Scope of sustainability in ecological cities

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Abstract— Sustainable urban development is an indispensable advance due to the growth of cities initially formed in a disorderly way and without care of the preservation of the environment. The relationship between man and the environment has been reframed, maintaining capitalist and progressive thinking, but with recognition of the awareness of a healthy environment and restrictive measures that guarantee environmental protection. The exercise of the joint evolution of society and nature, working in an intelligent way, using the technologies available to the population, aiming for future well-being, will ensure that there are conditions of use for a future society that will succeed the current one. Its purpose is to specifically address the extent and importance that cities that care about sustainability have, acting and caring locally, to make their impacts globally possible, as well as to address how unbridled and with no organization involved in cities that were created without the necessary care with the preservation of the environment. In the various phases of the Research, the Referent Techniques, the Category, the Operational Concept and the Bibliographic Research were activated.

Keywords— Sustainable development. Sustainable Cities. Environment.

I. INTRODUCTION

This article aims to address the importance of sustainable development as a social requirement of all cities and countries, with a view to ensuring that future generations can enjoy a healthy and safe environment.

Its purpose is to specifically address the extent and importance that sustainability-minded cities possess, by acting and caring locally, to be able to counter their impacts globally, as well as to address how unbridled development and without organization implied in the cities that were created without the necessary care with the preservation of the environment.

This article is divided into three topics. In the first, it will be discussed about Sustainable Development, drawing a general line about its meaning and its implication throughout the world.

In the second item we will consider reflections about sustainable cities, creative and innovative practices that become necessary for the advancement of society, and the use of applicable technologies as a way of seeking development, concomitantly to a preserved environment.

Regarding the third point, it will be portrayed, regarding the reach of sustainability through sustainable cities.

As for the Methodology used, it is recorded that in the Investigation Phase the Inductive Method was used, in the Data Treatment Phase the Cartesian Method, and, the Results Report expressed in this article is composed on the inductive logic basis.

In the various phases of the Research, the Referent Techniques, the Category, the Operational Concept and the Bibliographic Research were activated.

II. SUSTAINABLE DEVELOPMENT

Sustainable development is found when the economic and social growth of a society is marked with corresponding attention also to environmental preservation, both for this generation and for future generations, guaranteeing them a healthy and lively environment.

Consciousness about the degradation of the environment is a recognized theme around the world, because it will be at a critical moment in the history of planet Earth, since much has been extracted from nature to advance growth, while the ecosystem does not regenerate at the same speed.

Thus, having reached levels of urbanization and development, all countries are more attentive to the fragility of nature, seeking to reconcile social and economic development with environmental preservation.

In addition to the collective consciousness that arises regarding the preservation of nature, the orders are
attentive to the establishment of rules for the maintenance of natural resources.

In this sense, DERANI clarifies that "environmental law is a right for man. It is a right that man must see in all dimensions of his humanity," that is, they are regulations that benefit the very human being, maintaining the planet where he lives.

Clarifying about environmental law and sustainability, FENSTERSEIFER points out that:

Communication between fundamental social rights and the fundamental right to the environment is also one of the central objectives of the concept of sustainable development on the horizon constituted by the Socio-environmental State of Law, since, together with the idea of environmental protection, the central objective is to meet the basic needs of the world's parts and the equitable distribution of natural resources (eg access to water, food, etc.).

Concerning Environmental Law, DERANI says:

They are factors that make up the quality of life, the quantity of natural resources for the production, as well as the hygiene of the environment and the availability of nature destined to leisure.

Thus, sustainability is the most adequate way for a civilization to progress but considering that transformations occur not only with attention to the needs that are present in the daily life of society, but also in guaranteeing the maintenance of nature.

Although greed motivates the enterprise at all costs, laws that are pertinent to the use of natural resources are growing, with societies, institutions, government, scholars and sympathizers in constant vigilance, so that the Law on the environment is fulfilled, and cases of distortion have the necessary punishment and reprimand.

Regarding the internationally required care in the face of nature and its conservation, VEIJA emphasizes:

The international community's understanding of the care required for environmental conservation has been much more intense than is commonly assumed. A few indicators are enough to realize that the global political process with this focus is frantic.

Sustainable development is a way of maintaining a balanced relationship between the progress of man and the maintenance of nature by carefully regulating all activities that may adversely affect the environment.

In this sense, they clarify BODNAR and CRUZ:

The concern of the present generation should not be to guarantee future generations the same amount of environmental goods and resources. The insufficiency of this objective is manifest. This is because the irresponsibility of the human being generated a historically unsustainable development and has already led the present generation to the verge of collapse by the manifest limitation of many primordial goods for the full life. Thus, it is fundamental that all collective intelligence and that all accumulated scientific knowledge is also in the service of improving the conditions of the whole community of future life and not only in the service of the human being.

Thus, the adequate one is the advance allied to the creation and application of methods that conciliate social and technological development with the conservation of the natural resources.

Emphasizing that nature is part of a collective right to be maintained and preserved, says Fensterseifer:

In environmental matters, the democratic process must always be present, in view of the repercussion and collective nature of environmental degradation for the whole of society.

And yet, FENSTERSEIFER, complements:

The very transindividual nature of the issues surrounding the ecological theme imposes a democratic and transparent process for the political decisions taken to have legitimacy and constitutional foundation. Any activity that is harmful or potentially harmful to the environment, before being implemented, must be subordinated to a democratic decision-making process, giving voice to all representatives of social groups interested in the issue.

DERANI notes that "environmental economics focuses on the role of nature as a supplier of raw materials or as recipient of harmful materials," and asserts:
Determining price to nature is the same as privatizing it, imputing to the user of this resource a monetary consideration. The appropriation of a natural resource for production or production waste depends on the availability of the individual to bear the price charged to the parcel of nature that is intended to be used.

Thus, it is well-known that the concern with the environment is a constant matter, since with the advancement of technology and access to information, consumption is increased every day, and all are in constant movement, and consequently, the preservation of natural resources is imperative.

III. SUSTAINABLE CITIES

In the specific case of Brazil, urbanization occurred as a result of the Industrial Revolution.

Since then the consequences of unbridled and irresponsible development have been evident, since the price of social, technological and cultural development has been realized at the expense of great wear and tear on nature.

Without concern for natural sources, cities began to develop in a disorderly way, without organization and without attention to the environment and to sustainability, since natural resources seemed inexhaustible.

The development of a community that transforms into a city demands an extensive and complicated sequence of actions, and in practically the integrity of development in Brazil, practically the entirety of the spaces already have a consolidated occupation, in the way they were naturally developing.

Along these lines, BOFF points out:

The concept of sustainability can not be reductionist and applies only to growth / development, as it is prevalent in our times. It must cover all the territories of reality, ranging from people, taken individually, to communities, culture, politics, industry, cities and especially to Planet Earth with its ecosystems. Sustainability is a way of being and living that requires aligning human practices with the limited potentialities of each biome and the needs of present and future generations.

There is no more possibility of reorganizing the formation of cities, which simply came into existence and developed.

However, it is possible to create strategies to maintain nature and natural resources, seeking to minimize the degradation of the environment.

As an example, driving cars that cause great pollution are mentioned, and new forms of fuels that are less harmful to the environment, manufacture of vehicles in better quality material, and electric ones are already being explored, not to mention the great incentive the use of bicycles, public transport, hiking, etc.

Therefore, even in the face of advances that do not go down in any way, a collective conscience about sustainability is gradually being created, and minimizing damages to nature becomes an interest of all.

Considering that most cities have already been formed with the natural progress of their development, consequently, there is still an expressive number of Brazilian municipalities that have not yet properly implemented an organized master plan.

It is worth noting that the City Statute (Law No. 10,257 / 2001), which regulates articles 182 and 183 of the Federal Constitution, establishes general guidelines for urban policy and other measures.

The City Statute establishes rules of public order and social interest that regulate the use of urban property for the collective good, security and well-being of citizens, as well as environmental balance.

Thus, even though most cities are already structured in every country, it is increasingly recognized the importance of sustainable actions as a source of citizenship promotion, preventing this growth of cities too much to destroy the balanced environments in these urban spaces.

Still, in Brazil there are few cities that can be considered as sustainable cities, although many have isolated actions and private and governmental measures to combat environmental degradation.

This is because in the past the great interest in the growth of infrastructure, technologies, economy, modernity, has caused an acceleration in growth without care with the sustainability of cities.

However, practices of preserving the environment and creating ways to minimize the use of technology with reduction of environmental degradation are growing every day.

As an example, the search for greater urban mobility with the use of collective transportation, energy saving, water saving, waste recycling, energy sources and sustainable fuels is indicated.

GONÇALVES presents other examples of cooperation related to sustainability:
Standardization issues such as radio frequencies, electrical outlet models and customs classification can be considered as situations requiring coordination, without necessarily having an underlying conflict. Absent temptations to change the behavioral pattern, we can, once again, speak in cooperation in the weak sense.

These are individual and community attitudes in a city that, when viewed as habits, can improve the quality of life of citizens in an equitable way and guarantee the use of nature by future generations.

Urban growth without environmental awareness leads to territorial, economic, cultural, environmental and social changes that will take years to be minimized.

For this reason, the great importance of environmental protection, as FENSTERSEIFER says:

Environmental protection is directly related to the guarantee of social rights, since the enjoyment of these rights (such as health, housing, food, education, etc.), at levels constitutionally desirable, is necessarily linked to favorable environmental conditions, such as, for example, access to drinking water (through basic sanitation, which is also a fundamental social right that is part of the content of the existential minimum), (...).

FENSTERSEIFER also contends that the accelerated development of cities and the search for sustainable urban environments is an idea that cannot go back, clarifying:

The prohibition of environmental retrogression, as with the prohibition of social retrogression, is related to the principle of legal certainty, the protection of trust or even predictability in the normative framework of legal relations (the constitutional guarantees of the acquired right, the act perfect legal and res judicata, as well as the limits matters to the constitutional reform are expression of the constitutional principle of legal security), which presents itself as a characteristic feature of the conformation of the State of Right.

Therefore, it is necessary that this approach of the government with the population in the quest to manage and maintain the cities in a sustainable way is so necessary, that even urban planning and environmental sustainability are issues regulated in the Maximum Charter of our country.

IV. SCOPE OF SUSTAINABILITY THROUGH SUSTAINABLE CITIES

Today the world has more urbanized and populated areas than preserved natural areas.

The urban densities are marked by occupation of space and soil without appropriate prior organization and without maintenance of the natural space and environmental balance.

As seen, a city that is considered sustainable must work in a smart way, using the technologies available to the population, but that works projected for the future, having as ideals and projects thought about the years to come, ensuring that there are conditions of use for a future society that will succeed it.

Sustainability is a theme that affects all residents of planet Earth, not just Brazilian cities, because any degradation or environmental preservation, in one way or another, interferes and impacts in every country in the world.

So, everyone must be united and concerned about sustainability on our planet.

In this respect, pointed out GARCIA:

Thus, sustainability consists in the thought of global empowerment for the preservation of balanced human life, and consequently of environmental protection, but not only this, also the extinction or diminution of other social ills that act contrary to the hope of delaying the survival of man on Earth.

In this line, on global civil society, GONÇALVES points out that they are individuals who, regardless of the border, care about these public affairs:

It consists of "groups, individuals and institutions that are independent of states and state borders, but which are at the same time preoccupied with public affairs."

GONÇALVES complements:

The construction of Global Environmental Governance is fundamentally aimed at enabling cooperation and consensus to be achieved in negotiating to solve major environmental problems, with increasing participation.
In fact, it is a great challenge to ensure a decent quality of life for the population of your cities when the infrastructure is already completely geared towards environmental degradation, without concern for nature.

However, the improvement in the quality of natural resources and maintenance of nature bring clear benefits in all aspects of the city and its inhabitants: for housing, education, health, availability and generation of employment and income, among many other aspects.

It is worth pondering that the lack of structure, knowledge, social development, implies the unregulated advance of community life, not paying attention to environmental issues, since in a poor people, the search for survival is already difficult and it is very costly to think, still, in care with the preservation of the environment.

On the distinction of environmental degradation in countries of different economies, VEIGA says:

In an economy that favors competition for value production, where the constant pressure for modernization and consequent technological efficiency require not only better but greater appropriation of nature and energy, it is necessary to adapt to more broad purposes, embraced by the expression quality of life and welfare, producing a social change of values (gesellschaftlichen Wertwandel) based on another ethical consensus on the objectives of the economy.

Countries with low economic power tend to grow in a disorderly way and the increase of the urban population without the figure of rule and of a public power accompanying this natural urbanization, has as unalterable consequences without adequate structure of security, unregulated use of sources of energy, in short, a naturally disorganized growth.

If in these countries there is little investment for education, health, food, culture, still less can investments in social and urban structure for environmental maintenance.

These relations cannot be isolated particularities, because, as seen, in the natural environment there are no boundaries, since degradation damages the planet.

On the need for solidarity in this coexistence of the human being on this planet, FENSTERSEIFER says:

Solidarity expresses the fundamental need for the coexistence of the human being in a social body, formatting the web of intersubjective and social relations that are drawn in the space of the state community. But here, in addition to a moral duty or obligation of solidarity, it is necessary to transpose to the legal and normative level such an understanding, as a fundamental pillar for the construction of a society and a rule of law, guardians of the fundamental rights of all its members, without exclusions.

Thus, a sustainable city becomes a reference for quality of use of natural resources, influencing positively around the world, being that locality where the well-being of all citizens, with concern for nature, is sought.

It is a projected or adequate city, thinking about the well-being of the population, longevity with quality of life, healthy environment, ensuring that all contribute and are part of this sustainable development.

In the words of ROMERO:

(...) sustainable city is the human settlement constituted by a society with awareness of its role of agent transforming spaces and whose relationship is not given by the nature-object reason but by a synergistic action between ecological prudence, energy efficiency and equity socio-spatial.

Regarding environmental citizenship, geared towards a larger dimension of the collectivity, of the planet, FENSTERSEIFER indicates:

Environmental citizenship is increasingly turning towards a planetary dimension. It is necessary the local action of the environmental citizen, but always with a vision focused on the reflections that environmental degradation brings to the entire planetary ecosystem. As an example, atmospheric pollution and global warming generated largely by developed countries have a direct impact on the environmental quality and living conditions of developing countries. Therefore, a new conception of citizenship is necessary, recognizing the role and the importance that everyone has in the defense of Planet Earth.

As said, a new conception of citizenship is necessary, where each one recognizes its importance in Planet Earth.
Despite the existence of several practical and theoretical obstacles, the number of groups, cities, governments, scholars and citizens dedicated to implementing committed actions with present and future generations grows daily.

In this context, it is concluded that it is a fundamental Community right to live in an ecologically balanced environment, in which everyone must be aware of their role on the planet, contributing to the necessary integration between policies of urban development and protection of the environment, that is to say, each doing his part.

V. CONCLUSION

The advance of civilization and urbanization of cities has led to environmental disasters so severe that it has become essential to create regulations to minimize environmental degradation.

The relationship between man and the environment has been reframed, maintaining capitalist and progressive thinking, but with recognition of the awareness about the maintenance of a healthy environment and restrictive measures that guarantee environmental protection.

Throughout the development of cities, the process of occupation and use of space was used with a focus on progress, based on growth and improvements, without appropriate maintenance of the natural space and the environmental balance.

Reflections on urban environments and sustainable cities have grown as population concentration in urban space brings degrading variables to the environment, that is, when the development of the city has already greatly damaged nature.

However, individual and collective practices can minimize non-retrofitting advances, such as pollution from car use that can be minimized using public transport, accessibility for bicycle riding, use of new sources of fuel, etc.

Sustainable development should not be a goal to be pursued, but viewed as a fundamental condition for guiding the advancement of civilizations with the guarantee of already damaged environmental conditions.

Thus, the result of practices in sustainable cities inspires other places in the world to work intelligently, using the technologies available to the population, aiming for future well-being, ensuring that conditions exist for use by a future society that will happen.

The theme is of great importance, so much so that UN Brazil, in partnership with UN-HABITAT, launched on 05/06/2018 in Maceió / AL, the Glossary of Sustainable Development Objective 11, with the slogan Sustainable Cities and Communities, which will be discussed in Agenda 2030.

Finally, the fact that the UN is debating sustainable development through sustainable cities demonstrates, in addition to all the above, the sensitivity and importance of the theme, which must inevitably be discussed by the world.

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