

Revue-IRS



Revue Internationale de la Recherche Scientifique (Revue-IRS)

ISSN: 2958-8413 Vol. 1, No. 4, Juillet 2023

Sustainable development: the history and evolution of a concept

MAKHROUT Samir, Doctor of Economic Sciences, Faculty of Juridical, Economic and Social Sciences, Cadi Ayyad University, Marrakech

AIT HBIBI Amina, Doctor of Economic Sciences, Faculty of Juridical, Economic and Social Sciences, Cadi Ayyad University, Marrakech

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Abstract: This paper examines the conceptual and theoretical foundations of the concept of sustainable development. As well as the criticisms linked to this concept. First, we will attempt to differentiate between the concepts of development and growth, then we will try to explain the historical background to the birth of sustainable development, reviewing the various definitions and characteristics of sustainable development. The analysis we have conducted demonstrates that sustainable development is a concept characterized by semantic ambiguity, and that its application in the field requires a great many initiatives and public commitment in order to guarantee its operationalization. As a result, we are considering the green economy model as a contribution to achieving the goals of sustainable development.

Keywords: sustainable development, sustainability, environmental economics, development, growth.

Digital Object Identifier (DOI): https://doi.org/10.5281/zenodo.8156763

Introduction

As the 21st century begins, the international community is facing major challenges, risks and problems - often combined - of development, social justice and environmental asset protection. These issues and problems are united under the banner of "sustainable development".

As globalization is illustrated by the multiplication of interdependencies and the extension of global capitalism, the world is experiencing an exponential depreciation of physical and natural capital, intensified by industrialization, the massive use of fossil fuels and the overexploitation of natural resources.

Sustainable development is concerned with the general improvement of living conditions for human beings, without undermining the biosphere's ability to regulate and evolve. Indeed, sustainable development is not just a tool for protecting the environment, but also a model of development that can be sustained over the long term. The question of sustainability has given rise to a number of works that distinguish between two components: weak sustainability, supported by neoclassical economists, and strong sustainability, defended by ecologists.

In this context, it is useful to present the concept of sustainable development and the historical background to its birth and evolution over time. To this end, this first topic is organized as follows:

The first part of this article deals with the two terms that make up "sustainable development": "development" and "sustainability". We will attempt to present some definitions and theoretical approaches.

The second point will be concerned with the emergence of the concept of sustainable development, reviewing tentative definitions of sustainable development, the evolution of the concept, its main characteristics, the environmental protection principles of sustainable development, the multi-dimensional conception of sustainable development, and its various critical approaches.

Section 1: Sustainable development, "development" and "durability"

The concept of "Sustainable Development" refers to the two terms that make up its name: "Development" and "Sustainability".

1. Development": the first concept of "Sustainable Development

However, to approach this first component, it's a judicious and even necessary to mention, in passage, another concept that is directly related to and interacts with the first, and that is, "growth". Although "growth" and "development" are very distinct terms, there is a certain amount of confusion between them, since until the end of the 18th century, there was no such distinction between the two concepts. In fact, it was only in the post-war period, following the crisis of the 1930's, that thinking centred on the capacity of all the world's countries to achieve the occidental living standard.

These economic and political reflections have resulted in the creation of the development economy. Development aid programs were designed to enable poor countries to keep pace with the rich. In this regard, (Truman H, 1949) differentiates between "developed" and "underdeveloped" countries.

1.1. Development or growth?

The concept of development is a set of transformations in economic, social, institutional and demographic structures. It has been widely adopted in a variety of domains and academic fields, and has undergone an extensive process of formalization.

Development is defined as "the process by a country is in a position to grow its assets sustainably and independently, and to distribute them equitably among its people". (Friboulet J, 2015).

As defined by (Prades J et al, 1991), "development is a question of values associated with attitudes, preferences, lifestyles, standards and belief systems". In his opinion, these values represent the sustainable evolution of a society, because they are decisive for its priority issues.

According to (Villeneuve C, 1998), "development should respond to the expectations of the human being, it is a question of the quality of human life, which must satisfy the essential needs of the human being, such as health, education, security, etc.".

To these definitions we can also refer to the UN (1986), which defines development as "a process, economic, social, cultural and political, which is directed towards improving the well-being of the general population". With this definition, the UN focuses on the well-being of the population as part of the development process.

In this perspective, (Rostow w,1960) admittedly points to "economic development intervening in the history of societies, in order to ensure sustainable growth of the economy". However, this idea is opposed by economists such as Joseph Schumpeter (1912), who noted that development cannot be reduced to growth, defining the former as a quantitative change, while development is defined by a qualitative change.

Perroux (1966), for his part, considers growth to be "the lasting expansion of the dimension of an economic unit, whether simple or complex, achieved through structural changes".

In fact, (Denoel F, 1990) considers that development growth "creates new polarized economic regions that are manifested in a variety of different forms".

However, according to (Bormans C, 2001), "development is the combination of mental and social changes in a population that have a positive effect on the overall real product of a nation".

The appearance of the development concept has necessarily led to the appearance of "underdevelopment" in the discourse of decision-makers and researchers; this provides the opportunity to place different societies in a substantial continuity, making it possible to compare different countries (Vivien F, 2003).

1.2. Under-development

Over time, the under-development concept has required a considerable amount of theoretical development and contextualization. This concept has been accompanied by a certain delay in its conceptualization, which has left its mark on the history of economics. To examine this concept, we'll first discuss the conceptualization of underdevelopment as a phenomenon of delay, and then turn to the concepts of under-development as a milestone in international socio-economic history.

1.2.1. Under-development a phenomenon of "retardation"

To approach this question, we will primarily focus on the contributions of "Nurkse" and "Lewis" and their contributions to the conceptualisation of the under-development concept.

- Nurkse's contribution:

Nurkse examined and analysed underdevelopment based on the aspect of a shortage of savings, considering underdevelopment as a vicious circle. In his view, underdevelopment is a vicious circle: a shortage of income leads to a low savings rate, which in turn leads to poor investment. In a similar way, very low incomes lead to insufficient demand for capital, resulting in low levels of investment and under-accumulation of capital, which in turn leads to low productivity.

As a result, underdeveloped countries risk being encircled by poverty, due to low savings capacity and declining incomes resulting from low productivity (Merdad B, 2012). In his analysis, Nurkse asserts that "poor economies can be encircled by debt, given the inadequacies of savings". These countries can become indebted through recourse to foreign capital, but this worsens the economic and social situation for these countries, which risk finding themselves in a state of insolvency towards these creditors.

- Lewis's model: underdevelopment founded on ''dualism''

The British economist Lewis A (1951) proposed an analytical model based on the correlation between rural underemployment and underdevelopment. According to Lewis, "the economy of

underdevelopment" is composed of two main sectors, one modern and the other traditional. The traditional sector is made up of agricultural activities, and is a non-capitalist sector defined by high marginal productivity, a labor-intensive and employment-creating sector.

The modern sector, on the other hand, can attract employees to earn higher incomes, and can be attractive to employees while creating more employment.

For Lewis, the dualism of the two sectors is a step in development, and these intersectoral relations are limited by labor flows.

1.2.2. The concept of under-development as a historic phenomenon

To this purpose, we begin with the thinking of François Perroux. We will then review the current of the independence school, for which the problem of development and under-development is defined as a center and a periphery.

- The Perroux philosophy (Perroux F, 1952)

According to Perroux, "under-development is a structural phenomenon, the result of domination by one country over another". This domination manifests itself mainly when one country (A) exerts influence over another (B), without the relationship being reciprocal. This domination can be described as the influence of the center on the periphery, as in the case of third-world countries that have been influenced by colonial countries, creating an inequality that has been a factor leading to under-development. The domination mentioned by Perroux is manifested in the unsatisfied provision of basic human needs such as nutrition, education and health.

The dependency approach emerged after the Second World War, starting in Latin America and rapidly extending to all Third World countries (Lzenzama M, 2008). The authors of this approach include (Faleto C, 1969) and (Furtado C, 1966), whose analysis is based on the idea of development and underdevelopment as a "center and a periphery". This approach is based on the premise that there is economic dependence between countries on the periphery, generally made up of Third World countries, and countries at the center (developed countries). This analysis focuses on the domination and strength exerted by the countries of the center over the countries of the periphery, by influencing the decisions and actions of Third World countries.

The dependency approach denounced the creation of peripheral areas in third-world countries, as leading to tensions and conflicts (Degrave F, 2005).

After presenting the basic features of the emergence of the concept of under-development, this reflection takes us to the question of growth and development.

2. Sustainability: the first concept of sustainable development

The concept of sustainability has given rise to a considerable amount of thought and research, which can be divided into two main positions: that of weak sustainability adopted by the "neoclassicals", and that of strong sustainability defended by the "ecologists". The two positions are based on the treatment of "natural capital" all the elements provided by nature (natural resources as such, the biosphere's regulatory capacities) which contribute, in one way or another, to the well-being of societies" (VIVIEN F, 2008).

2.1. Weak durability: neoclassical approach

For the neoclassical Robert Solow, "the sustainability requirement must essentially take the form of a general injunction: not to conserve this or that resource, still less to preserve all natural elements in an unaltered state, but to preserve indefinitely the productive capacity of human societies, it being understandable that the capital of society is not limited to productive equipment (factories, machinery,

and buildings) but includes all assets that contribute to generating well-being in the future: knowledge and skills (human capital), but also natural assets".

In the neoclassical conception, sustainability is assimilated to the non-decrease of well-being over time, in the sense that well-being reflects the level of economic growth. In addition, advocates of this posture underline that the total quantity of capital (natural and man-made) available to a society must (and, indeed, can) remain constant from one generation to the next. This possibility is made real by a mechanism of substitution between the different forms of capital, i.e. natural and artificial. As Solow explains: "the present generation is consuming 'natural capital' and, in return, bequeathing to future generations more productive capacity in the form of stocks of equipment, knowledge and skills". Solow is signalling the compensation mechanism that operates continuously over time to prevent a decline in the stock of all assets (natural and non-natural): as the natural stock diminishes, the artificial stock increases. Indeed, most natural resources are perfectly replaceable, and the value attributed to them is linked to the services they provide.

However, Solow recognized the existence of certain natural assets that he described as exceptional and irreplaceable, and recommended that they be preserved to be passed on, as such, to future generations. As a result, this sustainability version relies heavily on the assumption that technical progress is a compensating factor between different forms of capital. In this way, Solow bases his reasoning on this principle of perfect substitutability to demonstrate the possibility of preserving natural capital by replacing it with artificial capital or a technological substitute, and that this form of capital will be bequeathed to future generations (instead of natural capital). For Solow, sustainability does not mean preserving resources in their current state, but rather preserving productive capacity, given that the factors of production (and hence of growth) can take many forms (physical, human and natural capital). In opposition, Godard (1994) postulates that "this conception of sustainability assigns a critical role to the hypothesis of general substitutability: that of natural resources by other forms of reproducible capital and that of environmental services (sea bathing, oxygen in the air, etc.) by other forms of collective consumption (swimming pool baths, bottled oxygen, etc.)".

Ecological advocates, for their part, subscribe to this logic, which questions the principle of substituability and consequent durability.

2.2. Strong sustainability: ecological approach

The ecologicalists are focusing on the ecological damage caused by the dynamics of capital accumulation that drive quantitative growth. Since the 1980s, this research has been institutionalised under the title of "ecological economics".

In opposition to the neoclassical approach, this second approach, based on the principle of "strong sustainability", insists on the need to maintain, for the long term, a "critical" stock of natural capital to be passed on to future generations. The proponents of ecological theory reject the assumption of substitutability between factors of production, and advocate instead complementarity between natural capital and other factors of production. In opposition to the monetary value of nature, these Authors intend to build an economic model based on ethical values and environmental considerations.

In the same sense, Daly and Farley consider that natural capital cannot be perfectly offset by other forms of capital. In their view, there can be no "absolute substitutability" between the different factors of production.

F.D. Vivien explains that, "the aim of ecological economics is to insert the economy into social regulations, with societies in turn having to insert themselves into the regulations of the Biosphere, according to a scheme of 'normative management under constraints' (...). [It] thus intends to set limits to be respected in environmental matters and defends a model of "strong sustainability", with the ecological constraints defined within this framework appearing more important than previously".

On the subject of sustainability, we have briefly reviewed two major positions. What distinguishes them is the priority (over growth) given to natural assets and their integration into the economic model. For neoclassical theory, growth is the top priority, as long as it is sustained, and in the long term, it is supposed to ensure the sustainability of well-being by reducing social disparities and even preserving the environment. For the ecological approach, it is rather the environment that is the priority, in the sense that the transfer of natural capital to future generations is a necessary condition for ensuring ecological sustainability.

After all, in one approach or another, a major consensus has built up around the promotion of "sustainable development" to respond to multiple economic, social and environmental challenges.

How did this concept emerge and evolve? What are its main foundations and perspectives?

The next section will attempt to provide some answers to these and other questions.

Section 2: Sustainable development

Since the 1940's to the end of the 1980's, international opinion has become more critical of growth. The previous development model had failed. Certainly, some progress has been made, but over time it has become clear that this model has aggravated problems.

Faced with such problems, a series of solutions for development, social justice and environmental protection have emerged, under the banner of "sustainable development". This "new-born "proposes a readjustment of the existing development model, based on the use of fossil fuels and considering the environment as a new essential factor, on the one hand, and the need for transition to another model that is less ecologically intensive and richer in terms of job creation, on the other.

1. An attempt to define sustainable development

There is a panoply of definitions of the concept of sustainable development, the most widely accepted being that of the World Commission on Environment and Development (WCED 1987): which defines sustainable development as "a model of development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

This definition underlines two essential points: firstly, the concept of needs, which must be given the highest priority in order to meet the needs of future generations. (Guay L, 2004)

This definition is generous, however, insofar as it focuses on the responsibility of present generations to protect the interests of future generations.

For the World Commission on Environment and Development, "sustainable development is a process of transformation in which the exploitation of resources, the direction of investment, the orientation of technology and institutional change are carried out in a harmonious manner and enhance the present and future potential to better meet the needs and aspirations of humankind" (WCED, 1987).

(Crabbé P, 1997), considers that "sustainable development is people-centred, aiming to improve the quality of human life and protect the environment". Sustainable development aims to achieve a better quality of human life, while taking into account the capacity of ecosystems.

In the World Bank's (2001) definition, "States can ensure human and economic development compatible with better environmental conditions, if financing mechanisms are accessible". The World Bank focuses on an essential aspect of achieving sustainable development, namely the question of financing, which is an essential mechanism for achieving sustainable development objectives.

For (Mawhinney M, 2008), sustainable development is "development that ensures social progress and recognizes the needs of individuals, development that ensures effective protection of the environment and prudent use of natural resources, development that aims to maintain high and stable levels of economic growth and job creation". This definition focuses primarily on the concept of prudent

management of natural resources, and supporting economic growth by creating new opportunities for sustainable employment.

On the environmental issue, the International Union for Conservation of Nature (IUCN 1991) defines sustainable development as "the improvement of the living conditions of human communities, while remaining within the carrying capacity of ecosystems". Sustainable development must enhance people's living conditions, while preserving limited quantities of resources (water, energy or raw materials). From this perspective, sustainable development is concerned primarily with the development of technologies to improve the management of exhaustible natural resources.

Another economic definition of sustainable development, according to which "sustainable development is a management strategy, which strives to manage all assets and aims to improve long-term well-being" (Rogers P, Kazi F, Boyd J, 2012).

Similarly, let's take up the definition proposed by (Barbier E, 2016), according to which "sustainable economic development aims to improve the living standards of the population affected by poverty", this improvement can be measured directly in terms of increased: income, improved access to healthcare, access to basic services (water, sanitation), access to education. Or indirectly, by increasing overall economic growth.

These discussions on the various definitions of sustainable development are essentially based on three approaches (Guay L, 2004):

- The first, qualified as "conservative", in which growth and development are assimilated, is based on the idea that profitability and environmental preservation can be achieved in parallel, and rejects the current of thought for which there is a contradiction between economic activities and environmental preservation;
- The second is based on the work of environmental economists. They consider that sustainable development requires an adjustment between economics and ecology;
- The third focuses on the social component, which requires the same intention as the economic or environmental component.

Finally, the concept of sustainable development has gradually taken on a structured identity, requiring clarification of its various definitions and approaches. These approaches generally come up against the different points of view of researchers, depending on whether their positions are economic, social or environmental, and lead us to ask whether there is a universal definition that encompasses all the concerns of the various players.

In this sense, sustainable development is not just a question of balance between the three components - environmental, economic and social - but a reflection on the new parameters guaranteeing the well-being of the population of present and future generations.

In this perspective, the "environment" factor is a condition, while the "economic" factor is a means to development, and the "social" factor is an aim of development.

2. The evolution of sustainable development

To retrace the history of the emergence of the concept of sustainable development and environmental concerns, we'll go back to the 17th century, when (Carlowitz C, 1713) Chief Forester at Freiberg in Saxe, was interested in sustainability questions.

To clarify Carlowitz's vision, we return to the years 1618-1648, when economic prosperity began in the town of Freiberg after the war years. In fact, Freiberg became a rich silver mine, the extraction of which required a lot of wood. This resulted in a shortage of local markets and excessive deforestation.

As a result, Carlowitz, conscious of this problem, has proposed a forest management plan to ensure the future wood needs of the local population. These are the first concerns aimed at ensuring sustainable management of natural assets (wood). It's a new philosophy for managing natural resources to satisfy the needs of both present and future generations.

In the 18th century, the question of demographics came to the fore with the rise of economic growth. Malthus (1798) declared that "demography is the principal reason for misery". In his book "An Essay on the Principle of Population", Malthus expounds his principle on population, arguing that "overpopulation is the principal cause of the misery of nations, hence the necessity of finding mechanisms of demographic adjustment in cohesion with economic growth".

Malthus suggested that, to promote progress and human happiness, human reproductive capacity had to be re-examined. He proposed two laws, "the law of production and the law of subsistence", the first expressed as a geometric sequence, the second as an arithmetic sequence. He thus distinguishes between the different types of obstacles to the population: "preventive and destructive".

The preventive obstacles are linked to the human species, and they stem mainly from the feeling of "fear" of not being able to satisfy the needs of individuals in terms of food and the basic needs for life (quantities necessary for clothing and to lodge), while the destructive obstacles, they include all the phenomena that can stop the natural duration of human life.

Destructive obstacles often manifest themselves in many forms (poverty, disease, war, starvation, hard jobs...). All preventive and destructive obstacles are considered immediate obstacles to population growth.

During the 19th century (Fourier J, 1883) proposed the analytical theory of heat "the greenhouse effect". Indeed, Fourier was interested in atmospheric gases and their medium and long-term effects on the temperature of the planet.

(Stanely W, 1865), interested in the question of coal depletion, published his work "The coal question". Indeed, he is interested in the question of scarcity of the raw material, and its consequences, he found that technological progress could improve the productivity of coal mines, and beyond the slowing down of the depletion of mining resources.

Seven years later, Léon Walras (1872), discovered the principle of proportionality of scarcity, "marginal utilities with prices", and he defined "the relationship between the available quantity of a good and the number of people who need ".

In 1938, Guy Stewart Callendar attempted to link the growth of industrial carbon dioxide emissions to rising temperatures. First, Callendar identified the causal links between the combustion of fossil fuels and global warming, then he identified meteorological data from various stations around the world, which indicated upward trends of 0.5° C at the beginning of the XXth century. In a second step, Callendar devoted himself to the study of carbon cycles and heat balances of the earth for which he theorized climate change by demonstrating a 10% increase in carbon dioxide between the years 1900 and 1935. These quantities of carbon dioxide come mainly from fossil fuel production systems.

Subsequently, during the 1960's and 1970's, the debate grew richer on the links between the consequences of economic growth and the depletion of resources, with the publication of the Meadows report in 1972, following the recommendations of the Club of Rome. This report bearing the name of the three researchers, Denis Meadows, Donnela Meadows, and Jorgen Randers, published under the title "halt growth", recommends and proposes a model of growth based on five variables: "population, agricultural production, industrial production, natural resources and population".

Indeed, the Meadows report describes the path in order to reach a steady state of equilibrium. To do this, the variables, capital and population remain constant and the birth rate, death rate, investment and capital depreciation must be maintained. Finally, it is necessary to find a compatibility between the levels of population, the levels of capital, and the systems of values.

Added to this is the work of the Stockholm Conference on the Environment, held in 1972, which led to the creation of the United Nations Environment Program (UNEP), which is part of the United Nations and whose objective is to coordinate the activities of the United Nations related to environmental issues. During the work of UNEP, the notion of "eco-development" will emerge, aiming to reconcile development and the environment. Ignacy Sachs (1981), will attempt to define the concept of eco-development as "a heuristic tool for practitioners and decision-makers and a philosophy of development that has its roots in the analyzes of Third World rural economies carried out in terms of dependence and self-centered development" (Sachs I, 1981).

According to Sachs, the complications of development are global, since we live in a world marked by a disproportionate distribution of natural wealth between the different categories of the population. As a result, eco-development is opposed to "abusive economism" which destroys natural resources and the environment for the benefit of the interests of large industrial economies.

In this sense, ecodevelopment aims to achieve "development while respecting both socio-economic objectives and ecological prudence" (Sachs I, 1980). These objectives appear in "the equitable management of the material and immaterial needs of all men, in order to achieve diachronic solidarity with future generations, and synchronic solidarity with the present generation, as well as ensuring ecological prudence and decision-making autonomy.

The concept of green development, according to Ignacy Sachs, is based on five dimensions:

- Social sustainability, based on sharing in order to close social gaps, promotes development acting on society.
- Economic sustainability promotes a more efficient allocation of resources.
- Ecological sustainability limits the excessive consumption of fossil fuels, while trying to replace them with renewable energies.
- Spatial sustainability favors a better distribution of spaces-economic activities.
- Cultural sustainability incorporates cultural values and norms into production systems.

These five dimensions of eco-development are interdependent, and imply the adoption of a participatory approach ensuring a healthy and sustainable environment for current and future generations.

Indeed, eco-development, newly born on the world stage, will disappear from the international institutional vocabulary during the COCOYOC¹ conference (1974). Thus, the idea of a development reconciling economic and socio-ecological considerations will be born, based on the reappropriation of the notion of eco-development in order to give birth to sustainable development.

2. The characteristics of sustainable development

The concept of sustainable development has several defining characteristics, the first of which is that it "relates to the notion of development and not to that of growth" (Crabbé P, 1997). According to the UNDP (1991), the notion of development encompasses such important notions as productivity and creativity, and the encouragement of social, economic and political freedoms. It must be focused on people. The second characteristic is that it is "an ethical concept that refers to a process aimed at a set of economic and social transformations that lead to a more desirable situation" (Pearce 1989). Then there's the question of the temporal dimension of sustainable development, due to the long intergenerational duration. Moreover, the concept of sustainable development requires a certain return

¹ COCOYOC is a United Nations conference organized from October 8 to 12, 1974 in the city of Cocoyoc (Mexico). This conference brought together experts to discuss the theme of the use of resources, the environment and development strategies.

to "social ethics", given that our era is marked by marginalization, the abandonment of inherited cultural norms and the deterioration of human/nature relations. Sustainable development allows us to re-discover the value systems and ethics of societies (Clandine O, 2004).

Another characteristic is the stakeholder theory. (Niclos P, 2011), considers that the economy takes the view of "a structured set of stakeholders in relation to the company. This structured network is the basis of development, beyond growth".

Sustainable development is thus operationalized by taking into account three dimensions: the economic-developmental dimension, the ecological-environmental dimension, and finally the socio-political dimension.

With reference to the Brundtland report, sustainable development is characterized by growth that generates more jobs and productivity, and fewer externalities; secondly, maximum satisfaction of the needs of present generations by reducing inequalities and dissatisfactions; and thirdly, consideration of the rights of future generations by applying the precautionary principle to resource management and risk reduction (Rumpala Y, 2009).

Moreover, the question of "ensuring a balance between present and future generations in a world marked by the scarcity of natural resources" (Latouche S, 1994) has been raised by several economists (Ricardo, Malthus).

After reviewing the characteristics of the concept of sustainable development, we will turn our attention to critical approaches to the concept of sustainable development.

3. Critical approaches to the concept of sustainable development

We will examine a number of recent criticisms that have been levelled at the concept of sustainable development. Most of these criticisms concern the ambiguity of the concept of sustainable development, its contours and its purpose.

According to (Rist G, 2001), "development" is the main cause of environmental damage, threatening the "sustainability" of the ecosystem desired by all. For his part, (Harribey J, 1998), describes the concept of sustainable development as "congenitally ambiguous", in the sense that it is an insurmountable contradiction referring back to the distinction made by economist François Perroux, founder of development economics in the 1950s and 1960s, between growth and development. This distinction has been accompanied by the entry of development models into an impasse characterized by human and social exclusion and ecological degradation, leading to rising unemployment and social inclusion.

Serge Latouche's book "Surviving Development", published in 2004, describes the first criticism as being linked to the word "sustainable", which remains vague and ambiguous. The majority of definitions offered in favor of sustainable development focus on three aspects (sustainable ecology, efficient economy and social equity); these definitions remain universally acceptable, but not practicable.

To achieve sustainable development, we require an educated and informed society capable of understanding the challenges, changing its behavior and participating in the major choices society makes. Also, "sustainable development requires actions targeting the achievement of a balance between ecological, social and economic dimensions" (Diemer A, Marquat C, 2015).

Conclusion

In conclusion, the debates on the emergence of sustainable development have intensified with the emergence of a global awareness of the critical and worrying state of the environment and natural resources, which are limited in time and whose character is marked by non-regression, to which must be added man's responsibility in this situation. In reality, economic development does not necessarily

lead to sustainable prosperity, as it requires a global approach to protect the interests of current and future generations. Consequently, we need to reflect on the need for a different development model to protect the environment and biological ecosystems.

We have demonstrated that sustainable development is viewed as an ecological awareness promoted in societies in order to combine concrete actions in favor of the environment, the economy and society; it covers both individual behavior and corporate policies and strategies.

Sustainability offers societies the opportunity to harmonize economic, social and environmental aspects. This transition to sustainable development has taken many forms, including negotiations and agreements between states, particularly developed countries, to contribute to the preservation of the environment. Achieving sustainable development also requires respect for human rights and the promotion of development research. It must also be accompanied by global governance mechanisms.

However, sustainable development has suffered from a number of problems in its application; it has been criticized in its conceptualization and operationalization, as it requires a great deal of investment and funding.

In response to these criticisms and observations, UNEP published a report in 2001 emphasizing the need to move towards a new development model based on the green economy, a model that reconciles economic and social progress, while preserving the environment and creating new green jobs; this growth model is known as the "green economy".

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