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Sustainable Economic Development: The Necessary Dialogue between Environmental Law and Economics

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ABSTRACT

This article aims to analyze the distinction between the concepts of economic growth, economic development, sustainable development and environmental justice; the inter-action between Environmental Law and Economics in the paradigm of environmental justice, and what is the purpose of such interaction; and environmental justice as a possible solution to the installed state of environmental imbalance. To this end, the concepts of economic growth, economic development, sustainable development and environmental justice are investigated; Complexity Theory and its transdisciplinary approach; and environmental justice as a new order capable of reversing a state of installed environmental imbalance. To obtain the results desired by the research, the method of approach to be followed will be the empirical-dialectical, using bibliographic research, having as a reference system of the Law and Economics of Richard A. Posner. In conclusion, it is pointed out that there is a need for a new development model, which, based on transdisciplinarity, should seek solutions in favor of socioeconomic-environmental balance for present and future generations, as a way of overcoming the state of environmental imbalance installed, as well as all the economic, political, cultural, social and environmental impacts caused by it.

1. Introduction

Nature provides essential raw material and energy for the most varied economic production processes. Thus, the close relationship between environment and economy is undeniable.

With the environmental crisis, installed from the Industrial Revolution and identified in the 1970s, there was the realization that natural resources were finite and, therefore, it would be necessary to modify growth trends and form a condition of ecological and economic stability

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capable of maintain itself until a distant future, in order to avoid its exhaustion. With that came the concern with the need to create principles and norms aimed at regulating economic, social and environmental relations.

In this context, Environmental Law emerged, which evolved over time, in order to constitute a set of legal principles and norms aimed at the legal protection of the environment, aiming to guarantee its balance, through economic, social development and environment, with the aim of guaranteeing the existence of a dignified life for present and future generations.

In this aspect, given the complexity that involves human issues, including those related to development, Environmental Law, aiming at achieving its purpose, interacts with different areas of knowledge, through the application of its precepts, seeking to value, with its principles, the actions developed by the community.

Among the areas with which Environmental Law interacts is the Economy, which consists of the set of activities developed by human beings, aimed at the production, distribution and consumption of goods and services necessary for survival and quality of life.

This interaction occurs to inform a development model able to balance socioeconomic development with environmental protection.

Given this reality, some questions arise, such as Do economic growth and economic development have synonymous concepts? Is there a state of environmental imbalance in-installed in postmodernity? Can the sustainable development model, qualified by the interaction between Environmental Law and Economics, prove to be a solution to a possible state of installed environmental imbalance?

To this end, initially, we seek to clarify the conceptual distinction between economic growth and economic development.

Further on, it is verified whether the sustainable development model, qualified by the interaction between Environmental Law and Economics, could prove to be a paradigm able to inform a new development model, aiming at reversing such a state of environmental imbalance.

The justification for the research on the subject in question is the need for discussion about the relationship between Environmental Law and Economics as qualifiers of sustainable development, understood, this, as a new order arising from the disorder installed by growth and development purely economic.

As for the objective to be achieved, it is an attempt to clarify the necessary transdisciplinary interaction established between Environmental Law and Economics in the context of sustainable development, aiming to reverse the installed state of environmental imbalance.

To obtain the results desired by the research, the method of approach to be followed will be the deductive one, using bibliographic and legislative research, having as a reference system the Law and Economics of Richard A. Posner.

2. Literature Review

2.1 Economic Growth and Economic Development

Economic growth or development does not mean a guarantee of quality of life. Indeed, in recent decades, the world has witnessed a certain economic growth, compared to previous decades, however, it can be cited as an example that the quality of life has fallen in most large Brazilian cities ^[1].

The attempt to distinguish between the concepts of economic growth and economic development began at the beginning of the 20th century with Schumpeter, for whom, according to Nali de Jesus Souza, development would only occur “[...] in the presence of technological innovations, by innovative entrepreneurs, financed by bank credit” and with a non-routine production process, which “[...] starts to demand extraordinary profit”. In another turn, according to Nali de Jesus Souza, Schumpeter attributed to economic growth a merely expansive characteristic ^[2].

It appears that, although he made a distinction between the concepts of growth and economic development, Schumpeter still analyzed development only under the economic aspect.

At that time, the income gap between rich and poor countries boosted the beginning of the economic discussion about distribution, mainly from the 1930s, with the use of National Accounting, inspired by Keynesian theories ^[3] in which the classification of nations is now carried out according to their per capita income.

The separation of the concept of development from the concept of pure economic growth took place in the post-war period, a period in which much of Europe was in a scenario composed of a [...] anachronistic land structure, backward peasant agriculture, adverse trading conditions for primary commodities, incipient industrialization, chronic unemployment and underemployment, and the need for an active developmental state to face the challenge of establishing democratic regimes capable of simultaneously leading to post-war reconstruction and overcoming social and economic backwardness ^[4].

In that period, the concept of development already tended to evolve, although it was still rooted in the economic dimension.

In the late 1960s, the British economist Dudley Seers

published an article on the meaning of development, provoking “[...] a real revolution in development”^[5].

The recognition that development was a normative concept and full of value judgments would be the starting point for any discussion about development. In this sense, Seers pointed out three basic conditions for development, two of an objective nature, being food and employment, and one of a subjective nature, being equality understood as equity^[6].

In this way, Seers places the human condition as the mainstay of the concept of development, so that it is not limited to the economic condition of a nation.

In 1986, in a special issue of *Development Dialogue*, Manfred Max-Neef et al. proposed a new concept for development, called *Desarollo a Escala Humana*. According to the authors,

Such development (development on a human scale) focuses and is sustained in the satisfaction of fundamental human needs, in the generation of increasing levels of self-dependence and in the organic articulation of human beings with nature and technology, of global processes with local behaviors, from the personal to the social, from planning to autonomy and from Civil Society to the State^[7].

A new expansion of the development concept only took place in the early 1990s, when, following a trajectory similar to that of Seers, Max-Neef, Elizalde, Hopenhayn, Mahbub ul Haq, Amartya Sen, Richard Jolly and others, in an attempt to make development something measurable, they developed the Human Development Index (HDI), which was introduced by the United Nations Development Program (UNDP) as a new way of measuring development, revealing itself as a counterpoint to the Domestic Product. Gross Per Capita (GDP per capita), which, until then, was the most used index to characterize the development of a region, but which only portrayed the economic dimension of such a situation. However, for Boisier, the HDI, for methodological reasons, does not include all the areas that the concept of human development considers^[8].

In 1995, Boutros Boutros-Ghali, then Secretary General of the United Nations (UN), published the report entitled *An agenda for development* and, in the chapter *Report of the Secretary General A/49/665*, defined five dimensions of development. These five dimensions are 1) Peace as the foundation. Traditional approach to development presupposes that it takes place under conditions of peace. Development cannot proceed easily in societies where military concerns are at or near the centre of life. 2) The economy as the engine of progress. Economic growth is the engine of development [...] Accelerating the rate of economic growth is a condition for expanding the resource

base and hence for economic, technological and social transformation [...] It is not sufficient, however, to pursue economic growth for its own sake. 3) The environment as a basis for sustainability. Development and environment are not separate concepts, nor can one be successfully addressed without reference to the other. 4) Justice as a pillar of society. Development does not take place in a vacuum, nor is it built upon an abstract foundation. Development takes place within a specific societal context and in response to specific social conditions. [...] People are a country's principal asset. Their well-being defines development. 5) Democracy as good governance. The link between development and democracy is intuitive, yet it remains difficult to elucidate [...] In the context of development, improve governance has several meanings. In particular however, it means the design and pursuit of a comprehensive national strategy for development. It means ensuring the capacity, reliability and integrity of the core institutions of the modern State^[9].

This expansion took the concept of development to the level of intangibility, in order to allow the work of several professionals, from the most varied scientific areas, in research on development.

In this context, sociologists, anthropologists, psychologists, historians, jurists, among others, participated in investigations on development, making them even more complex, multidisciplinary and comprehensive, since they were no longer limited to the discussion on the economic dimension, that is, under economic growth, but rather advanced in the political, social and environmental dimensions.

Thus, it can be said that, although necessary, economic growth will not always generate development, as there can be economic growth without, however, the distribution of wealth generated, distribution, which is essential for improving the quality of life of human beings, as well as the protection of environmental resources. In this sense, Sachs states that

[...] the goals of development go well beyond the mere multiplication of material wealth. Growth is a necessary condition, but by no means a sufficient condition (much less is it a goal in itself), for reaching the goal of a better, happier and more complete life for all^[10].

This evolution takes the concept of development to a broader scope, in order to make it complex and intangible, by incorporating the economic dimension and, beyond it, the political, social and environmental dimensions.

2.2 Preludes of the Sustainable Development Model

Post-modernity, strongly marked by the unregulated exploitation of non-renewable natural resources, the inadequate disposal of solid waste, the unrestrained emission

of untreated liquid effluents and the high emission of greenhouse gases, is characterized by environmental imbalance.

The state of environmental imbalance, experienced in post-modernity, calls for the discussion of the relationship between Science and Consciousness. In this sense, Edgar Morin ^[11] proposes a transdisciplinary approach capable of provoking a transformation of human understanding, aiming to enable the integration of a humanistic culture to the traditional scientific culture.

Thus, in relation to the discussion about the most appropriate development model, driven by the installed environmental imbalance, there was a migration from classical thinking to complex thinking, an opportunity in which disciplinary isolation was replaced by trans-disciplinary, aiming at the formation of a systematic knowledge integrating Science to Socioeconomic-Environmental Awareness.

Nature was exploited and subjugated by the way of life of the liberal period, characterized by industrial and technological development, which transformed nature into a prerequisite for consumption and the market ^[12].

Aiming to quickly supply the growing demand for food, pure water, wood, fibers and fuel ^[13] with the primary purpose of producing wealth – capital accumulation – human beings started the Industrial Revolution, which was potentiated by technological development ^[14], culminating in the installation of a state of environmental imbalance, characterized by the rapid and extensive modification of ecosystems caused by human beings.

There is no denying that the idea of economic growth or development, based on the accumulation of capital, if not exclusively on it, generated irreversible processes of environmental degradation, as human beings, for a long time, indiscriminately exploited non-renewable natural resources sources, as if they were infinite, bringing them to the brink of exhaustion.

With this, they transform available energy into unavailable energy, causing irreversible processes of environmental degradation, which result in imbalances.

The distance from equilibrium, that is, the situation of disequilibrium creates the possibility of a new order, for this reason it is stated that disequilibrium “[...] is not ‘chaotic’, but generative and self-creative. It opens space for the organization and for the constitution of increasingly elegant (cosmetic) and meaningful orders”. For chaos theory, there is no absolute chaos, just as there is no stable order, because what there is a dynamic system, characterized by circular, open and continuous movement between order – disorder – interaction – new order, “[...] this process, as it progresses, tends to create more and more diversity and, with that, to reinforce complexity” ^[15].

The economic imbalance provided by the liberal period made the western economic model based on the predatory relationship between human beings and nature, through the use of natural resources, generating the deforestation of native forests, the slaughter and imprisonment of native wild fauna, grounding of springs and water courses, industrial pollution, among other activities that degrade natural resources, developed in search of unruly economic growth. Such a stance generated such an environmental imbalance, which required a profound review of the mode of production and consumption.

Faced with this reality, the Nations, motivated by the environmental imbalance installed due to the repeated environmental degradations that have occurred around the world from the unbridled industrial, technological and economic development, have joined forces in the search for solutions capable of resolving this state of imbalance.

From the Stockholm Conference came the idea of the need for a new form of development and, with that, the indication of the need for a change of conscience, migrating, gradually, from the idea of the industrial period of growth or purely economic development, that is, from development at any cost to the idea of sustainable development with the forecast of adopting actions aimed at meeting the needs of current generations without compromising the possibility of meeting the needs of future generations.

This idea was deepened in 1987 on the occasion of the publication of the Brundtland report, prepared by the World Commission on the Environment and Development, an opportunity in which a new way of understanding development was presented, based on the concept of sustainable development, as being the process that “[...] meets the needs of the present without compromising the ability of future generations to meet theirs as well” ^[16]. The Brundtland Report also highlighted environmental problems such as global warming and the depletion of the ozone layer and highlighted concern that the speed of change is outstripping the capacity of scientific disciplines and our abilities to assess and propose solutions. The Brundtland report pointed to the unsustainability of existing production and consumption patterns, indicating a change in behavior in the face of the finitude of natural resources, in order to provide sustainable development through the achievement of economic growth reconciled with respect for social and environmental issues.

In 1992, the United Nations Conference on Environment and Development, better known as Eco-92, took place with the aim of reconciling socioeconomic development with conservation and environmental protection.

This conference adopted “[...] in the Rio Declaration

and Agenda 21 sustainable development as a goal to be pursued and respected by all countries”^[17]. In this sense, principle 4 of the Declaration of Rio de Janeiro inserts environmental protection into the development process, with a view to achieving sustainable development.

The Rio de Janeiro Declaration on Environment and Development also foresees, in its principle 16, the promotion of the internalization, in the costs of economic enterprises, of the negative externalities resulting from the environmental degradation promoted by the economic activities developed.

Thus, according to the idea of sustainable development “[...] all negative externalities resulting from environmental degradation, carried out by productive processes of the most varied economic activities, must be internalized in the costs of economic business”^[18], as such The development model is based on the Triple Bottom Line Theory, which predicts that obtaining economic development, externalized in the form of profit - Profit -, must occur associated with the generation of social development - People -, and environmental protection – Planet^[19].

With this, the aim is to avoid the socialization of such negative externalities, which must be internalized by economic agents together with the positive externalities resulting from the economic activities developed.

2.3 The Necessary Interaction between Environmental Law and the Economy to Guarantee Sustainable Development

Environmental Law encompasses the set of legal principles and norms aimed at the legal protection of the environment, aiming to guarantee its balance through economic, political, cultural, social and environmental development in order to guarantee the existence of a dignified life for the present and future generations.

Therefore, this branch of law aims to defend and preserve an ecologically balanced environment due to its essentiality to the healthy quality of life of present and future generations.

On the other hand, the economy is the set of activities developed by human beings aiming at the production, distribution and consumption of goods and services necessary for survival and quality of life.

When dealing with the relationship between the economic and environmental systems, Cristiane Derani states that such a relationship has the ultimate purpose of providing human beings with a dignified existence^[20] through the balanced functioning of both systems.

Environmental Law and Economics must aim to guarantee the existence of a dignified life, so they must focus their efforts on such a guarantee not only for the

present, but also for future generations.

Economic principles and environmental legal principles have a relationship of coalescence and dominance. It means to say that it is necessary to relativize some to the detriment of others, always based on the existence of a life worth living, understood as a fair, healthy and quality life, in which access is guaranteed, equal and equitable, education, housing, leisure, work, health and an ecologically balanced environment, aiming at the realization and social effectiveness of the principles of equality, solidarity and human dignity.

Law integrates development, which incorporates the economic dimension and, in addition to it, the political, social and environmental dimensions, having as its mainstay variables such as justice, quality of life, well-being, freedom, among others capable of guaranteeing the concreteness and social effectiveness of the principles of equality, solidarity and human dignity. This concept can be qualified by a set of postures that Eduardo Gudynas^[21] calls super-strong sustainable development, which “comprises the postures that define a multiple valuation of the environment, and therefore are not restricted to economic or ecological value. Recognize the limitations of science and technology, define the importance of the precarious principle, and lead in this way into more radical and substantial transformations in the face of conventional development” (our own translation). Therefore, the Law cannot and should not be understood as a mere tool at the disposal of development.

Economic production maintains a direct proportional relationship with the impacts on the environment, because the greater the economic production, the greater the risks of impacts on the environment.

Thus, to ensure sustainable development, Environmental Law and Economics must act in a transdisciplinary way, aiming to seek the alignment of the market economy with the economic, political, cultural, social and environmental purpose, to provide the existence of a worthy life to be lived. to present and future generations.

In this way, the interaction between Environmental Law and Economics must occur to regulate economic activities, allowing the production, circulation and distribution of wealth aimed at profit, in a balanced way, with the protection of environmental resources and with social development.

The identification and dimensioning of the aforementioned regulation of economic activities must occur through the consideration, in all national and international decision-making processes, of all economic, political, cultural, social and environmental nuances involved, having as mainstay equity, solidarity and the dignity

of the human person, in order to identify and quantify the potential impacts that the development of a given economic activity may represent for the quality of life of the populations directly and in-directly affected, always aiming to provide the existence of a dignified life for current and future generations.

Therefore, having sustainable development as the mainstay of a new development model, the efficiency of an economic enterprise, public or private, is no longer understood as simply the ability to increase profitability, and is now understood as the ability to increase the profitability, generating social development and protection of environmental balance, with equitable, solidary actions that respect the dignity of the human person, through consideration, in all decision-making processes, of all economic, political, cultural, social and environmental nuances that qualify the populations directly and indirectly affected by the effects of the development of their production processes.

In the model of development qualified by sustainable development, Environmental Law and Economics interact to ensure the maximization of the efficiency of economic, public and private enterprises, through the internalization of profits and negative externalities arising from their production processes, with the aim of sustainable and fair functioning of economic enterprises, in order to avoid the socialization of economic, political, cultural, social and environmental risks, which become part of the financial costs of the enterprises.

An efficient and effective legal protection of socio-environmental resources, to be carried out by the Government and the community, including companies, is a *sine qua non* condition for establishing a healthy balance between economic development and socio-environmental protection.

The search for profit at any price, marked by individualism and patrimonialism, typical of the liberal period, must, once and for all, give way to the search for environmental justice which, guided by environmental, social and economic principles, must privilege the collectivity. through complex thinking, which, based on transdisciplinarity, must seek solutions in favor of socio-economic-environmental balance for present and future generations, as a way of overcoming the state of environmental imbalance installed, as well as all economic impacts, political, cultural, social and environmental effects caused by it.

3. Conclusions

Economic growth, economic development and sustainable development do not have synonymous concepts.

The concept of economic development cannot be con-

fused with the concept of economic growth, as the former represents an evolution of the latter by incorporating variables such as justice, quality of life, well-being, freedom, among others, which make it more complete and complex, given that to the intangible characteristics of some of these variables.

Likewise, the concept of economic development cannot be confused with the concept of sustainable development, as it is based on the Triple Bottom Line Theory, which consists of obtaining economic development, externalized in the form of – Profit –, associated with to the generation of social development – People –, and to environmental protection – Planet.

Post-modernity, strongly marked by the unregulated exploitation of non-renewable natural resources, the inadequate disposal of solid waste, the unrestrained emission of untreated liquid effluents and the high emission of greenhouse gases, is characterized by environmental imbalance.

The state of environmental imbalance, experienced in postmodernity, calls for the discussion of the relationship between Science and Conscience, proposing a transdisciplinary approach capable of causing a transformation of human understanding, aiming to enable the integration of a humanistic culture to the traditional scientific culture.

Thus, in relation to the discussion about the most appropriate development model, driven by the installed environmental imbalance, there is a need for a migration from classical thinking to complex thinking, so that disciplinary isolation is replaced by transdisciplinary, aiming at the formation of a systematic knowledge. integrating Science to Socioeconomic-Environmental Awareness.

In view of this world scenario, the paradigm of sustainable development emerges as a new order to try to reverse the installed environmental imbalance, through practical actions that can provide an efficient and fair development, based on equity, solidarity and human dignity, and considering all the economic, political, cultural, social and environmental nuances involved.

In this regard, in order to be consolidated and successful, a new development model must be qualified by the paradigm of sustainable development, in order to privilege the interaction between Environmental Law and Economics to ensure the maximization of the efficiency of economic, public and private companies, through the internalization of profits and negative externalities arising from their production processes, aiming at the sustainable and fair functioning of economic enterprises, in order to avoid the socialization of economic, political, cultural, social and environmental risks, which pass to integrate the financial costs of the projects.

Conflict of Interest

There is no conflict of interest.

References

- [1] Atlas of Municipalities, 2013. United Nations Development Program – UNDP; Institute of Applied Economic Research – IPEA; João Pinheiro Foundation – JPF. http://www.atlasbrasil.org.br/2013/data/raw-Data/atlas2013_dadosbrutos_pt.xlsx. (In Portuguese).
- [2] Souza, N.J., 1999. Economic development (4th ed.). São Paulo: Atlas. (In Portuguese).
- [3] Araújo, C.R.V., 1995. History of economic thought: an introductory approach. São Paulo: Atlas. (In Portuguese).
- [4] Sachs, I., 2004. Development: inclusive, sustainable, sustained. Rio de Janeiro: Garamond. (In Portuguese).
- [5] Boisier, S., 2001. (Local) development: what are we talking about? Madoery, O. & Vázquez Barquero, A.(Eds.), Global Transformations, Institutions and Local Development Policies. Rosario: Editorial Homo Sapiens. pp. 46-74. (In Spanish).
- [6] Seers, D., 1969. The Meaning of Development, IDS Communication 44, Brighton: IDS. <https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/14769>
- [7] Max-Neef, M.A., Elizalde, A., Hopenhayn, M., 1994. Human Scale Development - Concepts, applications and some reflections. Montevideo: Nordan-Community. (In Spanish).
- [8] Boisier, S., 2001. (Local) development: what are we talking about? Madoery, O. & Vázquez Barquero, A.(Eds.), Global Transformations, Institutions and Local Development Policies. Rosario: Editorial Homo Sapiens. pp.46-74. (In Spanish).
- [9] Boutros-Ghali, B., 1994. An Agenda for Development Report of the Secretary-General.
- [10] Sachs, I., 2004. Development: inclusive, sustainable, sustained. Rio de Janeiro: Garamond. (In Portuguese).
- [11] Morin, E., 2001. Introduction to complex thinking. Lisbon: Piaget Institute. (In Portuguese).
- [12] Beck, U., 2011. Risk Society: towards another modernity; translation by Sebastião Nascimento (2nd ed.). São Paulo: Publisher. 34. (In Portuguese).
- [13] Reid, W.V., Mooney, H.A., Cropper, A., et al., 2005. Millennium Ecosystem Assessment Synthesis Report. United Nations. United Nations Environment Program. (In Portuguese).
- [14] Leite, J.R.M., 2012. Environmental damage in the risk society. São Paulo: Saraiva. (In Portuguese).
- [15] Boff, L., 1997. The Eagle and the Chicken (34th ed.). Petropolis: Voices. (In Portuguese).
- [16] World Commission on Environment and Development, 1991. Our common future (2nd ed.). Rio de Janeiro: Fundação Getúlio Vargas. (In Portuguese).
- [17] Milaré, E., 2001. Environmental Law. Doctrine – practice – jurisprudence – glossary (2nd ed.). São Paulo: Journal of the Courts. (In Portuguese).
- [18] Messias, E.R., Souza, P.R.P., 2015. Financing and Environmental Damage: The civil liability of financial institutions. Rio de Janeiro: Lumen Juris. (In Portuguese).
- [19] Elkington, J., 2012. Cannibals with fork and knife. São Paulo: M. Books do Brasil. (In Portuguese).
- [20] Derani, C., 2008. Economic Environmental Law (3rd ed). São Paulo: Saraiva. (In Portuguese).
- [21] Gudynas, E., 2011. Development and environmental sustainability: Diversity of positions, persistent tensions. In: Ruíz, A. M. & Castellano, F. L. (Eds.). The Earth is not dumb: dialogues between sustainable development and post-development. pp.69-96. University of Granada, Granada. <http://www.gudynas.com/publicaciones/GudynasUsosIdeasSustentabilidadGranada11.pdf>. (In Spanish).