



Short Communication

What ought we do to bring back environmental integrity

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Abstract: The civilization of the world has become a threat and distorted environmental integrity in the 20th century. Therefore, environmental ethics is currently getting important in academic considerations. Various public and private institutions such as universities and research centers output throughout the world are now paying attention and seriousness to the environment. This paper focuses on what mankind ought to do regarding the cross-cuttingness of environmental problems.

Keywords: environmental awareness, environmental entities, science and technology on the environment, environmental ethics.

Introduction: Environmental ethics is of vital importance, particularly, where, in this century, man has been seen to initiate anything in favor of himself (anthropocentric), subjecting himself as the only moral standing environmental entity perhaps this is due to his limited holistic understanding on the integrity of life in the environment (ecosystem)¹. The industrial revolution poses the problem of the relationship between human beings and the environment. Urbanization also risks of threatening the integrity of the countryside and natural resources such as forests,

moorlands, wetlands, riverbanks, and watersheds². But at the end the of 20th century, there has been a change in perspective about what to count as having moral standing due to the industrialization explosion regarding their waste outputs. Moral standing extensions are the essence of environmental ethics whereas some environmental entities have been granted moral consideration and ecosystem³. However, the industrial revolution has contributed much to the moral standing extension to animals⁴. Moreover, we had a long time used to consider ourselves



having moral standing, as many people feel the duty for care and attention to non-humans. The more radical eccentrics argue that human life has no greater moral value than nonhuman life, all living things have equal value⁵.

Whilst the discussion on environmental ethics for the preservation of environment or nature in a sustainable manner, there is also a great criticism from those who seem to see themselves as having no obligations and responsibilities for the future generations taken in the sense that they do not know what people of the future will be interested and the unborn cannot reciprocate our actions⁵. Therefore, this article focuses on the movement of what ought we do to bring back environmental integrity by applying several ethical theories such as consequentialism (utilitarianism), virtue ethics, and deontology as well as various other ethical approaches to settle and resolve environmental problems.

Methodology: This article was done by literature search from 2021-2022 at Philosophy and Religious Studies Department, University of Dar es Salaam, United Republic of Tanzania. Books, journals, periodic were reviewed. Pubmed, Google scholar, Embass were the possible search engines. Environmental awareness, environmental entities, science and technology on the environment, environmental ethics were the keywords to search the literature.

Value system for Environment: According to Peter Singer, consequentialists especially utilitarians focus on maximizing utility to the greatest possible number of subjects⁶. Singer's view is sentient, all and only

sentient beings experience value⁷. Singer argued natural areas should be preserved in instrumental grounds such as ecological habitats, and the non-sentient organisms in them are necessary to support sentient animals in leading satisfying⁷.

According to deontologists, intrinsic goodness and badness of actions are the concern⁶. Deontologists are concerned with the right action, not with producing a better state of affairs rather invokes other criteria entirely as well. According to deontology "one should defend an endangered species because it is the right thing to do, not necessarily because it will make the world a better place or be cost-efficient"⁶.

However, virtue ethics concerns the right virtuous action that a behavioral virtuous agent can do⁶. Virtue ethics principle of right action is a qualified (i.e, virtuous) agent principle. The action is right if and only if it is what an appropriately qualified person would do in a situation⁸.

Concerning utilitarianism which is a prominent applied ethical framework in the Western value system, to the extent helps to address environmental challenges but it is not sufficient enough as an approach toward environmental disintegration mitigation since it is imply instrumental treatment of the environment to meet maximum pleasure or utility to the greatest number of subjects whereas there a lot of environmental entities unconscious and cannot feel but they a vital to ecosystem integrity. Hence, the utilitarianism value system fails in the long run of conserving the environment and addressing environmental challenges.

What ought we do to bring back environmental integrity: To bring back the integrity of the environment, the adaption of deontological framework and ecosophy as advocated by Arne Naess. On her one fundamental ethical norm, self-realization which she meant that as human beings, we should not remove anything from nature as we are interconnected with it. Recognizing our wider 'Self' thus identifying ourselves with all other life forms on the planet. Seeing that our planet life forms have intrinsic or inherent value rather than confining intrinsic value to human beings only¹. This vital realization of human beings is an integral part of nature. sharing a true understanding of the environment which is inevitable to be achieved through environmental education in society through our educational institutions and policies.

1. Community's awareness of environmental problems: Since environmental ethics emerged around 1970, still there has not been enough awareness to the public regarding how to relate morally and ethically to their environment. Population without awareness of environmental problems, ethics, and values result in harsh treatment to environmental entities such as wild animals, forests, water and air⁹. Most ordinary citizens in the world have no awareness of how to treat the environment since environmental education has not been incorporated within the educational system⁵. Therefore, environmental education should be incorporated to keep environmental integrity. Environmental education should be one of the priority subjects in primary, secondary schools up to universities and colleges since we are facing a very serious existential

environmental crisis. Government should initiate regular environmental education programs through televisions, radios, magazines, social events, and all possible media of the public (social media) changing people's norms and behavior to adult citizens, parents, and general people⁵.

2. Self-knowledge and Individual Responsibility: Self-knowledge is embedded in once beliefs, practices, behaviors, patterns of thinking, and his relationship with society¹⁰. Knowledge is primary importance as it is the way of basic teachings. In their teachings, nature or environment is pictured and perceived in a holistic sense. Nature is a teacher and nurturer and we are an integral part of nature therefore once we destroy nature, we destroy ourselves¹¹. Respect for nature is a commitment to abide by the moral rules and ethical norms that embody in our attitude¹².

In this issue of self-knowledge, both leaders and ordinary citizens are subject since once both leaders and citizens have examined, clarified their pursuits with integrity then there is the certainty of efficiency of smooth and peaceful governance, as well as the good establishment of favorable environmental policies since representatives in the government, are concerned with the welfare of the public and sustainable development and environment¹⁰. In complex relation between individual agents and environmental, it is moral responsibility not to go by individualistic approaches⁶.

3. Religion on environmental entities: For so long in human history, man has treated his surrounding environment as a mere

means and favoured themselves by positioning in higher hierarchy, which means that they are superior to all other environmental entities, where other environmental entities (non-humans) have been always treated as of having instrumental value (means to an end). This hierarchical thinking is a negative instinct and a threat to environmental integrity that poses environmental problems¹.

The Abrahamic religions nurture the hierarchical thinking in environmental entities since their teachings reveal that all environmental entities are in the world for mere use and in favor of and dominion of man¹³. Therefore, this mentality toward the environment among masses of the global population has led to man's regards of the environment as only and mere instrument and not knowing the deep-rooted relationship, an interdependence that exists between man and nature¹. Actually, God provided all living creatures with the means to sustain themselves permeates patristic and medieval teachings¹³. Patristic and medieval theologians reasoned from their understanding of the world that humans are at the top of this instrumental order, primarily because they are endowed by God with the intellectual capacity to make informed decisions¹³.

However, some theologians reflected on God's care for creatures by maintaining a hierarchically ordered in which non-living and living creatures serve as sources of sustenance for one another according to their natures¹³. Islamism identifies the importance of non-human animals in the environment. Islam emphasizes animals shall not force to bear heavier loads than they can. The animal shall provide enough

food and water where there is water¹⁴. Animals shall not strike at their face because they glorify God¹⁵. Buddhism¹⁶ and Hinduism¹⁷ (though they use woods for burning dead human bodies) they do keenly keep the environment, respect to human nonhuman, plant and mountain. Taoism and many others have been always in chemistry with environmental ethics out of awareness and realization of the deep interconnectedness and relationship between man and nature¹. Thus these spiritual systems are friendly to the environment and in fact that human beings are one with nature rather not superior to other natural entities¹⁸.

Science and Technology on environmental sustainability: Egocentric political elites always are eager to employ science and technology to gain influence and control over others¹⁹. Lack of moral or ethical education, technology is being manipulated by political elites to pursue their private pursuits over the public. Therefore, the development of science and technology is practical and strictly pragmatic restoration tool for disturbing environmental integrity²⁰. If scientists and technologists are educated in morality to pursuits of the common good, then there is a possibility of utilizing the advancement of science and technology for common good where there may care for the integrity of ecosystem and resolution of a humanitarian crisis, that they are likely to be overridden by global or national egocentric political elites to employ science and technology for the betterment of the future generation¹⁹. Royal Society report declared that technology specially geoengineering should determine by social, legal, and political factors as much as by scientific and technical factors²¹.

The Human Population and Economic Tragedy: Rapid growth of population is the cause of environmental disintegration, is the problem to the integrity of ecosystem for maintaining so-called sophistication of life²². The economy under a dense global population becomes much more complex and extremely competitive thus population growth once unchecked, unbalanced leads to surviving life rather than living life²³. Thomas Malthus argued that the population can increase exponentially (ten children, each), but the food production cannot increase exponentially, which will soon strain resources²⁴. This perspective can be translated to the outweighing negative impacts of global dense population where life becomes of surviving, suffering, economically competitiveness, intense urbanization, posing the challenge of environmentally friendly energy resource⁶.

Cross-Cuttingness of Environmental Ethics: Environmental ethics is new in academic environmental education, it touches various disciplines such as environmental science, Physics, Biology, Chemistry, Geography, and environmental economics (businesses) as well as politics⁵. Environmental ethics need the harmonious cooperation of various disciplines particularly science and technology, economics, and politics in ultimate environmental policy formulations. Environmental problems are rooted in interdependent social-ecological systems; no single discipline can adequately explain how those systems work or how best to manage them⁵. The inclusion of different disciplines that contribute towards the resolution of environmental crises is a suitable approach.

Conclusion: The chief concerns of environmental ethics are to restore, environmental integrity and together with sustainability and concern for future generations. Weak sustainability theorists argue if future generations are as wealthy as they will be able to pursue their welfare. On the other hand, strong sustainability makes stronger demands on the present by accounting for more values than economic ones. A sustainable path characterizes into the future requires more specific and more demanding levels of protection for particular resources. Strong sustainability is often advocated by ecologists, who argue that simply counting and comparing human economic welfare across generations is inadequate to track sustainability because major natural systems and their resilience are seen as essential to the wellbeing of future people.

References:

1. Naess N. Ecology, community, and lifestyle. Cambridge University Press, United Kingdom, 1989.
2. Postma DW. Why care for nature? Springer, The Netherlands; 2006:3-4.
3. Des Jardins JR. Environmental ethics: An introduction to environmental Philosophy (4th ed). Wadsworth publishing company, Belmont, California, 2006.
4. Singer P. Animal liberation. (2th ed). Harper Collins, United States, 1975. 2022).
5. Smith KK. Exploring Environmental Ethics. Springer, New York 2018: 18,19-20. <https://doi.org/10.1007/978-3-319-77395-7> .
6. Gardiner SM and Thompson A. Environmental protection--Moral and ethical aspects. Nature--Effect of human beings on--Moral and ethical aspects. The Oxford handbook of environmental ethics. Oxford University Press, New York, NY, 2017: 199,215,230,356,501. DOI: <https://lccn.loc.gov/2016014553> _ (Access 20 March 2022).
7. Gruen Conscious animals and the value of experience., Oxford University Press, United states of America 2016. DOI:

<https://doi.org/10.1093/OXFORD/HB/9780199941339.013.9>

8. Hursthouse R. On virtue ethics. Oxford University Press Oxford, England.1999
9. Okello C, Tomasello B, Greggio N, Wambiji N and Antonellini M. Impact of population growth and climate change on the freshwater Resources of Lamu Island, Kenya. *Water* **2015**, 7(3):1264-1290. DOI: <https://doi.org/10.3390/w7031264>
10. McGeer V. Self-knowledge: Philosophical Aspects. *International Encyclopedia of the Social & Behavioral Sciences*, 2001. <https://www.sciencedirect.com/topics/psychology/self-knowledge> (Access on 2nd Mar 2020)
11. Jayawardena.M, Utumpala.JK, Peries J, and Caldera.AF. When we destroy nature, we are destroying ourselves. WNP conservation Ambassador series to raise awareness on conservation issues. (<https://www.ft.lk/environment/When-we-destroy-nature-we-are-destroying-ourselves/10519-709672>). (Accessed on.12 Mar 2022).
12. Taylor PW. *Respect for Nature*. 25th Ed. New Jersey, Princeton university press, 2011. <https://lccn.loc.gov/2010942223> (accessed 23rd February 2022).
13. Schaefer J. *Reconstructing Patristic and Medieval Concepts. Theological Foundations for Environmental Ethics*. Georgetown University Press, Washington DC, 2009. <https://lccn.loc.gov/2008046567> (Accessed on 20 March 2022). eBook ISBN: 9781589016118
14. Donovan A . 11 Ways Humans Impact the Environment 2020. <https://interestingengineering.com/11-ways-humans-impact-the-environment&ved=2ahUKEwidkMPWj9X2AhUFJhoKHhIFCA0QFnoECAIQAg&usq=AOvVaw17i-tLJBU4DtRSHKxYGv> (Accessed 11th Feb, 2021).
15. Owosho S. Islamic Perspective of Eco-Balance Human-Nature Relation: A Philosophical Examination. *Journal of African Environmental Ethics and Values*. 2011 1: 85-96.
16. Thathong K, A spiritual dimension and environmental education: Buddhism and environmental crisis environmental crisis. *Procedia - Social and Behavioral Sciences* 2012; (46): 5063-5068. DOI: <https://doi.org/10.1016/j.sbspro.2012.06.386>
17. BBC, Environment, part of Religious studies. <https://www.bbc.co.uk/bitesize/guides/zbvqr6f/revi>

[sion/3#:~:text=Most%20Hindus%20believe%20that%20all,%2C%20human%2C%20animal%20and%20vegetable](https://www.bbc.co.uk/bitesize/guides/zbvqr6f/revision/3#:~:text=Most%20Hindus%20believe%20that%20all,%2C%20human%2C%20animal%20and%20vegetable) (Accessed on 12 March 2022).

18. Devall B and Sessions G. *Deep Ecology: Living as if nature mattered*. Gibbs M Smith, Inc. Peregrine Smith Books Salt Lake City 2007.
19. Watt A. *Weather Modification: The ultimate weapon*. Maxwell Air Force Base, Alabama. 1993. <https://apps.dtic.mil/sti/citations/ADA283033>. (Accessed on 2nd Feb 2022).
20. Voulvoulis N and Burgman MA. The contrasting roles of science and technology in environmental challenges. *Critical Reviews in Environmental Science and Technology* 2019; 49(12):1079-1106. <https://doi.org/10.1080/10643389.2019.1565519>
21. Royal Society Report. 2009. <https://royal.society.org>. (web.20th.2022).
22. Malthusian K. *Theory of population*. <https://byjus.com/biology/malthusian-theory-of-population/> (Accessed on 20 Mar 2022).
23. Harley R. *Malthusian Theory of population Growth: Definition & Overview*. <https://study.com/academy/lesson/malthusian-theory-of-population-growth-definition-lesson-quiz.html> (Accessed 20 Mar 2022).
24. Malthus T. *An essay on the principle of population*. Ballantyne press, London, 1798.

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