

**Chapter 9 State of the art on the “El Veladero” National Park of Acapulco, Guerrero, Mexico**

**Chapter 9 Estado del arte sobre el parque nacional “El Veladero” de Acapulco, Guerrero, México**

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## Abstract

The “El Veladero” National Park is a natural reservoir in Acapulco de Juarez, Guerrero, so the general objective is to present in a synthesized way the elements that gave rise to the National Park and a specific objective; contribute to the state of the art in said natural area and its conservation. The guiding question, Is the objective that gave rise to the protection of said National Park currently being met? The methodology used was qualitative in nature, the documentary technique was used, which implied consulting the databases of *Latindex*, *Redalyc*, *SciELO*, among others. The work was based on a historical-geographical approach on the concepts of National Park and Sustainable Development. Results, based on the historical periods of Mexico, it was obtained that in pre-Columbian times the original cultures lived in harmony with nature thanks to a holistic worldview, but from the arrival of the Spaniards this relationship was altered by an exploitation excess of natural resources water, soil and vegetation, in such a way that, to date, there are several categories of management at the federal level to preserve the still pristine natural spaces such as the National Park. Conclusion, the “El Veladero” National Park was decreed so that the Port of Acapulco had a green lung where regulated ecotourism could be practiced with low impact on the surrounding environment.

## Acapulco, National Park, Sustainability, Territory, Tourism

### Resumen

El Parque Nacional “El Veladero”, es un reservorio natural en Acapulco de Juárez, Guerrero, por lo que, el objetivo general es, exponer de manera sintetizada los elementos que dieron origen al Parque Nacional y como objetivo específico; contribuir al estado del arte en dicha área natural y su conservación. La pregunta rectora, es ¿Se cumple actualmente con el objetivo que dio origen a la protección de dicho Parque Nacional? La metodología empleada fue de índole cualitativa, se recurrió a la técnica de documental, lo cual implicó consultar las bases de datos de *Latindex*, *Redalyc*, *SciELO*, entre otras. El trabajo, se sustentó en un enfoque histórico-geográfico sobre los conceptos de Parque Nacional y Desarrollo sustentable. Resultados, con base en los periodos históricos de México, se obtuvo que en la época precolombina las culturas originarias vivían en armonía con la naturaleza gracias a una cosmovisión holística, pero a partir de la llegada de los españoles dicha relación se vio alterada por un aprovechamiento excesivo de los recursos naturales agua, suelo y vegetación, de tal manera que, a la fecha existen varias categorías de manejo a nivel federal para preservar los aún espacios naturales prístinos como por ejemplo, el Parque Nacional. Conclusión, el Parque Nacional “El Veladero” fue decretado para que el Puerto de Acapulco contara con un pulmón verde donde podría practicarse el ecoturismo regulado y con bajo impacto en el medio circundante.

## Acapulco, Parque Nacional, Sustentabilidad, Territorio, Turismo

### Introduction

This article takes up again the lines of study of Geography in the field of environmental sustainability, in its relation with the human activities that are developed on the diverse elements of nature. Thus, this approach proposes to present a position on the relationship between the aforementioned pandemic and environmental (in) sustainability (Niño-Gutiérrez, 2021). In other Latin American countries such as Brazil, this approach is developed in parallel and even goes further when a multidisciplinary debate on environmental issues is proposed (Rabello & Oliveira, 2021). Hence, the objective of the paper is to synthesize the central ideas of the creation of the National Park "El Veladero" of Acapulco in 1980 and its prospective. The justification for the document is to synthesize the past, present and future of El Veladero National Park. The guiding question was how to rethink the sustainable future of the National Park under study.

In Mexico, a natural area was named a National Park for the first time in 1917. SEMARNAT mentions that the National Park called "Desierto de los Leones" was the first natural area that was authorized to be protected for the exploitation of its resources. El Veladero National Park has been one of the most recently categorized national parks in the state of Guerrero. It was decreed as a PNA on July 17, 1980 and covers 3,159 hectares (Vargas, 1997).

To be named as such, it had to meet a series of requirements stipulated by the Secretariat of the Environment and Natural Resources, which took into account its cultural and biological aspects, its capacity to carry out scientific research, and its capacity to practice ecotourism in order to categorize this natural space as a protected natural area (Semarnat, 2020).

### **Problem statement**

At the international level, conceptual mapping is useful to characterize and define academic constructs, as in this case the term National Park and the variable Sustainable Tourism. In the municipality of Acapulco, there is a lack of knowledge about the existence of diverse international bibliography on the use of this methodological technique that clarifies the concepts, ideas or theories reviewed in a documentary way. In Latin America there is evidence of the use of concept mapping in countries such as Colombia, Ecuador, Mexico and Peru. This has brought about notable achievements such as the elaboration of documentary, empirical and systematic review articles. These studies are becoming more numerous and/or complete in accordance with the complexity and high degree of precision required to present a proposal of such magnitude, since concept mapping is a valuable qualitative methodological technique that, if well focused, contributes to the dynamism of the concepts in the current state of the art.

The holistic character of the conceptual mapping is evidenced through the understanding, characterization, analysis and interpretation of the concepts of National Park and Sustainable Tourism in order to help systematize the most accepted characteristics of both terms under study through a pragmatic vision. Conceptual mapping in this work addresses the two concepts as academic constructs linked to the Sustainable Development Goals (SDGs) through an environmental dimension supported by the criteria of sustainable development, which through conceptual mapping is feasible to implement in Mexico thanks to its scientific and educational value. There is scarce literature on the two constructs studied in this research. This study fills the documentary gap and systematizes the concepts of Sustainable Tourism and National Park.

In the state of Guerrero there are few studies that integrate conceptual mapping, one of those studies is by the author Niño (2018), who exposes the fundamental features that integrate any study developed in function of conceptual mapping. Within his analysis, he mentions that conceptual mapping aims to "achieve continuous improvement where new scientific models and theories that seek to transmit and generate knowledge are tested" (p. 3).

Referring to the municipality of Acapulco, the Mexican Government categorized "El Veladero" as a national park in 1980 (Semarnat 2016). The main problem surrounding this National Park has been the constant demographic pressure. This has caused the constant invasion of settlers to build unauthorized settlements and the destruction of vegetation in order to use the soil for clandestine crops (Vargas, 1997). This causes the loss of endemic flora and fauna. Therefore, it is vitally important to work on the basis of the problem, which is represented by the local population's misinformation about the ecological importance of "El Veladero". The general objective is to summarize the elements that gave rise to "El Veladero" National Park and the specific objective is to contribute to the state of the art in this natural area and its conservation. The guiding question is: Is the objective that gave rise to the protection of "El Veladero" National Park currently being met?

### **Justification**

The present proposal is innovative and original. It will identify, through a temporal perspective, the evolution of the concepts of National Park and Sustainable Tourism. Both concepts have an importance in sustainable tourism development. This research has a practical-applied character because it assumes the challenge of contributing to systematize the advances achieved between 1971 and 2021. It provides a synthesis focused on the two categories mentioned above. This contribution of genuine historical-cartographic research is innovative because it is inserted in the framework of sustainable development in order to strengthen the correct use and management of the concepts of National Park and Sustainable Tourism. In Mexico, there is no in-depth research study that addresses the concepts of National Park and Sustainable Tourism based on the conceptual mapping tool.

The importance of the study of these two constructs lies in the fact that national parks are a special group of protected natural areas, since within them plans can be developed for sustainable tourism use and thus achieve local development (CONANP, 2020). Therefore, national parks and sustainable tourism are closely related. In the case of Acapulco, "El Veladero" National Park is a place with high value within its category of Natural Protected Area (NPA), which is an area of great biological, historical and cultural wealth. However, despite being designated as a protected natural area, there have been conflicts between the local population and the environmental authorities. If the national park is not maintained, Acapulco Bay could be at ecological risk, which could lead to drought, landslides, soil erosion, and other consequences (Vargas, 1997). At present, the area is in a state of abandonment and the problem of contamination and population encroachment is growing. The main cause of the population's lack of interest and the lack of support from municipal authorities has been the lack of information about the national park.

## Development

*Conceptual framework*, the basic concepts on which the study will be based are: 1) Sustainable Tourism, 2) National Park, 3) Sustainable Development. Sustainable Tourism will be understood as: "Tourism that takes full account of current and future economic, social and environmental impacts to meet the needs of visitors, the industry, the environment and host communities" (UNWTO, 2005).

*National Park*, are biogeographic representations, at national level, of one or more ecosystems that are significant for their scenic beauty, their scientific, educational, recreational, historical value, for the existence of flora and fauna, for their suitability for the development of tourism, or for other similar reasons of general interest (SEMARNAT, 2020).

*Sustainable Development*, the evaluable process by means of criteria and indicators of environmental, economic and social character, that tend to improve the capacity of life and the productivity of the people, based on own measures of preservation of the ecological balance, protection to the environment and use of the natural resources, so that the satisfaction of the necessities of the future generations is not compromised (SEMARNAP, 1996).

*Methodological framework*, the technique that will be used in this research will be the conceptual mapping technique, its antecedents go back to what Novak (1990) called for the first time as "concept maps and diagrams", later Tobón (1996) developed the conceptual mapping technique, he is considered as the father of this technique. The method will be analytical and documentary in nature. This requires the consultation of printed and digital documentary materials, such as: journal articles, book chapters and books where a systematic, conceptual and methodological approach of the works consulted is followed in order to respect the concepts, definitions, characteristics and opinions of the selected theoretical referents. The documentary method is enriched with cabinet work. It will include the consultation and selection of relevant information regarding the variables National Park and Sustainable Tourism. For this purpose, search engines, academic databases, virtual libraries and institutional repositories of universities and non-governmental organizations will be used. The methodology used will be qualitative, which includes the review of documentary material from 1971 to 2021 and will include a technique of consulting information from different web pages. Therefore, a historical and inductive methodology will be followed and a longitudinal and exploratory analysis will be carried out.

*Documentary technique*, first of all, we will resort to the reading, selection and analysis of books, book chapters and articles published in print or digital form on the two variables under study: National Park and Sustainable Tourism. The methodology will be qualitative in nature. Documentary techniques will be used, which will involve resorting to Latindex, Redalyc, SciELO database, among others. The research work will be based on a historical/geographical approach, which allows a semi-detailed analysis of the evolution in time and space over 50 years in the world. Its priority is centered on the contributions published by various theoretical referents of the Mexican, Latin American and Spanish schools. The qualitative techniques include the consultation of printed and digital conceptual cartography, which supports the state of the art of the two constructs under study: National Park and Sustainable Tourism.

*Theoretical framework*, the theory of complexity attached to sustainability, described by Luna (2020), describes the three pillars, economic, social and environmental, of sustainable development, in subsystems and these in turn form the complex system of sustainability. Sustainability, in some countries is synonymous with "sustainable" and is a term coined since the 1987 Brundtland report, drafted by the UN, by Dr. Gro Harlem Brundtland, and originally called "Our Common Future". The phrase that summarizes Sustainable Development in the report is the following: "Meeting the needs of present generations without compromising the ability of future generations to meet their own needs" (Larrouyet, 2015).

The most important precedent for the Brundtland report was the Stockholm conference held in 1972, where the exponential growth of development was limited to protect the environment (Domínguez & Aledo, 2005). The theory of sustainable development is based on principles that are focused on caring for the planet's natural resources while achieving economic development for the entire population. These principles can be represented in three pillars, which are: the environment, society and the economy. Also, this theory arises from the need to change the paradigm of indiscriminate consumption of natural resources and the concern to ensure the availability of natural resources to new generations.

Prior to the postulation of this theory, there was the theory of development. This theory was used to manage existing social economic structures in the medium and long term. It grouped countries into categories, depending on their socioeconomic development, into developed and underdeveloped countries (Gutiérrez, 2007). It also provided the basis for building the theory of sustainable development. More closely linked to economics, it can be said that development is born and becomes known as a tool to protect and manage natural resources, human beings and future generations and, at the same time, preserve the capitalist production model through the balanced and efficient management of resources to achieve their preservation (Ibañez et al, 2020).

It can be observed how sustainable development is constituted by several bases causes that involve its origin, this has also emerged as a paradigm of spatial development policies since the nineties, which is recognized for seeking an integral approach that allows the harmonious evolution of the economic, social and environmental subsystems that coexist in the territory to maintain and increase the collective welfare in the long term (Cervantes & Gómez, 2007). The relationships involving sustainable development in productive and social contexts are broad and multidisciplinary. The economic activity to which it is related can range from the primary sector to the service sector. For example, in tourism, the main objective of sustainable development is not only about environmental conservation, it has to be balanced in order to satisfy the needs of visitors, social and economic needs (Vera, 2001).

As mentioned above, the main objectives of development are to contemplate the survival of human beings and their way of life, and to this end, the aim is to conserve natural resources in a sustainable manner. However, the way of life of human beings implies an ever-increasing consumption of resources; therefore, if human beings continue to exploit resources indiscriminately, there will be no point in trying to conserve these resources in the future. From an international perspective, there are various points of view that differ from the primary objectives of sustainable development and call them into question. Considering that sustainable development is based on group support between communities and the general population and future generations, it is not possible to talk about sustainable development if there is a socioeconomic imbalance among the population. Some having a higher purchasing power than others, obtaining greater benefits at the expense of the work of others. Above all, sustainable development cannot be addressed if there is a consumerist market that is in charge of offering all natural resources as raw material and that is becoming larger and larger (Segrelles, 2013).

The history of the paradigm of sustainable development is based on ideas and models that seem to solve the problems of the environment and society, which humanity is going through, however, it often remains a utopian vision that is far from reality. This term has been losing its basis, where previously the goal was to achieve social development while conserving natural resources, today it has been corrupted to be seen as something "exclusive" or "elitist". Derived from the above, in the case of sustainable tourism, for example, it has become a synonym of a product that becomes exclusive for individuals with high purchasing power, leaving aside egalitarian social development. The "natural" or "ecological" aspect becomes the raw material of tourism to be available to tourists, leaving aside the conservation of natural resources (Domínguez & Aledo, 2005).

In the case of Mexico, because it is a country categorized as underdeveloped, the government has always sought to achieve egalitarian socioeconomic development based on sustainability. The approach to definitions of sustainable development depends on the area being addressed. In political-environmental matters, the concept is more closely linked to the protection of natural resources; however, economic and social criteria are also integrated, but emphasis is placed on the protection of the ecological balance in order to satisfy the needs of future generations (SEMARNAP 1996).

From an economic-political perspective, sustainable development is seen as a tool that promotes economically viable activities, taking into account society and natural resources. Regarding the latter two, it seeks to improve the living conditions of society and at the same time materialize productive processes that lead to decrease environmental impacts (Secretaría de Energía, 2015).

In scientific matters, Mexico has been a hotbed of sustainable research. For example, Niño (2013) mentions that "sustainability implies an analysis of ethical, social, political, economic and ecological factors, in discussion with different spheres of the governments of Mexico and the world" (p. 79). Also, he mentions that sustainable tourism, integrated to a national park, is defined as a process that aims to favor the quality of life of local communities and at the same time, maintains a standardized quality to favor tourists' experiences and conserve natural and cultural resources at the same time (Niño, 2013).

In the case of national parks, various researchers integrate multidisciplinary methodologies, taking into account various factors at the same time and integrating methodologies focused on regional development and a geographically guided point of view to plan and manage NPAs of this nature (Niño et al, 2007). The history of national parks and recreation are linked to the impact of human beings; human interest in using natural spaces is what drives the creation of alternatives to maintain sustainable tourism use. Therefore, the scientific community is currently seeking to integrate a multidisciplinary and trans-disciplinary methodology to work with national parks.

## Results

Entering into the subject of protection of natural spaces in Mexico, is to get involved in a very broad subject historically speaking, since the time of the Mesoamerican cultures there was a conscience towards the care of nature. This can be seen through the most important cultures that were part of pre-Hispanic Mexico, cultures such as the Maya and Mexica, worshiped nature and paid tribute to elements such as rain, the sun, plants and animals, many of these elements had a deity that the population associated with each one and were represented in various ways such as sculptures made of different materials, of which there are many vestiges today (Gonzalez, 2001).

In pre-Hispanic Mexico, society was very involved with nature, so much was their respect that they worshipped it, they felt part of it and not superior. From this period it is also known that the indigenous people took recreational walks in areas of natural spaces, even one of the rulers, King Netzahualcoyotl of Texcoco, ordered to make several Ahuehetes plantations in order to carry out activities of landscape appreciation (*Op. Cit.*, 2006). Therefore, as it happened in the United States, the conservation of natural areas occurred through the search for recreational activities, at least in Mexico's pre-Hispanic era.

According to the 1996 law, Mexico's Natural Protected Areas seek to conserve the country's endemic species while conserving its ecosystems, promote environmental education and environmental awareness, encourage government and private sector participation in protection, and ensure that NPAs can be managed based on specific and effective management programs and plans (Melo, 2002). With this, it is possible to observe the notable difference in the basis for the creation of NPAs, which initially sought only to conserve resources for their later exploitation and use for recreation, and then moved on to something more complex, such as environmental education.

**Table 9.1** Historical summary of the protection of National Parks in Mexico

| Epoch or historical period of Mexico                  | Event related to the History of the conservation of natural areas in Mexico.   |
|---|--|
| Pre-Columbian Period                                  | Botanical gardens and public parks created under the order of King Netzahualcoyotl of Texcoco (1402-1472).   |
| Colonial Period                                       | The Spanish Crown decreed laws in favor of the conservation of timber resources (1679).  |
| Period after the Independence of Mexico               | Benito Juárez established the first laws for the protection of Mexican flora and fauna, among them the Forestry Law (1870). The first natural area for conservation and public recreation, El Desierto de los Leones was decreed under the order of Lerdo de Tejada (1876).  |
| Porfiriato  | Porfirio Díaz decreed the Monte Vedado del Mineral del Chico as a National Forest (1898).  |
| Mexican Revolution and post-revolutionary period      | Department of Forests was created (1910). Venustiano Carranza decreed Desierto de Los Leones as a National Park (1917). Guadalupe Island was decreed as a Reserved Zone for Hunting and Fishing of animal and plant species by Plutarco Elías Calles (1928).   |
| Government of General Lázaro Cárdenas del Río         | Miguel Ángel de Quevedo sponsored the creation of 39 National Parks (1935).  |
| Government of Miguel de la Madrid Hurtado (1982-1988) | The Secretariat of Urban Development and Ecology (SEDUE) and the National System of Natural Protected Areas (SINANP) were created. More than three million hectares of ecosystems were protected and the General Law for Ecological Balance and Environmental Protection (Ley General del Equilibrio Ecológico y la Protección del Ambiente, LGEEPA) was enacted (1988). |
| Government of Carlos Salinas de Gortari (1988-1994)   | The National Commission for the Knowledge and Use of Biodiversity (CONABIO) was created. Ten Biosphere Reserves, two National Marine Parks and eleven other reserves were opened (1992).   |

Source: Castañeda, 2006

In the state of Guerrero, "El Veladero" National Park has been one of the most recently categorized national parks. It was decreed as a PNA on July 17, 1980 and covers an area of 3,159 hectares (Vargas, 1997). To be designated as such, it had to meet a series of requirements stipulated by the Secretaría del Medio Ambiente y Recursos Naturales, which took into account its cultural and biological aspects, its ability to conduct scientific research, and its capacity for ecotourism in order to categorize it as a protected natural area (Semarnat, 2020).

El Veladero is located in a high area in the bay of Acapulco and the area is characterized by being quite irregular because it is mountainous, within the PNA there is a characteristic oak forest, in addition to vegetation characteristic of the low deciduous forest: ceiba (*Ceiba pentandra*), amate (*Ficus insipida*) and fruit trees such as tamarind (*Tamarindus indica*), mango (*Mangifera indica*), huamúchil (*Pithecellobium dulce*); it also has endemic fauna: Black iguana (*Stenosaura pectinata*), green iguana (Iguana iguana), raccoon (*Procyon lotor*), chachalaca (*Ortalis vetula*), quail (*Coturnix coturnix*), tlacuache (*Didelphis marsupialis*) among others. During the rainy season, bodies of water are formed, which form small streams and riverbeds that cause runoff (Vargas, 1984). After Acapulco's tourism boom, many families migrated to the port in search of a better quality of life by working in tourism. These families did not have enough resources to build houses, so they had to settle in El Veladero, which had been set aside for wildlife protection.

A SWOT analysis of the Veladero ecosystem as a Natural Protected Area mentions anthropogenic practices as the main problem facing the National Park, which indicates poor management by the government of the surrounding communities. Something similar within the weaknesses where the lack of dissemination by the government stands out (Aviléz, 2014 cited in Niño and Saldaña, 2014). The first natural space to be declared a National Park in the state of Guerrero was the Grutas de Cacahuamilpa National Park, decreed on April 23, 1936, most of the park is located in the State of Guerrero and another small portion in the State of Morelos, it is located north of the state capital, in Chilpancingo.

The second natural space to be decreed as a National Park in Guerrero was General Juan N. Álvarez National Park, located in the municipality of Chilapa de Álvarez and was decreed as a National Park on May 30, 1964 (Vargas, 1997).

## Discussion

In the Spanish School, National Parks or other protected natural areas serve as a kind of territorial and tourist promotion, where the aim is to attract visitors through landscapes of natural beauty; however, this promotion can lead to the deterioration or even the disappearance of the natural area in question (Serrano, 2001). Therefore, it is necessary to manage these natural areas through responsible use that integrates an environmental conservation policy.

Sustainable tourism is a tool for managing tourism activity through the correct use of the natural environment, combining objectives of equitable social and ecological development; it is not only an environmental requirement for society. This means that it is not only an obligation, but that an establishment, in this case a tourist establishment, has to have an internal policy where a sustainable conscience is integrated in all the work strata, with this not only the satisfaction of the tourists is maintained, but also the local inhabitants can take advantage of the benefit (Ivars, 2001).

The objective of sustainable development is to incorporate the principle of solidarity within a community, which means that population concentrations mutually support each other from the local level with a global vision. An example in Spain where sustainable development is sought at the local level is the figure known as a Natural Park, which is a unit where there is preferably a retrospective balance between the agricultural sector, environmental conservation and biodiversity. The Agricultural Natural Parks are a modern tool where nature is preserved and the use of the geographical space is achieved through agricultural activities (Segrelles, 2015). This means that their function, in addition to being an ecological support, is to generate resources for the local population, so it is a sustainable management, since they are directly related to society, the environment and the economy.

Sustainable development is an alternative that arises to change the current model of tourism development, in a way that achieves a balance between the processes carried out in tourism activity and the resources it uses, most of which are natural resources (Rodríguez, 2010). The balance between economic benefit and the care of natural resources can be achieved through responsible and sustainable tourism development. Sustainable tourism consists of the active participation of society, the government and a suitable distribution of the natural territory (Vázquez et al, 2010). Among the contributions of Spanish referents, what stands out the most is a fair territorial distribution and this can only be achieved through a methodology with a geographical approach to the use of natural areas, which is what has led to the success of Spain in the management of its Natural Parks.

"Sustainable tourism is tourism that takes full account of current and future economic, social and environmental impacts to meet the needs of visitors, the industry, the environment and host communities" (UNWTO, 2005). The definition proposed by the UNWTO alludes to a strategy that each tourism destination must follow to move forward in a positive way, not only as a measure to mitigate damage to the environment, but also as a tool for social progress.

Over time, the term "sustainability" has lost its original essence and has been corrupted to favor the interests of the capitalist system. Ecotourism" has become an elitist activity, where only the wealthiest sector enjoys at the expense of the natural resources offered by the different tourist destinations (Domínguez & Aledo, 2005). Therefore, it is important to seek strategies where the term "sustainable" is not manipulated for false advertising purposes, but can be integrated into the policies of tourist destinations, so that local communities can also be included.

Natural parks are important because they have two functions: through them, conservation of the natural heritage is demanded and at the same time they function as a tool to achieve local socioeconomic development (Prats, 2001). Sustainable development is carried out when the needs of present generations are met without compromising the resources that can be used by future generations through ethical, social, environmental and economic objectives to ensure equal living conditions among the entire population with a vision towards the future (Provencio, 2019). In this sense, sustainable tourism has the laborious task of seeking to keep a tourist destination attractive, without forgetting to maintain the natural environment, so that its resources are not degraded. The paradigm of sustainable development is the result of the evolution of different ideas derived from the theories of development with respect to tourism; it seeks to maintain tourism activity by posing problems that can be solved with a focus on sustainability (Vera, 2004).



Within the sphere that represents the contributions of referents provided through the work of experts in the field of National Parks in Mexico, sustainable development is observed from different points of view, derived from the focus on the discipline in which it is being approached regarding the concepts of National Park, Sustainable Development and Sustainable Tourism. Sustainable development is a paradigm which integrates development policies and seeks to equitably integrate the economic, social and environmental subsystems or pillars, so that they feed back and generate a totalitarian development (Cervantes, 2007). This perspective of sustainable development is an idea derived from the equitable integration of the components of sustainable development, and stands out for the naming of sustainable development as a paradigm.

Sustainable tourism is an integral planning of a tourist destination where a sustainable approach is used, so that a space develops a tourist model through the exercise of using, but not overexploiting its natural and cultural resources, based on which the needs of the population can be met through the economic resources obtained through tourism. Within the strategy to integrate a sustainable approach to tourism, the aim is to maintain the satisfaction of tourists, that is, to integrate an equitable local development without affecting the tourist activity (*Op. Cit.*, 2007).

Sustainable development is a strategy to safeguard natural resources and human life while preserving the capitalist system that has prevailed throughout human history. Sustainable development is not a paradigm that destroys a system that has prevailed for a long time, on the contrary, it seeks to contribute and evolve this system through the Sustainable Development Goals (SDGs), so that the existing natural heritage can be valued and appreciated by the current and future population (Ibáñez et al, 2020).

Sustainable development cannot solve all social and environmental problems globally, such as pollution, overexploitation of resources, climate change, among others. For this, it is necessary to work with the root of the problems and integrate a multidisciplinary perspective. Sustainable development emerges as a tool to work based on it, specifically it does not work as a solid solution to end all the problems that afflict humanity, it works more as a means to avoid or curb as much as possible the problems mentioned above, through an appropriate methodology (Gutiérrez, 2007).

Sustainable development has to integrate an analysis on different important factors, such as ethics, society, political, economic and ecological factors, through the different layers of government. Sustainable development takes into account the social system as the main factor, since human activities and their influences are found within this system, therefore, all human relations, behavior and activities have to be contemplated in a sustainable strategy, this means integrating values and ethics to the SDGs to achieve a sustainable conscience.

National Parks are characterized by being of scientific interest at the geomorphological level, thus enabling them to be integrated with an ecological-environmental policy (Niño, 2013). The scientific interest that national parks possess is complemented by the capacity to carry out recreational activities, in this way it can be said that there is a social approach, since it seeks to integrate educational aspects with the practice of responsible tourism.

Sustainable tourism is defined as a process divided into two parts, on the one hand, it seeks to reach a socioeconomic development and on the other hand it seeks to maintain quality in the tourist experience and the most important thing is to integrate the above while maintaining the conservation of cultural and natural heritage (ibidem, 2013). From a social perspective, the objective of sustainable tourism is not only to seek to improve the living conditions of the host communities, it is also important to work on the satisfaction of tourists, since they are the main factor for local economic development. National Parks are of great importance to achieve the sustainability of the natural environment; therefore, they must be managed through a regional planning and development policy, which represents the basis for a new model that will achieve sustainability and prosperity for the local population (Niño, 2003). Most of the poor communities in Mexico develop within a rural environment, therefore, this disadvantage can be turned into an advantage through a strategy for ecotourism. The same can be applied to National Parks, through a strategy to develop community-based tourism.

SEMARNAT has recently defined National Parks as:

*"Biogeographic representations, at the national level, of one or more ecosystems that are significant for their scenic beauty, their scientific, educational, recreational, historical value, the existence of flora and fauna, their suitability for tourism development, or for other similar reasons of general interest" (Semarnat, 2020).*

The National Parks are the support in a geographical area because they contribute to avoid important problems, such as natural disasters, floods and landslides. These have to be analyzed in a way that includes not only physical aspects, but also geographical, population, economic and environmental aspects in order to improve their management and solve in a timely manner the problems that the parks of the national territory are going through. In some places, the national parks serve as environmental regulators and even help boost productivity, as in the case of tourism, by helping to improve the landscape (Vargas, 1997).

Good planning for a national park is achieved through land-use planning, and planning is dictated to establish sustainable development, commanded by community action (Niño & Melo, 2006). Ecotourism planning considers the geoecological characteristics of the landscape in order to avoid possible impacts and problems with a vision for the future. National parks are characterized by the recreational use of wildlife, distinctive natural landscapes, special uses for nature restoration, agricultural uses and human settlements (Niño, 2003).

Natural Parks should be managed based on a methodology with a geographical approach (Niño & Segrelles, 2014). Natural Parks in Spain are characterized by being managed through the Autonomous Communities that make up that country and within that management a management that helps to distribute an area in a correct way so that there is no conflict between natural and urban elements has to be taken into account, therefore, a geographical approach that at the same time is multidisciplinary is the best option for the management of these parks.

National parks are developed through territorial organization and function for regional development for the population (Fortunato, 2005). If you want to analyze the concept of sustainable development, you have to inquire about the different points of view of the referents in economic growth, conservation and preservation of biodiversity, of those who try to change the consumerist system of natural resources through protest (Garcia, 2015).

Good management of a National Park is achieved through a model where tourism can be the main promoter, not only for the dissemination of the park, but also for the development of the communities near the parks. In the case of Costa Rica, this methodology is widely used because there are several national parks (Aguirre, 2008). Costa Rica has a large volcanic area with abundant flora and fauna, as well as very valuable landscapes, which is why it has been used for years to establish volcanoes as National Parks so that they can be used for tourism and at the same time conserve their natural resources (Alvarado *et al.*, 2021).

## **Conclusion**

The problem and objective posed in this study was duly resolved, since the contributions of the indirect research sources, and mainly from the contributions of the analyzed publications, fundamentally addressed the need to promote reflections and discussions for the adoption of measures to prevent the elements of nature through the declaration of natural protected areas, which at the federal level, an example of this, are the national parks, among other categories of nature management. In summary, "El Veladero" National Park was decreed so that the Port of Acapulco would have a green lung where ecotourism could be practiced in a regulated manner and with low impact on the surrounding environment. However, this objective has been marginalized in each of the past state and municipal administrations.

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