# SUSTAINABLE DEVELOPMENT – A THEORETICAL APPROACH

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*Sustainability should represent the main goal of present leaders at both economic and political level. Although respecting the principles of sustainability might not seem cost effective, not respecting them will lead to much higher expenses for future generations. The present paper consists of theoretical approaches to sustainable development and practical challenges for the implementation of sustainability.*

*Keywords: sustainability, development, equity, poverty reduction.*

## Introduction

The first part of the paper presents a series of reasons why sustainability is needed in the present world and makes a short presentation of the evolution of sustainable development. The second part presents a more detailed look on how sustainable development has to be understood and applied in the everyday life of both global corporations and individuals.

The aim of the paper is to give an objective opinion on how the principles of sustainable development should be understood and the ways these principles should be applied.

## Sustainable development – a pressing requirement of the 21st Century

The concept of "sustainable development" or "sustainability" has and continues to be widely recognized and discussed. This concept "appears designed to remove the conflict out of the debate over environmental quality versus economic growth, which was evident in the 1960s and 1970s, during the surge in the environmental movement" (Davidson, 2005, p. 2).

The business world has "three basic issues to face: what it takes, what it makes and what it wastes, and the three are intimately connected" (Hawken, 1993, p. 12). They are determined by a change in the way people think, influenced by the Industrial Revolution in the 18th Century. The Revolution "led to incredible productivity and a world that now supports, at varying levels of sufficiency, 6,000 million people—more than 600 times the population existing before the agricultural revolution". But at the same time "far-flung markets and swelling demands drive environmental exploitation from the poles to the tropics, from the mountaintops to the ocean depths" (Meadows, 2006 p. 164).

The Industrial Revolution had also a major impact on the human thought. In the "capitalist" civilization "people must … think constantly in terms of making money. They must regard everything around them—the land, its natural resources, their own labor—as potential commodities that might fetch a profit in the market" (Worster, 1988 p.11).

Determined by serious alarm bells (poverty, inequality, environmental and natural resources crises) the leaders of the world have agreed on the need of a change. Although debates about the impact of our civilization on the planet's capacity to regenerate can be traced back to the end of the 18th century, the first debates about the relationship between the environment and development had taken place in 1972, at the Conference on the Human Environment in Stockholm. It was followed by the Brundtland Report, also known as Our Common Future, when the first definition of sustainable development has been given: "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs"[177]. Critics considered the definition "vague but optimistic" (Bartlett, 2006, p. 22). Since then numerous interpretations have been given.

The next stage was the UN Conference on the Environment and Development (UNCED), which was held in Rio de Janeiro, Brazil, during the summer of 1992. It was one of the most important international events of the 20th century. It was followed by the Kyoto protocol in 1997, which aims at imposing for the countries that have signed it a reduction of the emissions of green-house gasses. At the beginning of the 21st century, the World Summit on Sustainable Development was held in Johannesburg. Its goals were to gather resources for addressing global environment, health and poverty challenges.

So we can see that "sustainable development is an on-going process integrating ecological, economic, equity and ethical considerations for current and future generations of people and other living creatures, without endangering the life support systems of the planet upon which ultimately all life depends" (Moffatt, 2007, p. 319).

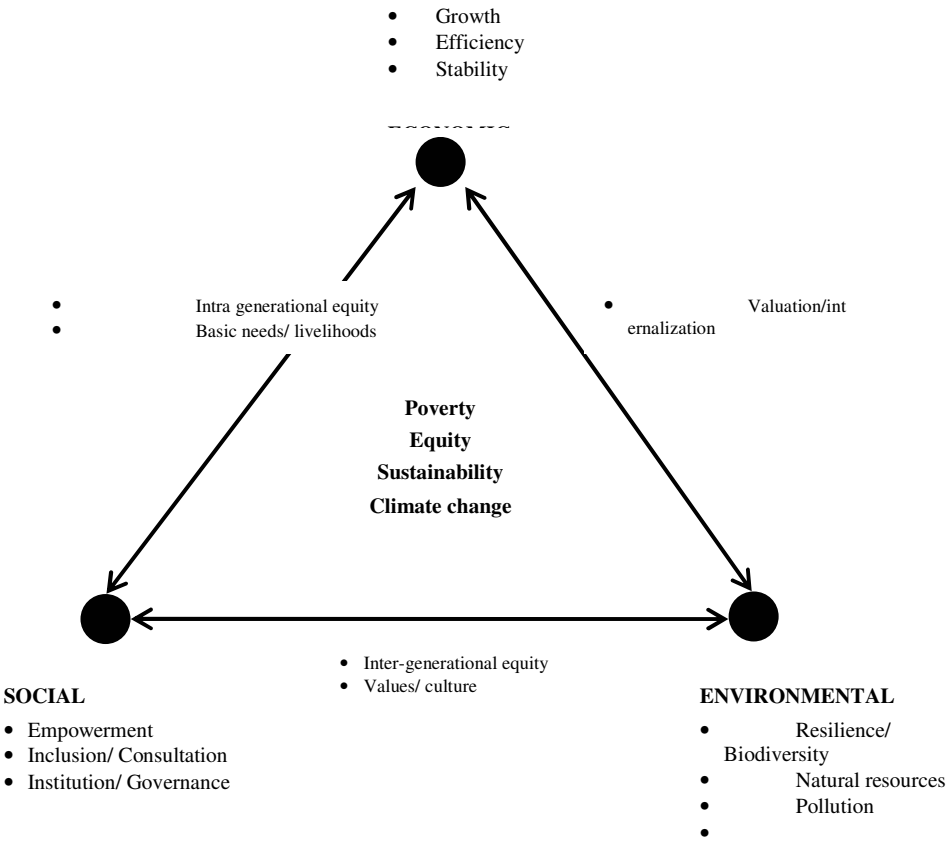
## Sustainable development – principles in practice

In 1992, Munasinghe presented (Rogers, 2008, p. 23) the three approaches to sustainable development:

- Economic – maximizing income, while maintaining a constant or increasing stock of capital,
- Ecological – maintaining resilience and robustness of biological and physical systems
- Social – cultural – maintaining stability of social and cultural systems.

For a better understanding he created the sustainable development triangle (Figure 1.). Sustainable development requires a balanced and integrated analysis from three main points of view: economic, social and environmental. Each viewpoint represents a domain and a system that has its own distinct driving forces and objectives. "The economic view is geared towards improving human welfare, primarily through increases in the consumption of goods and services. The environmental domain focuses on protection of the integrity and resilience of ecological systems. The social domain emphasizes the enrichment of human relationships and achievement of individual and group aspirations. The interactions among domains (represented by the sides) are also important to ensure balanced assessment of trade-offs and synergies that might exist among the three dimensions. Issues like poverty may be placed in the center of the triangle to re-emphasize that they are linked to all three dimensions" (Munasinghe, 2002, p.18).

**Figure 1. Sustainable development triangle – key elements and links (corners, sides, center)**



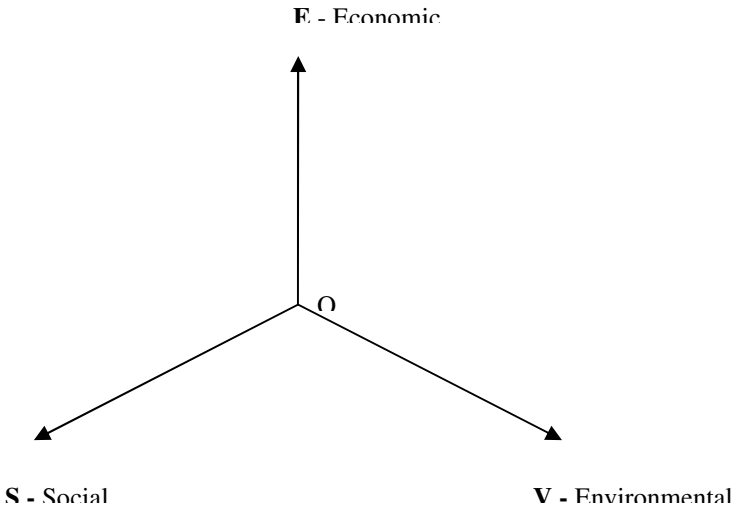

Source: Munasinghe (1992) - Environmental Economics and Sustainable Development, Paper presented at the UN Earth Summit, Rio de Janeiro, and reprinted by the World Bank, Washington D.C. [178]

Rogers has given a more practical solution to achieve sustainability (Rogers, 2008, p. 23):

- Leave everything in the pristine state, or return it to its pristine state.
- Develop so as to not overwhelm the carrying capacity of the system.
- Sustainability will take care of itself as economic growth proceeds.
- Polluter and victim can arrive at an efficient solution by themselves.
- Let the market take care of it.
- Internalize the externalities.
- Let the national economic accounting system reflect defensive expenditures.
- Reinvest rents for nonrenewable resources (weak and strong sustainability).
- Leave future generations the option or the capacity to be as well off as we are.

Considering the many definitions and principles of sustainable development, there are three operational criteria (Figure 2.). These criteria should evaluate each objective of the triple bottom line.

**Figure 2. Balancing benefits – the equilibrium of sustainable development**




Sustainable development equilibrium: OE = OS = OV

Source: adaptation after Rogers (2008) – An Introduction to Sustainable Development, p.45

The environment of our planet represents our greatest common wealth. "Clean air and water remain important matters, but environmental concerns now include such problems as acid precipitation, depletion of the ozone layer, greenhouse gas emissions and global climate change. These problems span national borders (thus defying any single-country solution) and are deeply complex" (Coggburn, 2007, p. 259).

Because of the advanced state of degradation of the environment "no one who is interested in justice wants to sustain things as they are now. Sustainability plays very differently in the environmental sphere, where the whole point is simply that conditions as they are *cannot* be sustained and the only question is how rapidly to ameliorate them" (Marcuse, 2006, p. 57).

There are critics who consider that in practice "ecological limits are rapidly converting economic growth into uneconomic growth—i.e., throughput growth that increases costs by more than it increases benefits, thus making us poorer not richer" (Daly, 2006, p. 39). In much of Africa, Latin America, and Asia, "a by-product of the pursuit of agricultural, energy, urbanization, and industrial objectives has been significant corrosive effects upon soil endowments, watershed management, water quality, coastal fishing, and survival of coastal reefs. From this experience, we should have learned that it is not enough that nations follow sensible environmental policies" (Gillis, 2005, p.23).

Regarding poverty reduction, it "is neither a noble nor an adequate goal, as poverty creates ecological destruction, increases social instability, and diminishes our humanity" (AtKisson, 2006, p. 241). So we can see that in practice fewer steps towards sustainability have been taken than in practice than in theory.

So, we can state that "the ultimate purpose of a business is not, or should not be, simply to make money. Nor is it merely a system of making and selling things. The promise of business is to increase the general well – being of humankind through service, a creative invention and ethical philosophy" (Hawken, 1993, p. 5).

## Conclusions

The solutions for our dilemmas are three fundamental principles that govern nature. First, "waste equals food", because in nature detritus is constantly recycled to feed other systems. Second, "nature runs off of current solar income", because the only external input into the closed system of the Earth is solar energy. Third, "nature depends on diversity, thrives on differences, and perishes in the imbalance of uniformity" (Hawken, 1993, p.12). The new economic theory should be written considering these principles.

At the same time, Shiva (Shiva, 2005, p. 9) has stated the principles of Earth Democracy that come to help us guide us towards the Era of Sustainability:

1. All species, peoples and cultures have intrinsic worth
2. The earth community is a democracy of all life
3. Diversity in nature and culture must be defended
4. All beings have a natural right to substance
5. Living cultures are life nourishing
6. Earth Democracy globalizes peace, care and compassion

In conclusion, our path has been set. It depends on each individual to recognize it, accept it and apply it in everyday life. We, as a civilization have passed the moment when we could learn from our errors. From now on we have to move forward flawlessly.

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