

HISTORY OF THE CONCEPT OF SUSTAINABLE DEVELOPMENT AND ITS CONSTRUCTION IN THE CURRENT POPULATION

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To quote this article:

Poblete, X., Reyes-Guillén, I. y Villafuerte, M. (2018) Historia del concepto desarrollo sustentable y su construcción en la población actual. *Espacio I+D Innovación más Desarrollo*, 7(17) 64-77. Recuperado de: http://www.espacioimasd.unach.mx/articulos/vol.7/num17/pdf/05_Sustentable.pdf

— Abstract —

Speaking of development, we necessarily refer to the analysis of the impact of human activities on natural resources, which from its concept involves the use of natural elements for the development of the populations in a capitalist system. In the present study, it is aimed at analyzing the concept of sustainable development, since perceptions of the current population, a population of high biological diversity and low human development index. First of all, a historical transit of the origin and evolution of the sustainable development concept and further way will develop the perceptions of the current population, specifically the case of San Cristóbal de las Casas, Chiapas. We will look back into the 18th and 19th centuries with pronouncements in favor of environmental stewardship for the assurance of the food and the development of the populations. An analysis of the essence of the concept and the current construction of this by the population of a city later addressed media, multicultural, with low index of human development and wide biological diversity. Within the results, shows that the construction of the sustainable development concept by the population studied, regardless of gender, age, and level of schooling, is related to the care for the environment and the majority fails to articulate a definition. While it is true that conceptual constructions have to do with the socioeconomic context, political, ideological, and environmental, true that in the case of Chiapas is also, and for the period in which it has conducted this study, the position is paradoxical. Chiapas has an important environmental richness and total risk of extermination.

Keywords

Sustainable development, construction of the concept in current population.

The impact of human activities on natural resources, which from its concept implies the use of natural elements for the development of populations in a capitalist system, led us to search for concepts that involve a series of factors of interest in the conservation and optimal use of them.

From this moment it is necessary to state that the concepts sustainable development and sustained development, have the same origin and the same meaning within the economy, ecology and development, can and are used interchangeably to refer to the maintenance of development by itself, due to that social, economic and environmental conditions allow it.

To speak of the interest for environmental care is to refer to the eighteenth and nineteenth century, with pronouncements in favor of environmental care for the assurance of food and the development of populations. The origins of the Sustainable Development concept can be found in the analyzes expressed by Malthus in 1798, which was restricted to the ability of the land to produce food to meet the needs of the growing population (Cavalcanti, 2000; Díaz, 2004); despite these projective analyzes, they did not avoid the chaotic environmental consequences of the Industrial Revolution (second half of the eighteenth century and part of the nineteenth century) and that are becoming more acute today.

It was not until the twentieth century that the interest and scientific discussion of the environmental impact of human activities was again rescued, as well as the planning of a new development mechanism that would ensure the environmental well-being of current and future populations. Despite these initiatives, it was not possible to have a foresight and measure the problems of development that would be considered chaotic for the next century.

Rachel Carson, biologist and writer of the twentieth century, started a movement in the United States of North America based on her studies on damages caused by pesticide and herbicide uses. Her writings, for example *Silent Spring*, demonstrated the serious damage caused by this activity and were the focus of attention and criticism generating waves of opposition, mainly from the industrialists and the government for obvious reasons (Carson, 1962). Because of this position, Carson was accused of being a communist; but her book generated an impressive environmental movement giving unity and coherence to the birth of a popular conscience.

Characters like Carson made history thanks to the publication of their studies and reasoning; such is the case of the British researcher James Lovelock, who presented the Gaia hypothesis, "The earth is a living being capable

of generating its own habitat"; "Gaia is a complex entity that includes the entire biosphere, atmosphere, oceans and Earth. It constitutes in its entirety a system that feeds itself and seeks an optimal physical and chemical environment for life "(Lovelock, 2008).

For 1968, the discussion was resumed by the Roma Club, made up of politicians, intellectuals and scientists concerned with solving world problems, who discussed and analyzed problems related to the limits of economic growth and the extensive use of natural resources. From these discussions was written the book entitled *The limits to growth*, Meadows and Meadows, which exposed both the limits of growth and the depletion of natural resources (Naredo, 2000).

Now it was between the 1970s and the 1980s that the concept of sustainable development began to be outlined, as a result of regulations, reports, events and international pronouncements, and a global opening to the exposition of reasons as to why the search for models of development that will take care of the environment, resources and services.

1. Earth Day, April 22, 1970, as an initiative of Senator Gaylord Nelson; whose objective was to raise awareness in the United States of North America about the need to care for the planet.
2. The United States Environmental Protection Agency is initiated by the signing of the NEPA, National Environmental Policy Act in the administration of President Richard Nixon (1969-1974). Puerto Rico, at the same time, establishes the Law on Environmental Public Policy for that country, and establishes the Environmental Quality Board of Puerto Rico (Naredo, 2000).
3. In 1972, the Stockholm Conference of the UN on the human environment was held, expressing its concern about the global environmental problem with the report of the Roma Club called "The limits to growth". The Stockholm Declaration reflects the introduction of the environmental dimension into the international political agenda, with a limiting image of the traditional model of economic growth (Baylis and Smith, 2005).
4. In 1976 the report of the National Academy of Sciences of the United States provided scientific evidence on the reduction of the ozone layer by chlorofluorocarbons (Naredo, 2000).
5. In 1977, the intergovernmental conference of Tbilisi defines at an international level the pedagogical principles of environmental education, as well as the main guidelines that should govern its development. Later on, the World Conservation Strategies by the

International Union for the Conservation of Nature, UNEP and the World Wildlife Fund, promoted the idea that the conservation of the environment was important for the survival of the human species (UNESCO / UNEP, 1977).

6. For 1987, the Final Report of the World Commission on Environment and Development drew attention to the urgent need for economic development that would bring together elements of environmental and social equity. This is where the concept of Sustainable or Sustained Development (UN, 1987) becomes official.
7. In the same year, the Montreal Protocol analyzed the problems related to the deterioration of the ozone layer and considered the reduction of the manufacture of halogens and chlorofluorocarbons (CFCs) to reduce the hole in the ozone layer in the Antarctic. It was not until 1994 that the halogens were no longer produced in the developed countries and the CFCs in 1996 (UNEP, 2006).
8. In 1992 during the United Nations Conference on Environment and Development, Agenda 21 was presented in Rio de Janeiro, Brazil. It was approved and promoted as a program of action by nations for its implementation (UN, 1992).
9. At the same time, there was an interest in creating strategies for the Americas and in 1994 the First Summit of the Americas was held in the United States. In the same year, but in France, the United Nations Convention to Combat Desertification was celebrated in countries affected by severe droughts or desertification, mainly in Africa.
10. The Summit of the Americas on Sustainable Development was held in 1996, in Santa Cruz de la Sierra, in Bolivia. Subsequently, a series of meetings, agreements, creation of Biosphere Reserves continued to take place in various parts of the world.
11. It was in 2002 that the Johannesburg World Summit on Sustainable Development was held, known as Rio +10 and in 2004 the Special Summit of the Americas in Mexico. Up to this moment, all countries continued to commit themselves to legislate, develop action plans, cooperation agreements, and everything related to the search for environmental protection and sustainable development.
12. The foregoing allowed the Kyoto Protocol to be carried out in Kyoto, Japan, in 2005, entering into force the greatest ecological pact in human history. This protocol was signed by more than 140 countries. Its main objective is to limit the emission of gases causing the greenhouse effect by the most polluting countries.

All these antecedents have formed a history of events between countries and marked differences in the ways of interacting with each other and with the environment. However, the road ahead is still long to identify the appropriate ways to achieve true Sustainable Development.

The United Nations has a Division of Sustainable Development that is part of the Department of Economic and Social Affairs in New York. This division promotes sustainable development by providing substantive secretariat services to the United Nations Commission on Sustainable Development (CSD); it also carries out technical cooperation and creation actions with international, regional and national capacity (UN, 2015).

In this way, the CSD can be understood as a forum on sustainable development that examines and monitors the progress made at the national, regional or international level on the implementation of Agenda 21, the Barbados Program of Action and the Plan for the Implementation of Decisions of Johannesburg and reports on this.

Part of the conclusions of Agenda 21 is on the importance of the participation of public opinion in decision-making as one of the fundamental requirements for achieving sustainable development. The specific functions and responsibilities of nine main groups of civil society are also mentioned, being these women, children, youth, indigenous peoples, non-governmental organizations, local authorities, workers, trade unions, commerce, industry, farmers, scientific and technological community.

Regarding the emergence of the concept of Sustained Development, it arose during the Brundtland report (UN, 1987), when the idea that the environment and development could not be separated was exposed. This idea was analyzed and approved by the General Assembly of the UN, during its XLII Session (1987).

Faced with this reality environment-development conjugate a binomial that cannot be separated and in the same way the execution of processes, challenges, planning of strategies must be constructed from that reality and it is under this criterion that the essence of the concept Sustainable Development can be understood as the capacity of humanity to make development sustainable without compromising future generations (CMMAD, 1987). This vision therefore promotes not only economic growth in quantitative terms but a qualitative development to consider among other elements, the social equity that leads to a better distribution of human,

symbolic, material and natural capital, a rationalization in the use and exploitation of natural resources, and national and international public policies that develop strategies to minimize environmental impacts.

However, even when the origin of the concept is genuine, the uses that have been given to it, mainly in less developed countries, are irrationally discursive in political forums, rather than academic ones.

Likewise, the approach of environmental training in the field of formal education is limited, with theoretical-methodological shortcomings that do not allow permeating correctly in the population and ensuring the educational goal, the change of behaviors. In this case, a change in the behavior of current generations in relation to their environment is sought, ensuring the quality of life of the populations at low environmental cost.

Sustainable Development: complex reality. The concept of economic development has evolved rapidly, from being considered as real *per capita* income to be constructed containing social, political and ecological elements. Within the latter, the central axes are the natural environment and society coercing into a sustainable process.

Unfortunately, the indiscriminate use of the concepts of sustainable development, and sustainability has led to a conceptual weakness. That is to say, the clarity of the term and the adequate use for it is not counted, becoming an epistemological complexity urgent to be attended to.

The importance of the above is that the current development processes in discourse are directed towards sustainable development, however, are we clear about what it means? Is it clear in the different social and production spheres?

Quoting Gutiérrez (1996), sustainable development represents an opportunity, a challenge to reconcile production methods with society and ensure a balanced distribution of wealth. But this reality is complemented by considering that currently the world is dominated by individualism, overproduction and consumerism (Martínez, 2003).

Tetreault (2004) discloses a set of models for sustainable development and presents a taxonomy of them to generate a comparison, some models that are normative and others are based on the experience of different projects, these models are: dominant, of political ecology, community model of sustainable development, fair trade, community industrial forest production, environmental activism and community-based conservation.

The above, offers the possibility that the regional development and its policies have had mainly two actors, the government in its three levels and the private initiative. Along with these actors there is also the voice of the population, previously non-participatory, from being only a passive element of development, to active participants of their own interests (Rappo and Vázquez, 2007).

In Mexico, awareness of environmental deterioration or what should be done is very low. The percentage of the population that ignores the environmental concerns is high (Urquidi, 2000, Galván et al 2012). This reality is opposed to what can be considered sustainable development, there is a disjunctive of growth and conservation, which focuses on increasing wealth to improve the quality of life of society without destroying the natural base on which the human activity, for the case of Mexico the costs of sustained growth are enormous as in other countries; but each country has different conditions, so the problem and alternative solutions differ (Castro, 2008).

OBJECTIVE

Analyze the conception of sustainable development in an area with high biological diversity and low human development index.

METHODS

The main objective of the study was to analyze the conception of sustainable development in an area with high biological diversity and low human development index. It was carried out during the period of June 2015 to February 2016. As a methodological basis, the study is qualitative, based on the biopsychosocial approach and with three phases of development: Phase 1) analysis of perceptions on sustainable development; in this phase, a sample of n=215 people were interviewed, from which the elements related to their perception of sustainable development were obtained. Phase 2) the identification and construction of the concept of sustainable development; and Phase 3) Viability for sustainable development in this region of Chiapas.

RESULTS

The average age of the interviewees was 25 years, in equal proportions to the male and female population. 100% have been living in San Cristóbal de las Casas for at least 10 years. However, 19% have their place of origin outside of Zona Altos.

Regarding schooling, 40% of the interviewees have a bachelor's degree; 11% high school; 35% secondary and only 14% have only primary level.

The Tseltal-tsotsil Zona Altos of Chiapas is characterized for being an area of high cultural diversity, and specifically the city of San Cristobal de las Casas, is cosmopolitan, a center of commercial exchange and great tourist activity. In the case of the interviewees, the mother tongue corresponds to Chol 10.81; Tojolabal 2.7; Tseltal 21.62; and Tsotsil 16.21; the remaining percentage corresponds to Spanish.

Perception of sustainable development; 35% of the interviewees said they did not know its meaning. On the other hand, although a high 65% claimed to know the concept, at the time of asking to be defined, 11% did not give any definition; 32% did not do more than refer to the care of the environment. The greater proportion (38%) defined it as being able to count on a job for the development of their family, making a daily salary; and the remaining percentage (19%) makes reference to the fact that sustainable development is a government program but they do not know it.

It should be clarified that they were asked if sustainable development is the same as sustained development. For 68% the concept means the same, protection of nature; and for the remaining percentage (32%) the concepts are different; but they could not express why.

Almost 50% of the interviewees consider that the development of Chiapas is not based on sustainability, because nature has been considerably destroyed and natural resources have been abused, poverty is increasing and there are not enough jobs. On the other hand, those who think that it is based on sustainability, say it because of the existence of protected natural areas, tourism and indigenous groups that represent the state.

Regarding the actions related to sustainability, 95% refers only to waste sorting, made at the state level as well as personal; paradoxically in Chiapas we do not have this type of waste management, and although personal or family, citizens separate their garbage, it is not processed, only raised by collection trucks that leave any type of garbage collected in the same space.

The identification of environmental changes in Chiapas is marked by the elimination of vegetation cover, air, land and water pollution, the decrease in rainfall and the increase in ambient temperature (98%). When asked if sustainable development would favor the environment and avoid current changes, the majority response was no, because there has been no way for

the government to actually lead sustainable development projects for the entire state; nor the population has been aware and educated for that. Those who do consider that sustainability in development is favorable are aware that these strategies would be beneficial for the care of nature and little by little the green areas would recover.

When requesting that they list the actions that they would do to favor sustainable development, they again considered waste sorting as the main action, followed by the reduction of vehicular use.

Finally, it was asked if they consider that Chiapas has a low human development index. The answer in 100% of the cases was yes and when asking the reasons why this was so, the main response was the mismanagement of resources in government; followed by the lack of jobs and useful projects, as well as the lack of a good functioning of the educational system in the state.

Some authors consider that the concept is shown as a development proposal, which expects a peaceful and gradual social change, organized and planned, based on the improvement of our relationship with nature (Meza, 1993, Riechman, 1995, Bifani, 1997). The question is how slow and gradual this change is expected, considering that the environmental impact of human activities in the last three decades has been, in many cases irreversible and in others, of high impact for the welfare of human populations.

DISCUSSION

The results of this study show that the construction of the Sustainable Development concept, regardless of gender, age and level of schooling, relates it to the care of the environment; the majority of the population fails to articulate a definition. Another important percentage of the population considers that it can be defined as "Having a job for the development of your family, making a daily livelihood". Emphasis is placed on the use of the term "livelihood", since in Spanish the word "sustento" is a factor that the interviewees relate to the "sustainable" concept.

It should be remembered that this study is temporarily located three decades after the appearance of the concept. Then we can infer that there has been no advance in the knowledge of the concept, as the first phase of the appropriation of the same for its execution.

It is clear that the concept is accepted as a social proposal, since the population does distinguish changes and environmental problems as a result of human

action and considers it necessary to implement strategies for environmental improvement. However, from that point, it is also limited to avoiding pollution and immoderate logging.

On the other hand, it is worrisome to know that the population has adopted the discourses related to the management of garbage, paradoxically for the case of Chiapas, Mexico; there are no programs for the proper management of solid waste. The exercise is truncated from the moment in which the garbage collection mechanisms do not stick to the waste sorting system that the families *could* have made at home.

Although it is true that the conceptual constructions have to do with the socioeconomic, political, ideological and environmental context, it is also true that in the case of Chiapas, and for the period in which the study was carried out, the position is paradoxical. Politically speaking, a party governs in the state in which the concept of the environment adheres to its name and discourse; likewise, Chiapas has an important environmental wealth and in total risk of extermination. Hence, the possible implementation of a sustainable development, in the case at hand, is not perceived as a central axis nor articulator of the political exercise, even less as a real possibility in the short and medium term.

In this regard, it is important to mention that according to the *2013-2018 Development Plan*, it states a development plan related to the environment, which promotes, among other actions, "An environmental culture for sustainability", under this heading The Education Environmental Plan for Sustainability becomes one of the axes with greater weight and seeks to articulate the perspective of gender and multiculturalism. Regarding this action, we still have to wait for the results that are generated, because three years after its implementation, it is not yet possible to measure its impact.

The complex reality of the insertion of the concept, in addition to the previously discussed, can be understood among other aspects, because the population is culturally diverse, in conditions of low human development index with poverty or extreme poverty, which makes it clear that basic demands are prevailing and that environmental policies should be based on these characteristics rather than take them homogeneously and import them from other areas of the country, or worse, from other countries, even if they have been successful in those places.

The concept of sustainable development will continue to be modified, both in its discursive part, and in the construction made by the population itself; so far in paradoxical positions.

The population is aware of a threatened environment and the consequences that the human population suffers from environmental deterioration. The unfortunate thing is that, despite the passage of time, national and international movements and commitments, it has not been possible to put into practice a concept that improves the harmonious link between human populations and the environment.

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