# Causes of the Ecological Crisis: A Brief Discussion

**ENV222 - Pathways to Sustainability: An Interdisciplinary Approach**

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The ecological crisis is the collection of problems of undermining sustainability or equality of the earth systems, such as overconsumption, climate change, or resource exploitation. These problems are often interrelated, multidimensional, and are difficult to tackle as there are many causes. Focusing on the sustainability aspects through a western perspective, this essay discusses three key causes of the ecological crisis, and illustrates how the dimensions of the crisis interact with one another. The three key factors are the overconsumption driven by the capitalistic economic structure, the loss and fragmentation of habitats through urbanization by technological factors, and the alienation of nature that psychologically influences our choices.

A key economic cause of the ecological crisis is the promotion of consumerism through capitalism, which drives the consumption crisis. Today's dominant economic structure involves the idea of free capital accumulation, and consumerism stems directly from it. Consumerism refers to a lifestyle of continuously pursuing, possessing, displacing, and replacing goods or services (Smart, p.5). Although consumption is normal and essential for anyone (Smart, p.4), excess consumption from consumerism behaviours have serious impacts on the ecosystem, which is the essence of the consumption crisis. There is a limit to the supply of natural resources that can be extracted from an area of land or sea in a given amount of time (Hathaway & Boff, p.24; Assadourian, p.4). Since natural resources are used up to make or sustain the supply of consumer products, consuming excessively is raising the demand and pushing it over the limit of supply. It is estimated that humanity is using 1.3 earths worth of resources, as specified by the Ecological Footprint Indicator in 2010 (Assadourian, p.4). This alarming rate of consumption puts a huge pressure on the renewability of the world's ecosystems and is contributing to soil loss and degradation, habitat destruction, species extinction, natural resource depletion, and collapses of ecosystem around the world.

The attractiveness of growth promoted by capitalistic economies affects the ecological crisis on a psychological level. According to Hathaway and Boff (2009), the idea that growth is essential to a healthy economy is embedded in politicians' minds. The attractiveness of growth is simply thought to be an easy way to target poverty, by making the "pie" bigger instead of redistributing it (Hathaway et al., p.29). This illusion is created by the lack of recognition of the limits of supply as discussed above, and widely affects actions of policy makers, entrepreneurs, and other influential figures whose actions can have a significant impact on the ecological crisis.

A key technological cause of the ecological crisis is related to the high degree of urbanization driven by transport and infrastructural technology. Today, over half of the world's population lives in cities; megacities with populations greater than five million are common (Kraas, Aggarwal, Coy & Mertins, p.V). This high degree of urbanization brings environmental impacts ranging from rising GHG emissions, consumption, and land use change. Although urbanization is the result of many factors, technology is ultimately responsible for the sheer extent of urbanization achieved. The inventions and use of machineries with evermore accuracy, speed or efficiency in manufacturing, transportation, and construction, has enabled urban growth on a previously unmatchable scale. Complex urbanization is only possible if there are productive agricultural ecosystems which allows a surplus of food (Marten, p.148), which directly results in overconsumption (Kraas et al., p.10). In turn, overconsumption increases waste, pollution, and land use. Furthermore, urbanization is directly contributing to the loss and fragmentation of natural habitats by replacing wilderness with concrete jungles, which results in an increase in biodiversity loss, that is currently evaluated to be one of the most violated planetary boundaries (Rockström et al., p.22).

The relationship between technology and the ecological crisis is an area of misconception, which complicates the ecological crisis through the psychological dimension. According to Ehrlich and Ehrlich (2004), some believes that technological changes can solve environmental issues. This belief likely stemmed from the idea of blaming "faulty technologies" as the cause of certain environmental issues instead of acknowledging consumption, policy, or other significant causes (Ehrlich & Ehrlich, p.140-1). Although technology certainly is a part of the problem (Ehrlich et al., p.142), using technology as a scapegoat prevents us from acknowledging that environmental

issues are usually caused by a collection of interconnected factors, and fixing one factor cannot solve the whole problem.

An important psychological factor that prevents many from recognising the severity of the ecological crisis is humanity's isolation and alienation from nature. Most, if not all, people have or have had an emotional attachment to nature. This attachment can be as unconscious as appreciating nature's presence, such as enjoying sitting by a tree. This emotional need for nature is also known as biophilia, which is generated during childhood experiences often during casual play (Marten, p.146). The love and respect for nature is arguably the most important factor that urges individuals to adopt ways of living that does not exploit, but protects their environment and ecosystems (Marten, p.146-7; Hempel, p.42). Our connections with nature are also related to the concept of ecoliteracy. "Ecological literacy" (or ecoliteracy) is a term coined by David Orr to describe one's ability to understand the complexity and functions of natural ecosystems (Hempel, p.41). An example of those who posses high ecoliteracy are the inhabitants of an island in the Republic of Palau, where local fishermen identified from first-hand experience, the consequences of global warming, such as coral bleaching (Hempel, p.42). Having ecoliteracy is another way of connecting with nature, and this connection plays an equally important role as environmental science, policy, and management when it comes to protecting the environment (Hempel, p.42). Unfortunately, urbanization and other factors have diluted our emotional connections with nature by separating nature and humanity. This has deeply contributed to ignorant attitudes towards environmental issues, and the rise of anthropocentrism.

The alienation from nature and ignorant attitudes towards environmental issues are undoubtedly embedded in the traditional policy paradigm. According to Carter (2007), the traditional paradigm has shown to be resistant to change since its emergence in the 1970s, despite the apparent flaws and influences of alternative paradigms of sustainable development. In general, government policies in the traditional paradigm can be described as using minimalistic actions to implement short-term solutions which target symptoms instead of causes, while long-term and comprehensive approaches to environmental issues have only been evident in very few countries. Moreover, environmental concerns have little influence in policy decisions as compared to economic factors (Carter, p.181-2). Disregarding or tactically treating environmental issues stems from the inability to see the interdependent relationships between ecosystems and cultural, political,

and economic systems (Carter, p.181), which arises from factors such as the lack of ecoliteracy and alienation from nature.

In summary, the capitalistic economic structure, the high degree of urbanization, and the alienation of nature are three driving forces behind the ecological crisis. Despite categorizing them as three different factors, they are not independent causes. For instance, urbanization contributes to the rise of alienation of nature, and the alienation of nature may accelerate urbanization. The interrelated characteristic of these causes suggests that targeting a factor individually cannot effectively ease the ecological crisis. However, there is still hope: A place to start can be recognizing the significance of the ecological crisis, understanding the interrelatedness of the causes, and most importantly, reconnecting with nature. Encouraging love and enthusiasm for the natural world can affectively reverse the disconnection and alienation from nature, create engagement with environmental issues, and inspire actions to protect the natural world. On a positive note, this aspect can be addressed by anyone: education leaders can decide to include environmental science courses in primary or secondary schools; parents may encourage children to spend more time with nature during casual play; anyone can appreciate nature more often by being in their back yard or visiting a park more often. Afterall, until we can truly care for the natural world and adopt sustainable ways of living, we must realize that we are not apart from nature, but a part of nature.

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