

THE EUROPEAN UNION AND SUSTAINABILITY: MITIGATING ENVIRONMENTAL PRESSURES AND VISION FOR 2050

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ABSTRACT

The European Union has been in the forefront of environmental preservation efforts throughout the world since the 1970s. According to statistics collected from throughout the world, environmental pressures have been reduced. These achievements are all the more remarkable when one considers the significant shifts that have taken place in Europe and around the world over the course of the last several decades. The substantial increase in the economy during this time period would have had far more severe consequences on health systems and human health if a comprehensive policy agenda had not been implemented during this time period. The European Union has shown that well-designed policies that are compelling are not only successful but also generate enormous benefits. An attractive future vision for the year 2050 is being developed by the EU as a foundation for the well-being of its people. This vision calls for a low-carbon society, a green and circular economy, and resilient ecosystems. A multitude of mechanisms that allow the flow of people, money, products, and ideas in both directions are made possible as a result of globalization. These methods provide Europeans with a connection to the rest of the world. In point of fact, realizing what it means to conduct one's life in accordance with the boundaries imposed by the planet is a very difficult task.

KEYWORDS: *environment, pollution, globalization*

INTRODUCTION

Environment refers to the natural conditions and materials of the Earth, including air, water, soil and subsoil, all atmospheric levels, organic and inorganic substances, and living organisms, as well as natural systems including the elements (Bran et al., 2020). The deterioration of the environment is the result of both natural and human causes (Rădulescu & Burlacu, 2019). If natural factors such as hurricanes, earthquakes, and volcanic eruptions occur intermittently, at varying intervals of time, and for short durations, then the anthropic factors (due to human action) manifest continuously, and their negative effects are consequently much more severe, even threatening the occurrence of planetary catastrophes (Bran et al., 2019).

Creation of nature, man acted upon it, molding it into his own interests, while simultaneously becoming the creator of the living environment, an action that dictated the development of his intellect at the same time.

Through his ability to discover, invent, and create, he has been able to make extensive and rapid, even explosive, changes to nature, transforming the environment to his advantage and that of his fellow man (Bodislav et al., 2019). However, he is also capable of causing incalculable damage when acting abusively, irrationally, without knowledge of their laws and without strict observance of these laws. Lack of knowledge has caused many well-intentioned individuals to persevere in acts that harm the environment, without recognizing that they too have contributed to this. Changes to the environment

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have often been sluggish and difficult to detect, despite the fact that some of them, although seeming modest, have caused lasting harm, such as the widespread use of pesticides, mercury contamination, the usage of dangerous materials such as asbestos, etc (Mogos et al., 2021).

All of this has resulted in a shift in the public opinion position of governments, which have moved to deliberate actions to find and apply the most appropriate measures, based on the level of understanding of the available material and technological phenomena and resources, and a greater sense of responsibility for environmental protection - humanity's most valuable shared resource.

This study is the outcome of an attempt to evaluate the topic of environmental protection from an economic viewpoint - the economic efficiency of this activity - using methodologies that combine environmental economics theory with experience.

1. THE CONCERN WITH POLLUTION AND THE IMPORTANCE OF PROTECTING THE ENVIRONMENT

Existence's challenge might be stated as follows: Is there a system of prices and quantities that ensures the general equilibrium of the economy and also leads to an equilibrium connection with natural environments? Formalizing the nature of a balance with natural ecosystems is challenging.

Any economic system that utilizes pricing as a mechanism of allocating both intra- and inter-temporal resources fails the equilibrium economy-environment test. This is mostly due to the fact that changes in the economy always have material and energy flow consequences for natural systems (Profiroiu et al., 2020).

As entropy rises, so does our misunderstanding of how dissipated residues act throughout the network of linked ecosystems that serve as the physical foundation of all economies (Radulescu et al., 2020).

In the environmental economy, the importance of updating in intertemporal allocation choices remains a contentious subject. Concerns are raised by ecologists since the upgrading seems to advance societal costs over time. In terms of the expanded equilibrium concept, updating threatens the long-term equilibrium by "storing" combinations of problems for future generations: high rates of refreshment tend to encourage depletion of today's non-renewable resources rather than tomorrow's; they permit the adoption of untested technologies that impose costs on future generations (solving the problem of radioactive waste and closure of nuclear power plants, groundwater contamination, global warming, ozone layer destruction, etc.).

More than half of these expenditures were made by Germany and France: Germany's environmental expenditures account for almost 35% of all EU environmental expenditures and France's environmental expenditures account for 19%. It follows the United Kingdom (12 percent), Italy (10 percent), and the Netherlands (8 percent). These five nations account for over 85 percent of total expenditures. By comparing a country's environmental expenditures to its GDP, it is determined that the environment is most significant in Austria, where it comprises 2.6% of GDP, followed by the Netherlands (2.3%), and Germany (2%). Greece, Italy, Belgium, Ireland, and Spain invest less than one percent of their GDP to environmental protection. France is in the center of the pack, spending around 1.5% of GDP on environmental protection.

Waste management accounts for 42% of all environmental expenditures, making it the most expensive environmental service. The management of waste accounts for 29% of worldwide expenditures, followed by the battle against air pollution at 19% of the total. These three industries represent just 90 percent of worldwide environmental expenditures.

Soil rehabilitation is sometimes considered a subsector of waste management, in part because waste management businesses are frequently the ones to deplete polluted soil.

Environmental expenditures account for up to 40% of investment costs and up to 60% of operational expenses inside the European Union. The distribution of these two categories of spending varies by industry and nation.

Labor is a significant factor in the waste management industry, which has a high proportion of operating expenses (Ladaru et al., 2022). In the fields of air pollution and cleanup, the allocation between operating and investment expenses is more equitable (Florescu et al., 2019).

The private and public sectors play vastly different roles throughout the nation, with the public sector contributing more to the funding of environmental expenditures in southern states. In Spain, Portugal, Greece, and Italy, public agencies account for two-thirds of total expenditures.

In the nations of Northern Europe and Central Europe, the private sector is assuming a greater role. In Austria, for instance, environmental expenditures on firms accounted for 44% of overall expenditures in 2015, up from 30% five years before. Only in the United Kingdom are private sector expenditures much more than governmental sector expenditures. This is due to privatization plans, particularly in the sanitation and waste treatment sectors.

2. GMO'S VERSUS NATURALLY BREAD

Genetically modified foods are created with comparable or enhanced qualities compared to conventionally produced foods, and are available as fresh foods such as vegetables and fruits, or processed foods such as soy or oil derived from genetically modified maize. Using recombinant DNA technology, genetically engineered foods are produced by tampering with the genetic identity of the organism. Utilizing cutting-edge biotechnology has repercussions on science and the environment, as well as economic, social, and ethical consequences. Numerous groups and organizations have openly criticized the subject of plant and food production via biotechnology, boycotted specific goods, and refused categorically to sell them. In reality, the creation of these meals has become a point of weakness for all decision-makers involved, from research to the desire of major corporations to dominate the food industry, leaving the customer in the difficult position of selecting the most nutrient-dense, health-promoting foods.

Due to the extensive use of chemical fertilizers and pesticides, new plant and animal husbandry techniques, and creative automation techniques, American agriculture has been more productive during the last half-century. The United States has 30 million hectares of genetically modified plant cultivation, the most of any country. Clearly, water pollution, soil nutrient depletion, and the harmful effect on insects and birds are the price of this accomplishment.

This form of farming has had a severe effect on rural communities, put on the market fruit and vegetables with pesticide residues, and, in certain instances, developed a culture of eating fruit and vegetables with an attractive look but no flavor.

However, organic farming is one of the responses to contemporary agricultural practices. Organic farming preserves the environment by minimizing the use of chemical fertilizers and pesticides and preserving the soil. About four percent of the food produced in the United States is of organic origin, because of the influence of the new organic farming techniques. Even though organic foods are more expensive than conventional ones, this is the case on the European Union market, because in Romania these issues are not clearly brought to the attention of the public by competent authorities, and not always applying organic methods is safe for protecting the environment and achieving the marketing standards demanded by the European market - shape, color, and taste.

On the other hand, genetic engineering has the potential to boost production per hectare, to safeguard water resources and biodiversity, but these features of the advantages of using both forms of agriculture have sparked debate among scientists and farmers. However, there are good aspects to the growing of genetically modified plants, since it minimizes the use of hazardous pesticides, therefore protecting water resources and preventing soil erosion. Will plants that are resistant to flooding or that can thrive in low soils be able to grow? Some customers have skepticism over the usage of biotechnologies, stating that this sort of crop generates ecological issues and that food may be harmful or allergenic.

Globalization does not just imply that global trends have consequences for Europe's society, economy, and environment. It also indicates that the consumption and production habits of a nation or area lead to environmental challenges in other regions.

The ecological repercussions of European consumption and production may be seen from two distinct angles. Initially, a "production" approach analyses the pressures from resource consumption, pollution, and environmental deterioration across Europe. Secondly, a "consumption" viewpoint focuses on the environmental pressures on the resources utilized or the emissions inherent in the goods and services consumed in Europe, both those produced in Europe and those imported from outside the continent.

CONCLUSIONS

In recent years, the international community has vigorously discussed the potential that climate change threats may undermine international security. Numerous nations, including the United States, the European Union, and others, have commissioned studies to examine the possible effects of climate change on their national security. Numerous years have passed since the European Union assumed a leading position in developing international collaboration to combat climate change concerns via its different policy instruments and activities with dissimilar parts of the globe.

The EU is especially concerned about the spillover impacts of climate change challenges, whereby climate-induced migrations from third countries might have incalculable implications on its territory. In this sense, it has established special policies to address the effects of climate change in a number of developing nations and to promote more international collaboration in this area. Recognizing that the challenges posed by climate change are multifaceted and that no one nation can successfully address them, the European Union and the African Union have undertaken collaborative policy measures to address climate change concerns.

Despite the current legislation, new laws are required to be completely in line with new developments in the agricultural sector, particularly in light of the many and significant ramifications of privatization and changes in the ownership structure. Absent are realistic and suitable agricultural policies based on an accurate evaluation of the current circumstances. Currently, agricultural development need regulations that both stimulate agricultural activities and impose restrictions (incentives or penalties) to avoid illogical farming practices.

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