Examining the Values Allocated to the Natural Environment: Non-human beings in focus: The Case of Some Selected Districts in East Gojjam Zone

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ABSTRACT
Value is a worth given to something either for its consequential utility for the valuers or a worth given for its own sake. While the former way of evaluation is called extrinsic value, the latter is called intrinsic value. Any kind of approach we adapt to anything emerges from a kind of value we allocate to the thing in question, i.e., kind of value people attribute to the natural environment in general and to non-human, in particular, determine people's treatment, evaluation, action and attitude toward the being in focus. Supposing that the ever-increasing environmental crisis is anthropogenic, this paper is trying to examine the kind of value allocated to the environment and non-human beings in East Gojjam. A qualitative approach and case study design were employed to achieve the objective. Both Primary and secondary dated dates were collected. To collect data, focus group discussion, semi-structured interview, key informant interview, and document review were employed as data collecting instruments. Hence, the participants: officials and exports from the office of wildlife protection, office of natural resource management as well as the office of forest enterprise, local people and religious leaders were purposively selected, and the sample size was determined by data saturation. Finally, the collected data was analyzed thematically. The research found out that the kind of value ascribed to environments is extrinsic. Treating animals and plants as the mere means for the manifold end of human being paves the way for human beings to have untrammeled intervention in the environment.

1. Introduction
This study aimed to examine the value allocated to the environment and its elements. Nowadays, the adverse effect of environmental calamity is unequivocal more than ever. The loss of biodiversity, the ever-increasing climate change, global warming, water and air pollution at local and national levels, among others, are instances that unfold vividly how far humans' way of life, culture, religion and science are hostile to the natural environment in general and to non-human beings, which are the main essential elements of the environment, in particular. J.B. Callicott argues that “the most pressing environmental concern of the waning twentieth century is the erosion of nature's biological diversity… Several episodes of abrupt, mass species extinction occurred previously in the biography of Planet Earth” (1995:3). All these environmental predicaments are perpetuated because of humans' unchecked intervention with the natural course of the ecology.

Down the age, human beings have believed that nature and its parts are created to satisfy the dynamic of their desire. This anthropocentric (human-centred) view of the environment has theological and philosophical justification. “The Christian doctrine of the creation sets the human being apart from nature, advocates human control of nature, and implies that the natural world was created solely for our use” (P. Harrison, 1999:87). Once we take the environment anthropocentrically, we are bound to give intrinsic value for ourselves and extrinsic or instrumental value for the environment and non-human beings.
Humans' evaluation and perception of the environment can be seen through their treatments of non-human beings, for they are the living constituents of the environment. Regarding the value allocated to non-human beings, thinkers proposed two irreconcilable ideas. Some contend that since non-human beings are not rational, conscious, and agents or subjects of morals, there are no compelling reasons to allot intrinsic value or to believe that they have inherent worth. Immanuel Kant and Rene Descartes, well-known philosophers in modern philosophy, argue that assigning intrinsic value to non-human beings is nugatory. While the former denies non-human beings a moral treatment for their own sake (1997:35), the latter takes them as machines as if they don't have their own will, choices and good (1998:181). For brevity, these two philosophers allocate instrumental value for non-human beings.

Albeit human-centred thinking of the environment has been the governing intuition for many centuries; lately, some thinkers have come up with an alternative environmental theory that questions and criticizes the hitherto dominant view that has legalized humans' unlimited exploitation and subjugation of the environment. The counter-argument proposed by biocentric philosophers against anthropocentrism is that human being is not the only species bestowed intrinsic value; rather, other living beings are holders of intrinsic value too. The point of departure for these philosophers to admit the inherent worth of non-human beings is that living beings, whether they are conscious, sentient and rational or non-sentient, unconscious and irrational, have their own good and interest (Singer, 1993) & (Naess, 1989).

Denying non-human beings an intrinsic value is the first step to involve with the actions: that is an amplified encroachment of humans on the natural courses of the beings in consideration. This unlimited encroachment, in turn, brings an ecological crisis. Aldo Leopold conceives such hostile intervention of human beings with the ecology as immoral and wrong. “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” (1949:14).

The following argument from Moncrieff captures our stubborn behaviour toward nature: “a man-nature dualism is deep-rooted in us. Until it is eradicated not only from our minds but also from our emotion, we shall doubtless be unable to make a fundamental change in our attitude and action affecting ecology” (1973:62). The point here is that unless we should move beyond subject-object (self-matter, dualism) understanding of nature and ourselves, no effective measures can be taken against the variegated environmental crisis.

When non-anthropocentrist, i.e., biocentrist, deep ecologists, animal rights champions extend moral standings, exhibits respect and genuine concerns for non-human beings, they are not contending that human beings should not have any interaction with or make any use of non-human beings (Singer, 1989), Regan, 2003), (Attfield, 2003). They never denied the fact that we human beings are entitled by nature to base our livings upon non-human beings in a limited and justifiable way.

It is utterly true that we Ethiopians lead our lives in exposure to the natural environment; most of us have direct contact with the environment and its constituents daily. We grow up hearing the mosaic voice of animals; we have been blessed with direct access to a variegated fragrance of flowers; the air we used to breathe, the water we quenched our thirst by, the turf we played over were too natural. “Nature serves us in more ways than as a pool of raw materials and a dump for wastes. It provides priceless ecological services, many of which we imperfectly understand. And, undefiled, nature is a source of aesthetic gratification and religious inspiration” (Calscott, 1995:3). Unfortunately, anthropogenic environmental calamity at the national and local levels has surged. The prove for this perpetual crisis is unfolded in many ways: the quality of the environment is losing its naturalness; climate change for bad is at its peak; wilderness is deprived of flora and fauna; polluted water and polluted air-borne diseases are here and there and loss of biodiversity.

For environmental crises is anthropogenic, the exigent resolution is anticipated from human beings. To articulate any effective solution for the extensive environmental problems, first and foremost, humans' orientation toward the environment in general and non-human beings, in particular, should be reshaped. Any kind of approach we adapt to anything emerges from a kind of value we allocate to the thing in question, i.e., the kind of value we attribute to things or beings determines the understandings and treatments we extend to them; it is the value that shapes or influences our behaviour, choice, action and attitude towards something else. Although there are scholars who carried out research on environmental issues and climate change at the national and international level, the anthropogenic ecological crisis is still crying for urgent resolution.

Alemnew et al. examined the Distribution and Ecological risk of Trace Metals in Surface Sediments from Akaki River catchment and Aba Samuel reservoir, Central Ethiopia; and concluded that “the concentrations of Pb, Cd, Mn, Ni and Zn in sediments were relatively greater and at levels that may have adverse biological effects to the surrounding biota” (2018:1); Aaramde et al. evaluated the effect of anthropogenic change of the landscape on the lives and habitat of large mammal animals in Nech Sar National Park; and find out that humans' unlimited intervention with natural course of the park cause the loss of biodiversity in the area(2019); Misgana et al. produce an article entitled “Ideas and knowledge: Supporting Ethiopia to Develop a Climate-Resilient Green Economy”; and the concluding remark is that “Ethiopia is at a crucial stage of Climate Resilient Green Economy (CRGE) planning.
and has taken many innovative approaches to this agenda" (2014:4); Girmachew analyzes "The Policy and Legislative Framework of Environmental Rights in Ethiopia", and he comes up with idea that "environmental rights tend to be anthropocentric" (2012). Likewise, Mulgeta. Scrutinized the "Challenges and Forest-Based Opportunities in The Drylands of Ethiopia", and conclude that "today, many dryland communities are experiencing increasing hardships, frequent droughts and food insecurity, as well as a declining quality of life" (2011:3); Shibru and Kifle examine the environmental policy, and they underline that environmental crisis in Ethiopia is wide-ranging because of the "misguided and unregulated modification of the Ethiopian environment, in particular, the vegetation, soils and natural ecological processes" (1998:7).

All the research mentioned above emphasizes the anthropogenic ecological crisis, and they approach the environment anthropocentrically. This research is different from the aforementioned researches in that it will assess the kind of value allocated to non-human beings. A certain value determines humans' way of treatment of the being in focus. Moreover, the value given to non-human beings is not studied at both the local (east Gojjam zone) and national levels. Since we are in perpetual anthropogenic environmental crisis, the way we approach, treat and evaluate the living constituent of the environment must be the concern of everybody and every institution; because the environment without its elements is abstract.

2. Research Approach and Design

The study used a qualitative approach to investigate value judgment, moral behaviour, attitude, feeling, interaction, action, and principles of human beings for the natural environment and non-human beings in the East Gojjam zone. The study also employed a qualitative case study design because it is used for conducting research that involves an empirical investigation of a particular contemporary phenomenon within its real-life context, events, conditions, interactions by using a variety of data collection procedures. At the same time, this inquiry strategy allows describing, exploring and understanding social and behavioural problems (OSSREA, 2001; Zainal, 2007). Therefore, the study evaluates the treatment of the natural biotic environment; it scrutinizes the normative principle that governs the relationship between human beings and other living species in the study area.

The study used in-depth interviews, semi-structured interviews, focus group discussions, and document reviews to collect the necessary information. Thus, the following data collection instruments were used to collect the primary data. These are: In-depth KI Interview, Semi-structured interview and Focus Group Discussion (FGD), Document Review

2.1 Sampling Techniques and Sample Size Determination

The study used non-probability sampling techniques; the sample units were not selected based on chance but determined by the researcher's judgment. For this study, particularly purposive sampling was employed by taking purpose in mind and the information gained from participants. Thus, people, experts, officials, institutions, and districts of the East Gojjam zone were purposively selected for this study.

2.2 Method of Data analysis

Qualitative data analysis techniques analyze the data through thematic and document analysis, and it is analyzed manually. The data analysis process was undertaken based on the word by word translation of the interviews through reading the notes taken during the interview. At this stage, internalizing the raw data will be emphasized by reading the notes repeatedly.

3. Result and Discussion

3.1 Institutional Understanding of Natural Environments: Animals and Plants

Although some environmental science thinkers interchangeably use the terms 'Environment' and 'Nature', these words imply differently. Regarding this, Dale Jamieson contends that while environment refers to a part of nature that are directly or indirectly affected by human action and choice for good and bad. However, "no such condition applies to what we think of as nature. So the moon, for example, is part of nature but not part of our environment. On this view, the end of nature might be thought of as the beginning of the environment"(2008:2). In other words, nature is that which is out of the reach of human hands and their technology like that of far stars or planets. But the environment is that which consists of entities or elements that have ecological relation with human beings. Thus, it is obvious that the environment is part of nature.

The natural environment consists of all living and non-living things existing naturally; they are not human-made. It includes all elements of creation on earth: human beings, animals, plants, vegetation, microorganisms, soil, rocks, atmosphere, and natural events (Bichena District Office of Natural Resource Management, 2013). Similar to this, the document we get from the Dejen District office of wildlife preservation classifies the natural environment as a part of nature that contains living beings and non-beings (2013). Three participants in the interview give us a similar definition of the natural environment. They state that the natural environment, as the name is self-explanatory, is the entity that is within reach of human beings. That means human beings(a participant gives the clarification among the three) have direct or indirect contact with the elements of natural environments. The other adds that the mountain, the forest, the river, the weather, flora and fauna, and the like are the constituents of the natural environment.
3.2 Institutional Evaluation of Non-Human Beings

The document researcher got from the Gozamen District Office of Agriculture and the manual he got from the Amber District office of Forest Enterprise read that non-human beings are living beings except human beings. As the experts in this office tell us, which is supported by the documents, that animals and plants are valued according to their nature and status. In light of his idea, because we human beings have a natural claim to base our existence on them, we have moral privileges to allocate instrumental value.

The other interview participants in the Gozamen District office of environmental protection unit states that the kind of treatment given by the government in particular and human beings in general to non-human beings presumed different stands. She continues to say that human beings for a century have been giving instrumental, aesthetical and spiritual value for the beings in focus. A friend of her colleague, in interview replies, for the question asked by the researcher (“do we give care for animals and plants only because they are useful for human living?”), that “nothing comes to my mind when I think about why I should care about these creatures except for their manifold benefit to satisfy human interest and desire. I think it is the work of nature or nature works this way. Can have other reason to be cautious of them?” (Experts in Gozamen District Office of Land Administration, 2013).

The kind of value we assign or allocate for something or being obviously determines our actions, attitude, and treatments. The institution we get information from and experts asserts that it is valued behind every government and institution’s effort. The researcher insists that the question is, “what kind of value is given to the non-human beings by individuals, institutions and government”. In what follows, I will present and discuss the answer given by professionals from selected offices at the district level.

Professionals from Enemay District Office of Forest Enterprise enlighten us about their office and individuals’ value to the beings in focus. One participant contends that animals and plants are creatures that are meant to serve human beings; like plants are serving animals by being food, like other lower animals are foods for the other animals, it is natural that human beings make use of non-human beings. He uses this ordinary example to justify his argument that non-human fellow beings have instrumental or extrinsic value for human beings. And he believes that they are created for this purpose. Another expert in the same office forwards his idea in line with the former one that because animals and plants are not like human beings and lack many qualities, it is reasonable to treat them as the means for humans’ end. The other expert of forest enterprise addresses one key question that;

"If you admit the fact that animals and plants are living beings, do you think that these beings have their own interest, and what is expected from human beings in general and from governments and professionals in particulars?"

His reply was that albeit animals and plants are beings with life, but they are not conscious of their interest, activities, goods, and their lives. He says that all that animals and plants do is not out of reason or consciousness but rather out of instinctive impulse. For this official, animals are not aware of their death; they can’t distinguish what is good for and what is bad for them, they don’t have a capacity to abstract that something is useful or not for the others. According to this guy, all this leads us to say that human beings have a moral and natural reason to claim instrumental values out of them (Enemay District Office of Forest Enterprise experts’ and officials’ interview, 2013).

3.3 The Evaluation of Farmers and Local People of Nonhuman Beings

Farmers and local people directly relate to the life of animals and plants. That means these parts of the society intervene with the natural process of the being in consideration. Their way of intervention shows their ways of evolution. One farmer from Amber District tells us that he knows the behaviours interest of animals and plants and acts according to these behaviours and interests. To use his word literally, “like God directs me on my action and like He knows good of me, I am in charge of guiding them toward their good; they don’t know what benefits them and hurts them” (Farmer in Amber District, 2013). His friend in a similar District argues that he considers his animals (domesticated animals) as family members; he has emotional and ethical relations with them. He is certain that his animals identify him or know him as their master. He says they even recognized his voice, and they feel secure when he is around them. He added that he felt their joy and their pain.

Though it was too difficult to make him understand the concepts of value, the researcher could deduce that the farmer allocates instrumental value for his animals and plants. The following statements from him enable the researcher to say that the existence of the beings in focus is contingent on the existence of the farmer and his family. “Animals and plants are nothing if they did not give any benefit for human beings.” In the interview, his friend argues in line with the former one, and he says that “Because God loves us human beings, and He created us in His image, He lets us make use of other creatures” (Farmer in Amber District, 2013). The farmers’ understanding is the idea entertained by Anthropocentrists. “Man can therefore have no duty to any beings other than men, and if he thinks he has such duties, it is because of an amphiboly in his concepts of reflection, and his supposed duty to other beings is only a duty to himself” (Kant,1991:237). As Kant denies these direct beings duty or intrinsic moral treatment, the two farmers in the interview treat animals and plants as a means for the end of human beings. The other three participants of the
interview with farmers and local people hold similar evaluations of non-human fellow beings that they have no natural tendency to set purpose and end in their life; rather, they are created to compliment others’ purpose and end.

3.4 The Evaluation of Religion of Nonhuman Beings

Though there are different religions in East Gojjam, the researcher interviewed only priests from the Orthodox Christian church. Four priests from Gozamen District try to show the evaluation of the Christian Religion of non-human beings. According to one Priest’s assertion in the interview, Christianity views nature and environment as the creation of God. The goes on contending that human beings and Angels are created to praise God’s name and to inherit his Kingdom (Heaven); heaven and earth are created to host creatures; the four elements (earth, air, fire, and water) are created to source creatures; the other creatures are created for wondering (to thought deeply); the other is created to know the existence of God; and the other is created to be food for body and for the soul (Interview with priests in Gozamen District, 2013).

For this Priest, non-human beings are here in this world either to be a source of wonder, food for both body and soul or a reason to praise God and to believe in His existence. The Priest vividly accepts the hierarchical understanding of creation that goes like this: God at the top, Angele> Human beings> animals> plants> inanimate beings. In light of their view and religious scripture (Bible, mainly), the higher the being is in the order, the more natural privilege has to materialize the lower. One the Priest among the other read the following verse from the Holy Bible to justify their anthropocentric understanding of the natural environment.

And God blessed them, and said unto them, be fruitful, multiply, replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth. And God said, Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree that has fruit with seed. And to every beast of the earth, and to every fowl of the air, and to everything that creepeth upon the earth, wherein there is life, I have given every green herb for meat: and it was so (Gen.1:28-30).

This verse enables the priests and the Christian communities to take non-human beings instrumentally. Because Human beings, according to the priests in the interview, are created in the image of God, human beings are allowed to control, use, and intervene with the lives of other creatures. But the other Priest warns the believers not to caricature the above verse from Genesis and the like ideas. This Priest continues to say that when God creates all other creatures and allow us to live according to His will, it does not mean that we human beings have unlimited right to do whatever we please to the natural course of the environment; rather, human beings have spiritual and natural duty to preserve our environments and its elements. The Priest’s idea is advocating weak anthropocentrism. The weak version of anthropocentrism is believed to be the environmental theory that can be applied in tackling the environmental crisis. As Bryan G. Norton states, weak anthropocentrism, without attributing intrinsic value for non-human beings, is entertaining the idea that human beings should adjust or limit their intervention with the environment (1982).

It is possible to say that the researcher could infer from the above discussions, interview and focus-group-discussion that the natural environment in general and animals and plants, in particular, are given extrinsic value.

3.5 Allocating Extrinsic Value for Non-Human Beings and Environmental Problems

An environment without its elements (both living beings and inanimate things) is an abstract concept. That is the way the researcher prefers to approach the natural environments through their living being constituents: animals and plants. But it does not mean that the natural environment is only the composition of living beings.

After the researcher understands that anthropocentrism is the dominant view in the study area, he insists on another kind of question like that of “what is the negative impact of allocating instrumental value for non-human beings in the process of preserving the environment? Can we change our ways of evaluation from anthropocentrism (that prioritize human being at any time at any cost) to biocentrism that ascribe intrinsic value to every living being? What can adapting biocentrism help human beings in preserving biodiversity? Their replies to such questions run as follow.

Albeit thought that human beings need to extend their moral standing to other fellow beings is a strange idea for many interview participants and attendants of FGD, they come to believe that considering all living beings in our moral standards can play a positive role to keep safe the natural balance of the environment.

FGD participants argue that if we human beings can make a shift in the evaluation of animals and plants, we can bring change to our endeavour of protecting the environment. However, there is doubt about the implementation of the non-anthropocentric evaluation of non-human beings. The sources of the doubt are two: first, treating all life forms equally (adapting non-anthropocentrism, biocentrism) undermines human dignity and status. Second, biocentrism seems not to be implemented easily, for living beings, by their very nature, are not equals and similar. Of course, the participants misunderstood the concepts of
biocentrism as if it denied human beings their right to make use out of natural environments. A close examination of biocentrism shows that it never tries to get human beings outside the ecosphere.

4. Conclusion
The findings show that the dominant understanding of the environment in the study area is human-centred (anthropocentrism) that prioritizes the interest of current human beings and the posterity (the future generation) to the wellbeing or natural balance of the environment. All the alleged corrective measures taken by governments against ecological crisis are done out of the calculation that the damage of the environment sooner or later will be the damage of human beings. That means the caution both government offices and human beings extended to natural environments is like that of care given to instruments or tools. That is to say, officials or experts, farmers and local people allocate extrinsic value for the living constituents of the environments. For natural environment is abstract without its elements, it is through animals and plants we approach it. But it does not mean that the beings in focus are the only parts of the environment. Thus, the way these beings are treated and evaluated in the study area can show the kind of value given to the environments. In this regard, animals and plants are treated and evaluated extrinsically; their interest, wellbeing, right to live and will to live is tolerated so far it benefits human beings in one or other ways. The adverse effect of such human-centred thinking and practice in the study area is crystal clear. Because the natural environment and the beings in focus have been denied inherent worth, humans’ intervention with the natural course of the environment is untrammelled in the study area. The alleged reason to deny them moral treatment is that animals and plants cannot think and don’t have a life goal or purpose; rather, they are supposed to serve others with life purpose and goal.

Adapting biocentric thinking and acting accordingly is far-fetched at all. The various stakeholders in the area are not willing to fully think or act friendly to the environment and its elements. Concept such as the animal liberation movement, biocentric egalitarianism and ecological balance is out of the reach of their thinking. Everybody is chasing both his trivial and basic desires at the expense of the life and interest of beings in consideration. Animals and plants that appeared to have no direct instrumental significance are considered obstacles to the fulfilment of human desires. Since life is interwoven and interdependent, magnifying a single species’s interests, rights, and values is irrational and unnatural. Thus extending moral standing to animals and plants is helping them and the ecosystem as whole and human beings. Humans as moral agents and rational beings are expected to adjust their behavior, practices, view, and practice so that they will not be a threat to the lives and flourishing of the being in focus.

Reference
[1] Aaramde, F. (2019). The effects of anthropogenic landscape change on the abundance and habitat use of large terrestrial mammals of Nech Sar National Park. Retrieved from https://doi.org/10.1186/s40068-019-0147-z
[2] Alemnew, B. (2018). Distribution and ecological risk assessment of trace metals in surface sediments from Akaki River catchment and Aba Samuel reservoir, Central Ethiopia. Retrieved From: https://doi.org/10.1186/s40068-018-0127-8
[3] Attfield, R. (2003). Environmental Ethics: An Overview for the twenty -First Century. Malden: Polity Press.
[4] Callcott, J.B. (1984). Non-Anthropocentric Value Theory and Environmental Ethics. American Philosophical Quarterly, Vol. 21, No. 299-309.
[5] Descartes (2008). Discourse on the Method. New York: Cosimo Classic.
[6] Elmursharaf, K. (2012) Qualitative Sampling Techniques Training Course in Sexual and Reproductive Health Research. Reproductive and Child Health Research Unit
[7] Evans, C. (2005) With Respect for Nature: Living as Part of the Natural World. New York: State University of New York Press,
[8] Getachew, S. (2003). Household access to farmland and socio-economic status: the case of Wondakabole, Gozamen wárráda (East Gajjam), Amhara region. A thesis submitted to Addis Ababa University
[9] Girmachew, A. (2012). The Policy and Legislative Framework of Environmental Rights in Ethiopia, in Ethiopian Human Rights Law Series, Vol. IV. Addis Ababa University School of Law: Addis Ababa University Press.
[10] Harrison, P. (1999). Subduing the Earth: Genesis 1, Early Modern Science, and the Exploitation of Nature in Journal of Religion, Vol. 79, No. 1. 86-109.
[11] Harrison, P. (2016). Descartes on Animals. The Philosophical Quarterly (1950-), Vol. 42, No.167 (Apr. 1992), pp. 219-227. Oxford: Oxford University.
[12] Jakobsen, T. (2017). Environmental Ethics: Anthropocentrism and Non-anthropocentrism Revised in the Light of Critical Realism. Journal of Critical Realism Vol.16 No. 2.
[13] Kant, I. (1997). Groundwork of the Metaphysics of Morals” in Cambridge Texts in the History of Philosophy.Ameriks, K. (trans. & Ed.). Cambridge: Cambridge University Press.
[14] Leopold, A. 1949. A Sand County Almanac. Oxford: Oxford University.
[15] Martin, M. W. (2007). Albert Schweitzer’s Reverence for Life Ethical Idealism and Self-Realization Chapman University, USA: Ashgate Publishing Company.
[16] Misgana, E. (2014). Ideas and knowledge: supporting Ethiopia to develop a climate-resilient green economy. Retrieved from: http://www.jstor.com/stable/resrep01606.
[17] Mulugeta, L. (2011). Challenges and forest-based opportunities in the drylands of Ethiopia, in Center for International Forestry Research. Retrieved from: http://www.jstor.com/stable/resrep02127.6.
[18] Naess, A. (1989). Ecology, Community and Lifestyle: Outline of an Ecosophy. Rothenberg, D. (Ed.). Cambridge: Cambridge University Press.
[19] Norton, B. (1982). Environmental Ethics and Weak Anthropocentrism. *Journal of Environmental Ethics* (6):131-149.

[20] Passmore, J. (2009). Man’s Responsibility for Nature,” in Callicott, J. Baird and Robert F(Eds.). *Encyclopedia of Environmental Ethics and Philosophy*. 1. Detroit, Michigan: Macmillan Reference, USA, pp. 142-145.

[21] Paul W. T. (2011). *Respect for Nature: A Theory of Environmental Ethics*. New Jersey: Princeton University Press

[22] Regan, T. (2003.) *Animal Rights, Human Wrongs: An Introduction to Moral Philosophy*: Roman

[23] Shibru, T. and Kifle, L. (1998). Environmental Management in Ethiopia: Have the National Conservation Plans Worked? Environmental Forum Publications Series No. 1. Addis Ababa: Organization for Social Science Research in Eastern and Southern Africa (OSSREA).

[24] Singer, P. (1989). All Animals Are Equal, in Regan, T. and Singer, P. (Eds.). *Animal Rights and Human Obligations*. New Jersey: Prentice-Hall. 148-162

[25] Tadaki, M., J. Sinner, and K. M. A. Chan. (2017). *Making sense of environmental values: a typology of concepts*. *Ecology and Society* 22(1):7. 
https://doi.org/10.5751/ES-08999-220107