

**F**acing a common challenge, the humankind and the environment in which they live, had a destiny and a target in common: the survival. Such an urgent demand for a global union has never been known before.

The cooperation which becomes one characteristics of the humankind from now on, is based on the realization that all things are interrelated and interdependent. Today, residents of Tokyo, Amsterdam and Denver know that their, and their children's, future is influenced by what Brazilian farmers are doing to meet their family needs. Similarly, Chilean farmers start to realize that industrial waste from Japan and North America is polluting the fish resources which is considered as never-ending by their ancestors.

It's high time we understood that there was a relation between the environment and economic development. By carrying out intensive researches into this interdisciplinary relation, we could start to assess the threat to the environment correctly and make policies necessary for our survival.

Although two words, ecology, and economy, come from the same Greek root oikos meaning "family", these disciplines have recently occupied relatively small parts in structural analysis. The relation between economy and ecology is considered as loose and the fields they analyze are absolutely different and separated. Everything is different now. There is a basic relation between disciplines when exchanges take place between complex communities of consumers and producers. Nothing is given for free. Everything is sold. This opinion reflects a part of typical changes taking place in the world economy: the transition from the economy based on the idea that natural resources

# THE CLOSE RELATION BETWEEN ECONOMIC DEVELOPMENT AND THE ENVIRONMENT

by OSCAR ARIAS

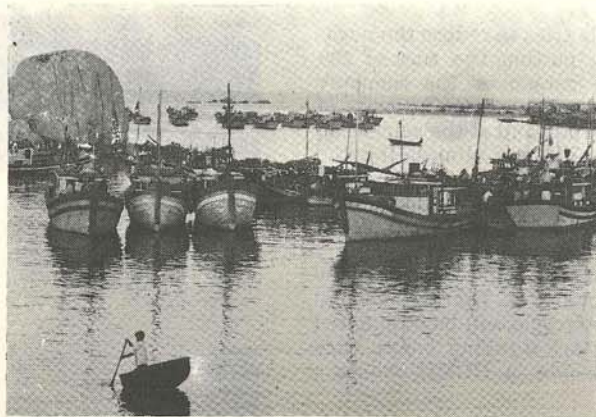
are unlimited to an economy based on the realization of limits of the environment, from a cow-boy economy to "the economy of coming spaceship" as put by Kenneth Boulding a quarter of a century ago.

Recently, many economists have been instructed that the air and water were things free of charge which were supplied by the nature in limitless quantity. Functions of the environment, such as circulation of water and nourishing substances, or climatic changes, are easily given for free, because they have no market, they stay outside the price system and are priced at nil. Natural capital is not considered as a form of capital, so there is no amortization or maintenance cost included in economic calculations.

Too little attention was given to the role of the environment acting as a foundation of resources or a bin for waste materials produced by production and consumption. Economists usually ignore the effects of production and consumption on the environment and fail to examine externalities of these side-effects.

Emerging model is based on a broader view on economic activity paying more attention to the environment and ecosystem in which production and consumption taking place. In this model, environmental expenses should be internalized instead of transferring them to other parties or other generations. Because new model is based on internalization of all expenses, so it's necessary to state clearly expenses and benefits and distinguish between creating real income and causing damage to natural capital because of either exhaustion or depression.

An important concept came into being in 1987 in a report of the United Nations Commission on the Environment and Development which was known under the name "Brundtland



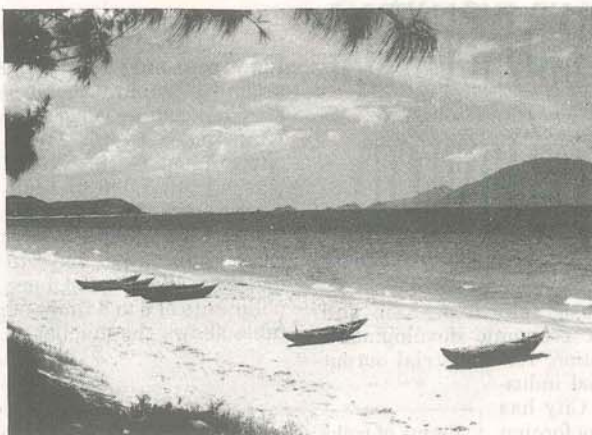


Report". In this report, Gro Harlem Brundtland, Chairman of the Commission and Norwegian Prime Minister, has used the term "sustainable development" to indicate the development methods of future generations.

This concept had been accepted immediately and was popularized broadly. It has become a common word in the language of leaders and policy-makers. The Conference on the Environment and Development held in Rio de Janeiro in June, 1992 under the direction of Maurice Strong was a good example of this tendency. Over 100 political leaders from all over the world have supported the concept of sustainable development. If the environment was presented as a global problem in the United Nations Conference in Stockholm, 1972, then nobody could deny the fact that the environmentalism and the search for a sustainable development had reached their peak in Rio de Janeiro summit.

Unfortunately, the economic implications of sustainability weren't clear enough to the eyes of policy-makers and businesspersons. In his "Green Market", Theodore Panayotou presented basic economic arguments with a view to explaining the causes of environmental deterioration and helping with outlining appropriate policies on reorientation of efforts to develop into sustainability.

Firstly, author concentrated on economic causes of environmental deterioration, and then, explained reforms necessary for the sustainable development, such as removing obstacles to activities, correcting shortcomings of the market mechanism and reforming political policies. Because the sustainability requires us to pay attention to the future, so we should examine long-term capacity of resources as well as long-term expenses and benefits.



Panayotou noted that decision-makers tended to pay attention to short-term benefits and ignore long-term ones. This tendency entailed changing forests into pastures or bare lands just because of some short-term benefits regardless of damages caused to the fu-

ture. Panayotou focused on the fact that many functions and resources of the environment haven't been brought into the market mechanism. And because of this, they belong to nobody, they aren't estimated and aren't economically taken into account. In the worst

cases, an increase in outlay can accelerate the excessive deterioration although the scarcity and social cost increase.

*The Green Market* examined shortcomings of the market and of the policy separately. It also analyzed the relationship between those two kinds of shortcoming and reforms necessary for the sustainable development. Panayotou, in order to support his arguments, has drawn from his interesting experiences in many countries a lot of researches on specific cases.

The result of the UNCED program is that a global effort to define the sustainable development by specific actions is needed, and this work is an important contribution which clarifies economic and policy aspects of the sustainability. The book is a necessary document for policy-makers and businesspersons in both developing and developed countries.

It was told that Hernando Cortes, the conqueror of Mexico, gazing at distant Tenochtitlán, capital of Aztec kingdom, was conquered by its beauty. Deep in the fog of the highland was a silver lake shining with morning sun. There was an island in the lake where the central power of the Mexican empire reigned.

However, what Cortes didn't see were deteriorated forests running from snowy mountains to valleys, polluted rivers and destroyed ecosystem around him.

We can't act like Cortes, we should predict the world in future, considering it as an opportunity to share and welcome the most precious gift, the life - a life which is abundant and long-lasting if we know how to unite and respect our natural heritage■

(This article is the preface of "The Green Market" written by Theodore Panayotou. The title is ours)