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## The Impact of Anthropocentric View on the Global Ecology: A Study of Kathmandu Valley

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## 6 Abstract

In this article the researcher unfolds the impacts of anthropocentric view on the environment 7 and ecology of the Kathmandu Valley. The research approach adopted in this article includes 8 the anthropocentric view that separates humans from nonhuman and nature and adversely 9 impacts the environmental ecology. The main conclusions drawn from this study about the 10 impacts of the anthropocentric view to nature are: anthropocentric view separates humans 11 from nonhuman and nature, leads to the global ecological crisis, human centered perspective 12 has caused ecological crisis in the global ecological chain, human centered view through 13 technology has disrupted the natural environment of both urban and rural parts of Nepal and 14 it is even harmful for humans. 15

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17 Index terms— anthropocentric, ecology, environment, impact.

## 18 1 Introduction

he anthropocentric view refers to the human centric view that takes humans as the superior beings who dominate the world and all other beings are means to the human end. According to Charles Darwin's theory of evolution, Homo-sapiens are supposed to have evolved through natural selection. This view paved the way for interpreting the natural world in a different way and the long established view toward the natural world underwent change. This theory itself became a root for human centered views about the universe. This is hypothesized as an anthropocentric view that posits humans at the center and that adversely impacts the natural environment. I argue that anthropocentric views about nature have led to the deterioration of the natural world.

The purpose of this research is to explore whether anthropocentric view impacts the ecology of Kathmandu valley furthermore the reason behind the human centered attitude. Similarly, the aim of this research work is also to judge whether anthropocentric practice is the root cause of ecological crisis in Kathmandu valley.

The research applies some conceptual and theoretical tools to analyze the issues that are a global concern. As the research delimits its scope selecting the geographical area of Kathmandu valley, the issues being discussed and analyzed have a global relevance. To conduct the entire research, both primary and secondary sources have been used. In addition, the concept of environmental ethics and Eco symbiotic perspective have also been employed to analyze the environmental issues in general and Kathmandu valley in particular. Furthermore, I figured out ecocentric ideas through environmental literature and interviews.

As the epistemological assumption, the output of anthropocentric view is tested with environmental issues. Such a test researches whether the anthropocentric views impact on the ecology, and moreover given the pace of urbanization how it is likely to grow in future adding to more ecological predicament of Kathmandu valley. The research attempts to address the following research questions to study the behavior of the people living in the city areas that has promoted anthropocentric view affecting the ecology of Kathmandu valley:

1. What factors have led to the anthropocentric view among the inhabitants of the Kathmandu Valley? 2. How has such an anthropocentric view affected the environment of the Kathmandu valley? 3. How can the views derived from environmental ethics help minimize the environmental pollution at the global level and in the Kathmandu valley in particular? 4. How does anthropocentric view impact ecology? 5. Why is the relation

44 between ecology and nature necessary?

For the followers of anthropocentric view, humans are supposed to have originated as the superior to all 45 nonhuman species. But environmentalists argue that anthropocentrism is ethically wrong and it is the root cause 46 of ecological crisis. Human beings, according to anthropologists and nature biologists, originated much after the 47 world environment turned conducive for living organisms. This clarifies that all life forms including humans would 48 49 not have been possible if nature did not form a life supporting system known as ecosystem. For this regard, the scientific study of nature and living organisms has produced possible evidence. For example, Darwin, a pioneer 50 in this field came up with his theory of evolution that totally negated the divine theory, and yet the theory that 51 explains the creation of the universe has remained inconclusive. In the same way, the universe designed by God 52 with some purpose has been refuted by scientists with the claim that the supreme invisible being as an architect 53 of the universe has no scientific foundation. Among all the species of animals that appeared in nature, the Homo 54 sapiens learned to adapt to nature and live in a community. They also developed a language to communicate 55 with each other. Unlike other species, they also developed tools to accumulate more food and for traveling to 56 other places. These two qualities namely, tools and language made humans distinct from the rest of the animals. 57 They grew up in nature, developed more tools to use resources for survival and also gave name to nature with 58 their inherent cognitive mind. In other words, it is humans who constructed the word nature as they are sentient 59 60 creatures with conscious minds. Concluding the above mentioned data, Pablo Solon, the environment activist 61 argues "The anthropocentric viewpoint is that human beings are the central and most important entity in the 62 world; that humans are superior to non-human life because they are the only ones that have consciousness, values and moral status" (107). Such a feature of anthropocentric view creates the superiority of human beings to the 63 nonhuman that becomes manifest in humans consuming products of nature and manipulating the ecological 64 paradigm to interpret nature and its phenomena. Human dominance over nature has been seen at various levels 65 from global to local. The study aims to examine how such anthropocentric views have led to the global ecological 66 crisis and how the attitude of the inhabitants of the Kathmandu valley too is shaped by the same view that has 67 triggered the deterioration of the environment of the valley. 68

The ecological issue is global and local as well. In global standpoint, the study, compiled over three years 69 by more than 450 scientists and diplomats demonstrates the ecological issue. Highlighting this issue, Jonathan 70 Watts, the environmental editor of the Guardian writes "The biomass of wild mammals has fallen by 82%, 71 natural ecosystems have lost about half their area and a million species are at risk of extinctionall largely 72 as a result of human actions" (Human society under urgent threat from loss of Earth's natural life.). Such 73 74 data elucidates the adverse effect of human activities on ecology that can produce a catastrophe for the entire 75 ecosystem. Furthermore, such global ecology and nature, obstructed by anthropocentric views, is also reflected in Kyoto protocol. Concerning this issue, the Eco critic Jennifer Kuzma argues "The United States exited 76 Kyoto protocol because of the influence of the fossil fuel lobby and its Stranglehold on the Republican Party, a 77 situation that persists today" (10). This fossil fuel lobby apprehends the reduction in human friendly technology 78 and consequently contributes to the decline of ecological equilibrium. On the other hand, censorship in such 79 technology decreases economic output but improves the quality of biosphere. Despite the fact that ecology is 80 more significant than economy, the United States has politicalized Kyoto signature in order to favor the economy 81 rather than ecology which is an entirely anthropocentric view. This ecological issue, produced by the USA, clarifies 82 the lack of solidarity which is an obstacle to protect the ecosystem. Consequently, such human spotlighted view 83 impacts entire terrestrial, aquatic and air ecology including human beings, the fact that the existence of ecology 84 without bio centric view is not conceivable. As a matter of fact, ecological existence is contingent on the relation 85 amid the organisms. Emphasizing on ecological significance, Sylvia Batista illustrates, "It is worth noticing that 86 if we consider ecology as the study of the relations that organisms establish with one another and with their 87 physical surroundings, a post-human reading aims to look at those relations in order to problematize a privileged 88 human position in the world" (187). The above mentioned data point out that all the organisms are in the 89 ecological chain, whereas the privileged humans are in the center of ecology being superior to nonhuman. 90

In addition, the anthropocentric view clarifies that human supremacy challenges the natural environment 91 globally. Furthermore, Eco critic George S. Session researches the ecology and argues, "The search for causes of 92 the environmental crisis has tended to move to the deeper level of examining" (72). This environmental crisis 93 has been recognized in the global scene and consequently appeals to conserve the ecology from anthropocentric 94 impact. The above mentioned data indicates that anthropocentric view produces the boundary between nature 95 and human whereas Vanessa Hull, et al researches the relation between human and nonhuman animals and 96 concludes "In today's globalized world, humans and nature are inextricably linked" (15). But humans' attitude of 97 taking nature for granted and viewing it simply as an object created for him has invited ecological problems. Such 98 an anthropocentric view separates humans from nonhuman and nature and adversely impacts the environmental 99 aspect. 100

Moreover, the anthropocentric view splits human beings as entities from the entire ecosystem including all flora and fauna. This has a deteriorating effect on the relationship between nature and ecology which leads to existential crises of ecology in all three aquatic, terrestrial and atmospheric levels. In the global environment, human highlighted outlooks have marginalized and disrupted ecology. For example, global warming, climate change and declining drinking water resources are evidence to divulge the cumulative impact of anthropocentric views. Such evidence clarifies that human centered perspective has caused ecological crises in the global ecological chain. The fact is that the anthropocentric view is socially fabricated knowledge to produce the intrinsic value for human beings. Moreover, this anthropocentric view produces instrumental value for the nonhuman world. Furthermore, the human centric view through technology adversely impacts the entire ecological predicament. Such data illustrates that anthropocentric views exploit nature and ecology in a vulnerable way. In this context, the paradigm to the adaptation of ecology is essential. In a broader sense, the justice for both human and nonhuman is significant to harmonize the entire ecology.

Additionally, the practices of such a human centered view through technology the surging technology as a tool of anthropocentric view impacts the relation of the biotic and abiotic environment in the earth including lithosphere, hydrosphere and atmosphere. Even scientifically, the researchers have concluded the natural disruption is the consequence of anthropocentric view through technology. Such anthropocentric view has centered the man excluding and othering nature including aquatic, atmospheric and terrestrial ecology. This trend has been increasing at a global level including developed as well as developing countries and Nepal is not exceptional.

Every year, the climatic condition of Nepal is deteriorating which adversely impacts the ecology. As shown above, the cause behind such deteriorating climatic conditions is related to human's perception about nature and their activities. According to the environmental report of The Asian Development Bank, "Nepal faces unique challenges. Temperatures are rising fastest at the highest altitudes, causing quick melting of snow and ice" (7). Such temperature rising and melting of ice justify the sign of climate change. Climate change is directly related to greenhouse gas which is the root cause of global warming.

125 In environmental terms, the human centered view through technology has disrupted the natural environment of 126 both urban and rural parts of Nepal. Moreover, such a human centric idea has produced an adverse impact on the entire ecology. Claiming the impact of anthropocentric ideas, the environmental researcher Ashutosh Mohanty 127 explains "The biodiversity was remarkably rich. But with the growth of population and expansion of the city, 128 large-scale deforestation took place. Concrete jungles disturbing the flora and fauna of the region replaced the 129 natural Jungle" (131). This research of Mohanty illustrates that the deep ecology is also deteriorating in Nepal 130 due to anthropocentric views. The deep ecology rejects anthropocentrism and advocates for biocentrism. In this 131 background, all the flora and fauna have equal rights and intrinsic value. For example, rivers, air and land are 132 sacred in the tradition of Kathmandu valley. While observing the present cultural trend of the Kathmandu valley, 133 the humans have exploited the sacred entity of deep ecology through modernism and consumerism. For instance, 134 the land has been concretized, rivers have been used for the disposal of excrement and air contains emission of 135 old vehicles. While pointing, such deteriorating deep ecology disharmonizes the entire ecology of Kathmandu 136 valley. As a fact, the deep ecology is a sacred relation among the entire living organism. The way humans have 137 disrupted the abiotic world, adversely impacts on the holy entity of ecology. The fact that the biotic world 138 requires an abiotic world for survival. Such data clarifies that deep ecology is at the root of interdependence of 139 all living organisms and non-livings entities. This relation is religious as well as spiritual concept. 140

The research applies different ecocentric and biocentric concepts as its theoretical tools. It includes the concept 141 of deep ecology and environmental ethics as a central focus along with other scientifically oriented theoretical 142 framework to analyze the issues. One dimension of deep ecology manifested in Buddhism that highlights the 143 importance of the forest. Buddhism holds the belief that "forests are delightful, where the world finds no 144 delight, there the passionless, for they not for pleasure" (The Dhammapada). Dhammapada proposes that 145 forests represent the significance of nature and ecology including all the flora and fauna. This doctrine specifies 146 that forest as the representative terrestrial ecology and nature can enhance the delight. This is the way to 147 experience pleasure from nature. On the contrary, the anthropocentric view through technology has consumed 148 and domesticated the forest in Nepal. Accordingly, the destination of anthropocentric view is towards catastrophe. 149 The above mentioned idea clarifies that modern technology and economic activities as the mode of 150 anthropocentric views, have demoted and disrupted nature and ecology. For example, climate change, natural 151 disaster and declining indigenous drinking water. Resources are evidence to reveal the increasing impact of 152 anthropocentric views on ecology. This evidence elucidates that human centered view through technology has 153 created ecological crises in the lithosphere, atmosphere, rivers, lakes and ponds. In the same way, the human 154 centered view evaluates the human as intrinsic and nonhuman as the instrumental. According to L. Goralink and 155 M. P. Nelsion, "Anthropocentrism literally means human-centered, but in its most relevant philosophical form it 156 is the ethical belief that humans alone possess intrinsic value. In contradistinction, all other beings hold value 157 only in their ability to serve humans or in their instrumental value" (Encyclopedia of Applied Ethics). This idea 158 concludes that natural disruption is the consequence of anthropocentric views. Additionally, the practice of such 159 anthropocentric view leads the ecology and natural environment of Nepal towards more natural calamity in the 160 comparison of the past. To save Nepal from natural calamity and ecological crisis, the government of Nepal, local 161 and international organizations have endeavored through environmental acts, pressure and awareness. But most 162 of such efforts are less effective in Nepal. 163

Human activities based on anthropocentric views have polluted the environment of Kathmandu valley adversely impacting the terrestrial and aquatic ecology. Explaining the impact of human centric view, the environmental researcher Sadhana Kaysta and Bidur Upadhya wrote, "The Bagatti River is the dumping ground for domestic and industrial effluents. In the Bagmati river, carbonate contribution is noted to be 32.5 % from carbonate weathering and 67.5 % from silicate weathering" (26). This shows how the residents of Kathmandu, Lalitpur and Bhaktapur are least concerned about the environmental pollution. Similarly, the worsening geological condition of the Bagmati river demonstrates how the increasing urbanization has disrupted the built environments. The

growing modernism and consumerism of Kathmandu city, the rapidly developing materialism and urbanization 171 have skyrocketed the price of the land. This has led to the commercialization of private land consuming it for 172 monetary value and consequently exploitation of forest areas too has increased. Such change in the land use 173 pattern can affect the living organisms that are deprived of its natural environment as ecological predicament is 174 contingent on the proactive role of the human organism. Forest is a source of various human needs. For example, 175 the Eco critic Robin Sears, et al argue "Forests clearly provide subsistence goods and income through provision of 176 forest products" (17). But the forest area of Kathmandu is decreasing every year due to human centric activities 177 affecting the balance between humans and nature. Thus human privilege is the root cause of environmental 178 degradation in Kathmandu valley. Moreover, the technology as the mode of anthropocentric view, is rapidly 179 domesticating the ecology of Kathmandu valley. For example, rivers are biologically dead, and temperature is 180 increasing due to human behavior and unethical environmental practices. Therefore, the natural environment is 181 deteriorating in Kathmandu valley which is the adverse impact of anthropocentric view. 182

To elucidate the idea of environmental studies, the evolving philosophies illustrate the significance of both ecology and nature, the fact that modern society needs both nature friendly ideology and symbiotic harmony solving the unprecedented set of problems. The solution of such a problem is urgent and unavoidable for symbiotic harmony and environmental tranquility. Therefore, an option to ecological conservation is essential to sojourn the adverse impact of anthropocentric view on ecology. However, this is challenging to harmonize the entire ecology of Kathmandu valley due to increasing modernism and consumerism.

189 Besides, the anthropocentric view problematizes the ecology through humanism, modernism, consumerism and technology for the prosperity of homo-sapiens. As claimed by the nature writers, humanism focuses on 190 the privilege of human beings and accordingly endangers both biotic and abiotic environments. Observing 191 this environmental reality, Ehrlich et al, the American Biologist explains, "When humanity exterminates other 192 creatures, it is sawing off the limb on which it is sitting, destroying working parts of our own life-support system" 193 (Sixth Mass Extinction of Wildlife). This data clarifies that the life support system due to humanization, utilizes 194 the nonhuman as the instrumental value. As a result, such a mode of anthropocentric view leads the organism 195 towards the brink of extinction. According to nature writers and environmentalists, the Sixth mass extinction is 196 supposed to happen in the future. This is the adverse impact of anthropocentric views on ecology. 197

In the same way, Consumerism as the mode of anthropocentric view, demands more commodities and appliances and accordingly such human needs are fulfilled through the consumption of natural resources. This is the objectification of nature which disturbs the adaptation of organisms in life supporting ecosystems. As a result, the degree of consumerism is beyond the biospheric capacity. Furthermore Mayell, Hillary explains, "Approximately 1.7 billion people worldwide now belong to the consumer class -the group of people characterized by diets of highly processed food, desire for bigger houses, more and bigger cars, higher levels of debt, and lifestyles devoted to the accumulation of non-essential goods" (67).

The demand of consumers is contingent on modern production. The point is that consumerism, in this background, supports modernism which produces a system to impact on ecology. This type of modern trend emphasizes production exploiting nature and the environment. In fact, anthropocentric views dichotomized the organism as human and nonhuman. Furthermore, the technology as the mode of anthropocentric view contributes to the Homo sapiens to fulfil the consumption.

The anthropocentric view stemming from humanism, consumerism, modernism and technology, centers 210 the human beings and that adversely impacts nonhuman and natural environments. Such an impact of 211 anthropocentric view is against the existence of the entire ecology. The human centered view is even harmful 212 for humans because the existence of homosapiens is not possible without an ecosystem. Therefore this research 213 focuses on why and how anthropocentric view impacts the ecology at a global level and also examines at a 214 micro level how it has affected the geographical area of the Kathmandu valley leading to the environmental 215 deterioration. Thus as the delimitation, this research focuses on the anthropocentric view on terrestrial and 216 aquatic ecology of Kathmandu valley. The major emphasis is on the urban part of Kathmandu valley. 217

As the urban areas of Nepal have witnessed an increasing amount of environmental pollution affecting the quality of life of humans and nonhumans as well as their habitats, the research will contribute to reassessing the attitudes and behaviors of the inhabitants of the

The Impact of Anthropocentric View on the Global Ecology: A Study of Kathmandu Valley Kathmandu 221 valley. This will change their anthropocentric view and develop an eco-friendly view that is likely to bring 222 positive change in the ecology of Kathmandu valley and same to global level. Such environmental awareness 223 contributes to protecting the ecological predicament and nature. The fact that Kathmandu valley has suffered 224 from the massive ecological crisis has been recorded by many researchers and environmentalists. This research 225 is a continuation of examining the same issue but with a different perspective and framework which produces 226 the instrumental value for the conservation of nature and ecology. In addition to such importance, this research 227 rediscovers the value of environmental ethics. 228

In the collusion, modernism, consumerism and technology as the modes of anthropocentric view are the factors to cause the environmental degradation and accordingly ecology of the Kathmandu valley is in crisis. This is a challenging issue because both ecology and modernization are important to us. So, modification in technology seems essential.

In spite of a number of scientific researches, endorsement of environmental acts and commitment of major 233 stakeholders, the implementation side is less effective to improve the environment of Kathmandu valley. Delaying 234 the initialization of environmental acts on time, leads the entire ecology of Kathmandu valley to crisis. Similarly, 235 the impact of anthropocentric views on the ecology is more in the core city area, however, less in the rural area. 236 237 The adverse impacts can lead the ecology on the brink of extinction. In this framework, the human centric 238 perspective is the root cause of environmental degradation as well as ecological crisis. Hence, modernism and 239 consumerism as the mode of anthropocentric view has transformed the green Kathmandu valley into a polluted city which produces the crisis for the entire ecology. 240

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 [Accessed (2020)]
 Accessed
 10.5751/ES-07404-200317.
 http://dx.doi.org/10.5751/

 242
 ES-07404-200317 6 Apr. 2020.
 Apr. 2020.
 http://dx.doi.org/10.5751/

[Dhammapada and Dhp (2021)] '90-99) (online-dhamma.net). Retrieved from www'. (Dhammapada , Dhp .
 buddhanet.com. Accessed 5 Sept, 2021.

[Sessions ()] 'Anthropocentrism and the Environmental Crisis'. George S Sessions . http://www.jstor.org/
 stable/23261527 Humboldt Journal of Social Relations 1974. 2 (1) p. . Department of Sociology, Humboldt
 State University

248 [Mayell (2004)] As Consumerism Spreads, Earth Suffers, Hillary Mayell . https://www.
 249 nationalgeographic.Accessed 2004. 13 Dec. 2020.

[Kayasta and Upadhya ()] Chemical of Bagmati River, Sadhana Kayasta , Bidur Upadhya . 2013. Nepal
 Academy.

[Goralink and Nelson (2012)] Encyclopedia of Applied Ethics, L Goralink, . M P Nelson . 10.13140/2.1.1777.6324.
 www.researchgate.net January 2012.

[Development Bank (2020)] 'Environmental Impact Assessment (DRAFT)'. Asian Development Bank . adb.org.
 *com. Accessed* 1 May. 2020. (Retrieved from www)

[Sears (2017)] Evidence for Forest Contribution to GNH in Bhutan, Robin R Sears . Retrievedfromwww. jstor.org/stable/resrep16275.9 2017. 6 Apr. 2020. p. .

[Battista ()] Posthuman Spiritualities in Contemporary Performance: Politics, Ecologies and Perceptions, Sylvia
 Battista . 2018. Liverpool University Press.

[Mohanty] 'State of Environment in Kathmandu Valley'. Ashutosh Mohanty . Journal of the Institute of
 Engineering 8 (1) p. .

[Hull ()] 'Synthesis of Human-Nature Feedbacks'. Vanessa Hull . 10.13140/2.1.1777.6324. Retrievedfromwww.
 jstor.org/stable/26270 Ecology and Society 2015. 20 (3) .

[Kuzma (2015)] 'Technology governance alternatives'. Jennifer Kuzma . https://research.ncsu.edu.URL:

265 <a href="https://research.ncsu.edu/ges/files/2014/03/Kuzma-Forum-Letter.pdf">https://research.ncsu.edu/ges/files/2014/03/Kuzma-Forum-Letter.pdf</a>>Accessed25
266 Forum Issues in Science and Technology 2015. December 2020. p. .

[Sólon (ed.) ()] The Climate Crisis: South African and Global Democratic Eco-Socialist Alternatives, Pablo Sólon
 Vishwas Satgar (ed.) 2018. Wits University Press. p. . (The Rights of Mother Earth)

[Watts (2019)] URL: <Human society under urgent threat from loss of Earth's natural life/ Biodiversity/The</li>
 Guardian>, Jonathan Watts . May 2019. Sept, 2021. p. 5. (Human society under urgent threat from loss of
 Earth's natural life)

272 [Ehrlich ()] 'Vertebrates on the Brink as Indicators of Biological Annihilation and the Sixth Mass Extinction'. P

R Ehrlich . doi: 10. 1073/pnas.1922686117. Proceedings of the National Academy of Sciences 2020. PNAS. p.