



Sustainable development and human development. Evolution or transition in the scientific conception of sustainability?¹

Julián Santiago Vásquez Roldán², Robert Ng Henao³

¿Desarrollo sostenible y desarrollo humano. ¿evolución o transición en la concepción científica de sostenibilidad?

¿Desenvolvimento sustentável e desenvolvimento humano. Evolução ou transição na concepção científica de sustentabilidade?

ABSTRACT

The integration of the various ideological views by the academic community around the great problems facing the planet has allowed the establishment of a complex system of practical and theoretical relationships between man and nature, generating a strong connection between sustainable development and human development, and conferring greater prominence to the role of human beings, according to their powers, liberties and actions for achieving and maximizing their individual and collective well-being. In this regard, this chapter aims to analyze the influence of the human context in the historical conceptualization of development and its relation with human and planetary well-being over the past 50 years. We try to prove that when it comes to development from the human perspective or from the perspective of sustainability, it tends towards the same discourse that enables convergence and evolution of the concept of development into a much less utopian trend, with greater scope and application under the scientific paradigm of sustainability in terms of human welfare.

Keywords: sustainable development, human development, local development, regional development, welfare, governance.

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2 GINVECO Group researcher at the Faculty of Economics, Autónoma Latinoamericana University, email julian.vasquez@unaula.edu.co ORCID: 0000-0002-2561-5285

3 GINVECO Group researcher at the Faculty of Economics, Autónoma Latinoamericana University, email robert.nghe@unaula.edu.co ORCID:0000-0002-9228-2193

RESUMEN

La integración de varias posturas ideológicas de la comunidad académica en torno a los grandes problemas que afronta el planeta ha permitido establecer un complejo sistema de relaciones prácticas y teóricas entre el hombre y la naturaleza, generando una fuerte conexión entre desarrollo sostenible y desarrollo humano, y confiriendo mayor prominencia al papel de los seres humanos, de acuerdo a sus poderes, libertades, y acciones para alcanzar y maximizar su bienestar individual y colectivo. En este sentido, el propósito de este capítulo es analizar la influencia del contexto humano en la conceptualización histórica

del desarrollo y su relación con el bienestar humano y planetario durante los últimos 50 años. Intentamos comprobar que cuando se trata del desarrollo desde una perspectiva humana o desde la perspectiva de la sostenibilidad, se tiende hacia un mismo discurso que posibilita la convergencia y evolución del concepto de desarrollo hacia una tendencia mucho menos utópica, con mayor alcance y aplicación bajo el paradigma científico de sostenibilidad en términos de bienestar humano.

Palabras clave: desarrollo sostenible, desarrollo humano, desarrollo local, desarrollo regional, bienestar, gobernanza.

RESUMO

A integração de várias posturas ideológicas da comunidade acadêmica em torno aos grandes problemas que afronta o planeta há permitido estabelecer um complexo sistema de relações práticas e teóricas entre o homem e a natureza, gerando uma forte conexão entre desenvolvimento sustentável e desenvolvimento humano, e conferindo maior prominência ao papel dos seres humanos, de acordo aos seus poderes, liberdades, e ações para alcançar e maximizar seu bem-estar individual e coletivo. Neste sentido, o propósito deste capítulo é analisar a influência do contexto humano na conceptualização

histórica do desenvolvimento e sua relação com o bem-estar humano e planetário durante os últimos 50 anos. Tentamos comprovar que quando se trata do desenvolvimento desde uma perspectiva humana ou desde a perspectiva da sustentabilidade, se tende a um mesmo discurso que possibilita a convergência e evolução do conceito de desenvolvimento a uma tendência muito menos utópica, com maior alcance e aplicação sob o paradigma científico de sustentabilidade em termos de bem-estar humano.

Palavras chave: desenvolvimento sustentável, desenvolvimento humano, desenvolvimento local, desenvolvimento regional, bem-estar, governação.

INTRODUCTION

From the 1960s, the confluence of various ideological views by the scientific community around major global issues such as the concentration of income, loss of biodiversity and environmental degradation, has allowed to identify an increasingly strong correlation among physical measurements of inevitable human activity, nature, resource conservation and environmental sustainability (Bettencourt & Kaur, 2011).

This complex system of interrelations between man and nature is what allows establishing the existence of a strong connection between sustainable development and human development, with the latter more focused

on human development, depending on the capabilities and freedoms that humans have (Miller, 2013. P 281).

As it is intended subsequently to identify in this work, and because of its degree of ambiguity, sustainable development has been interpreted across multiple considerations (Bosselmann, 2008); unlike the concept of human development, upon which lies a higher degree of uniformity and unanimity in its conceptualization (Ul Haq, 1995).

The ecological or environmental dimension was only recently inserted into a practical and tangible level in anthropological, sociological, political and economic visions of man and his relationship with the territory. Therefore, the sustainability field is incipiently developed and of rather low acceptance but, on the

contrary, with recent, relentless and prolific technical, academic and scientific creation, given the interest that this new development approach has aroused globally, and given its multidisciplinary and especially transdisciplinary nature (Palmer, 2012; Shahadahu, 2016).

The approach that this paper seeks to establish in the conceptualization of sustainability and its relation to the understanding of human development from a framework of local application aims to conceive the environment as a concept that is intimately linked to ecology. According to the Pan-Hispanic Dictionary of Doubts of the Royal Spanish Academy of Language in its first edition (October 2005), the environment is the "set of circumstances or conditions outside a living being that influence their development and their activities"⁴. Ecology will be regarded as the study of the relationships of living beings with each other and with their environment (Lee Ellis, Kweon & Hong, 2008). In the framework to be developed in this paper, special emphasis will be given to the natural dimension of the environment, reduced in a utilitarian fashion sometimes to qualify as natural resources, but the focus will also be on the environment built by human activity. In urban environments, both dimensions are in continuous interaction. As suggested by Verschure and Tuts (2004, p. 250), all environments are constructs, in the sense that they are transformed, reinterpreted and endowed with meaning by the human being.

The risks involved in a markedly economic understanding of the processes of managing development and its scale of action on a human, social or territorial level, identifies a number of elements that combine into what can be called a common denominator in terms of building a perception of development more focused on economic aspects (Wiek, 2007 p. 54). The features listed below as evidence of the risks posed by this confusion are considered as the main and most valuable criticism of these approaches:

- Economic growth is the engine of development and social progress, presented as the instrument and the purpose of development. Issues linked to the unequal distribution of income are not incorporated (Steelman et al., 2015);
- Despite the contributions of the structuralist approach through the use of instruments for

synchronic and diachronic analysis, its anachronistic vision of development (without considering the time variable) reveals the little incorporation of a country's historical perspective in the studies carried out (NESS et al., 2007);

- Development refers to the development of countries, obviating its territorial, local and individual levels and the effects of this "development" on human interactions with society, institutions and the environment (Fischer et al., 2007);
- They do not pay attention to relevant elements of development as they really are - social subjects themselves-, or to the environment or culture, which would provide a more comprehensive view of the concept (JERNECK et al. 2011)

The main loss of validity of these economic approaches lies in their inability to solve current problems (UNDP, 1992). Although productivity and efficiency continue to be recognized as important indicators in the consolidation of a much more holistic definition of development, the so called alternative trends begin to incorporate new analysis components, such as gender equality, the satisfaction of basic human needs, respect for ethnic minorities, inclusion and social cohesion, governance, governmentality, metabolic efficiency, environmental sustainability and, more recently, the valuation of the territory and localities (Valcárcel, 2006, p. 31).

Finding a valid definition for the concept of development that links the concepts of human and territory from a scientific perspective is not easy. This is especially due to the economic vision that has accompanied its various lines of thought throughout the twentieth century, where one can identify interesting contributions such as: *development as a process in stages* (Rostow 1990; Kuznets 1955; Chenery 1966); *the progressive expansion of the capitalist core* (Lewis, 1996); *the poverty trap* (Nurske 1953; Chenery, 1966; Strout, 1966); *the role of external economies* (Rosestein-Rodan, 1984; Hirschman, 1958; Myrdal, 1957); *the center-periphery approach and the deterioration of terms of trade* (Prebisch-Singer, 1982).

The excess of strictly delineated components from economic science is precisely one of the elements for which the concept is questioned by some authors, for the simple fact of being considered as a unique construction of Western societies⁵. It is their heritage

4 Pan-Hispanic Dictionary of Doubts of the Royal Spanish Academy of Language -first edition (October 2005), (<http://buscon.rae.es/dpd/SrvltConsulta?lema=medioambiente>)

5 In this regard, see the interesting work of Gilbert Rist entitled "Development: History of a Western belief" (Rist, 2002).

of the notions of progress, civilization or growth (Valcárcel, 2006), which for some is the main reason for their dichotomous validity as a concept with a vocation towards universal application in any context.

We depart from the idea that, under new approaches (human, regional and sustainable developments), it is possible to talk about development in the sense of a permanent change and transformation process (from the individual level to the global level); it is of a multidimensional and transdisciplinary character, but not necessarily of an evolutionary, cumulative and unidisciplinary one (Miller, 2013).

Evolution of the concept of development and its debate around the concept of sustainability

Since the mid-eighteenth century, the history of mankind has been determined by a particular pattern of thought, which has consequently influenced the spread of views that society accepts about the facts related to the determining conditions of sustainable development (Mebratu, 1998). This scheme of thought has been closely linked to the establishment of a set of economic, environmental, political, cultural and social elements that have laid the foundations of what historiography acknowledges as the emergence of capitalism, understanding emergence or birth as a synthetic and adjusted characteristic of what is considered as modernity (Miller et al., 2014; Bettencourt & Kaur, 2011; Kates, 2011).

Parallel to the advancement and penetration of the new model of economic organization in the social context and the dynamics of public responsibilities and the government, the juxtaposition of individual behavior, and the psychological and economic validation of selfishness, the thinking and autonomous individual appears, who engages in an ongoing struggle to satisfy their own needs as opposed to the responsibilities that the new model imbues (Komiya & Takeuchi, 2006). In a now famous interpretation of the work of Max Weber, the German historian Wolfgang Mommsen (1971, p. 111) warned about the presence of an "abysmal antagonism" between individual responsibility and product rationalization, particularly in the modern capitalist world of work with its hierarchical structures, disciplines and bureaucracies.

The real problem is the ease with which we accept this paradox, because as the problems arising from approaching the operating limits of the system become more noticeable, we are also more aware

of the environmental problems derived from the socioeconomic processes that we are a part of (Nassauer, 1995; NG, 2013; Foody, 2015). In this way we advocate the need to generate greater scientific and technological progress for our nations. But even knowing this, we are unable to accept our responsibilities regarding the increasing abuse and deterioration of nature with the consequences of increasing poverty and misery for most people on the planet (Jimenez 1996, p.79).

The environmental crisis and its correlation with the effects of growth and economic expansion has been accelerated during the second half of the twentieth century, with the additional problem of progressive increases in the inability of human understanding as to the true dimension of man in nature (Carvalho 1998, p.15). Man's pressures for better survival conditions have encouraged population growth, the globalization of economy, culture and technology, and the generation of a high network of interdependencies between advanced and emerging nations (Van Kerkoff, 2014). Although with these the world economy has managed to recover from the recent crisis context, the implications of the depletion of resources, generating catastrophic effects on habitats and the environment, are incalculable versus traditional mechanisms under which the current production model is supported (Duit et al., 2010).

However, although the outlook is daunting, all is not lost. Environmental education, culture and management are critical when raising awareness about the significant changes required by society and the system, where responsibility does not exclusively encompass the role of states and large corporations (Kajikawa, 2008), but rather requires a change in our customs and ideologies concerning the processes of consumption, accumulation and production. In sum, a change is required in all our dynamics with the environment and our relationship with our surroundings and our fellow beings, those who have impacted the dichotomy of the pursuit of individual satisfaction of human needs as opposed to the leading role of the individual as a link in the production chain under ideal welfare frameworks (Ng, 2014.).

For about three decades, special relevance has been given to the delicate situation that the natural environment is experiencing, from the capitalist system's desire to relate development with economic growth, without any distinction (Redman, 2014). This concern is not new in history, given that sustainability has been talked about since the eighteenth century,

with the French proposals regarding physiocracy (Kates, 2011). This theory, consisting of an economic system and a production model based on the power of the land and agriculture, proposed the consideration of natural factors in the production of wealth. However, such approaches did not have resonance against the emerging and subsequently influential economic theories of Adam Smith and David Ricardo through their school of classical liberal thought, for which industrial and financial wealth was conceived independently from ecological factors (Llobera, 2001).

In the nineteenth century, economists of the Russian school such as Podolinsky (1995) and Geddes (1949) began to give shape to what would be the roots of the trend now known as green economy. More recently, in the early sixties, came the concept of sustainable economy from authors such as Herman Daly, John Cobb and Clifford Cobb (1994) and Paul Erlich (1996), who referred to the “need to ensure an equitable economic system that was in relation to the consumption of natural resources, progressive in moral and ethical aspects as well as in human knowledge and technological applications, and in terms of distribution” (Llobera, 2001).

At present, some collective movements, academics and social groups have been more sensitive to the increasing environmental degradation and depletion of natural resources and have gradually directed the attention of development experts towards the consolidation of a movement in defense of the planet. This has been done by means of a strong criticism against the prevailing model of economic system which, according to them, is the main cause for this dangerous situation (Miner, 2008). At the same time, they have been noticing the growing problems of poverty in a world where, apparently, the generation of material wealth was supposedly increasing (Kemp et al., 2005, p.13). However, the first attempts to operationalize the concept of sustainable development have been aimed towards economic and environmental dimensions. It is only in recent years when more interest has been found in considering the social dimension of implementing sustainable development (Froger, 2004). Thus, a new vision of sustainable development arises, under the fulfillment of four basic objectives: economic prosperity; inclusion and social cohesion; environmental sustainability; and governance and governability (Sachs, 2014).

Perhaps one of the most decisive events for the reorientation of the conceptualizations about development and the evolution of the concept

around the paradigm of sustainability is the forum of independent and international debate known as the “Club of Rome”. The forum has brought together scientists, economists, entrepreneurs, sociologists and senior officials from various organizations around the world since 1968 and, in 1972, published a report entitled “the limits to growth” (Mebratu, 1998; Meadows et al., 1972). The main conclusion of the report focused on the absolute limits to growth which earth is approaching during the next hundred years, due to the complex and almost exponential increase in world population, industrialization, pollution, food production and the excessive exploitation of natural resources (Kates et al., 2001).

Although the analysis of the interactions among those problems is extraordinarily complex, the Club of Rome analyzed the evolution of key parameters of planet Earth (population, natural resources, industrial food production and pollution), generating a predictive model of the global behavior of the planet called World3⁶, with different versions over the years (Weber, 2010). The study highlighted the physical constraints to growth and concluded that there would be a collapse of the above variables in 2050. Although many labeled them as doomsayers and the predictions are certainly based on a mathematical model that simplifies reality (simplification of which the authors were aware), these predictions sounded the alarm about the devastating effects that standard patterns of production and consumption were causing to planet Earth (MEADOWS et al, 1992).

The United Nations Conference on Human Environment held in Stockholm in 1972 is another reference that should be considered when analyzing the elements and the most representative moments in the evolution and inclusion of the sustainability paradigm in conceptualizing development. The international community met there for the first time to analyze the global needs in the field of development and the environment. Although the relationship between environment and development did not emerge strongly enough, there was sufficient evidence to confirm the need for altering the way economic development had been carried out (Mebratu, 1998, p. 500). But it was not until the late 80s of the twentieth century that the term sustainable development itself

6 World3 is a computer software simulation. It was created to make projections about the future development of the planet, using a large database with many variables. These projections are based on the interplay of systems such as world's population, industrial growth, food production and limits on ecosystems on Earth.

began to spread worldwide, especially following the report “*Our Common Future*”, better known as the Brundtland Report of 1987. The report was supposed to be an advance on the proposals made to date, as the aspects considered included North-South inequalities, inequity of the current development model, the need for intergenerational justice, etc. (Meadowcroft, 2000; Sen, 2000). The World Commission on Environment and Development concluded in the study that ecological and social failures had common causes and therefore demanded common responses (Kemp, 2005, p. 13).

Despite its efficient and accepted analysis, the report does not deal with certain issues crucial for promoting sustainability and citizen participation with the required depth (Font, 2000). It has been criticized for its ambiguities, which have just opened a large stage where almost everything has a place and acceptance. Some voices, however (Sen, 2000), give value precisely to this ambiguity, arguing that what people need, as agents of change, is a sufficiently broad notion of sustainability that different linkages can adapt later on (Spangenberg, 2011).

Tryzna and Mebratu (1998) stress that the greatest advancement in the new conceptual perspective on development and the environment was given by the publication in 1980 of the World Conservation Strategy, which placed particular emphasis on the concept of conservation as a framework when discussing environment and development. It does not explicitly address the definition of sustainable development (what it does layout is the concept of sustainable development, understanding this as economic growth that does not infringe ecosystems), but recurrently stresses the concept of sustainability and the inevitable connection between environmental variables and development (Scholz & Steiner, 2015).

Other approaches to consider in the search for a conceptualization of development without destruction, or from a much more “green wave” oriented view, is the proposed eco-development that emerged from the United Nations Program for Environment (UNEP) in the early 1970’s (Mebratu, 1998). Eco-development, set forth by Polish socio-economist Ignacy Sachs (1981), is a concept that proposes a development model in which each country requires specific strategies to solve their particular problems, taking into account cultural, social, and ecological specificities, with the aim of better meeting the needs of the local community (Lin & Chang, 2013). The context of eco-development is structured in

three parts: economic, environmental and social; and the main issue to be resolved in each part revolves around the creation of welfare for society, which is somehow determined by technological constraints and issues related to environmental degradation (Masten & Powell, 2003).

In his work on sustainable human development, Calabuig (2008, p. 29) presents as a new approach to development, a comprehensive compilation of events, which are named by the author as great “milestones” of sustainability, and made up of the possible proposals from different summits, meetings and documents ratified worldwide. These have helped to address a new vision of sustainability from a conception of development much more oriented to the human component, placing special attention on the connections between the environment and economic growth, and on issues such as population, poverty, social mobility, inequality, climate change and urbanization, among others (Moffatt, 1996; Hopwood et al., 2005).

In this regard, according to the contributions of Naredo (1996), Alonso and Sevilla (2000), Bermejo (2000), and Rist (2002), led by the arguments put forward by Abeledo (2002) on the transition and evolution of the concept “development”, it is valid to consider the following as environmental scenarios of the economic paradigm and its implications for development management under the paradigm of sustainability: the mechanical and anthropocentric vision; commercial and mercantilist reductionism; technological and scientific optimism; the notion of unlimited and indefinite growth; the belief that natural resources are renewable and unlimited; in addition to the full rate of substitution between natural and anthropic capital (Walker et al., 2004).

Karl Marx and Frederick Engels had established at the time that production implied relations of production and therefore the predominance of capitalism as it generated the exploitation of the working class; it also linked the exploitation of said class to the terms offered by the environment (Bellamy, 2009). To achieve levels of development in line with the main paradigms of sustainability order, it is necessary to apply the basic microeconomic principles around the optimization of resources, production maximization and profit maximization (Kirby et al., 1995). However, this situation is not possible without radical changes in the economic structures that make up the current world order. Consequently, the following questions arise: is it essential to fully break with the current pattern of

growth and accumulation, changing the market and the importance of the role of consumption?; or will the constitution of supranational policies and the establishment of global agreements and commitments that encourage the disappearance of inequities be enough? (Jacobs, 1996).

Although answering these questions is complicated, it is more complex to frame the implementation of possible solutions in an agreement of opinion and wills, not without acknowledging the different ideological and theoretical views framing the problem that our planet and the prevailing economic, political, and social systems, are going through.

In the synthesis made from the different ideological views that have emerged throughout history since the origins of capitalism as the prevailing economic system, one can identify irreconcilable relations between man and his needs: the necessary resources and services to satisfy them, and the environment (CALABUIG, 2008). In this regard, the most important thing to consider is that we can build consensus among the responsibilities of the various individual and collective actors, both public and private. This consensus must embody a new concept of development consistent with the interests and needs of both rich and poor (Leff, 2000). The actions proposed within this new scenario must be of a truly global impact, because the consequential problems of environmental degradation and the effects of climate change, among other issues, are intertwined and cannot be isolated (Fussler, 2007).

Humanizing of the concept of development

The most significant conceptual change in development economics begins from the 1970s, motivated by the lack of signs that show a real scope of balanced welfare conditions and needs satisfaction for the entire population within a territory (Miller et al., 2014). The notion of economic growth loses momentum and gives way to another focus: the satisfaction of basic human needs. One of the authors that have validated the configuration and acceptance of alternative approaches to the concept of development is Sen (2000, p19), who conceives an alternative way to development as a process of expanding the real freedoms enjoyed by individuals. The same author points out that the fact that society focuses its attention on human freedoms contrasts with the strictest visions of development and its identification with gross domestic product growth, rising personal

incomes, industrialization, and technological advances or social modernization (Nussbaum & Mazzoni, 1996).

Alternative ideas to development will materialize in a variety of approaches that advocate for a development with a human face, more focused on ecological balance (Hidalgo, 1998, p. 280). Among the works and contributions of the past three decades related to the concept of human development, it is first necessary to note the report "Adjustment with a human face" published by UNICEF in 1987 (Cornia & Stewart, 1987). For its attempt to confront the economic orthodoxy under which many structural adjustment and stabilization programs have been implemented in developing countries (Cruz, 2006), this report becomes one of the forerunners of the approach and concept of human development that begins to integrate itself with the dimensions of sustainability sciences.

The human development approach emerged in the late 1980s within the United Nations, under the influence of the thinking and work of economists Amartya Sen (awarded with the Nobel Prize in Economics in 1998) and Mahbub ul Haq (Lechner, 2000). This concept is institutionalized starting from 1990 through the Human Development Reports prepared by the United Nations Program for Development. The first Report on Human Development of 1990, entitled "*Concept and Measurement of Human Development*", emerges from a break with traditional thinking of development as economic growth (Ferrero, 2004, p 106; Valcárcel, 2006, p. 25).

The interest in all that underlies human development came to occupy a central place in the debate about development in the nineties (Sarewitz et al., 2012). For a long time, the recurring question was: how is a country producing? The question being asked now is more often: how are people doing? The main reason for this change is the growing acknowledgement that expanding people's options and meeting an increasingly broader range of both physical and intangible needs is the real objective of development (Cutter et al., 2008). "Income is just one of those options -and an extremely important one- but it is not the total sum of human life. Health, education, physical environment, freedom, to name a few options, can be as important as income" (Ul Haq, 1995).

The structural bases for sustainability as a science that relates to development and human welfare are supported in the theory of Amartya Sen's "capabilities

approach” (Sen, 2000). This approach seeks to address an alternative conception of sustainability of territory and views development as a process of expansion of individual and collective human capacities to carry out activities that are freely chosen and valued. This report can be considered as the academic document that disclosed the concept of human development; it was written by a team led by Mahbub ul Hac and made up of Keith Griffin, Amartya Sen, Frances Stewart and Paul Streeten, among others (Ferrero, 2004, p. 106; Valcárcel, 2006, p. 25).

One possible definition of valid acceptance of human development and its relationship with sustainability is precisely the one coined by the UNDP Report on Human Development, which puts forward the following concept: “Human development is a process by which individuals’ opportunities expand, the most important of which are a long and healthy life, access to education and the enjoyment of a decent standard of living. Other choices include political freedom, guaranteed human rights and self-respect” (UNDP, 1992, p. 33). Human development is then configured under the tutelage of multiple disciplines and diverse applications in a multidimensional concept that goes beyond the simple satisfaction of basic needs and which applies equally to both developed and developing countries, and generally to any kind of territory (Ferrero, 2004, p. 106).

Several misinterpretation problems arise from the debate on the concept of development, as a result of the poor definition of its dimensions in recent attempts to theorize it (Cruz, 2006, p. 58). Regarding human development, there are some disagreements, but it is undeniable that there is broad agreement in relation to various aspects (Ul Haq, 1995, p.4):

- The human development paradigm is concerned with developing human capacities through a framework for growth and employment (Tomer, 2016).
- Human development has four pillars: equity, sustainability, productivity and empowerment. It considers economic growth as essential, but emphasizes the need to pay attention to quality and distribution; it carefully analyses their link to the lives of people and questions their long-term sustainability (Biggeri & Ferranini, 2014).
- Development must put people at the center of its concern. The human development paradigm establishes development purposes and analyzes the most sensitive options to meet these goals. The person is, from this approach, the means and

the end of development, that is, participant and beneficiary of the process (Tridico, 2011).

Hidalgo (1998, p. 278) analyzes the concept of human development as “an integrative concept of what has been alternative development, combining the satisfaction of basic needs, sustainable development, reform of the international order, autonomous development, multidimensional development, among others”. From this perspective, considering the perceptions of authors such as Keith Griffin (1990), Amartya Sen (2000), Frances Stewart and Paul Streeten (1976), one cannot deny the intellectual efforts made from the perspective of human development in recent years, in order to strengthen its relationship with the paradigm of sustainability and their actual implementation in the territory. However, sustainability is not fully embedded in the human development approach despite what is suggested by Hidalgo (1998, p. 284); this is why the current trend focuses on adopting the term sustainable human development as a way to consolidate the major contributions of both approaches in an inter- and trans-disciplinary way, from a more holistic conception of analysis.

The human development approach proposed by UNDP revolves around measuring its own instrument, which is known as the Human Development Index (HDI). Under this indicator, development is conceived as a concept that represents more than the variation in the income of a territory (Mesa, 2008); human development according to the UNDP seeks to ensure the need for people and groups to develop their potential and pursue a creative and productive life towards meeting their needs and interests⁷. This conceptualization focuses on an alternative vision that proposes placing development in its human component as the possibility of expanding the options people have available to carry out the lifestyle they value, that is, to increase the range of options or possibilities of what they can be and do in their lives. In this way, economic growth and sustainable consumption and income are only valid as long as they result in the generation of greater and better opportunities for people (Lopez - Bald & Grajales, 2013). To expand these options, it is essential to build human capabilities. The most basic capabilities for human development are: leading a long and healthy life, having access to resources that enable people to live in dignity, and being able to participate in decisions that affect their community (UNDP, 2015). Without

⁷ http://www.pnud.org.co/sitio.shtml?apc=aBa020081--&m=a&e=A#.VT5FsNJ_NHw

these capabilities, many of the options are simply not available and many opportunities are inaccessible.

Within the academic and scientific considerations and the concept of development from its human component inputs, one cannot exclude the focus on *Human Scale Development*, which ultimately is complementary to the contributions of Amartya Sen and UNDP. The human scale development has been led by the work of Manfred Max-Neef, Martin Hopenhayn and Antonio Elizalde (1986), where the importance of distinguishing between needs and satisfactions of these needs is stressed. According to these authors, human needs are not infinite and inscrutable; on the contrary, they are finite and well known. That does not imply a biological or etiological reductionism or the application of the approach of "basic needs of the poor"⁸ (Feres & Mancero, 2001). Human needs are those of all humans (Martínez, 1994) which, adapted to the context of development that this work calls for, could translate into the idea that development refers to people, not to objects (Max-Neef et al., 1996, p.40).

Max-Neef, Hopenhayn and Elizalde (1996) focus on talking about poverties rather than poverty, in the sense that any fundamental human need that is not adequately satisfied reveals a human poverty. Because of their impact on development policies, development on a human scale considers that these policies should be geared towards meeting the broad needs in the sense understood by this approach, which implies transcending the traditional economic rationale to commit the human being in full (Calabuig, 2008, p. 25). The proposal for humanizing development is then summarized as its practical application in a matrix of needs and satisfactions; the former are classified in four existential categories (be, have, do, being) and nine axiological categories (subsistence, protection, affection, understanding, participation, leisure, creation, identity and freedom) (Calabuig, 2008, p. 37).

CONCLUSIONS

There are important trends of thought that have been raising questions about the relationship between the conceptualization given to development and the very issues that structure the paradigm of sustainability. Based on this view, a certain conclusion emerges about the negative effects that the development model imposed by the capitalist system is causing not only in the physical component of the territory but

8 Characteristic of the World Bank and other international organizations from 1970

also in its main impact component which is society (Redclift, 2000; Rist, 2002). In his work "Development: History of a Western belief", Rist (2002) is even more critical and radical and dares to expose the thesis that sustainable development is really an oxymoron⁹.

Another trend worth considering within the existing debate between the importance of foisting the concept of development and the proper and concerning issues regarding the sustainability paradigm is the eco-technocratic vision (Alonso & Sevilla, 2000). According to Gallego (1972), this ideological stance arises from the Conference of the United Nations on Human Environment held in Stockholm in 1972 and its conception in the school of orthodox economics, which championed the term sustainability under the claim that economic growth (unlimited) is compatible with sustainability (Calabuig, 2008). This is one of the most important criticisms of the definition in the Brundtland Report and one of the biggest contradictions that the Report encloses: promoting as an alternative to eradicate poverty and stabilizing the global ecosystem precisely the policies of economic growth, which are those that have increasingly deepened the gap between rich and poor and have degraded the environment (Rist, 2002; Meadowcroft, 2003; Naredo, 1996; Bermejo, 2001; Llobera, 2001). The discourse then defended by technocratic environmentalism is now regarded as founding and validating official sustainable development, according to international organizations (Alonso & Sevilla, 2000). It states that although the threat to the planet is ongoing, its effects can be minimized by establishing a series of corrective measures. However, under deep analysis, these measures generate a great contradiction with the model of growth, accumulation and development of the great super powers, and even generate loss of development and exclusion for most countries that do not have great historical accumulations of capital, technology and power (Gorostiaga, 1991, p.39).

Authors such as Norton (1995) and Naredo (1996) have focused the analysis on the concept of sustainability, rather than on the concept of development, enabling the creation of two views on it. On the one hand there is the view of *weak sustainability*, understood as

9 Among literary figures in rhetoric, it is a logical figure that consists of using two concepts of opposite meaning in a single expression, which generates a third concept. Since the literal sense of oxymoron is opposite or 'absurd' (for example, "an eternal moment"), it forces the reader or listener to understand the metaphorical sense. <http://www.retoricas.com/2009/05/figura-de-oximoron.html>

the viability of a socioeconomic system in time, which is achieved by maintaining some of the production factors or available capacities in the production system (Leal, 2000). According to Calabuig (2008), the interpretation of weak economic sustainability reflects the assumption that both natural and unnatural factors are replaceable; the former can be liquidated as long as there is investment to provide an equivalent endowment for the next generation (Roseland, 2000); or the non-natural capital can be converted into natural capital, avoiding irreversible nature processes. On the other hand, there is the view of *strong sustainability*, which, according to Naredo (1996), is defined as the viability of the relationship that a socioeconomic system maintains with an ecosystem, where the latter has the peculiarity that it can function autonomously; unlike the socioeconomic system, which is entirely dependent on the ecosystem. Today, the vision of strong sustainability is framed almost to the level of a utopia and cannot be carried out because we place ourselves in an economy with budgets of unlimited growth. However, it is possible to start designing economies guided by principles derived from *strong sustainability* and make concrete projects which, although framed in today's economy, approach the ideal of sustainability (Luffiego & Rabadan, 2000. p. 476).

The Brundtland Report, where sustainable development is established as an official method to correct the effects of the ecological crisis, is vaguely defined as the one "which meets the needs of the present without compromising the ability of future generations to meet their own needs" (Alonso & Sevilla, 2000. p. 103). It is the report that best promotes strategies and intervention actions to revive the behavior of the former strictly economic models. This report granted the same meaning to development and growth. Regarding the social permeability of the ecological and environmental issues, it disguises the dichotomies which are present in the evolution of human development under the acceptance that development is simply guaranteed through the generation of strategies that encourage approaches which seek to guide growth through a sustainable growth path (UNCED, 1988, p. 68), forgetting the much more important concept of distribution from the same classical economicist view¹⁰.

¹⁰ According to Herman E. Daly (1991, p.38-41) to grow means to naturally increase the size by the addition of material through assimilation or accretion; while developing means to expand or realize the potentialities that are available within a society; access to a much fuller, greater or better state.

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