Chapter 10 The Sustainable Development Approach in the Economy– Ecology Dilemma

Gökhan Tenikler Dokuz Eylül University, Turkey

Gamze Yıldız Şeren Namık Kemal University, Turkey

ABSTRACT

The managerial model of cooperation and dialogue-driven, international, and supranational efforts during the past half-century form one of the most important topics within the "sustainable development" concept. Rapidly growing human population, together with the unsustainable pattern of consumption of renewable natural resources for future generations, also leads to the transfer of resources. The concept of development in keeping with ecological concerns about the impact of the dynamic approach should be reformulated. Faced with such dilemmas, these debates illustrate the need for a rational approach. Without jeopardizing the needs of future generations, to meet the demands of today's resource usage, the authors envision a sustainable development approach that seeks to balance protection and use. This approach should be addressed in the context of an understanding.

INTRODUCTION

The world we live in entered into a recent flurry of ends which can be estimated even today. However, this haste is not likely to be fulfilled only by those living in the present time, but needs to reach into future time.

So what's all the fuss about; what is the reason for this concern? Actually it is not too difficult to answer this question; the answer is very clear: Unsustainability. This concept corresponds to the expression: END OF LIFE.

DOI: 10.4018/978-1-5225-3817-2.ch010

The Sustainable Development Approach in the Economy-Ecology Dilemma

It is mandatory to ensure continuity of natural resources, the living and non-living environment that constitutes the environmental components. So it is possible to separate these resources into two categories: living and nonliving resources (Keleş, Hamamcı & Çoban, 2012).

Live natural resources are biologically diverse and are composed of plants, animals and microorganisms. Humans are also a part of biodiversity and the life chain. Extinction of one of these species endangers other species which complement all the types generating the chain. If the Protection-usage balance cannot be established in a healthy way, the shortened chain may eliminate humans in the future. Commissioned by the United Nations Environment Program (UNEP), in 1995 the "Global Biodiversity Assessment" scientific report disclosed that about 1000 generations of species could rapidly become extinct (Türkman, 1998). Again, in 2010, declared the Year of Biodiversity by the United Nations, the International Union for Conservation of Nature (IUCN) reported that 44% face this danger, while 2% were also completely accounted for as extinct, of a total of 47,677 species on the IUCN's Red List (United Nations Environment Program [UNEP], 2010).

Essential and gradually decreasing living resources for food and agriculture are among the important advantages a country can have these days. The world's arable lands and water resources are rapidly becoming polluted and destroyed. Scientists agree that people will face a serious food and water problem in the near future. In the light of these developments, a country's biological diversity, particularly in terms of genetic resources, confers the status of a great power, because wild living resources are utilized to develop varieties with high production potential and resistance to environmental pressures (Convention on Biological Diversity [CBD], http://www.bcs.gov.tr/biodiversity/biodiversity.php).

Nonliving natural resources needed to sustain biological diversity are air, water, soil habitats and the subterranean base. The relative importance of these resources has an economic rather than ecological basis. As a result of unlimited economic growth, resource depletion has accelerated, creating the danger that the resources will fail to perform their functions due to global warming, soil erosion, and atmospheric pollution.

The exit point of the problems of living and non-living natural resources is related to conservation vs use, or "ecology" vs "economy", and reconciliation of these conflicting values.

The term "ecology" was first used by the German biologist Ernst Haeckel in 1866 (Keleş et al., 2012). He combined the Ancient Greek "Oikos", meaning "house, home, dwelling place, habitation" with the word "Logia", which means "speaking, discourse, treatise, doctrine, theory, science" (Okologie). In this respect, the word "ecology", derived from a discipline that identifies the subject areas of creatures' lives, encompasses the meaning "home science".

The etymological root of the word "economy" is similar to that of ecology. It (oikonomia) is derived from a combination of the Ancient Greek word for "home" (oikos) with the word for "law, management" (nomos). Economy might thus denote "thrifty household management", because in this context it incorporates the meanings "household management" and "being frugal, being thrifty".

However, the word "economy" has moved away from this meaning nowadays. Modern economics has lost its roots in the Greek word oikonomia (household management). It has instead absorbed chrematistics, or the maximization of short-run gain (Pearce, 1998, from Hayward, 1995).

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/the-sustainable-development-approach-in-theeconomy-ecology-dilemma/189896

Related Content

Urban Green Innovation: Public Interest, Territory Democratization and Institutional Design

José G. Vargas-Hernándezand Karina Pallagst (2020). International Journal of Environmental Sustainability and Green Technologies (pp. 57-73).

www.irma-international.org/article/urban-green-innovation/243404

Use of Artificial Neural Network for the Construction of Lorenz Curve

Sudesh Pundirand Ganesan R. (2014). *International Journal of Green Computing (pp. 12-23).* www.irma-international.org/article/use-of-artificial-neural-network-for-the-construction-of-lorenz-curve/113748

An Overview of Internet Developments and their Impact on E-Government in South Africa

Goonasagree Naidoo, S. Singhand Niall Levine (2013). *Technology, Sustainability, and Rural Development in Africa (pp. 188-202).*

www.irma-international.org/chapter/overview-internet-developments-their-impact/75594

Green, Sustainable, or Clean: What Type of IT/IS Technologies Will we Need in the Future?

Albena Antonova (2014). Sustainable Practices: Concepts, Methodologies, Tools, and Applications (pp. 384-396).

www.irma-international.org/chapter/green-sustainable-or-clean/94942

Sustainable Agriculture: An Evaluation Using ANFIS

Debesh Mishraand Suchismita Satapathy (2022). International Journal of Social Ecology and Sustainable Development (pp. 1-15).

www.irma-international.org/article/sustainable-agriculture/287124