

Environmental Quality is a Global Issue

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Abstract- Environmental quality is a major international issue all around the globe. Humans have faced poor environmental conditions throughout history, but what we think of as environmental problems became more common and apparent with industrialization and urbanization. Concern over air and water pollution rapidly spread to a range of other conditions—soil erosion, pesticide contamination, deforestation, declining animal populations and species, and so on—through the efforts of environmental scientists, activists, and policy-makers.

Key Words: Environment, contamination, global, urbanization, services.

INTRODUCTION

Environmental problems, especially human-induced climate change, continue to have a prominent place on the international policy agenda. Environmental problems is a ubiquitous but vague concept, and we begin by clarifying the nature of these problems and how they emerge from human use of the environment by employing some basic concepts from ecology. Ecologists note that the environment provides many goods and services for human beings [1] but we can simplify these into three general functions that it performs for human populations and all other species [2]. First, the environment provides us with the resource necessary for life, from clean air and water to food and shelter, as well as the natural resources used in industrial economies. In providing what ecologists term the sustenance base for human societies, the environment is serving a supply depot function [3]. It supplies us with both renewable and non-renewable resources, and overuse of the former (e.g., water) may result in shortages and the latter (e.g., fossil fuels) in potential scarcities. Second, in the process of consuming resources humans produce waste products; indeed, we produce an enormously greater quantity and variety of wastes than does any other species. The environment must serve as a sink or waste repository for these wastes, either by absorbing or recycling them into useful or at least harmless substances. When the waste products (e.g., city sewage or factory emissions)

exceed the environment's ability to absorb them, the result is water and air pollution. Finally, like all other species, humans must also have a place to live, and the environment provides our habitat where we live, work, play, and travel (e.g., homes, factories, shopping malls, transportation systems, and recreational areas). Thus, the third function of the environment is to provide living space for human populations [4]. When we overuse a given living space - from a city to the entire Earth overcrowding and/or overpopulation result. In sum, when humans overuse an environment's ability to fulfill any single function, environmental problems in the form of pollution, resource shortages, and overcrowding and/or overpopulation are the result. Yet, not only must the environment serve all three functions, but, when, a given environment is used for, one function its ability to fulfill the other two can be impaired. Incompatibilities [5] between the living-space and waste-repository functions are apparent, for example, when using an area for a waste site makes it unsuitable for living space. Similarly, if hazardous materials escape from a landfill and contaminate the soil or water, the area can no longer serve as a supply depot for drinking water or agricultural products. Finally, converting farmland or forests into housing subdivisions creates more living space for people, but means that the land can no longer function as a supply depot for food or timber or as habitat for wildlife. Separating these three functions and analyzing conflicting uses of them provides insight into the evolution of environmental problems over time.

The energy crisis highlighted the dependence of modern industrialized nations on fossil fuels, and thus our vulnerability to energy shortages ultimately stemming from the finite nature of the global supply [6]. Developments have occurred in nations around the world, particularly with increasing industrialization and resource use, resulting in the global spread of local and regional environmental problems. In addition, problems stemming from functional incompatibilities at larger geographical scales have become common in

recent decades. The quest for living space, agricultural land, and timber leads to tropical deforestation and loss of biodiversity, while use of the atmosphere as a waste site for aerosols and greenhouse gases produces ozone depletion and climate change.

Global warming, in turn, threatens to make some land areas (particularly coastal zones) less habitable or agriculturally productive while also producing changes in Ocean temperature[7] that are harmful to invaluable coral reefs and fish populations on which humans depend. The geographical scale of these problems and their impacts combined with the international diffusion of more localized problems clearly constitute a globalization of environmental problems. The above examples of how human activities are affecting the ability of the environment to serve as our supply depot, living space, and waste repository focus on specific aspects of particular environments such as a given river's ability to absorb wastes without becoming polluted. It is more accurate, however, to note that it is not the environment but ecosystems and ecological processes that provide these three functions for humans — and for all other species. Exceeding the capacity of a given ecosystem to fulfill one or more of the three functions may disrupt not only its ability to fulfill the others, but to continue functioning at all [8]

In other words, current populations and lifestyles are exhausting nonrenewable resources like fossil fuels; creating shortages of renewable resources such as fresh water, fisheries, and forests; and generating accumulating levels of pollution, particularly hazardous wastes. Another way of putting it is that the ever-growing human population is exceeding the long-term carrying capacity of the global ecosystem. These studies demonstrate that wealthy and militarily powerful (or core) nations are able to use poorer (both peripheral and semi peripheral) ones as supply depots, obtaining a growing portion of the natural resources they consume from those nations occupying more peripheral positions in the world economic system. Likewise, wealthy nations increasingly use poorer nations as waste repositories by shipping wastes to them for disposal, locating polluting industries in them, and overusing the global commons (oceans and atmosphere) on which all nations depend. It is argued that partly through this vertical flow of exports from less developed countries, more developed and militarily powerful nations are able to at least partially

externalize their high levels of consumption-based environmental costs to the former. This in turn tends to increased levels of environmental degradation within the borders of the less developed nations while also suppressing their domestic levels of resource consumption [9]. For example poorer nations may replace forests that provided sustainable supplies of plant and animal life for local populations with vast and privately owned coffee farms or cattle ranches whose yields are primarily exported to wealthy nations. Generally speaking, the populations of wealthier and more militarily powerful countries are positioned advantageously in the contemporary world economy and are thus more likely to secure and maintain favorable terms of trade allowing for greater access to the natural resources and sink (or waste-repository) capacity of areas within less developed countries. These structural relationships allow the wealthy and powerful nations to partly outsource or shift the environmental costs and burdens of their extremely high consumption levels, which ultimately contributes to the depletion of natural resource stocks in less developed countries. It is tempting to conclude that economic globalization is inevitably harmful to the environment. However such a conclusion would overlook the potential for other forms of globalization to mitigate the environmental harms associated with ecologically unequal exchange relationships and the outsourcing of resource intensive and polluting industries to poorer nations. For example along with the emergence of public concern for the environment observed in nations around the globe[10], the growth and reach of international nongovernmental environmental organizations and the establishment of environmental ministries and regulations in national government have increased in recent decades[11]. Recent research shows that such civil and political forms of globalization appear to have the potential to mitigate to some extent at least the environmental harms caused by forms of economic globalization, particularly the harmful effects of foreign direct investment in poor nations [12-16]. In sum, while some forms of economic globalizations have thus far contributed to environmental degradation both within poor nations as well as globally. Perhaps the current ecologically unsustainable trajectory of humankind can be altered but doing so will require a globalization of effective social and political action on behalf of sustainability.

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