
Economic Growth Sustaining Under Environmental Sustainability and Human Development. A Global Challenge

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This paper treats the sustainable development concept, which aims to support economic growth in terms of environmental sustainability and human development. For that purpose the paper shows the concept of sustainable development' origins and enlargement, the transition from the economic development paradigm to the sustainability paradigm as is seen through the three sustainability' dimensions (economic, social and environmental). It is made an analysis of environmental and business sustainability in the context of economic development, due to the fact that sustainable development comprises environmental protection, and environmental protection is a determinant of sustainable development. Without the environment protection, there is no sustainability. As a conclusion, the implementation of the environmental strategies in organizations should be a policy priority in order to meet the needs of current and future generations .

Keywords: *sustainable development, economic development, sustainability, environmental sustainability, environmental strategies.*

Introduction

Since the industrial revolution in nineteenth century Europe, continuing desire of mankind to progress rapidly, involved a rate of resource consumption, superior to the recovery capacity of the planet without taking into account environmental impacts, resulted in damage to ecosystems, loss of biodiversity and climate change.

Among the factors contaminants include:

• **Industry** contaminant listed as the main factor includes three types of influences pollutant by:

» *liquid waste* - which often is discharged untreated into rivers and oceans – affecting marine life and hence our;

» *solid waste* - also often are thrown direct on the ground or buried in unsuitable areas, affecting human health through pollution infiltrating into the soil and spread diseases by insects attracted to waste;

» *air pollution* - which brings major climate change, locally and globally.

• **Deforestation** and intensive cultivation of the land, leading to loss of soil nutrients, thus leading to low yields - as example we mention the rape culture;

• **High water consumption**, resulting, mitigation, hydro stocks in lakes, below the emergency or drying them.

So people, exercising voluntary or involuntary a negative influence on the environment, by exhausting resources or causing contamination, they have as the single purpose only the benefit. Also, a deficient management of resources, has led to an increased environmental problems. But, we also can adopt measures and create strategies, to ensure that our existence can also have a positive impact on the environment. People depend by the natural environment to survive - all our needs come from it.

The concept of sustainable development, has become the new official paradigm for the humans development. This represents the bridge between economics, society and the environment. It is therefore necessary to understand the fundamentals of this development and the role that companies play in this relationship.

Origin and development of the concept of development

In an attempt to, shape the development of the concept of environmental sustainability, the seventies years are presented as a reference for new approaches to economic and social development of the century.

At the end of the twentieth century, the concept of sustainable development as a new and ambitious goal of guiding humanity in its striving for growth and survival. It is a concept that provides a future vision for confrontation growing problem of environmental deterioration and unequal distribution of resources, concept that is greeted with great confidence by the international community.

Specifically, 1972 is a key year because it coincides with a series of political speeches, economic and social development of strategies in all areas. In this year's energy crisis began and was published the first report by the Club of Rome of the concerning of growth limits, (known as the Meadows Report), celebrated its first Conference on the Human Environment in Stockholm, and was signed in Paris, the World Heritage Convention, it is also the starting year of the new program of the European Economic Community Environment.

The concept of sustainability receives international attention since the advent "*World Conservation Strategy 1980*" developed by the International Union for Conservation of Nature,), Programul Națiunilor Unite pentru Mediu (UNEP) și Fondul Mondial pentru Natură (WWF), defined as characteristic of a process or status that can be maintained indefinitely "(IUCN, UNEP, WWF, 1980). The term "sustainable development" does not refer to a steady state, fixed, but highlights the dynamic nature of development and refers to the effort required to maintain a process to continuously progress. The term sustainable development is described for the first time in the year 1987 with the report "Our Common Future" prepared by the World Commission on Environment and United Nations Development (WCED), called Brundtland. This is when they begin reflections on the concept of sustainable development Report. This is the time when they begin to reflect on the concept of sustainable. Brundtland Report, presents sustainable development as "*Development that meets the needs of the present without compromising the ability of future generations to meet their own needs*" (WCED, 1987). Brundtland Report, aimed, creating a working document to serve as a reference for setting policies in accordance with conservation.

Brundtland report by development means human progress. Analyzing

seemingly simple definition of sustainable development, we see that it contains two essential factors: *human needs and limitations of the global system*. Regarding the first factor, WCED believes that the primary objective of sustainable development is the satisfaction of needs, and that only when people's basic needs are met, occur the sustainable development through economic growth. However, does not explain clearly enough what is meant by a better quality of life, once basic needs are covered, instead, specifies that all persons shall have equal access to the goods and the perceived needs are determined culturally and socially. Equity mentioned by the committee, refer to a current social justice and equity between present and future generations.

Regarding global system boundaries, they vary depending on the types of resources, for example, nonrenewable resources, renewable resources and the many services that the environment provides and the ability to assimilate waste, climate change, air and water resources implicitly clean, food resources, etc. Species of animals or plants as renewable resources can be preserved for future generations, whether their use rate can not exceed their regeneration and natural growth (sustainable performance). On the rate of extraction of non-renewable resources (fossil fuels and minerals), should not be exhausted until a replacement is found or an acceptable alternative, and emphasis should be placed on an efficient, reuse and recycling. Regarding support systems biosphere, atmosphere, water, soil etc., The Commission proposes to minimize the effects of these elements to ensure basic environmental functions such as maintenance of the ozone layer and the Earth's temperature.

Brundtland report served as the conceptual basis for the United Nations Conference on Environment and Development, known as the Earth Summit, held in Rio de Janeiro in June 1992. It was the largest meeting of heads of government ever made, which was attended by 182 countries to discuss environmental and sustainability acquires through which institutional character. This meeting resulted in agreements relating to various historical sustainable development principles that have shaped policy and practice for the last two decades. These include:

- Economic development and environmental protection to be integrated;
- There must be greater equity within countries and between rich and poor countries:
- Needs to improve scientific and technical knowledge related to sustainable development;

- Governments should protect citizens from environmental issues;
- must be studied and simulated environmental impact before adopting projects to determine environmental impacts;
- Must recognize the role and importance of women in society - which often play a vital role in environmental management and development of young people so that they can meet the needs of future generations, indigenous people because of their knowledge and traditional practices related to environmental management.

Since the Earth Summit in Rio have been made at international level, several agreements and plans related to sustainable development. These include:

- **The adoption of the Programme of Action of “Agenda 21”**, which is an agreement by the United Nations (UN) to promote sustainable development undertaken at the Earth Summit, referring to the twenty-first century. This represents a detailed plan of action to be greeted at the international, national and local, international bodies and non-governmental organizations in all areas where there is human effects on the environment. United Nations Commission on Sustainable Development (UNCSD), under the United Nations in December 1992 trying to control and provide information on the implementation of the agreements at the local, national and international.

- **Millennium Development Goals**, must be comply by the all 189 UN member states by 2015. Of the 8 goals, Goal 7 - Ensure environmental sustainability, is to ensure that sustainable development principles are incorporated into national policies and programs and reverse the loss of environmental resources, reducing or slowing biodiversity loss significantly by 2010, reducing the a half until the 2015 the population without access to safe drinking water and basic sanitation; significantly improve of life in 2020, at least 100 million slum dwellers.

- **United Nations Framework Convention on Climate Change**, which seeks to prevent adverse effects of climate change.

Agreements above indicates a good level of progress in many areas, including a better understanding of the importance of sustainable development. However, despite these agreements, global exploitation continues, mainly as a result of consumer demand.

From the paradigm of economic development to the sustainability paradigm

For a better understanding of things have to make a distinction between the concept of sustainable development and sustainability. Sustainability is considered a long-term goal, ie a sustainable world and sustainable development of processes and ways forward to achieve this goal, for example, agriculture and sustainable forestry, sustainable production and consumption, a responsible government, research and transfer technology, education and training, etc.. (UNESCO, 2012). Sustainability is a paradigm of thinking about a future in which environmental considerations, social and economic balance in the pursuit of development and ensure a better quality of life. These three areas, society, environment and economy are interconnected (UNESCO, 2012).

Initially, in the 60 - 70, economic development paradigm in relation to environmental performance was seen as a limiting factor for growth (Jimenez and Rams, 2002). However, with the advent of environmental issues in the early seventies, it was recognized that there is indeed significant gaps in the paradigm for decades, leading to a new analysis of economic development, the new aspects and perspectives adopted (Sunkel and Leal, 1985).

Sustainability paradigm is a major change from previous paradigm of economic development, with its disastrous consequences and social environment, which until recently were regarded as inevitable and acceptable. However, we understand now that these serious and threats to human welfare and the environment as a result of economic development do not match their location within the paradigm of sustainability (UNESCO, 2012).

With time, the sustainability paradigm was supported by theories of environmental remarked complementary role for technological progress and economic growth. The reasons for this relationship was recognized are divided into two categories (Sunkel and Leal, 1985):

(1) The negative effects of economic development on the environment, have negative repercussions on their own development process and call into question his goals and even his ability to be sustainable and permanent.

(2) By implementing natural resources and environment in strategies, plans and policies for economic and social development is a rich source sees better opportunities for economic and social development, especially in the medium and long term.

Thus appears the so-called *sustainable development strategy* that trying to cover issues of economic growth, social and environmental. Is to design a growth model that allows prosperity of present without compromising the ability of future generations growth. This strategy was outlined in international forums such as the OECD and the EU (Jimenez and Rams, 2002).

Although the concept of sustainable development proposed by the WCED continues to be quoted most frequently occurring many interpretations of the concept of sustainable development. Figure 1 shows the configuration of sustainable development and the situation in landscape development proposals. This represents a growth model aimed prosperity of present without compromising the ability of future generations growth.

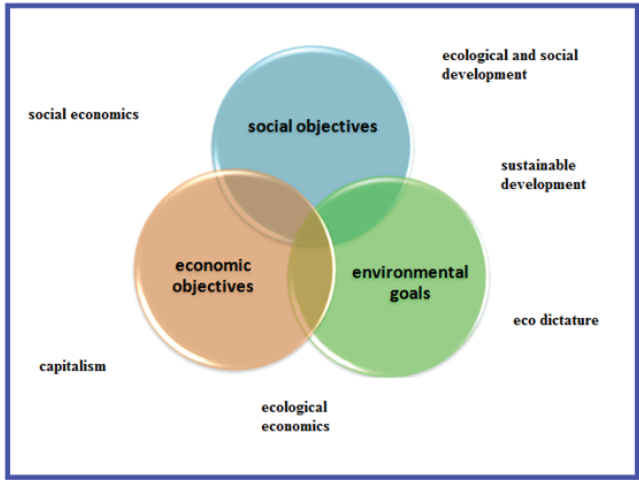


Figure 1: Perspectives and paradigms of development
Surce: *Meadows (1972)*

Below we present more detailed discussions on the environmental sustainability and the three dimensions of sustainability (environmental, socio-cultural and economic).

Environmental sustainability in the context of sustainable

In the scientific literature, we find the concept of sustainable development in different aspects of preservation resource exploitation. A basic distinction made by economists sustainability as very weak, weak, strong and very strong. The debate on these different notions of sustainability is based on

the possibility of replacing natural capital with capital built by people.

Regarding the notion of *strong sustainability*, its followers believe that certain features of nature and living species, the ozone layer can not be replaced with capital made by people. In this sense, the concept of strong sustainability is seen as human economic capacity to maintain critical natural capital. This conservative attitude and population growth implies zero or even negative (strong sustainability). This approach came to be called extreme durability taken to absurd strong, meaning that appear intact preservation of nature as we find it today (Daly, 1995).

Regarding the notion of weak sustainability, advocates define this as maintaining natural and human capital. Weak sustainability is based on the belief that nature has instrumental value for people and waste of resources and environmental services can be compared to investments in new technologies and alternative mechanisms. Particular interest of this vision of sustainability is that natural capital decreases not once consider the possibility of replacing natural capital with capital items. From the perspective of neoclassical economics that allows infinite substitution between natural capital and human (very low development), sustainable development is considered equivalent sustainable growth without the need for conservation.

The three dimensions of sustainability: environmental, socio-cultural and economic

In time, the dominant conception of sustainable development passed from discussion about natural capital and considered other aspects of human development. In this sense, the concept includes highlighting the economic, social and environmental aspects of sustainability, the idea of participation of all sectors of society in decision-making and responsibilities differentiation rich and poor (Meadowcroft, 2000). In this sense, there are three dimensions of sustainable development:

- **Environmental sustainability** must ensure that development is compatible with maintaining essential ecological processes, biological diversity and natural resources.

- **Social and cultural sustainability** should ensure that sustainable increases individuals' control over their own lives, to ensure that sustainable development is compatible with the culture and values of individuals and communities that maintain and reinforce identity.

- **Economic sustainability** should ensure that development is economically efficient, beneficial to all agents in the affected region and that resources are managed so as to preserve for future generations.

A very common vision of sustainable development today is the integration of these three aspects of sustainable development (environmental, economic and social) with different objectives and functions in human development. Through the integration of economic, social and environmental needs are allowed optimization of current welfare without jeopardizing the welfare of future generations, which means preserving social bases, economic and environment depends Development (Brundtland, 2002). The three dimensions of sustainability form (see Figure 2). Sustainability is a basic premise of sustainable development, but it is only to define an social option. We can think of the sustainable use of natural resources without the necessary conditions for quality of life now and in the future, the most desirable for all or part of the human population (Herrero, 2002). Prin urmare, trebuie reținut că dezvoltarea unei singure dimensiuni nu este suficientă pentru a realiza dezvoltarea durabilă a sistemului uman, și poate afecta în mod negativ întreg sistemul de progres sau bunăstare umană.

(Bosch et. Al., 1998) presents a series of basic principles of sustainability to be applied in any human economic activity:

- a. Preservation, in the sense that resources should be used only for basic needs and in an efficient manner;
- b. Preferential use of renewable resources, especially energy;
- c. Using recycled materials, so as to minimize the generation of waste and reduce consumption of primary raw materials;
- d. Investments designed to recover natural systems;
- e. Limiting population growth;
- f. Promoting public transport and use of clean alternative measures for short trips.
- g. Adaptation of production (services) so be respectful with the environment.
- h. Treatment integrated of environmental management issues, socio-economic, educational and cultural.
- i. Promote participation and social engagement in policy formulation aimed at preserving environmental quality.

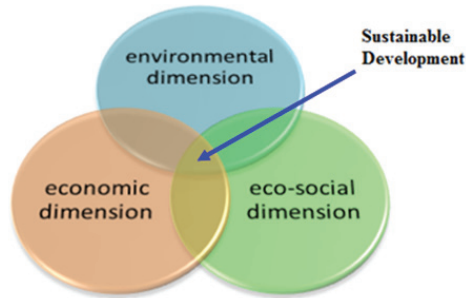


Figure 2: The three dimensions of sustainable development

Source: Retrieved and adapted from (Fullan and Puig, 1997)

Business sustainability in the context of sustainable economic development

Since the 90s, the idea of sustainable development has taken off in the private sector. Although the primary responsibility of companies is to generate profits, it is increasingly recognized that they can simultaneously contribute to social and environmental objectives. This transformation of the role of firms is an answer to the recent changes in society in developed countries. The main reasons explaining the growing concern of the business sector for sustainable development are:

- New worries and expectations of citizens, consumers, public power and investors in the context of globalization and industrial exchange on a large scale, leading to a concern for increasingly higher environmental and social criteria.
- Changing relationships between business, government and civil society have given a greater role, but also greater responsibility for the operation of companies against environmental and social problems.
- In the end, the expansion and sophistication of modern information and communication allow transparency and extensive knowledge of business activities to be brought to the end.

More than before, the company now expects to report in a transparent way about the behavior of the three fundamental areas that can add and destroy value: economy, environment and society. Responsibility of companies in sustainable development can be expressed by the term “triple Bottom

line”. This concept was introduced by John Elkington in his famous book “Cannibals with Forks” to refer to levels of behavior on three key issues: “profit” (economic prosperity), “planet” (environmental quality), “people” (social welfare) (Elkington, 1997). Sustainability in business strategies have evolved over time (see Figure 3). After an era characterized by respect, by companies of the law, the traditional approach to solutions “end of the tube”, the concept of cleaner production (or purer) introduced by the United Nations Environment Programme (UNEP) and refers to the prevention of environmental pollution through changes in processes, products and services. Later, this concept was completed by other integrated strategies in order to contribute to sustainable development in the business world.

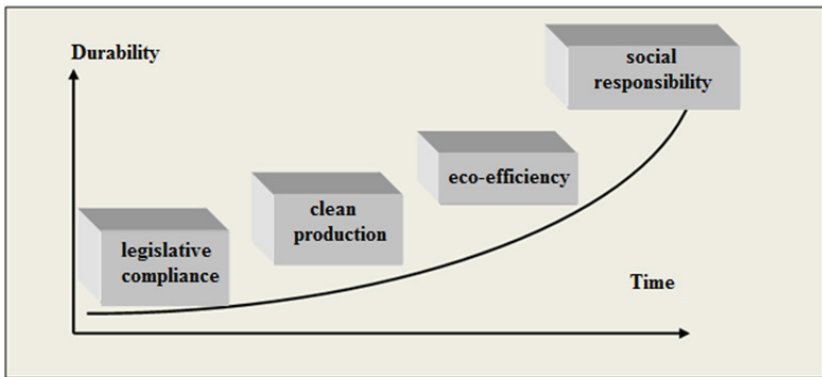


Figure 3: The evolution of sustainable business strategies

EU Sustainable Development Strategy

Emergence of the European Environment Agency report in July 1999, called *the EU average at the beginning of XXI century*, included an assessment of the situation at that time and future prospects of EU sustainable policy, reveals that any of environmental situation or short-term trends were not as expected or desired in some cases may even aggravate the situation. This is the evidence of development, not comply with EU objectives in terms of sustainable development in economic and sectoral policies (Beltran, 2002).

This report allowed the European Environment Agency (EEA) finding areas that require community action and led to the establishment of the 6th Community Environment Action Programme in Environmental Matters, “Our

future is in our hands” in terms regards Sustainable Development Strategy.

Below are five of environmental and sectoral priorities:

a) *Climate change*: energy efficiency and renewable energy.

b) *Waste and materials*: closing cycles and reducing material flows, reducing final waste . Improve productivity.

c) *Territorial package and natural resources*: maintenance, restoration of natural capital and support the economy. Maintaining functional resources.

d) *Environmental and health quality*: the environment as a basic right for a healthier life.

EU offers to the market inequities several policies and fundamental principles to guide them. For that joined environmental objectives such as the prevention and precaution, internalization of environmental costs and the use of resources, based on the paradigm of “sustainable development” (Jiménez Beltrán, 2002). Thus, in the Gothenburg Council in June 2001 was launched strategy,, sustainability “which established some important principles to be met and identified certain priorities, goals and objectives. It also announced a new direction in policy formulation, including:

a) the importance of the disconnection growth in the use of resources;

b) fair prices (internalisation);

c) extensive consultations with all stakeholders;

d) the Impact Assessment on the sustainability of all major policy proposals.

e) Council noted several objectives and general measures for future policy development, divided into four of environmental priority areas: climate change, transport, public health and natural resources (Jiménez Beltrán, 2002).

Member States, following the guidelines set by the EU, has developed the National Strategy for Sustainable Development, which seeks to promote actions and policies responsible for our common future and that it leads to a society of balanced economic growth through prudent use of natural resources and environmental conservation.

Conclusions

In conclusion, the concept of sustainable success is due mainly legitimacy of the idea, its legal base, namely, that human society can continue

to seek a better life and the extent and generality that formed it. The advantage of this flexibility of the concept of sustainable development is that it allows the possibility of multiple interpretations and practical approximations and therefore provides an objective applicable to the various contexts of economic, social and environmental. On the other hand, the disadvantage of the concept is so vague that it can adapt to any kind of work ethic, scale of values and political preferences, which allow you to not question the continuing growth of industrialized countries or current models natural resource management.

And yet, based on academic debate created on interpretations of sustainable development can be identified certain principles generally accepted. A vision of sustainable development very common is represented by the integrated model of three dimensions of sustainability: environmental, socio-cultural and economic.

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