can try to see that all these movements are some where deeply rooted in the non-anthropocentric approach towards nature.

In the Silent valley case the hydroelectric project was ultimately stopped by Mrs. Indira Gandhi to make it a national park, because the valley is home for rare species of vegetation and animals. These are the rarest and most threatened animals and plants. They are the special knots in the ecological nets. Human beings know once these species are extinct then we cannot bring them back. We better value them as they are and make policies to protect them not for anything else but for themselves.

Similarly the *Chipko* movement can also be based on the non-anthropocentric approach towards nature. Tree-hugging was the method adopted to protect the trees being felled. The movement adopted Gandhi's method of *Satyagraha* or non-violence. May be this method was adopted for the socio-economic movement. But tree-hugging can be seen as showing respect for trees to save these from the timber contractors.

In the case of Narmada bacaho andolan we take Shripad Dharmadhikary's concept of value in the phrase, the price of development is the death of a river. He says the river Narmada is a living entity though it is only a geomorphological entity for others. He talks about the death of the river by damming it because he considers the river Narmada as a living entity. It was alive because it was free-flowing. Now it is in a slow process of death, because the development of the river basin disrupts the free flowing of the river. Once the dam is constructed on the river, then the one side is submerged under water causing flood that destroys forest and rare species in those forests. This results into with holding of the free flowing movement of the river. As the non-anthropocentric or deontological perspective talks about ascribing living characteristic to each and every entity in nature, here too we see how a river can be an individual characterized as a living entity. When a river dies then many other balances in nature also looses its balance. Here we are reminded of the ecocentric approach towards nature, especially Aldo Leopold:

"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

In the above we have only described briefly some of the cases that point out how we intensely feel that we are under obligation to nature because nature is not a dead or physical entity. Nature is like our fellow beings to whom we have our duty because we respect them as end in themselves. Nature or environment two on a similar ground deserves respect and thus the sense of obligation towards nature enters into our moral consciousness. In the light of this observation we now discuss some of the specific environmental policies in order to see whether these policies could be grounded on the deontological value aspect of nature.

(a) Endangered Species Act (ESA) 1973, America

It is an American piece of environmental policy. The act aims at the preservation of species of fish, wild life, and plants that "are of aesthetic, ecological, educational, historical, recreational and scientific value to the Nation and its people."

This act aimed at protecting all rare and endangered animals and plants. The protection of endangered animals includes the prevention of taking life of individual members of endangered species. Taking life of individual members includes hunting, trapping and killing. It also includes penalties such as paying fine and imprisonment for anyone who breaks this law.

From the perspective of environmental ethics this particular act seems to be anthropocentric. The protection we provide to the animals and plants through this act is not for the benefit of the species or the individual members of the species. It is only for the "Nation and its people." But at the same time we can also see that it talks about the non-economic benefits like human aesthetic, educational, historical, recreational and ecological values. We can give emphasis on the ecological value of this act. It gives value to the endangered species not only because only human beings ascribed values but also at the same time they value the life of these endangered species and it is a significant ethical commitment.

(b) The wild life (Protection) Act, 1972, India

This Act provides for the protection of wild animals and birds and for any other matters connected with them. It restricts the killing and hunting of certain endangered species. The species such as: animals like bear, tigers, leopard, black buck, Indian gazelle or chinkara, elephant, and wild buffalos. Reptiles and amphibians such as: gharial, leathery turtle. Birds such as: large whistling teal, and peacock. The above mentioned animals and birds are enlisted in schedule 1 species. Punishments under the Indian wildlife protection Act, 1972, for killing a schedule 1 species are:

Maximum Imprisonment: 7 years and a monetary penalty of not less than Rs, 10.000. Minimum imprisonment: 3 years imprisonment and a fine not less than Rs, 10.000. Highest awarded prison term: 5 years to wild life criminal Sansar Chand, for trading in a leopard skin. Highest punishment awarded is: Jail plus a fine of 60.000.

The species that are enlisted in the schedule 1 of Indian wildlife Protection Act, 1972 are the endangered species. They are preserved because they are near about extinction. We can see a non-anthropocentric approach in this kind of act that is only meant for the protection of the wild life. On the breaching of this law human beings are punished for killing these animals.

From the above discussions regarding movements and policies we can see that there are possibilities of formulating environmental policies on the basis of deontological values of nature. We have explained this in the light of Taylor's attitude of respect for nature. We have shown that with the help of Taylor's idea we can explain better the need for maintaining a balance between human and nature. In this respect we have further argued that the phrase respect for nature constitutes the common ethical foundation for all other approaches to nature or environment. With the attitude of respect for nature we can build a complementary approach towards nature bringing out the various

aspects that nature represents. Attitude of respect in this sense as we have argued gives rise to a holistic approach to nature based on the assumption that nature exhibits its own ethics. This ethics itself as we have argued in our enquiry expresses a kind of moral holism incorporating the three ethical perspectives namely deontological, utilitarian and virtue ethics. A holistic perspective such as this as we have claimed in the course of this enquiry, can alone form a viable unified system of environmental ethics.

It is well known that human beings are responsible for causing environmental degradation. We have given a metaphysical explanation for this destructive nature of man. We hold along with Buddhism that basic suffering of man comes from desire. In the context of environmental destruction the basic cause of suffering is the desire of man. It is the human desire or greed that has brought this imbalance between man and environment. It is the nature of man that is responsible for the problems that man faces in all spheres of life. Extending this insight to ecological crisis, we can say that it is the nature of man that is responsible for all environmental crises. Most of the ecological problems we face today are due to the lack of our failure to derive a holistic approach to nature. Human being's uncontrolled and unlimited desire is the basic cause of environmental problem. Human desire gives rise to greed and ego and this resulted into an imbalanced relationship between human beings and nature.

Buddhism holds that if desire is the sole cause for nature's destruction then it is also true that the same desire can be the ground for bringing harmony between man and nature. That is man realizes that for his own interest nature must be preserved so that a harmony can exist between man and nature. In this respect Buddhism proposes the set of relevant virtues that can change man's behaviour towards nature. Generosity, compassion and wisdom produce a better balance among human beings and nature. These virtues together constitute adopting

the attitude of respect for nature that enables establishing a harmonious relationship between man and nature. As we have maintained the respect for nature is the key concept that cross across the three traditions of environmental ethics. The deontological point of view perceives the respect for nature as the ultimate attitude. In the utilitarian tradition the respect for nature can be seen as a virtue in order to see human beings as good stewards of nature from the enlightened anthropocentric point of view.

Respecting Nature

In the previous discussion we tried to see that whether environmental policies could be based on deontological values. The answer is affirmative because the concept such as "respect" can be considered as the basis on which the environmental policies are based. The concept "respect" is the common concept on which a holistic approach can be built. It will be an approach which will be comprised of the three differently considered ethical approaches as complementary. This will be evident from Taylor's approach which puts the attitude of respect for nature as its objective. For Taylor the attitude of respect for nature is a set of dispositions of moral agents and it is the ultimate moral attitude towards nature. Human beings while adopt this attitude bring a set of standards relating to character and rules of conduct as their own ethical principles. Along with the attitude of respect for nature Taylor has developed an ethical system for a proper guidance to take the attitude of respect for nature. The ethical system is constituted of rules of conduct, priority principles and types of virtues that are associated with the various rules of conduct. To these rules of duty and priority principles Taylor has said that virtues are the essential characteristic for having the attitude of respect for nature. Virtues play the most important and basic role in Taylor's theory. Virtues help in living the right kind of life in relation to nature. This is the practical aspect in developing and cultivating certain kinds of virtue. According to Taylor

the attitude of respect for nature is expressed through the character of moral agent. The attitude is expressed in a person's character when he has developed firm, steady and permanent disposition that enables him to deliberate and act consistently along with the four rules of duty. These dispositions are the good character traits or virtues. At this point Taylor brings the general virtues of moral concern and special virtues as the basis of the attitude of respect for nature. General virtues are those character traits that we need for deliberating and acting in the right way. These virtues are deliberated and acted irrespective of any particular moral rules and it is open to all kinds of situations. These are connected with those aspects of character which is directly connected with a moral agent's consideration of the inherent worth of all kinds of wild living beings. Hence the virtues of moral concern are the ability and disposition to take the standpoint of animals and plants as exhibited in the Mineral king's valley and the Sillent valley cases. It is also the ability to look at the world from the perspective of the good of all kinds of wild creatures. The virtues such as benevolence, compassion, sympathy and caring are the general virtues of moral concern. When we develop these character traits for the wild creatures then only we are taking the stand point concerning how the wild creature should be treated. On the basis of this a person takes the attitude of respect for nature, because it formulates the emotive and valuational background for all kinds of actions that expresses the attitude of respect for nature.

Except the general virtues Taylor says about certain special virtues related to a particular rule of duty. Possession of a special virtue gives a person the capacity to deliberate clearly and accurately about the course of conduct which a particular kind of duty requires in a particular given situation. It provides the capacity to carryout a particular kind of duty by doing the right thing in the right way for the right reasons in that situation. Considerateness is the virtue which is related to the duty of non-maleficence. It is the disposition of a being concerned in the well-being of others. Considerateness is related to the particular beings which

we could harm if we act in a particular way. Thus being considerate is directly related to the disposition of not harming any creatures. We could also harm them if we are not attentive to the effects of an action. Considerateness as a virtue is not only seen in the disposition of not to harm but also in the disposition of not to be negligent. This kind of virtue we can see as the underlying principle on the basis of which our environmental policies are based such as the court case of Tennessee valley where a fish called the snail darter was listed under the endangered species act. Regard and impartiality are the two special virtues that are related to the rule of non-interference. Regard is the virtue which a person has when he condemns any kind of constraints upon animals. It is a kind of respect for living beings. Regard means to feel sad towards any action which interferes with the freedom of individual organisms and species population directly. It also involves not imposing artificial constraint on their way of living. Animal rights movements if considered from ethical point of view can be said to be based on such basic virtues. This is reflected in its practice. Impartiality is the disposition to be free of bias with reference to different species. An individual's personal feelings for or against any particular species should not be allowed to interfere one's judgement or conduct. Trustworthiness is the special virtue related to the rule of fidelity. It says wild creatures should not be deceived or tricked or betrayed in their wild state. Fairness and equity are the two special virtues related to the rule of restitutive justice. It is the disposition to want to restore the balance of justice that being disturbed by an individual's wrong doing. It means compensating the damage by making policies for the wild living beings that has been treated badly such as wild life preservation parks. Equity is the virtue in having a sense of the proportionate weighing of different claims of justice. When equity and fairness are combined together in a character then it becomes the foundation to achieve the proper restitutive measures to restore the balance of justice between agents and subjects.

Our reason for discussing again the general and special virtues at this point requires a brief clarification. We are doing it with a view to find out how and why Taylor gives importance and priority to the virtues in order to have the attitude of respect for nature. His theory gives priority to the virtues on the basis of which the attitude towards nature is constructed. The attitude itself is based on the virtue respect which can be regarded as the ultimate highest virtue. "Respect" as being the ultimate highest virtue is based on the general and special virtues of moral agents. The virtue such as benevolence, compassion, sympathy and caring are the general virtues and considerateness, regard, impartiality, trustworthiness, fairness and equity are the special virtues on the basis of which the highest virtue called respect is based. Taylor says respect for nature is not a matter of personal caring and affection and it is different from our personal feeling towards nature such as love for nature. The attitude is not a private relationship and it is an impartial universal relationship of human beings with nature. This relationship is not dependent on the attractiveness or unattractiveness of nature. A moral agent who takes it as the ultimate moral attitude should also consider it as an attitude that all other moral agents should take so that it becomes an universal attitude. At this point we are reminded of Kant's categorical imperative. In categorical imperative Kant also takes "respect" as a virtue towards human beings by human beings. But in the case of Taylor's attitude of respect, "respect" as the highest virtue is hold by human beings towards non-human living beings. The only difference between Kant and Taylor is, Taylor has extended the domain of respect one step ahead to accommodate non-human living beings. Hence "respect" as a highest virtue plays an important and basic role in Taylor's theory of environmental ethics. At this point we can see though Taylor's theory of environmental ethics ascribed inherent worth and independent intrinsic value to nature he nevertheless calls for a change in the human attitude towards nature. He calls for a change in our attitude from exploitative to being respectful towards nature. His

theory though called deontological and non-anthropocentric is the one which equally gives importance to the role human beings play. Human beings can only have the attitude of respect for nature. According to this attitude a person is disposed to experience the positive and negative reactions towards nature because he has the valuational, conative, practical and affective dispositions. Human beings carry certain ends and purposes that include avoiding interference with the natural state of wild living beings and at the same time he aims at preserving their existence as a part of the order of nature. In order to achieve this he cultivates certain virtues towards nature. No other species except human beings alone can only hold the attitude of respect towards nature. The attitude towards nature is thus possible only in relation to human beings and the society in which they live. Respect as a virtue can only be associated with human beings and human beings as rational beings can develop this virtue not only towards human beings but also towards non-human living and non-living entities in nature. This position because of its broad based value perspective is shared by the virtue ethics and enlightened anthropocentrism.

Virtue ethics perspective towards nature also talks a similar kind of approach towards nature like Taylor's attitude of respect for nature. A virtue ethics perspective focuses on human excellence and flourishing by considering man and nature at the same level. Environmental virtue ethics gives us a better interrelation with nature. It gives reasons for treating other non-human entities with respect. It provides a strong ground for environmental protection for human beings and therefore it brings a more harmonious relationship between man and nature. It gives us many reasons to have more positive, sustainable and respectful position towards nature. Hepburn talks about "respect" as the environmental virtue. He says "respect for other things" as the first moral attitude with the environmental virtue wonder. The concept of respect as a moral attitude is central to the western moral thinking such

as Kant's categorical imperative. Hepburn extends this concept of respect to nature by ruling out the acts thoughtless manipulation. The virtue "respect" involves the disinterested attention to things. The disinterested attention allows a correct appreciation of things and the appreciative attention allows recognition of their value. This virtue involves fascination, enjoyment, delight, and other related feelings with which we respond to nature. The other environmental virtues such as temperance, sensitivity, awesome, wonder, compassion, gentleness, humility, gratitude are also related to the attitude of respect for nature.

One major objection against the non-anthropocentric aspect of environmental ethics is it has over generalized in its criticism against the human-centeredness and the dominant world view. But not all human beings and all human-centered ethics are responsible for environmental problems. The enlightened anthropocentrism establishes a harmonious relationship with nature. We take the concept of "stewardship" from enlightened anthropocentrism in order to see that it can be based on the attitude of respect for nature. But the question arises, is enlightened anthropocentrism sufficient to make us effective stewards of the nature? The answer is yes the virtues which are human-centered may provide for the motivation of environmentally responsible behaviour of stewardship. Stewardship for nature is to make efforts to maintain and enhance the condition of nature for the sake of nature and not primarily for the sake of stewards. To be a good steward we need a character having dispositions of benevolence, loyalty, patience, self-discipline, courage, and respect. The steward is responsible for to take care of nature. Therefore he cannot exploit the resources of nature without any consideration to the effects of his actions. He can restrain fierce animals but he should also protect the non-dangerous and useful animals. Passmore says through our established ethical principles we can preserve our environment. These principles are the basis environmental preservation policies, and these principles are motivated by our compassion for fellow creature, our aesthetic appreciation of natural beauty and our dislike towards any activity which brings environmental problems. These are based on the principle that we should have reverence or deep respect for other forms of life. This attitude of respect does give us reasons to give priority to the interests of other species than our own interests. All kinds of reforms in environmental policies would be more successful if they are based on the attitude of respect for nature. As Leopold says, effective environmental stewardship of natural world cannot occur if we see it only as a resource for maximizing economic benefits. There is a need to develop a greater sensitivity to the non-economic needs, values and interests the nature serves in order to preserve nature. Since we know that what is good for us is also good for nature, therefore there are many policies formulated in favor of nature and non-human entities, such as the cases which we have discussed in this chapter.

The three ethical approaches which are discussed in our study are based on the attitude of respect for nature. The only difference is the level of the attitude is different in application to the practical affairs. Most of the environmental policies that are based on the instrumental value of nature do help in nature conservation to some extent. May be these policies are like the life saving drug for a patient who would go into coma if that particular drug would not have been given. But it does not mean that that particular drug cures the disease. There may be some other drug which the patient could have taken earlier to prevent the disease. The deontological theories prescribe the values for nature in the same way as vaccines are prescribed, to prevent degradation of nature. Utilitarian values of nature are like emergency measures to put a pause of the degradation of nature. The attitude of respect for nature is like the vaccine to prevent the environmental degradation. We agree that it is the most effective method to save nature and to establish a harmonious relationship with nature. We need to cultivate and inculcate the attitude of respect for nature in every child right from their childhood. Every adult and older people also need to adopt this attitude in their way of living.

Critics may raise questions to this approach, as Ramchandra Guha. He says if deep ecology is put in to practice then it would lead to disastrous consequences in developing and underdeveloped countries. This attitude is disastrous for poor and agrarian population. But at the same time he welcomes the transition in attitude towards nature from human-centered to non-human centered in both religious and scientific traditions. What he does not accepts is the radical conclusions drawn by deep ecology such as the human intervention in nature should be guided by the need to preserve the biotic integrity and not by the needs of humans. The solution for such kind of problem lies in inculcating certain virtues, such as, respect as the basis for taking the role of steward looking after nature. It is the human being who is the moral agent and he is the only agent who is capable of ascribing value to anything. Virtues can only be cultivated by human beings, and can motivate human beings with reasons to make sacrifices of personal resources and convenience in order to preserve natural land scapes, air, water and biodiversity. Human beings as stewards need to adopt the attitude of respect for nature in order to play a proper role of stewards. As a steward he sees to maintain a balanced relationship in nature. In order to develop this kind of attitude we need extensive environmental education. People must understand how the present management of nature affects the quality of life of future generations. They must also understand how a better balance is maintained. Hume says ignorance, rather than anthropocentrism is the obstacle for all kinds of natural degradation. It is not that people care too much for the welfare and values for the humanity but it is that they care too little for the nature and they also do not understand how much care is needed for nature. We need to look forward towards education. In the concluding chapter we would be discussing this aspect. The ultimate moral attitude that Taylor says to adopt towards nature is, "respect for nature". This

attitude is based on "respect" and this is an extension of Kant's categorical imperative. This itself is deontological. In this way we ascribe value to nature for its own sake. This attitude is also anthropocentric because it is the human being who holds the attitude of respect for nature. The environmental policies are more effective if they are based on this attitude as we have seen in the cases of the Mineral King's valley, Tennessee Valley, Silent valley, *Chipko* movement and *Narmada bachao andolan*. In order to develop such attitude we need to look forward to education. Only human beings can be educated and he is the moral agent who is capable of ascribing value to nature.

CHAPTER-VIII

Conclusion: Education and the Attitude of Respect for Nature

One of the criticisms against Taylor's theory of respect for nature is how is it possible to say that someone has respect for nature. According to him all living being possesses inherent worth as a member of the earth. To adopt the attitude of respect for nature is to ascribe inherent worth to the living being. This attitude towards nature is based on Kant's categorical imperative. The adoption of this attitude involves cultivating the disposition to treat every person having inherent worth. Analogously in environmental ethics the attitude of respect towards nature involves having the disposition to treat nature which has an inherent worth by itself. But the problem is how do these dispositions

are being cultivated? How the attitude brings the capacities that are needed to ascribe inherent worth to living beings? No one gets these capacities only by adopting this attitude. It cannot be acquired overnight through a sudden rational process. Taylor calls for a change in action, emotion, perception, sensibility and understanding towards nature. Hence it demands for a complete change in the character of an individual, to see himself as sharing a common bond with nature. It does not come suddenly. This problem can be solved if we construct the attitude of respect for nature as a virtue which we have seen in the previous chapter. But the same question again, arises that is, how virtues can be cultivated? The answer is, virtues can be cultivated or acquired through moral training from the beginning of a person's childhood and the training continues through the process of self improvement. Here comes the need of education in cultivating the attitude of respect.

In a broader sense education here means, all that which man learns through various ways of communication. For human beings there are only few traits which are innate and they are limited. The modern man that we see is the product of a long process of learning. Whatever the modern man is because of education rooted in his rich tradition, history, culture and knowledge. On the other hand, there are many things which are innate in nature. It is innate for a plant to grow in a particular farm, and many different animals exist in many different forms which are innate in them according to the laws of nature. This innate nature is revealed through various manifestations of nature, such is, flower blooms, lion roars, river flows downwards etc. They do not need education to behave in that particular way. It is the human being who needs education to learn about each and every aspect of life. It is the human being whose actions can only be judged morally right or wrong. Through education only he shapes his character. Whatever he acquires in his early age through the process of integrated education that only shapes his character. From his childhood he gets a holistic knowledge. Environmental education should be one aspect of this process. Man's attitudes towards nature and environment depend upon the education. Environmental education should have two objectives. The first one is, to promote environmentally sensitive behaviour which can be imparted through environmental ethics and the second one should be to provide knowledge about the causes and consequences of environmental pollution and degradation. At the elementary school level a child should deal with nature in a positive way by developing interest and respect for other forms of life.

Environmental Ethics and Education

Inculcating environmental responsibilities are one of the objectives of environmental education. It provides knowledge and promotes awareness to inculcate attitudes, values, commitments and ethical responsibilities in children as well as in adults for proper utilization of natural resources. This also involves the protection and improvement of environment. Hence environmental education is very closely linked with environmental ethics. Environmental ethics is the code of behaviour for guiding and controlling human actions towards environment. This code of behaviour does not depend on the presence or absence of environmental laws for the understanding, protection and improvement of the environment. On the other hand, the environmental policies are dependent on environmental ethics. Environmental ethics encourages the development of environmental laws, attitudes and behaviour. Hence environmental ethics is a very important aspect of environmental planning and management. It is the eco-friendly attitude towards nature that controls the human behaviour and action which is very closely related to the environmental education. UNESCO has an environmental education section which has been implemented since 1975, and that is the UNESCO-UNEP International Environmental Programme (IEEP).

But the question is how to make people aware of environmental ethics? We know that all ecological problems cannot be solved by science and technology. This is the reason behind for the need for environmental ethics. Science gives us technologies to clean the environment but also need a change in our value system with regard to nature and it can only be done through education. Education has a very important role in creating environmental awareness which leads to action. We can see five ways to educate and inculcate the environmental values in people. These are (a) home, (b) religion, (c) mass media, (d) formal and informal education, and finally (e) making people to realize that "nature is our teacher".

(a) Home

Environmental education must begin from home. The parents of a child should bear the responsibility of giving the environmental values and ethics to the child. The role of the mother is very important in this regard. Mother is the best and the first teacher and home is the best and first school of a child to learn. At this level the teaching is interdisciplinary and holistic. The mother does not divide her instructions into, physics, chemistry, biology etc. It is the whole environment that the child learns while acquiring his knowledge. For the child, nature is the whole one unit and not subdivided into different units. Therefore it is easy to teach the child about the holistic nature of earth and how the protection of this unity is necessary. When the parents see the child hits an animal or tears the branches of a plant then the parents say do not do this because you hurt the animal or plant. They tell the child to water the plant to take care of the pet animals because they need it and they are important units of nature. It is in this way parents can teach and explain the purpose of a living being to the child.

b) Religion

It is another way of inculcating value in an individual's character. Every person is born in to some religion. All religions incorporate environmental values in their code of behaviour. Therefore religious institutions important in imparting environmental are Particularly in Hindu religion people offer worship Gods and Goddesses associated with some animals and plants. In many festivals animals and plants are worshiped and this shows the value given to maintain a healthy balance between the human-beings and nature. Mahabharata, Sri Krishna tells not to worship the rain God Indra rather he suggests to worship the Gobardhan mountain, the river Yamuna, trees and forests because they are the important units of nature. Children can be taught the value of nature by such kinds of stories from mythology.

c) Mass media

The third mechanism to inculcate environmental values and awareness is through mass media. Mass media has very important role in preparing and communicating meaningful messages for the public. Now-a-days environment has become an important topic in spreading awareness of the importance of healthy environment. It spreads the message that man is an integral part of environment and he is dependent on it and should maintain, improve and protect the environment. It spreads the message by advertising and campaigns related to the protection of nature. Many eminent personalities including sports and film personalities spread the message of the importance of nature. It includes ND TV's annual greenathon and save the tiger campaigns which spreads the message of the value of tiger and environment. This is an important mechanism to teach people regarding the value of nature.

(d) Formal and non-formal education

Formal and non-formal educational systems have very important role in inculcating environmental ethics. It should inculcate positive environmental ethics and motivate the students to take desirable

environmental actions. Research studies suggest that the attitudes and behaviours of children are modelled after the attitudes and behaviours of others. All students spent six to seven hours a day in a school. The children should understand the role of various biological, physical and socio-economic factors on which the natural environment is dependent. This interdependency should be taught in both formal and informal educational system. Environmental education should also promote the attitudes which encourage the individuals to discipline themselves in order to maintain a balance with the natural environment. They should be taught to make a distinction between the essential and the luxurious developmental programmes. Α holistic requires approach the contribution of all natural, social, ethical and art sciences for analyzing and finding solutions for environmental problems. The ethical dimension is an important aspect like all other aspects. Involving students in environmental campaigns, encouraging them to plant trees and to take care of those trees, teaching them the important role the trees play in the environment etc. are some of the activities through which the educational system impart certain values in children. Informal education like taking the students to nature camps is also important. There they can learn the important purpose each and every living and non-living entities have in our ecosystem. For example, we can imagine a dialogue between a teacher and a group of school children where a teacher is explaining the students the need for protecting environment.

Teacher - "The tiger is to nature what parliament is to our democracy".

Question - "How is it so sir?"

Answer - "it is because, if you protect parliament, you protect everything it stands for: the constitution, freedom, and the people. Similarly if you protect the tiger, you protect its forests and its streams and the entire ecosystem that keeps us alive."

The above explanation is simplistic but it explains the logic of conservation to the children.

(e) "Nature is our teacher"

This is the traditional belief that views nature as a world of spirit. Physical phenomena is not just the material wants of life but it also influences our intellectual advancements. We learn many chains of connections from nature. All natural entities, laws and forces are interdependent. Nature itself is the vast repository of various kinds of knowledge. We learn many things from nature. Nature has sustainable solutions to the problems human being is facing today. Scientists and engineers study the unique models and systems of nature while technologies. This kind of biologically-inspired designing new engineering is called biomimicry. American biologist Ianin M. Benyus in his book Biomimicry: Innovation Inspired by nature, was the first person to propose that we learn many things from nature and this is the perfect tool for eco-design. From the following example we can see how our dayto-day material things have been built upon nature's self-maintaining processes. One of the examples is, the leaf of the lotus plant has a waxy surface that is covered with tiny bumps or ridges. Theses ridges cause water droplets to roll off, carrying away dust and dirt. This unique ability of the lotus plant to clean itself is called lotus effect. This particular technique is used for self-cleaning paint coatings. Research is also underway to create self cleaning textiles, metals and plastics.

These are some of important means through which children can be educated about the environment and ethical responsibilities that they have towards protecting the environment. Environmental ethics can be taught only through education. The attitude of respect for nature is inculcated through environmental education. Respect as a virtue can be cultivated from the childhood. Children should be motivated in such a way that they should see every entity in nature as having an important existence. Children are the future citizens of the country. They are the future leaders, in decision-making, in politics, in industry, in science and technology. If they are provided with right kind of environmental education which is based on environmental ethics then we can be sure

about their future behaviour and the values that they will adopt towards environment. They are the ones who are going to deal with future environmental problems and therefore they should be trained from the ethical point of view in the preparation and implementation of environmental and developmental projects. For the present citizens and leaders' mass media, religion and many awareness programmes will help to be an environmental friendly citizen. Now- a -days people are aware about the well balanced nature. They know nature in itself has to be respected not for anything else but for its own sake, because science and technology can never solve all kinds of ecological problems. We need to bring change in our attitude towards nature from exploitative to the respectful attitude. It is the duty of all responsible and concerned citizens to see that natural resources are wisely used. On the other hand each individual has a right to a healthy environment but at the same time no one has the privilege to endanger the environment to the extent of adverse effects of nature. Ecological sustainability of natural resources should be maintained. Therefore it is the duty of human beings to be a good steward to see that natural balance is maintained along with the use of natural resources. This kind of management should be based on the attitude of respect. According to O.P Dwivedi, in order to make this happen we must have to show our commitments towards the respect for nature in our day-to-day moral life. This attitude is not possible without some set of norms which are formulated and accepted. Adopting such norms in a form of a code would be the first practical step towards cultivating the attitude of respect towards nature. We know that by acquiring such an attitude we are working towards the well-being of nature along with the well-being of our children and future generations. In this process education, non-governmental organizations, mass media, religion and culture have important roles.

The question is how the attitude of respect for nature can be an instrument for environmental protection? Can there be a strategy that is based on the ethics of environmental conservation? The answer is yes, it

can be. The first draft of the report on World Conservation Strategy for the 1990s states:

- (a) People should respect nature, like all creatures. we are an integral part of nature as well as users and consumers of nature;
- (b) Every life form is unique and warrens respect regardless of its worth to people;
- (c) All persons should take responsibility for their impacts on nature;
- (d) People should ensure the means of survival of all other life forms; and should not knowingly cause the extinction of another species;
- (e) People should treat all creatures humanely, and protect them from cruelty and avoidable suffering. (IUCN, UNEP and WWF, Second World Conservation Strategy for the 1990's (first draft), Gland, Switzerland: IUCN, September 1989, pp. 3-4)

If we look at these principles then we can see that these principles are very much similar to those principles prescribed by Taylor's theory of respect for nature and deep ecology. Today human being is well aware and well informed about the need for protecting and the moral duty associated with it. Without appropriate action and efforts preservation, environmental conservation will not be possible. For this reason a code of environmental protection and conservation on the basis of the attitude of respect for nature may be seen as an instrument for protecting nature. An environmental code of conduct can be adopted by each individual. A code is always general. But we can draw many guidelines from the code with which we can deal with specific situations, such as protection of endangered species, removal of rain forests, acid rains etc. This would tell us what is to be done and what action should be taken. These guidelines are similar to the government regulations for environmental protection and conservation.

The code is to provide inner incentives such as the attitude of respect for nature. Having such a code means an individual acts in such a way so that he not only thinks about his welfare but also he thinks about the well being of the natural environment. This kind of attitude is necessary because in democratic countries like India environmental laws and regulations can not be forced. Therefore a code becomes an adoptive instrument that can be cultivated. It encourages our obligation towards nature by seeing it as the source of sustainer of all life support system.

- O.P Dwivedi has formulated some codes on the basis of basic principles. The basic principles are:
- (a) Stewardship based on the virtue of respect ought to be the human being's obligation so that the aim of all nations should become ecologically sound sustainable development.
- (b) It is a fact that there is interdependency among all entities in nature. Disturbance in one part would lead to disturbance on all other parts and we should recognize that fact.
- (c) We should accept that we are the generations which is accountable for present and future generations. The responsibility should be shared by the individuals, corporation and many other groups in the society. We should also have the responsibility to make aware our fellow human being regarding the environmental protection and conservation. Therefore all individuals are accountable for the action that brings disastrous consequences for the environment. On the basis of these basic principles we formulate some environmental codes.
- (a) Respect for nature as a whole including its constituent entities should be our attitude. It is the right of every entity to achieve the fulfilment of its complete life cycle.
- (b) It is the duty of each society to act as the care taker of the environment along with his fellow human beings. It is the need for the society to encourage, restraint and caution in the use of natural resources. Attempts should be made to control man's greed and also his exploitative attitudes by cultivating the attitude of respect for nature.
- (c) It is the obligation of all present individuals to hold natural resources in trust for the present and future generations. It is the

moral commitment of all individuals to protect and conserve the environment.

- (d) It is the responsibility of each person to preserve and maintain ecological balance, biological diversity, endangered species and environmental sustainability.
- (e) It is the right of every individual to participate in environmental decision-making process to receive information and to be consulted by governmental bodies.
- (f) There should be flow of information by mass media to the public concerning the sate of the environmental qualities, and possible dangers arising out of the industrial and developmental projects.
- (g) We should create a group of environmental volunteers in each society to help in monitoring and maintaining a healthy and sustainable environment.

These environmental codes are like the instruments based on the attitude of respect for nature for environmental protection and conservation. It should be seen as voluntary action starting from the grass root level. This environmental code could be adopted by any country with suitable modifications. Different nations and different individuals have different perceptions about the environment. Therefore they have different needs to be satisfied from the environment. The code could be modified to address different environmental problems in different nations. On the basis of these environmental codes O.P Dwivedi has suggested certain guiding principles for environmental management. The environmental codes are voluntary instruments and it requires support from governmental bodies.

(a) Conservation and stewardship

The government should pursue a national policy that enhances environmental conservation and preservation. It should maintain the common properties such as the watersheds, soils, atmosphere and space etc. for the future generations as the obligation of present generations.

(b) Prevention and collective decision-making process

The Government should formulate the preventive environmental policies instead of remedial and curative policies. The protection of nature should be a collective concern. On the basis of this principle the Government should call for co-operation from the public for environmental planning, assessment and management.

(c) Global responsibility

We know that environmental problems are global in nature. Therefore the governments of different countries should work cooperatively to develop and apply solutions to those problems.

(d) Environmental ethics, education and awareness

This should be the most important guideline for environmental management. Proper awareness and education create the necessity for clean and safe environment. The government should provide environmental education which is based on environmental ethics. It gives us the knowledge about the nature of different environmental problems and at the same time it demands for a change in our attitude from the exploitative to the respectful attitude towards nature. The moral guidance for environmental protection and conservation is in need. It should serve as a framework for environmental management to guide people. The moral code and the guiding principles for environmental management are needed because without one the proper environmental management would be ineffective. So in the words of O.P Dwivedi:

The true impact of a code if it were to be accepted would be hard to measure; but its absence so far is seen as a moral vacuum. (Dwivedi. O.P, environmental ethics: Our Dharma to the Environment; Sanchar Publishing House, New Delhi, 1994, pp.118).

He says amoralism towards nature has given us self-destruction. Amoralism in terms of objectivity and materialism of nature has given us many environmental problems. He calls for a change in our attitude so that we become a steward of nature. It demands that we should be in harmony with nature with the help of the environmental code of conduct and guiding principles for environmental management. Then only we can build a harmonious relationship with nature.

The reason behind bringing Dwivedi's concepts of environmental code and guiding principles in this context is to relate the attitude of respect for nature with the welfare of human beings. The human being is the only creature in nature totally dependent on it for his survival in every aspect of life. He is the only creature who has one major characteristic that differentiates him from other creatures i.e., the rationality and morality. He is the only one for whom the moral domain is concerned. Traditionally this domain was only limited to human beings and fellow human beings. But now the time has demanded to extend this domain to the non-human nature including every thing. Only human beings can value anything whatever he wants. He ascribes the instrumental value to nature, if he can ascribe this value then he can also ascribe the intrinsic value and he can adopt the attitude of respect for nature. Therefore human beings have a duty to take care of nature in the same way he has a duty towards a baby and an insane person. According to the traditional moral theory the moral domain does not include children and mad persons. But it does not give permission to normal rational individuals to behave immorally with them. It only said their behaviour cannot be judged morally because they are not rational. But at the same time morality demands the behaviour towards them should be moral because the normal rational human being's behaviour can be judged morally and they have certain responsibility towards a baby or insane person. Similarly we cannot demand moral behaviour from nature as it is irrational but our moral theory does prescribe us to take care of nature as we have duty to take care of it. It also demands to maintain a harmonious relationship with nature because it ultimately affects the welfare of human beings. To adopt and inculcate the attitude of respect for nature is possible because we already hold this attitude

towards other fellow human beings including irrational human beings such as babies and insane persons. The cultivation of this attitude depends on both the formal and informal education. The respectful attitude gives us a better interrelationship with nature. It provides a strong self-interested reason for treating nature with respect. A self interested reason means the reasons based on a person's concern for his own virtue and development. In this context "respect" as an environmental virtue becomes a strong ground for environmental protection for human beings. It gives us many reasons to have a more positive, sustainable and respectful position towards nature. The out comes of such attitude is obviously going to be correct. To be nature friendly is to be respectful towards it.

BIBILIOGRAPHY

- Albert, S., "General Idea of the History of Philosophy", Greek Philosophy, K.P Bagchi & Co, Calcutta & New Delhi, 1847.
- Alder, J. & Wilkinson, D., *Environmental Law and Ethics*, Macmillan Press Ltd., 1999.
- Almond, B. & Hill, D. (ed), Applied Philosophy, Morals and Metaphysics in Contemporary Debate, Routledge, London, 1991.
- Balint, P.J., "How ethics Shapes the Policy Preferences of Environmental Scientists: What We Can Learn from Lomborg and His Critics", *Politics and the Life sciences*, Vol-22, No-1, March-2003, 14-23, Jstor, 1st October, 2009, http://www.jstor.org/stable/4236682.

- Ballanayne, P.F., "History and Theory of Psychology Course", www.google.com.
- Bamhart, M.G., "Ideas of Nature in an Asian Context", *Philosophy East & West*, Vol.47, No.3, July-1997, pp.417-432, <u>www.jstor.org</u>.
- Barrett, C.B. & Grizzle, R., "A Holistic Approach to Sustainability Based on Pluralism Stewardship", *Environmental Ethics*, Vol. 21, No.1, 1999, 23-42.
- Bates, J., "An Enquiry into the Nature of Environmentally Sound Thinking", *Environmental Ethics*, Vol. 25, No.2, 2003, 183-198.
- Beauchamp, T.L., "The Nature of Applied ethics", Blackwell
 Companion to Applied Ethics, A companion to Applied Ethics, Frey,
 R.G. & Wellman, C.H. (ed), Blackwell Publishing, 2003.
- Beckoff, M. & Hettinger, N., "Animals, Nature, and Ethics", *Journal of Mamalogy*, Vol.75, No.1, (Feb., 1994), pp. 219-223, American Society of Mamalogists, http://www.jstor.org/stable/1282254, 26th June-2008.
- Benson, J., Environmental Ethics, An Introduction with Readings, Routledge, London, 2000.
- Bharati, A., "Groovy Greenhouse", *The Hindu*, Young World, Hyderabad, June-15, 2010.
- Bharati, A., "Mimicking Nature", *The Hindu*, Young world, Hyderabad, December-1, 2009.
- Birch, T. H., "The Incarceration of Wildness: Wilderness Areas as Prisons", *Post Modern Environmental Ethics*, Oelschlaeger, M.(ed), State University of New York Press, 1995.
- Bourdeau, Ph., Fasella, P.M. & Teller, A. (ed), Environmental Ethics, Man's Relationship with Nature, Interaction with Science, Sixth Economic Summit Conference on Bioethics, Val Duchesse, Brussels, 10-12 May, 1989.
- Bowden, E.M., "Ethics, Theoretical and Applied", The Philosophical Review, Vol.4, no.6, Nov., 1895, pp. 616-623, Duke University Press, http://www.jstor.org/stable/2175643, 26th june-2008.

- Brennan, A., *Thinking About Nature*, Routledge Publications, London, 1988.
- Brown, P., "Buddhism and the Ecocrisis", www.google.com.
- Cafaro, P., "For a Grounded Conception of Wilderness and More Wilderness on the Ground", www.google.com.
- Cafaro, P., "For Grounded Conception of Wilderness and More Wilderness on the Ground", www.goolge.com.
- Cafaro, P., "Thoreau, Leopold, and Carson: Towards and Environmental Virtue Ethics", www.umweltethik.at.
- Callicott, J.B., "Multicultural Environmental Ethics", *Daedalus*, Vol.130, No.4, Religion and Ecology: Can the Climate Change? (Fall, 2001), The MIT Press, http://www.jstor.org/stable/20027719, 1st October-2009.
- Callicott, J.B., "Traditional American India and Western European Attitudes Toward Nature: An Overview", Post Modern Environmental Ethics, Oelschlaeger, M. (ed), State University of New York Press, New York, 1995.
- Chadwick, R. & Schroeder, D. (ed), *Applied Ethics, Critical Concepts in Philosophy*, Vol-I, Routledge, London, 2002.
- Chapple, C.K., "The Living Cosmos of Jainism: A Traditional Science Grounded in Environmental Ethics", *Daedalus*, Vol.130, No.4, Religion and Ecology: Can the Climate Change? (Fall, 2001)., pp. 207-224, The MIT Press, http://www.jstor.org/stable/20027724, 1st October-2009.
- Comstock, G.L., "Theism and Environmental Ethics", Blackwell Companions to Philosophy, A Companion to Philosophy of Religion, Quinn, P.L. & Aferro, C.T. (ed), Blackwell Publishers, UK, 1997.
- Connelly, J. & Smith, G., "Environmental Philosophy", *Politics and the Environment, From theory to practice*, Routledge, London, 1999.
- Cooper, D.E. & Palmer, J.A. (ed), *The Environment in Question, Ethics and Global Issues*, Routledge, London.

- Cowen, T., "Policing Nature", Environmental Ethics, Vol. 25, No.2, 2003, 169-182.
- Crawford, S.C., "The Ethics of the Vedic Period", *The Evolution of Hindu Ideals*.
- Curry, P., *Ecological Ethics: An Introduction*, Polity Press, UK, 2006.
- Demarco, J.P. & Fox, R.M., "Introduction", New Directions in Ethics, the Challenge of Applied Ethics, Routledge & Kegan Paul, New York, 1986.
- Devall, B., "The Deep, Long-Range Ecology Movement, 1960-2000-A Review", www.google.com.
- Dhar, S. & Dogra, C.S., "Blood Sport", Outlook, 27th June, 2005.
- Dharmadhikary, S., "Requiem for a River", *The Hindu*, Magazine, Hyderabad, April-6, 2006.
- Dwivedi, O.P., Environmental Ethics, Our Dharma to the Environment, Sanchar Publishing House, New Delhi, 1994.
- Elliott, H., "A Very Brief History of the Origins of Environmental Ethics, for the Novice", 1997, www.google.com.
- Epstein, R., "The Inner Ecology: Buddhist Ethics and Practice", *American Academy of Arts and Sciences*, 2005, www.google.com.
- Evanoff, R., "Ecosophy and the Deep Ecology Movement: Beyond East and West", An Interview with Arne Naess, The Trumpeter, Volume.21, No.2, 2005, www.google.com.
- Flournoy, A.C., "The Future of Environmental Ethics and Environmental Law: Building from the Ground Up", www.google.com.
- Fox, R.M. & DeMarco, J.P., "The Challenges of Applied Ethics",
 New Directions in Ethics, The challenge of Applied Ethics, Routledge
 & Kegan Paul, New York and London, 1986.
- Fox, W., "A Critical Overview of Environmental Ethics", Applied
 Ethics, Critical Concepts in Philosophy, Chadwick, R. & Schroeder,
 D. (ed), Vol-IV, Environment, Routledge, London, 2002.

- Frankena, W.K., "Ethics and the Environment", *Ethics & Problems* of the 21st Century, Goodpaster, K.E. & Sayre, K.M. (ed), University of Notre Dame Press, London, 1979.
- Ganesh, Chitra., "Come Let Us Join Hands to Save the Earth", *The Hindu*, Hyderabad, December-20, 2009.
- Gerrie, J.B., "Environmental Ethics: Should we Preserve the Red Herring and Flounder", *Journal of Agricultural and Environmental Ethics*, Vol-16, pp.63-76, Kulwer Academic Publishers, Netherlands, 2003.
- Ghosh, A., "Environmental ethics in Early Indian Civilization", Natural Resource Conservation and Environment Management, APH Publishing Corporation, New Delhi, 2003.
- Grumbine, R.E., "Wildness, Wise Use, and Sustainable Development", *Environmental Ethics*, Vol. 16, No.2, 1994, 227-249.
- Guha, R., "Wilderness Preservation: A Third World Critique", Environmental Ethics, Vol. 11, No.1, 1989, 71-84.
- Guthrie, W.K.C., "Pre-Socratic Philosophy", The Encyclopedia of Philosophy, Edwards, P. (ed), Vol.5, Macmillan Publishing .Co, New York, 1967.
- Hargrove, E.C., Foundations of Environmental Ethics, Prentice Hall, New Jersey, 1989.
- Haydon, G., *Education, Philosophy and the Ethical Environment*, Routledge Publications, London, 2006.
- Hursthouse, R., "Environmental Virtue Ethics", Institutional Issues
 Involving Ethics and Justice, From Encyclopedia of Life Support
 Systems, EOLSS Publishers, Oxford, UK.
- Jacobsen, K.A., "The Institutionalization of the Ethics of "Non-Injury" toward All "Beings" in Ancient India", *Environmental Ethics*, Vol. 16, No.2, 1994, 287-301.
- Jamieson, D. (ed), *A Companion to Environmental Philosophy*, Blackwell Publisher Ltd, UK, 2001.

- Jamieson, D., "Ethics, Public Policy, and Global Warming", An Introduction to Applied Ethics, Piet, J.H. & Prasad, A. (ed), Cosmo Publications, India, 2000.
- Jardins, J.R.D., Environmental Ethics, An Introduction to Environmental Philosophy, Wadsworth Publishing Company, New York, 1997.
- Kalapura, J., "Science-Religion Dialogue & Ecology, An Asian Perspective", www.google.com.
- Katz, E., "A Pragmatic Reconsideration of Anthropocentrism", Environmental Ethics, Vol. 21, No.4, 1999, 377-390.
- Kirkman, B., "Time to Act", *The Hindu*, Cambridge Letter, February-11, 2007.
- Knight, W., "Practical Ethics", *International Journal of Ethics*, Vol.4, no.4, July., 1894, pp. 481-492, The University of Chicago Press, http://www.jstor.org/stable/2375666, 26th June-2008.
- Lafollette, H. (ed), *Ethics in Practice*, Second Edition, Blackwell Publishing, 2002.
- Lama, D., "An Ethical Approach to Environmental Protection", Stanford Encyclopedia of Philosophy, www.google.com.
- Low, N. (ed), Global Ethics and Environment, Routledge, London, 1999.
- Massanari, R.L., "A Problematic in Environmental Ethics: Western and Eastern Styles", *Buddhist-Christian Studies*, Vol.18. (1998), pp. 37-61, http://www.jstor.org, 18th July-2007.
- Minteer, B.A., Corley, E.A & Manning, R.E., "Environmental Ethics Beyond Principle? The case for A pragmatic Contextualism", Journal of Agricultural and Environmental Ethics, Vol-17, pp.131-156, Kulwer Academic Publishers, Netherlands, 2004.

- Mishra, R.P. (ed), *Environmental Ethics-A Dialogue of Cultures*, Concept Publishing Company, New Delhi, 1995.
- Misra, R.P., "The Indian World-view and Environmental Crisis", Integration of Endogenous Cultural dimension into Development, www.google.com.
- Muirhead, J.H., "Abstract and Practical Ethics", The American Journal of Sociology, Vol.2. No.3, Nov., 1896, pp. 341-357, The University of Chicago Press, http://www.jstor.org/stable/2761629, 26th June-2008.
- Murthy, D.B.N., "How Serious are We About Pollution?", *The Hindu*, Hyderabad, December-27th, 2009.
- Nelson, M.P., "Environmental Ethics and the Land Ethic", Leopold and Environmental Ethics, Wildlife Society Bulletin, Vol.26, No-4, pp.741-744, 1998, www.google.com.
- Norton, B., "The Ignorance Argument: What Must we Know to be Fair to the Future?", *Economics, Ethics, and Environmental Policy, Contested Choices*, Blackwell Publishing, 2002.
- Norton, B.G., Searching for Sustainability, Interdisciplinary Essays in the Philosophy of Conservation Biology, Cambridge University Press, UK, 2003.
- Padmanabhan, G., "Beauty without the Beasts", *The Hindu*, Metro Plus, Hyderabad, January-27, 2010.
- Palmer, C., Contemporary Ethical Issues, Environmental Ethics, ABC-CLIO, California, 1997.
- Pandey, K.C. (ed), *Ecological Perspectives in Buddhism*, Readworthy, New Delhi, 2008.
- Partridge, E., "Environmental Ethics and Public Policy", www.igc.org/gadfly.
- Partridge, E., "On the Possibility of an Environmental Ethics", *View points*, Wisconsin Institute, 1995, www.google.com.
- Partridge, E., "On the Rights of Animals and of Persons", www.igc.org/gadfly.

- Partridge, E., "Reconstructing Ecology", www.igc.org/gadfly
- Partrige, E., "In Search of Sustainable Values", www.igc.org/gadfly.
- Passmore, J., Man's Responsibility for Nature, Ecological Problems and Western Traditions, Duckworth & Co. Ltd., London, 1974.
- Patridge, E., "Environmental Ethics: An Introduction", www.igc.org/gadfly.
- Pojman, L.P., Environmental Ethics, Readings in Theory and Application, Wadsworth, US, 2001.
- Reed, P., "Man Apart: An Alternative to the Self-Realization", Environmental Ethics, Vol. 11, No.1, 1989, 53-70.
- Reichart, J.E., "A New Environmental Ethic", Business Ethics
 Quarterly, Vol.5. No.4, The Environment (Oct., 1995), pp.795-804,
 Philosophy documentation Centre, 1st October 2009, http://www.jstor.org/stable/3857415.
- Rosa, H.D. & Silva, J.M.D., "From Environmental Ethics to Nature Conservation Policy: Natura 2000 and the Burden of Proof", Journal of Agricultural and Environmental Ethics, Springer, 2005, www.google.com.
- Rubin, C.T., "Environmental Policy and Environmental Thought: Commoner and Ruckelshaus", *Environmental Ethics*, Vol. 11, No.1, 1989, 27-52.
- Saksena, K.D., *Environmental Planning, Policies and Programmes in India*, Shipra Publications, Delhi, 1993.
- Sandler, R., "Introduction: Environmental Virtue Ethics", www.jstor.org.
- Saraswati, B., "Man in Nature", www.google.com.
- Sessions, G., "Ecocentrism and the Anthropocentric Detour", *Key concepts in Critical Theory, Ecology*, Merchant, C. (ed), Rawat Publications, New Delhi, 1994.
- Silva, L.D., "The Buddhist Attitude Towards Nature", www.google.com, 2005-2010.

- Simmons, I.G., "Normative Behaviour", *Interpreting Nature*, *Cultural Constructions of the Environment*, Routledge, London, 1996.
- Singer, P., "Not for Humans Only: The Place of Nonhumans in Environmental Issues", Ethics & Problems of the 21st Century, Goodpaster, K.E. & Sayre, K.M. (ed), University of Notredame Press, London, 1979.
- Singer, P., Practical Ethics, Cambridge University Press, UK, 1993.
- Singhvi, L.M., "The Jaina Declaration on Nature", www.google.com, 2010.
- Sivadas, S., "And Silent Remained my Valley", *The Hindu*, Young World, Hyderabad, June-22, 2010.
- Smith, M., "To Speak of Trees: Social Constructivism, Environmental Values, and the Future of Deep Ecology", *Environmental Ethics*, Vol. 21, No.4, 1999, 359-376.
- Sober, E., "Philosophical Problems for Environmentalism", Applied
 Ethics, Critical Concepts in Philosophy, Chadwick, R. & Schroeder,
 D. (ed), Vol-IV, Environment, Routledge, London, 2002.
- Sponsel, L.E. & Natadecha-Sponsel, P., "Nonviolent Ecology:The Possibilities of Buddhism", www.google.com.
- Srivasava, D.C. (ed), Readings in Environmental Ethics, Multidisciplinary Perspectives, Rawat Publications, New Delhi, 2005.
- Srivastava, D.C., "Environmental Ethics: To What Extent does it go Beyond Human-centred Ethics", Applied Ethics, Dubey, A.P., Paragon Enterprises, Delhi, 2004.
- Subbarao, S., *Ethics of Ecology and Environment*, Rajat Publications, New Delhi, 2001.
- Swearer, D.K., "An Assessment of Buddhist Eco-Philosophy", http://www.jstor.org, 10th December-2005.
- Syed, S., "Countdown to Climate Change", *The Hindu*, Young World, Hyderabad, December-15, 2009.

- Taylor, P.W., Respect for Nature, A theory of Environmental Ethics, Princeton University Press, New Jersey, 1986.
- Tharakan, K., Iype V, G. & Afonso, A.V., "Environmental Ethics:The Making of a Metaphysics of Man-Nature Relationship".
- Thompson, R.L., "Vedic Cosmography and Astronomy", www.google.com.
- Valaskakis, K., Sindell, P.S., Smith, J.G. & Martin, I.F.P.,
 "Buddhist Values", The Conserver Society, A workable Alternative for the Future, Harper & Row Publishers, New York, 1979.
- Vogel, L., "Does Environmental Ethics Need a Metaphysical Grounding?", Hastings Centre Report 25, no.7, Special Issue (1995), pp.30-39, www.google.com.
- Vohra, B.B., "Care of Natural Resources", *Environment, Man and Nature*, Sharma, L.T.G. (ed), Reliance Publishing House, New Delhi, 1989.
- Wallis, N., "Buddhism and Environment", <u>www.google.com</u>, 2010.
- Walsh, M.J., "Ancient Greek and Roman Philosophy", *History of Philosophy*, Geoffrey Chapman, London, 1985.
- Welchman, J., "The virtues of Stewardship", *Environmental Ethics*, Vol. 21, No.4, 1999, 411-423.
- Yamamoto, S., "Environmental Ethics in Mahayana Buddhism: The Significance of Keeping Precepts (Sila-pāramitā) and Wisdom (Prajnā-pāramitā)", http://www.jstor.org.
- Yamamoto, S., "Mahayana Buddhism and Environmental Ethics,
 From the Perspective of the Consciousness-Only
 Doctrine", www.google.com.
- Yamin, Farhana., "Biodiversity, Ethics and International Law", *Ethics, the Environment and the Changing International Order*, July-1995, pp.529-546, Jstor, 1stOctober, 2009, http://www.jstor.org/stable/2624839.
- ... "Environmental Ethics", Wikipedia, the free encyclopedia, http://en.wikipedia.org/wiki/Anthropocentrism.

- ... "Essay Sample on "Aristotle's Teleological view of Nature", www.google.com.
- ... "Pre-Socratics", www.google.com.
- ... "Virtue Ethics", Stanford Encyclopedia of Philosophy, 2007, www.google.com.
- ..."Environmental Ethics", Stanford Encyclopedia of Philosophy, www.google.com.