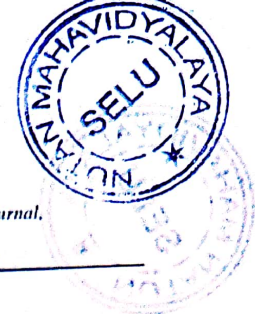


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**Emerging Issues of Environmental Concern**

**Dr. Ishwar Baburao Ghorude , Dr. Kirti Sadhuroo Niralwad**

*\*Department of Environmental Science, Kohinor Arts, Commerce & Science College, Khultabad,  
Aurangabad.*

*\*\*Department of Chemistry, Nutan Mahavidhyalaya, Selu, Parbhani  
Email ID- [ghorade.ishwar@gmail.com](mailto:ghorade.ishwar@gmail.com)*

**Abstract:**

*Environmental issues are harmful effects of human activity on the biophysical environment. Environmental protection is a practice of protecting the natural environment on the individual, organizational or governmental levels, for the benefit of both the environment and humans. Environmentalism, a social and environmental movement, addresses environmental issues through advocacy, education and activism. These disasters take a heavier human toll and come with a higher price tag. In the last decade, 2.4 billion people were affected by climate-related disasters, compared to 1.7 billion in the previous decade. The cost of responding to disasters has risen tenfold between 1992 and 2008. Environmental issues and emerging global challenges in the 21st Century. Humankind has witnessed urgent pressures from the climatic changes and environmental pollution challenges by emerging pollutants. There is overwhelming evidence in the last decades that anthropogenic activities drive global environmental change in what has been come to be called the Anthropogenic 'Era. The majority of scientists and environmental state agencies understand now that chemical pollution needs to be dramatically reduced because it is destroying the environment contaminate food and water, causing diseases in humans and wildlife. Protecting the environment is a long and daunting task, requiring continuous planning, governmental policies, and public and industrial participation.*

**Keywords:** *Environmental issues, climatic changes, pollution, wildlife, governmental policie & Industrial participation.*

**Introduction:**

The United Nations Environment Programme (UNEP) coordinates the organization's environmental activities and assists developing countries in implementing environmentally sound policies and practices. Every year UNEP publishes a Year Annual Book with global environmental problems Also, the UNEP's scientific experts in the last years published annual Frontier reports identifying —emerging issues of environmental concern. The reports provide analytical descriptions of emerging environmental issues and innovative policy interventions, new solutions and adapting existing practices. Environmental issues are harmful effects of human activity on the biophysical environment. Environmental protection is a practice of protecting the natural environment on the individual, organizational or governmental levels, for the benefit of both the environment and humans. Environmentalism, a social and environmental movement, addresses environmental issues through advocacy, education and activism.<sup>1</sup> These disasters take a heavier human toll and come with a higher price tag. In the last decade, 2.4 billion people were affected by climate-related disasters, compared to 1.7 billion in the previous decade. The cost of responding to disasters has risen tenfold between 1992 and 2008. Destructive sudden heavy rains, intense tropical storms, repeated flooding, and droughts are likely to increase, as will the vulnerability of local communities in the absence of strong concerted action.<sup>2</sup> Environment destruction caused by humans is a global, ongoing problem. By the year 2050, the global human population is expected to grow by 2 billion people, thereby reaching a level of 9.6 billion people.<sup>3</sup> The human effects on Earth can be seen in many different ways. A main effect, is an increase in global temperature. According to the report "Our Changing Climate", the global warming that has been going on for the past 50 years is primarily due to human activities. The UN Environment's Sixth Global Environmental Outlook (GEO-6) in 2019 is the most comprehensive assessment of the state of the world's environment. The report also offers a rigorous analysis of Earth's prospects for a healthy future. It contains chapters on the most important environmental issues facing the Earth in the next decades. The most important problems: [https://www.unenvironment.org/interactive/global-environment-outlook/].<sup>4</sup> erpopulation, urbanization and consumption. There are about 7.7 billion people living on Earth in 2019. At the same time these people will be increasingly drawn to life in cities (50% now). It is estimated that by 2050, roughly 68% of the population will live in urban areas. Urbanization increases energy consumption by raising the demand for housing, food, public utilities, land use, transportation, use of more electric appliances, etc.<sup>5,6</sup> Food production and waste for growing population. Earth encounters a rapid global population growth and in addition climate pressures that will affect agriculture. The result will be high demand of more food to feed the additional population. Countries have to use greater efficiency and resilience in food production and to encourage people everywhere to adopt diets that are more sustainable (reduce meat consumption).



Food waste is a huge part of the problem. About 1/3 of all food produced for human consumption is ultimately lost or wasted.<sup>7,8</sup> Climate change and rising temperatures, Floods, droughts, forest fires and other climate disasters are already disrupting Earth's food supply, natural resources and human health. Such threats will probably become more frequent in the future.<sup>9,10</sup> Biodiversity is under serious threats as a result of human activities in exploiting natural resources (air, soil, marine environment, forests, aquatic resources). The main dangers worldwide are population growth and resource consumption, climate change and global warming, habitat conversion and urbanisation, invasive alien species, over-exploitation of natural resources and environmental degradation. The three greatest proximate threats to biodiversity are habitat loss, overharvesting, and introduction of exotic 7 species. Toxic pollution, have specific targeted effects on species, but are not generally seen as threats at the magnitude of the other causes.<sup>11,12</sup> Overexploitation of natural resources and ecosystems. Throughout of the history of established human societies their survival dependent on exploitation of natural resources. Even primitive humans have manipulated natural resources to produce the materials (food, energy, construction materials, medicinal products) they needed to sustain their growing populations. Natural resources are an important material basis for a stable natural economy and social development. With industrialization and urbanization mankind's demands for natural resources increased substantially and large scale exploitation and consumption resulted in deterioration and exhaustion of nonrenewable natural resources. The overexploitation of natural resources (air, water, soil, forests, minerals, etc) and Earth's ecosystems by humans has long-lasting consequences for the future provision of natural resources and ecosystem services. Inevitably if this trend continues there will be problems in the provision of food, increase health hazards and risks of natural disasters. Emission of greenhouse gases (GHG) may affect the global climate for centuries, the non-sustainable harvest of fisheries and forests may leave these systems degraded for decades. The limitations of natural resources has 8 been widely recognized by the scientific community and the transition to sustainability constitute the focus of an ongoing debate.<sup>12,14</sup> The global problem of hazardous/toxic waste. Hazardous or toxic wastes (liquid, solid and sludge) are discarded materials that can cause substantial threats to environmental resources (air, water, soil) and to human health. Hazardous waste is dangerous byproduct of a wide range of activities, including manufacturing, farming, water treatment systems, construction, automotive garages, laboratories, hospitals, and other industries. Hazardous waste contains chemicals, heavy metals, carcinogens, pathogens, radioactive or other toxic materials. Hazardous waste are also municipal and households generated waste, from items such as discarded food, plastics, furniture, batteries, used computer equipment, and leftover paints or pesticides. On a global scale humans produce every year more than 400 million tons and the amount is increasing.<sup>15</sup>

#### **Ecological connectivity: A bridge to preserving biodiversity:**

Large-scale industrialization has resulted in widespread fragmentation of previously intact landscapes around the globe. From the clearance of richly populated rainforests to the damming of mighty, arterial rivers, the knock-on effect of isolated, impacted ecosystems is detrimental to the health of flora and fauna alike, and in severe cases, threatens species extinction. Landscapes are also not limited to the terrestrial realm as ecosystem connectivity extends beyond continental shores into marine seascapes and the oceans. Initiatives to promote landscape connectivity are offering hope in various global locations, but much more focus in planning to reconnect habitat patches or preserve existing connectivity is needed. This is vital to preserving the remaining biodiversity and to protect the interlinked ecosystems on which we all depend. National efforts require expansion to the international level, as ecosystems are not bounded by country borders. From marine reserves to wildlife corridors and beyond, this wide-ranging chapter explores the issues of, and solutions to, fragmentation in the natural world and the imperative for joined-up thinking in planning for the preservation and conservation of biodiversity and species survival.

#### **Emerging and neglected zoonotic diseases**

The 20th century was a period of unprecedented ecological change, with dramatic reductions in natural ecosystems and biodiversity and equally dramatic increases in people and domestic animals. Never before have so many animals been kept by so many people—and never before have so many opportunities existed for pathogens to pass from wild and domestic animals through the biophysical environment to affect people causing zoonotic diseases or zoonoses. The result has been a worldwide increase in emerging zoonotic diseases, outbreaks of epidemic zoonoses as well as a rise in food borne zoonoses globally, and a troubling persistence of neglected zoonotic diseases in poor countries. Around 60 per cent of all infectious diseases in humans are zoonotic<sup>16</sup> as are 75 per cent of all emerging infectious diseases.<sup>17</sup> On average, one new infectious disease emerges in humans every four months.<sup>18</sup> While many originate in wildlife, livestock often serve as an ecological bridge between wildlife and human infections. This is especially the case for intensively reared livestock which are often genetically similar within a herd or flock and therefore lack

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the genetic diversity that provides resilience: the result of being bred for production characteristics rather than disease resistance.<sup>19</sup> An example of livestock acting as a "disease bridge" is the case of bird flu or human influenza pathogens, which first circulated in wild birds, then infected domestic poultry and from them passed to humans. The emergence of zoonotic diseases is often associated with environmental changes or ecological disturbances, such as agricultural intensification and human settlement, or encroachments into forests and other habitats.<sup>20</sup> Zoonoses are also opportunistic and tend to affect hosts that are already stressed by environmental, social, or economic conditions.<sup>21</sup>

#### Conclusions:

Environmental issues and emerging global challenges in the 21st Century. Humankind has witnessed urgent pressures from the climatic changes and environmental pollution challenges by emerging pollutants. There is overwhelming evidence in the last decades that anthropogenic activities drive global environmental change in what has been come to be called the Anthropogenic 'Era. Modern human societies have engaged in increasingly disruptive modes (increasing non-renewable energy use, consumption and waste of food, increasing exploitation of natural resources). Overpopulation and urbanization caused immense changes in the water cycle, imbalances and degradation in the marine and terrestrial ecosystems, acidification of the oceans and degradation of forested area. Despite the increasing numbers of international treaties, national and international regulations to reduce air pollution and water contamination by toxic and hazardous chemicals, a high proportion of pollutants are still discharged in air, sediment, rivers, lakes and open seas, oceans. The majority of scientists and environmental state agencies understand now that chemical pollution needs to be dramatically reduced because it is destroying the environment contaminate food and water, causing diseases in humans and wildlife. Protecting the environment is a long and daunting task, requiring continuous planning, governmental policies, and public and industrial participation.

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