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REVISTA DE LA FACULTAD DE GEOGRAFÍA E HISTORIA

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# ARTÍCULOS · ARTICLES



# LA CONCIENCIA MEDIO AMBIENTAL EN EL SECTOR DEL TURISMO DE SOL Y PLAYA. UN ESTUDIO CON LA TÉCNICA DELPHI

## ENVIRONMENTAL AWARENESS IN THE SUN, SEA AND SAND TOURISM SECTOR. A STUDY USING THE DELPHI TECHNIQUE

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### Resumen

El turismo de sol y playa es la tipología de turismo que fomenta el mayor flujo de pasajeros a nivel internacional, generando crecimiento económico y creación de empleo. Sin embargo, como cualquier otra actividad económica, genera externalidades negativas que se manifiestan en impactos medioambientales. El Programa de Turismo Sostenible *One Planet* dirigido por la Organización Mundial del Turismo anuncia su nueva visión para el turismo global: crecer mejor, fortalecerse y encontrar el equilibrio entre las personas, el planeta y la prosperidad.

Más allá de las buenas intenciones, con la técnica Delphi como herramienta, se ha hecho una primera aproximación para dilucidar la conciencia medioambiental del sector, así como el compromiso de desarrollar e incorporar planes de gestión sostenibles y contribuir al desarrollo económico teniendo en consideración el medioambiente y las comunidades locales en su conjunto. 14 profesionales de diferentes empresas a nivel mundial enfocadas en áreas geográficas destinadas al turismo de sol y playa fueron seleccionados para participar en el estudio. Obteniendo como respuesta, todavía, un sector con conciencia medioambiental muy débil que no incorpora el medioambiente en su estructura operativa, no se responsabiliza de sus acciones ni de futuros desarrollos sostenibles.

### Palabras clave

Medio ambiente; método Delphi; sector turismo de sol y playa; turismo sostenible; Responsabilidad Social Empresarial; concienciación.

### Abstract

The so-called sun, sea and sand tourism continues to be the type of tourism that fosters the greatest flow of passengers on an international scale, giving rise to an

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economic impact and job creation. However, like any other type of economic and human activity, it generates negative externalities that manifest themselves in environmental impacts. The One Planet Sustainable Tourism Programme led by The World Tourism Organization announces its new vision for global tourism—growing better, stronger, and balancing the needs of people, planet and prosperity.

Beyond good intentions, with the Delphi technique as a tool, a first approach has been made to elucidate the environmental awareness of the sector, the commitment to develop and incorporate sustainable plans to behave in an ethical manner and contribute to economic development while the quality of the environment and local communities as a whole. 14 professionals were selected to participate in the Delphi, all from different companies worldwide focused on geographical areas intended for sun, sea and sand tourism. Obtaining as a response, still, a sector with very weak awareness that does not incorporate the environment into its operational structures, it does not take responsibility for its own actions nor future sustainable developments.

### Keywords

Environment; Delphi method; sun, sea and sand tourism sector; sustainable tourism; Corporate Social Responsibility; awareness.

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## 1. INTRODUCTION

The increasing number of inhabitants on the planet, it is not possible to assume that our impact is muffled by the environment; nor can humans continue to pretend that natural resources are unlimited. Our planet has biophysical limits that will ultimately limit exponential growth: the society of the future will need to be a sustainable one, or it will not exist at all. The search for sustainability is necessary, but there is no current agreement in place that will lead to it (Arias et al., 2010).

Sustainable development can be defined as «development that meets the needs of the present without compromising the ability of future generations to meet their own needs» (Brundtland, 1987). Two aspects are indispensable for sustainable development.

First, understanding that economic growth alone is not enough; the economic, social and environmental aspects of any activity are linked. To consider only one of them results in unsustainability errors (OECD, 2008).

Second, the interdisciplinary nature of sustainable development requires that borders, both geographic and institutional, be transcended to coordinate strategies and decision-making. Environmental problems do not only depend on a government or a neighbourhood, and solutions require cooperation as part of a participatory process. The basis of sustainable development is the need to consider three pillars together: society, economy and environment (Figure 1), in other words: people, habitats and economic systems (OECD, 2008)

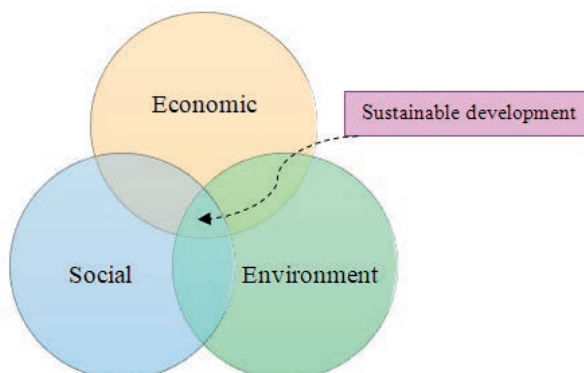


FIGURE 1. SUSTAINABLE DEVELOPMENT'S PILLARS. Source: Prepared by the author

Climate change is a threat to sustainable development. The AR5 (Fifth Assessment Report) of the Intergovernmental Panel on Climate Change (IPCC) dedicates three complete chapters to future projections from different angles on the possible evolution of the climate and the impacts derived from it (Meyer, 2014). The possible evolutions of those will depend on components such as population, economic development, energy technologies, land use, etc.

It has been concluded that in every possible hypothetical scenarios, many aspects of climate change and its associated impacts will continue for centuries, even if all anthropogenic greenhouse gas emissions would stop today (IPCC, 2014).

Adaptation and mitigation responses are underpinned by common enabling factors. These include effective institutions and governance, innovation and investments in environmentally sound technologies and infrastructure, sustainable livelihoods and behavioural and lifestyle choices. Adaptation options exist in all sectors, but their context of application and potential is different between sectors and regions (IPCC, 2014).

The sectors of the economy or economic activities divide economies according to the type of productive process that characterizes it.

Each country bets on one or another sector depending on its own and external resources, its growth and expansion is subject to its possibilities and preferences when adopting a specific development strategy, thus characterizing its production model and largely determining the management policies that must be adopted to achieve the economic objectives that have been established (EAE Business School, 2020).

The tourism sector on its own deserves greater attention and a careful analysis. According to the first comprehensive report on global tourism numbers and trends of the new decade, the latest UNWTO World Tourism Barometer, this represents the tenth consecutive year of growth. All regions saw a rise in international arrivals in 2019. For 2020, it was expected a growth of 3% to 4%, due to major sporting events, including the Tokyo Olympics, and cultural events such as Expo 2020 Dubai (World Tourism Organization, 2020). However, as consequence of the outbreak of COVID-19 in 2020, tourism is one of the most directly affected sectors in the current global crisis.

«The devastating impact of the COVID-19 pandemic on global tourism has carried on into 2021, with new data showing an 87% fall in international tourist arrivals in January as compared to 2020» (World Tourism Organization, 2021).

Despite the exceptional circumstances that are taking place, tourist activity is a determining development factor, as it is a currency-generating activity, a multiplier of tourist spending, and a generator of employment, among other benefits, which brings an increase of the quality of life in the territories. However, like any other type of economic and human activity, it generates negative externalities that manifest themselves in environmental impacts (Portela & Fernández, 2018) and social impacts (Stainton, 2021), making it one of the main fields of research and action.

The General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) meeting in Paris from 17 October to 21 November 1972 resulted in the approval of the so-called Convention Concerning the Protection of the World Cultural and Natural Heritage. This Convention highlights the inclusion of the man-nature combination, aspects that had previously been separated and lays the basis for what will later become the new concept of Natural Heritage. In the last decade the heritage list has incorporated new elements from oceanic and marine areas.

The transformation of a natural space into a landscape is the result of human occupation and the consequent territorial modification giving rise to a cultural process (Portela & Fernández, 2018).

The landscape is the element in which the tourist impacts converge and the actions aimed at developing the so-called sustainable tourism and it can be defined as «Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment, and host communities» (Portela & Fernández, 2018).

Some countries have a strong tourist attraction, giving rise to a dimension of high economic impact and job creation, to the point that the flow of visitors can become a negative element for the management, protection and ordering of landscapes, placing landscapes as protectable structures from the environmental point of view.

Currently, no one questions the environmental effects of tourism activity, and therefore the need to minimize them and establish measures that allow for the coexistence of tourism and the environment.

Sun, sea and sand tourism is the most demanded of all. This segment of tourism is usually associated with leisure, as well as with the terms rest, fun and entertainment. Although this type of tourism may be associated with other segments of tourism, as a general rule, it can survive on its own, as the reports published by the UNWTO can confirm year after year (World Tourism Organization, 2018).

Between 1950 and 1973 people began to talk about the tourist boom of sun, sea and sand tourism. This development is a consequence of the new international order, social stability and the development of leisure culture in the western world. At this time, legislation on the sector begins and leads us to the era of standardization of the tourist product. Large tour operators launch millions of identical tourist packages onto the market, making the product cheaper and more popular (Rodríguez, 2011).

However this stage is also characterized by a lack of experience, which implies a lack of planning, it is built without making any forecast, neither of the demand nor of the environmental and social impacts that may be suffered with the massive arrival of tourists (Rodríguez, 2011).

The impact of sun, sea and sand tourism on the environment offers quite a varied range of outrages: gigantic buildings on the beach, chalets hanging from the cliffs, rubbish spread out of control, polluted waters, impassable roads, noise until dawn, loss of fertile land, etc. All this appears during the initiation phase or the exploitation of the tourist activity. The start-up process involves a structural impact on the environment, which results in the construction of roads, water pipes and buildings. The next phase of tourist exploitation affects the consumption of resources (water), accumulation of spills (garbage) and air pollution (cars, air conditioners and fires) (Franco & García, 1999).

The boom in coastal development and recreational use of beaches also causes the rapid erosion of a habitat of vital importance to living beings. To make way for new constructions, coastal dunes are often eliminated. The protection afforded by the sand dunes is then lost, increasing the vulnerability of the local natural environment. Overfishing threatens the food supply for birds and other living animals, and in the long term, for people. Sea level rise threatens nesting and spawning habitats on beaches and islands, as well as putting coastal communities at risk. Beaches are vital migration habitats for many species. If the extensive urbanization of coastal areas

for tourism and recreation continues, coastal erosion will undoubtedly become a more serious problem.

The historically most outstanding receiving destinations, due to their climatic conditions and with flows of tourists that motivate for sun, sea and sand tourism have been the Mediterranean and the Caribbean (Figure 2). Hawaii, Guam Islands, the coasts of California and more recently Southeast Asia also has an image of sun and beach destinations and are noted for the reception of this type of tourist.

The Mediterranean is the star destination for sun, sea and sand tourism. It is made up of the countries of the southern coast of Europe and those of the northern coast of Africa with waters in the Mediterranean Sea. This area is home to 24 countries, among which France, Spain, Italy, Portugal, Greece and Turkey stand out on the European side, and to a lesser extent Tunisia, Egypt and Morocco on the African side.

The Caribbean is another of the quintessential destinations for sun, sea and sand tourism. Distinguishing itself by warmer, cleaner, calmer and more exotic waters, where activities related to the sea, nautical sports and cruises have had pre-eminence and correspond to the image achieved and consolidated during the second half of the 20<sup>th</sup> century (Ayala et al., 2003).

The Caribbean has been modestly enriching its offer. Some countries such as the Dominican Republic are already promoted as places of sensations, highlighting aspects that go beyond the sun, sea and sand. Cancun has extended its original offer to the Riviera Maya by introducing pre-Columbian culture, archaeological sites, theme parks and unspoilt nature in its packages. Lastly, Cuba, Puerto Rico and Jamaica make up the most visited destinations for mass sun, sea and sand tourism.

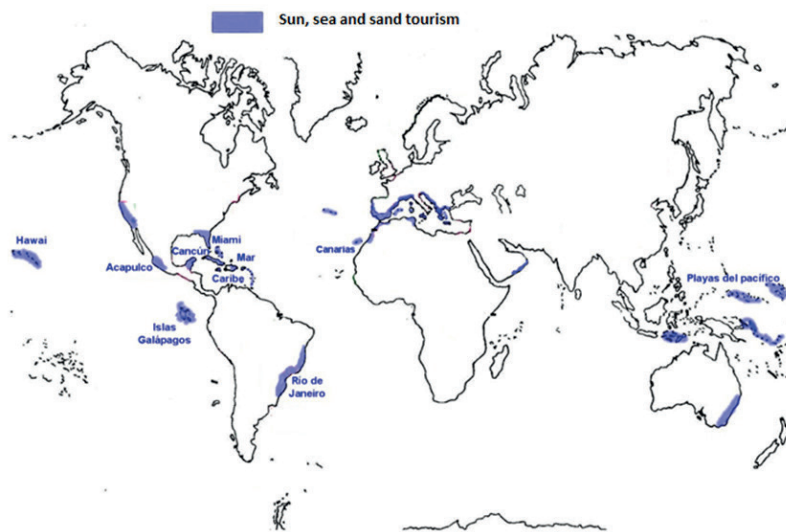


FIGURE 2. MOST HISTORICALLY OUTSTANDING DESTINATIONS FOR SUN, SEA AND SAND TOURISM. Source: <https://histogeomapas.blogspot.com/2016/10/el-turismo-mundial.html>

A broad understanding of the economic, social and environmental performance of tourism is required, in order to establish the limits within which adequate management of the environment is possible. Tourism is a consequence of economic

development and lifestyle. Behind the phenomenon there is a hedonistic approach that prioritizes consumption and enjoyment of the environment without worrying about the rhythms of nature, the renewal of resources and the aesthetics of the environment (Franco & García, 1999).

Many regions have emerged from underdevelopment after joining tourism development and borders have been enlarged by the knowledge of the people, but the environment has paid a high price due to our predatory impulses. It has also become a problem for the economy because the environment is already a scarce good not only due to the consumption of raw materials (soil, forests, etc.) but also due to the loss of other more intangible assets such as the landscape, areas of retreat and relaxation, or comfort.

In the destinations, the tourist is perceived as a source of foreign exchange, without at any time a balance of global gains and losses, including the environment, being carried out. Something has changed this position as evidenced by the concern to restrict the number of visitors in some areas and the application of tourist taxes sometimes in order to respond to the necessity of decreasing.

Following the holding of the Earth Summit in Rio de Janeiro in 1992, followed by the Rio + 5 Summit in New York and the World Summit on Sustainable Development held in Johannesburg in September 2002, it was suggested that companies assume the principles of Social Responsibility. But it is from the Davos Forum in 1999, within the framework of the UN, when the global pact was established to incentivize companies to incorporate the principles of Social Responsibility (Calvo, 2017).

Corporate Social Responsibility (CSR) is the function that companies assume in favour of sustainable development, that is, the search for a balance between economic advancement, social well-being, the good use of natural resources and the environment. This balance is important in the exercise of business, since companies must be an active part in the search for solutions to the challenges that exist in society, for their own interest in having a more stable and prosperous environment (García, 2018).

Corporate Social Responsibility involves the voluntary integration of a management model applied in the organization of social and environmental impact to economic impact, incorporating for this purpose both internal and external stakeholders that are affected by, or that affect the activity of the company or organization. The implementation of an environmental management system (EMS), defined by the international standard ISO 14001, reduces the environmental impact of the activities, products and services of the organization, optimizes the consumption of raw materials, resources and energy, and eliminates or treats properly waste, discharges and emissions, resulting in significant economic benefits in the medium and long term (Rodríguez et al., 2012).

An EMS consists of a continuous cycle of actions (planning, action, review and improvement of the environmental performance of a company) to achieve the improvement of environmental behaviour, known as the continuous improvement. However, today it is a voluntary act of the company (Rodríguez et al., 2012).

The 2030 Agenda for Sustainable Development was approved by UN Member States at the 2015 World Summit for Sustainable Development coinciding with the

entry into force of the Paris Agreement on climate change (to limit the rise in global temperatures). In order to eradicate poverty, protect the planet, and ensure prosperity for all people, 17 goals, 169 goals, and a political declaration were established.

The tourism sector reflects in its activity many of those goals set for Sustainable Development: Goal 8, Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all; Objective 12, Guarantee the patterns of consumption and sustainable production; and Goal 14, Conserve and sustainably use the oceans, seas and marine resources to achieve sustainable development (Zhenmin, 2019).

In recent years, the demand for sustainable tourism has increased. According to the report Sustainable Tourism Profiles and trends by Dr. María del Pilar Leal:

The percentage of consumers who are willing to pay more for sustainable brands and who showed a commitment to social and environmental values increased from 55 % to 66% between 2014 and 2015. 73% of Millennials and Generation Z are more likely to pay more for sustainability, compared to 51% of Baby Boomers. Between 2014 and 2015 the demand for more sustainable destinations has multiplied by five. Green tourism companies continue to receive differentiation from major online travel booking and search engines, including TripAdvisor with its GreenLeaders program targeting accommodation, Travelocity and Expedia. Travel bloggers focused on ecotourism, cultural heritage tourism and unique experiences continue to grow year after year. Approximately one in five travellers uses a «blog» to read about a tour operator (Leal, 2017).

Now, on the one hand, environmental policy is already part of the actions of governments to a greater or lesser extent, in the same way that the seed has been sown on the figure of the «ecological citizen», understanding as «that citizen who, with a variable degree of commitment, capable of manifesting itself in different spheres - moral, domestic, public - in different ways, it shows a sufficient disposition to contribute to the realization of some form of sustainable society » (Arias et al., 2010) The question arises: What is the tourism sector's response to the needs of adapting to this new generation?

The objective of the tourism sector is the evolution towards a new dimension of tourism, sustainable tourism, as it is proposed on its website; UNWTO, sustainable development (World Tourism Organization, 2015).

Under these premises and after having theoretically introduced the relationship between sustainable development, the 2030 Agenda (SDG), Corporate Social Responsibility, the environmental impact that the activity of the sun, sea and sand tourism sector generates and the degree of involvement of the World Tourism Organization (UNWTO) for sustainable development, the study of this research focuses on the previous hypothesis of the existence of a weak sustainable tourism sector in the sun, sea and sand typology. It does not follow a sufficient commitment that denotes more sustainable efforts or political guidelines that are closer to environmental associationism. It prevails that the activity satisfies the need for leisure and rest for visitors, without responding to the needs of the present receiving regions, nor improving the opportunities of the future. It is not focused on managing all resources in a way that meets economic, social and aesthetic needs,



while respecting cultural integrity, essential ecological processes and biological diversity beyond good intentions and the purposes of actions.

The research object is now set out to elucidate environmental awareness in the sun, sea and sand tourism sector worldwide and its trend beyond good intentions, that is, to assess its involvement by analyzing basic concepts of sustainable development such as Corporate Social Responsibility and the integration of an environmental management plan to its operational structure. Reproduce the distinction between values and opinions, on the one hand, and attitudes and behaviours on the other, interpret the empirical data obtained from the study and theoretically justify these from the concepts developed in the previous section. The Delphi technique will be used to validate the aforementioned objectives.

## 2. METHODOLOGY

The technique chosen to reach the objectives of this research is the Delphi method, a social research methodology specially designed from the opinion of experts.

The Delphi study adapts to the needs of this research since it does not intend to reach unique conclusions, but rather to help identify the present situation and aspects that have not yet materialized today but are developing (Global University Network for Innovation, 2006).

This tool integrates aspects of qualitative and quantitative research, without the need to work with statistical representation. In order to measure the weight of the various trends, opinions issued by the panel of experts who do not know each other will be taken.

Another of the method's characteristics is iteration and controlled feedback. It is achieved by presenting the questionnaire several times. In addition, the results obtained with the previous questionnaires are presented so that the experts get to know the points of view and can gradually modify their opinion if the arguments presented seem more accurate than theirs.

This technique allows an agreement or consensus to be reached on the topic. It also enables the use of technology-based tools, which have made it possible to overcome some planning and organization limitations (López-Gómez, 2018) due to the present confinement circumstances in which we find ourselves due to the COVID-19 outbreak. Participation and collaboration are maximized, communication can be structured in the application and the process of data storage, processing and analysis is optimized.

The chosen medium is the online tool Google Forms, which maintains the anonymity of the participants and also facilitates the participation of experts from distant geographical locations, and in a widely accessible format.

Since the results of a Delphi study depend on the knowledge and degree of understanding of the panellists, the most important aspect for its success is the adequate selection of the participants. Selected individuals must be able to pass judgment on the subject under discussion for the method to yield a reliable result.

## PROFILE OF INFORMANTS

14 experts have been selected with an average of 17 years of experience in the sector, of various sizes of companies, focused on different geographical areas, per excellence, intended for sun, sea and sand tourism both nationally and internationally. The experts all have one common characteristic, and that is that their positions have decision-making power. This characteristic was decisive when it came to choosing the panel, considering both the years of experience and the ability to make decisions that imply the evolution of the company towards one direction or another essential. Likewise, the participation of both women and men has been taken into account to avoid bias and obtain representation from both. This neutrality measure introduced a secondary challenge, when choosing the experts, as practically all of the positions that fit the profile help by men. It was, therefore necessary to discard several panellists already chosen to specifically look for women and balance that way the representativeness of both sexes.

All were contacted via email to request collaboration with the research project. Below are the places where the work of the selected experts is carried out.

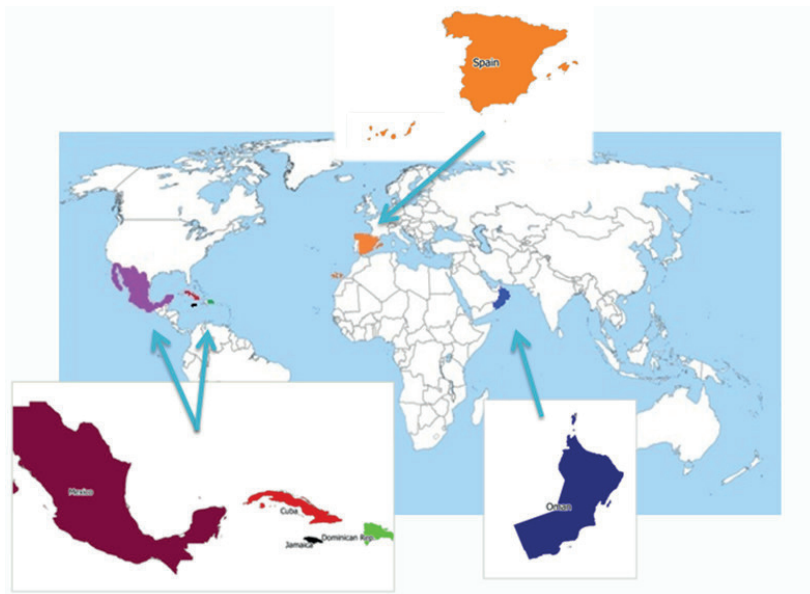


FIGURE 3. PANELIST'S WORKPLACE. Source: prepared by the author

## 3. RESULTS

### 3.1. FIRST ROUND OF QUESTIONS

The first phase was proposed as a series of open questions so as not to induce answers, with a little contextualization to the object of study.

A very wide range of positions and opinions has been obtained regarding the topics consulted. Almost always the profile and region variables are explanatory of



the various positions, therefore the issues are relevant variables. The summary of the responses is shown below.

1. What are the advantages and disadvantages in the practice of sun, sea and sand tourism? List both:

The answers represent several of the advantages of the sun, sea and sand tourism (Chart 1). It highlights the strengthening of the economy, job creation, local economic growth and cultural exchange as the main benefits followed by infrastructure development.

In this section other proposed answers included: local, national and international market guarantees; and knowledge of local biodiversity.

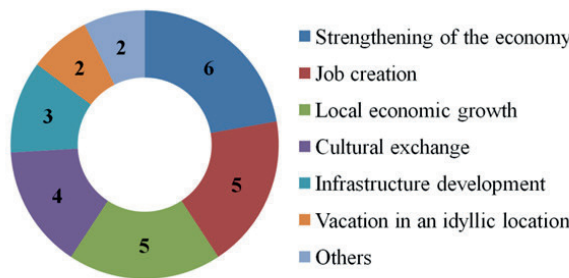


CHART 1. ADVANTAGES. Source: prepared by the author using results of Delphi technique

As for the disadvantages, a greater range of responses is observed. Among the proposed results, it shows that the environmental impact, overexploitation of resources and pollution are the main problems generated by the activity of sun, sea and sand tourism (Chart 2).

Among «others», at least one panelist proposed: low-cost/lower-medium expands tourism, price competition, lack of environmental education, repercussions on native fauna and conflicts with locals.

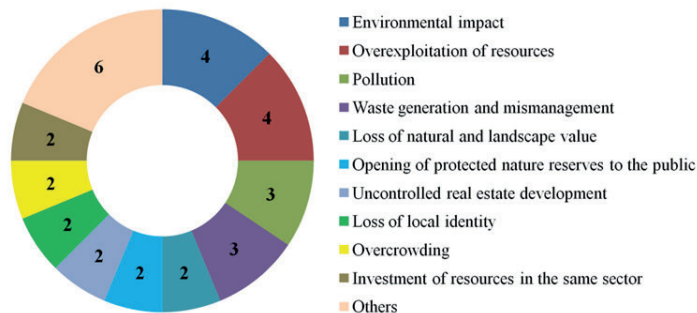


CHART 2. DISADVANTAGES. Source: prepared by the author using results of Delphi technique

2. What recommendations would you provide to overcome the main disadvantages in practice identified in the answers to the previous question?

To solve the disadvantages, a wide range of responses are observed again (Chart 3). Among other measures, the following were suggested.

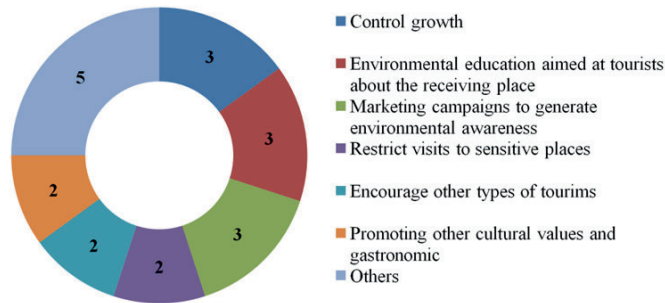


CHART 3. RECOMMENDATIONS. Source: prepared by the author using results of Delphi technique

- \* Greater supervision by the authorities.
- \* Ecotax.
- \* Legislating to avoid a price war.
- \* Implementing a department in the company that manages environmental tasks and growth based on sustainability.

3. Do you think that sustainable development is compatible with sun, sea and sand tourism?

Virtually everyone agrees on considering sustainable development compatible with sun, sea and sand tourism (Chart 4). But the panellists are concerned about corruption and impunity, and they also appeal to legislate more and better in order to obtain results. To reach sustainable development, a balance between development and sustainability must be found. The usage of renewable energy is also proposed. It is thought that the tourist lacks environmental awareness and makes it impossible to carry out sustainable tourism practices.

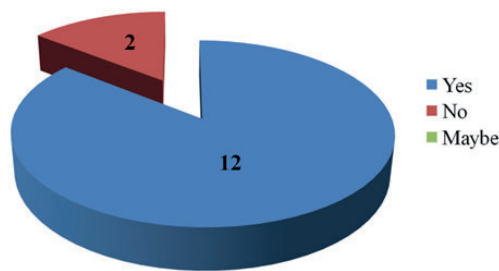


CHART 4. COMPATIBILITY. Source: prepared by the author using results of Delphi technique

4. During your professional career, do you think that there has been any change in recent years regarding the management of sun, sea and sand tourism because of the introduction of new environmental laws?

Half of the panellists bring a positive view to the introduction of laws (Chart 5). Although much more work must continue, progress is seen in the regulation of building permits, with stricter rules and regulations, thus halting uncontrolled construction. The expansion and creation of new protected areas is also noted.

The less optimistic half of panellists considers that there have been no improvements. Mainly due to corruption, impunity on the part of the authorities and the economic benefit continues to prevail over anything else. Companies seek certification to have a good social image, but they do not give it continuity.

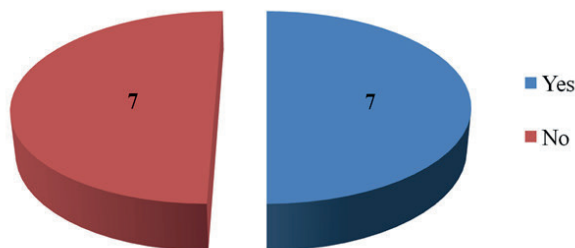


CHART 5. IMPROVEMENTS AS A CONSEQUENCE OF THE INTRODUCTION OF LAWS. Source: prepared by the author using results of Delphi technique

5. Is your company part of any Environmental Management Plan? If the answer is yes, what does it consist of? List the main lines of action:

Only four of the panellists affirm that their company is part of an Environmental Management Plan, of which only two know how to identify the plan to which the company belong and the work that is being carried out (Chart 6). The other two panellists believe that their company belongs to some type of Environmental Management plan due to the nature of the tasks performed, but the answers indicate doubt or lack of knowledge in this regard.

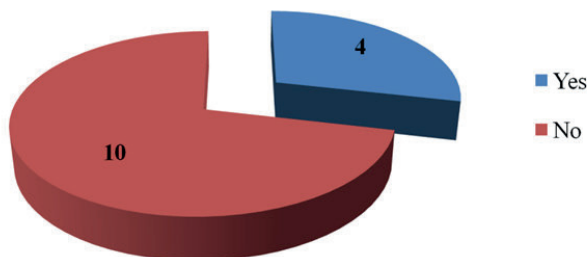


CHART 6. TAKE PART OF AN ENVIRONMENTAL MANAGEMENT PLAN. Source: prepared by the author using results of Delphi technique

6. Additional comments regarding the sustainability of sun, sea and sand tourism.

Panellists emphasized the need to work against corruption and uphold the rule of law of environmental laws and regulations. When creating laws, they must be created in collaboration between the government, experts, civil society and developers. When developing new destinations, control and order factors

should be implemented to be more successful. Clear, less general, more specific, less subjective and more objective legislation without falling into the bureaucracy that represents a barrier to it.

Another possibility would be to establish educational programs. For example, a public budget should be invested to maintenance of beaches, cleaning and surveillance, in addition to promoting knowledge of native flora and fauna among tourists. In this way, the commitment to the conservation and care of the destination places is promoted.

## 3.2. SECOND ROUND OF QUESTIONS

### 3.2.1. First part

The first part of the second questionnaire was designed to receive quantitative answers, although also leaving an open question that could include the aspects that the questionnaire had not integrated from the answers of the first round. Standardized questioning and response procedures have been used, which give the interviewee less freedom of response in order to guarantee a more consistent evaluation of the same questions. All the panellists then have understood the same thing in the same context and therefore evaluation of the consensus can be made.

Operationalization is the process by which a researcher defines how a concept is measured, observed, or manipulated within a study. The result of the operational definition is the indicator. On the other hand, index and scales try to add in a single data the information referring to several indicators, they are based on the generation and validation by statistical methods, this mathematically proves that the selected elements are really indicators of the same concept, to which it's called a latent variable.

The scale used was the Likert scale. The degree of agreement with the various categorized items was tested, as a result of the content analysis of the previous phase. The selected items or variables have been assigned a score, where 1 represents strong disagreement and 5 strong agreement. Mainly, the participants had to classify the answers of the first round according to the proposed scale. In addition, they could optionally add comments for some questions and make a final observation.

The analysis of the responses obtained as a global result is shown below. An index itemizing the points scored for each question is provided with this means, the median, the mode and the standard deviation.

To visually identify the trend of each of the items, a color scale was considered as shown below (QuestionPro, S.f.) (Table 1):

TABLE 1. LIKERT SCALE

	Strong disagreement	Disagreement	Neutral	Agreement	Strong agreement
<b>Variable Analyzed</b>	1	2	3	4	5
<b>Total</b>	14 – 21	21 – 35	35 – 49	49 – 63	63 – 70
<b>Mean</b>	1 – 1.5	1.5 – 2.5	2.5 – 3.5	3.5 – 4.5	4.5 – 5

Since the mean only does not represent the responses in many of the cases, the standard deviation has also been calculated to see the dispersion of the data. For example, items marked with two asterisks do not see a degree of agreement or neutrality although the arithmetic mean says otherwise (Table 2).

TABLE 2. LIKERT SCALE STATISTICAL ANALYSIS

	Mean per item	$\bar{X}$	$M_e$	$M_o$	S	Mean level of agreement
<b>TOURISM AND ECONOMY</b>						
1.Tourism strengthens the local and state economy and generates employment	67	4.8	5	5	0.426	
2.The saturation and over-exploitation of sun, sea and sand tourism should be managed to reduce the environmental impact	66	4.6	5	5	0.469	
<b>NECESSARY MEASURES FOR EFFICIENCY AND SUSTAINABILITY IN TOURISM ACTIVITY</b>						
3.Limit the number of projects in a tourist destination and plan them better	65	4.6	5	5	0.497	
4.Encourage diversification in investments	64	4.5	5	5	0.6461	*
5.Avoid price wars	60	4.3	4.5	5	0.914	
6.Beach limited access	31	2.2	2	1	1.2514	
7.Better control and planning for development of new tourist destinations	69	4.9	5	5	0.2673	
<b>OTHERS</b>						
8.The environment is affected by the activity of sun, sea and sand tourism	52	3.7	4	4	1.0690	**
9.The State is the most important agent in the management of the environment	49	3.5	3	3	0.6504	
10.The State must impose tougher sanctions and penalties to have an evolution toward sustainable tourism	59	4.2	4.5	5	0.8926	
11.Sun, sea and sand tourism operators are prepared to carry out sustainable tourism practices	47	3.3	3.5	4	1.0082	**

12.The implementation of renewable energy should be mandatory in both new projects and established businesses	64	4.5	5	5	0.7559	*
13. The environmental unawareness of a large percentage of tourists makes impossible to carry out sustainable practices.	44	3.1	3.5	4	1.0995	**
14.Corruption is the main impediment to carrying out sustainable development practices	57	4	4	5	0.9972	
15.Corruption originates from the State and is reflected in actions such as granting or not granting construction permits	58	4.1	4.5	5	0.8926	
16.Laws and regulations must be created in collaboration between government, society and developers, so that they are well done and enforced	66	4.7	5	5	0.5	
17.Considers it important the existence of a department that makes proposals that improve the environment (eco-friendly)	64	4.5	5	5	0.5	
WHICH ELEMENTS HELP ACHIEVE THE BALANCE BETWEEN TOURISM (BUSINESS) AND SUSTAINABLE DEVELOPMENT?						
18.Education to the local population	64	4.5	5	5	0.646	*
19.Tourist education	67	4.8	5	5	0.425	
20.Company actions (recycling, sewage treatment, use of solar energy, reduction of energy consumption, reduction of water consumption, banning single-use plastic, avoiding food waste ...)	69	4.9	5	5	0.267	
21.Cleaning and surveillance on the beaches	67	4.8	5	5	0.425	

Firstly, 12 of the proposed variables reached consensus of strong agreement in the mean (items 1, 2, 3, 4, 7, 12, 16, 17, 18, 19, 20 and 21). However, at least one panelist was neutral in the items marked with an asterisk (items 4, 12 and 18). Subsequently, 5 of the variables reach only the agreement (items 5, 8, 10, 14 and 15). Hence, these variables deserve individual attention since although the average of the points obtained denotes a positive degree of agreement, when analyzed separately, it is observed that there is no consensus in the proposals, moreover, at least two of the panelists have rated the item as neutral or less than neutral (Chart 7).

Next, 3 of the variables are presented as neutral (items 9, 11 and 13), but in the same way as the previous case, the neutral range is reached only in the mean because of the variety of answers is so much that doing the average gives neutral values.

Finally, 1 of the variables (item 6) tends to disagreement, but again, when analyzed separately, little consensus is obtained.

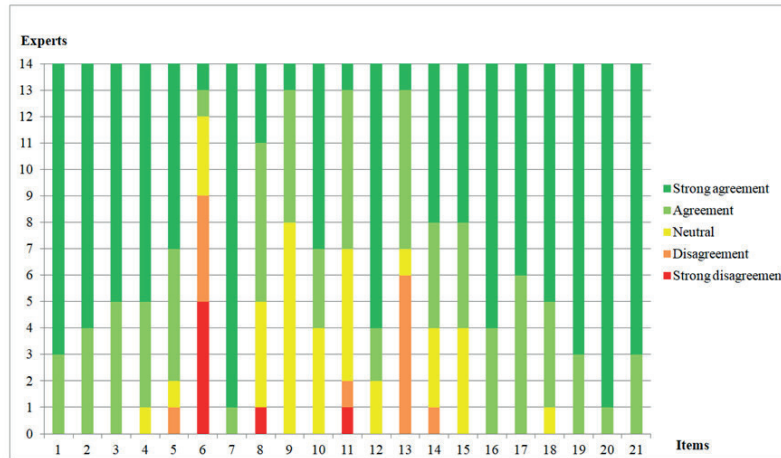


CHART 7. FREQUENCY OF EACH ELEMENT. Source: prepared by the author using results of Delphi technique

### 3.2.2. Second part

The second part of this round, first of all the participants had to indicate the necessary actions that should be carry on to educate each of the agents who intervene (local population, tourist and employees). Secondly, they had to indicate the elements that should be in the certification of a company as socially responsible and finally they were given the option of adding other comments about something that has not been included and they consider important. The analysis of the results obtained is shown on chart 8, 9 and 10.

Necessary actions to educate each of the groups:

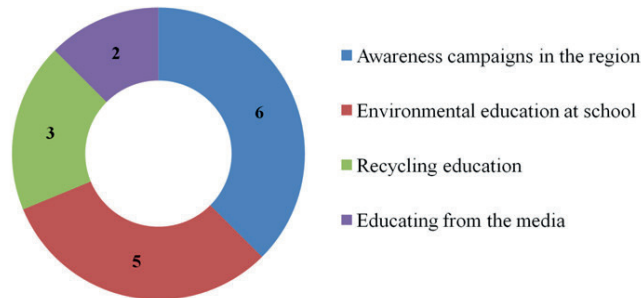


CHART 8. LOCAL POPULATION. Source: prepared by the author using results of Delphi technique

There is a clear trend towards the importance of educating about the closer environment to the local population, that is, their locality, in addition to the need to introduce environmental education in schools, followed by more specific actions such as recycling. Finally, several panelists cite the media as a transmission vehicle of environmental awareness.

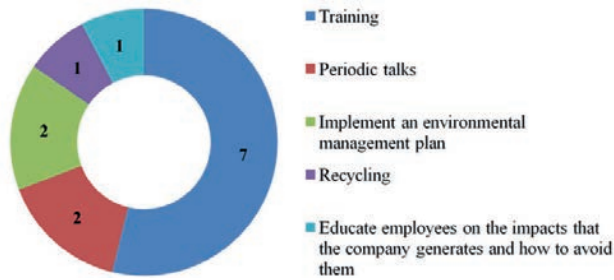


CHART 9. TOURIST. Source: prepared by the author using results of Delphi technique

Among the actions focused on tourists, it is important to provide them with pamphlets, brochures or audiovisual media about the ecology of the receiving environment in hotels and at the airport itself. It is also proposed to publicize current regulations regarding the environment and the impact that their visit generates.

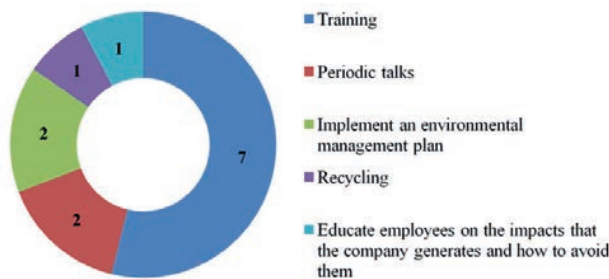


CHART 10. EMPLOYEES. Source: prepared by the author using results of Delphi technique

As for the employees, it is essential environmental training, in addition to the impacts that their activity generates, with talks and courses. It should be said that all this must be managed by a specific department that dedicates exclusively to this matter.

2. Elements that should be included in the certification of a company as socially responsible.

The list of proposed actions is included in the figure 4, with those that have been repeatedly suggested by one or more panelists in first place.



FIGURE 4. ELEMENTS THAT SHOULD BE INCLUDED IN THE CERTIFICATION. Source: prepared by the author using results of Delphi technique



#### 4. DISCUSSION

Experts identify the advantages generated by sun, sea and sand tourism as mostly economic. They highlight the strengthening of the economy, job creation, local economic growth and cultural exchange as the main benefits followed by infrastructure development.

The set of responses obtained have been grouped into three different typologies based on the economic, social and environmental factors relate to the pillars of sustainable development (Brundtland, 1987). According to the number of proposals per category, the percentage of each one has been calculated. It can be observed that the economic factor was the biggest segment with 63%. Social factor came as second (25%) and the environment contributed the least of the advantages (12%) (Chart 11).

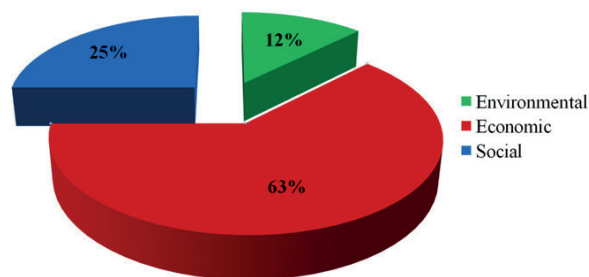


CHART 11. TYPOLOGY OF ADVANTAGES AS A CONSEQUENCE OF SUN, SEA AND SAND TOURISM. Source: prepared by the author

Regarding the disadvantages, the answers have also been categorized by their nature in three groups: environment, economy and society. The environment is representing the largest portion of the chart with around 47%; the environmental impact, the overexploitation of resources and pollution are the main disadvantages caused by the activity of sun, sea and sand tourism, as Óscar García Guillén and Tomás Franco Aliaga explained in their article «The environmental impacts of tourism» (Franco & García, 1999). Next the economy came as the second most affected group (33%) and society made up the smallest part of the chart (20%) (Chart 12).

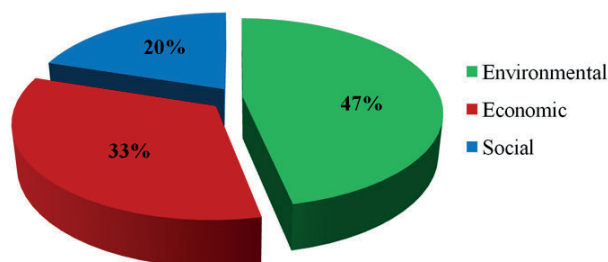


CHART 12. TYPOLOGY OF DISADVANTAGES AS A CONSEQUENCE OF SUN, SEA AND SAND TOURISM. Source: prepared by the author

The measures needed to solve the disadvantages caused by the activity of sun, sea and sand tourism proposed by the panellists, have been categorized depending on the agent that bears the responsibility: State, society or companies (Chart 13).

As result, the environmental management's responsibility falls on the State with 58% of the proposals. Far behind, companies take on decision-making (25%) and, lastly the responsibility lies on society, placing it as the least inclusive when it comes to reaching solutions and responsibilities.

The fact that a long list of proposals to be adopted to solve the disadvantages that the sun, sea and sand tourism generates has been achieved is considered positive. This confirms the existence of externalities as a consequence of the development of sun, sea and sand tourism (Franco & García, 1999) and therefore the need to take measures. However, the fact that the panellists do not agree on the proposals should be highlighted as counterproductive, as it highlights doubts about the way forward to achieve sustainable tourism.

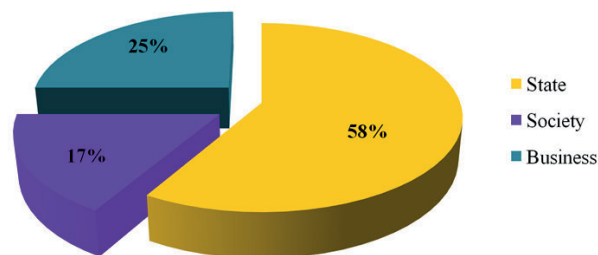


CHART 13. WHO TAKES RESPONSIBILITY. Source: prepared by the author

These results project a still very poor environmental awareness on the part of companies. Not only companies do not show any initiative to change its structures or take responsibilities but also the State is the one that must legislate, contrary to what the UNWTO suggested about Corporate Social Responsibility (García, 2018).

It would be advisable for the sector to try sustainability initiatives that motivate tourists, for instance hotels may ask clients to reuse towels that helps to save significant amounts of water and energy. Do not give the impression that the hotel wants to save money, but rather communicate with simple phrases such as «with what we save on washing towels, we are going to reforest here behind the beach» (Cabrini, 2017).

The issues that show the greatest degree of consensus are based on the importance of the tourism sector as an economic engine, and it must also be adequately planned to achieve sustainable development by making an environmental policy in collaboration with all social agents, such as proposes research by the Center for Sociological Research (CIS Spanish's acronym) on citizens environmental awareness, where it points out: sustainability must be based on instruments and plurality of public and private policies, to combine the interventionist virtues of public policy with the liberal virtues of the spontaneous development of civil society and economic agents; neither works without the other (Arias et al., 2010).

Consensus was reached on new ideas generated by some of the panellists such as the use of renewable energy and the creation of a specific environmental department in the company, in the same way the IPCC recommends in order to curb climate change and the necessary measures to mitigate it (IPCC, 2014).

With regard to the necessarily actions for education for sustainability, great consensus was obtained on the need to educate all the agents involved: the local population, workers and tourists. It is important to highlight this point since, in the first phase, environmental education was labeled mainly as the exclusive responsibility of the tourist and in no case was company or workers referred to. In contrast the agreement was lost when speaking of the State as responsible for the management of the environment. Practically all the items related to the State, no consensus was obtained, which triggers, on the one hand, and contrary to what was emphasized in the first phase, that there are certain doubts about granting the sole responsibility for the environmental management. In other words, corruption is not unilaterally or exclusively the result of bad arts practiced by the State.

The results obtained can be considered as positive since it makes sense to affirm that corruption must be the product of, at least, two parties. Therefore, the State is not blamed blindly as a bad manager, although on the other hand the *mea culpa* is diluted by the tourism sector and it does not assume the role that corresponds to it in accordance with the principles of Corporate Social Responsibility and the need to include these principles in the structure of the company to achieve the path to sustainable development (Pérez-Aranda, 2015).

Finally, it was confirmed that the panellists see other agents responsible for the management of the environment with the item: the State is the most important agent in environmental management; 8 panellists were neutral in this variable. Therefore, when analyzing the statements in which an initial consensus was not generated but the items have a common topic, in their joint study, a clear implicit consensus was reached. Although the variables presented to the experts are closed answers, a multitude of interpretations can be made. These can be outlined by repeating an item from different points of view and also allows setting control that tries to test the sincerity of the panelists in their answers (Pino, 2006). This can be applied to the topic of corruption and environmental management by the State.

The result obtained in the following items: the sun, sea and sand tourism operators are prepared to carry out sustainable tourism practices and the environmental unawareness of a large percentage of tourists makes it impossible to carry out sustainable practices, show zero consensuses. This result is extremely important since it is finally glimpsed first; the companies dedicated to sun, sea and sand tourism are not prepared to achieve the goal of sustainable tourism and second, the tourist is not solely to blame for the fact that companies are not prepared, as it was stated by several panelists in the previous phase. What is more, it can be said that the sector continues to look the other way and looks for the initiative in other agents instead of getting down to work. It is not worth blaming the tourist or the State especially if there is no implication from the sector.

It is not openly recognized that the sector is not prepared to carry on sustainable development practices, which is logical since taking responsibility, as a productive

sector, is an extremely important step in which many factors converge and in which economic development and sustainability conflict (Vásquez, 2016). That is why companies should work to find a balance between sustainability and development.

The latter is reflected in the item: beach limited access. When focusing on a specific measure that may generate incompatibilities with the economic benefit, it gets a tendency to totally disagree, as expected. Obviously, the objective of the sector is to generate profit, without benefits the activity has no place and therefore it would not be economically sustainable. That is why the item: cleaning and surveillance on the beaches, proposed in the first phase by one of the experts, is seen as positive by the panellists as there are not confronted issues economic vs. benefit.

Among elements that support the balance between tourism and sustainable development, some of the panellists proposed elements such as the need to promote quality tourism, since low-cost tourism often goes hand in hand with undesirable behaviours that harm the local population and the environment as cited by Sustainable Tourism expert Arturo Crosby in his article *Low cost tourism and its environmental and tourist impact* (Crosby, 2019). The panelists also aim to create the desire of the tourist consumer to make ecological decisions and use their purchasing power to do so. In addition, it was mentioned to reduce the number of rooms available in an effort to reduce the tourist density.

It is essential that people are familiar with the problems and priorities of the natural environment, that is why starting to educate from an early age about the near environment generates a link between man and nature, in other words, it creates values instilled from a young age and the media have the critical role of reporting to help raise awareness.

The environmental slogan «think globally, act locally» (Novo, 2012) involves citizens by relating the major global environmental issues with similar ones that affect people directly, and at the same time offer them practical information on what they can do for the environment. This clearly seems to have an effect among the panelists as it was reflected in the proposed actions regarding environmental education. For instance, recycling was cited numerous times by experts in both phases. That is why is worthy to mention the great work carried out to forge this idea and introduce it into our habits and behaviors, after years of advertising campaigns. The Ecoembes report on the recycling figures in 2019 indicated an increase in the percentage of recycling compared to previous years in Spain and the rest of Europe (Ecoembes, 2019). It is necessary to work to change the main legislative focus for a strategy that fosters shared responsibility and citizen participation but also promote the modification of certain behaviors and consumption habits. Correct waste management is essential to achieve truly sustainable development, in which economic growth is not linked to greater consumption of materials and energy.

Tourism can contribute to generating responsible attitudes towards the environment, through the perception of receiving communities and visitors. This is part of the environmental education and training task, therefore tour operators must make available to tourists the appropriate information on everything related to the environment where they will enjoy their holidays.

Service activities are responsible for a large majority of current environmental problems, and therefore adequate environmental management is necessary to prevent them or at least minimize them. In this context, worker participation is essential for several reasons. First, any environmental improvement measure that is implemented must have their participation to guarantee their effectiveness. Secondly, workers have the possibility to represent the most general interests of society as a whole and in this particular case, they should have the obligation to transmit them to tourists.

Under these circumstances, it is mandatory for companies to train the employees in environmental matters and impacts that the activity generates in collaboration with visitors.

Finally, the company's environmental policy will be based on the principles of action listed below (Rodríguez et al., 2012):

- \* Promote at all levels among employees a sense of responsibility in relation to the environment.
- \* Assess the impact on the environment in all new activities, on the local environment and on the environment in general.
- \* Take necessary measures to prevent or eliminate pollution or reduce it, as well as waste and resource conservation.
- \* Measures to prevent accidental emissions.
- \* Establish and apply procedures to verify compliance with environmental policy and the recording of results.
- \* Establish and apply procedures to be adopted when measures have been breached and goals to be achieved.
- \* Collaborate with public authorities to establish emergency procedures to minimize possible accidents that may occur.
- \* Make information available to the public to understand the impact of company activities on the environment and maintain an open dialogue.
- \* Adequate indicators to clients on the pertinent environmental aspects in relation to the use, handling of the products made by the company.
- \* Measures so that contractors, who work on behalf of the company, apply equivalent environmental standards.

The environmental management system model proposes an effective system to help organizations to continuously manage and improve their environmental performance. In general, the actions or elements that a company should include to certify itself as socially responsible proposed by the experts are very well focused. However, it is necessary to point out that the investment or the diversion of economic benefits generated by the activity is needed for all this to be possible. Integrated improvements in the already existing infrastructures, investment in the development of ecological hotels or development of sustainable practices of the activity of sun, sea and sand tourism, in the same way that it is done in other areas such as digital marketing, project development or market strategies. None of the panellists did mention investment in the environment.

## 5. CONCLUSIONS

A change in trend is observed after Delphi technique.

The sun, sea and sand tourism sector benefits the economy while the environment pays for it. The environmental disadvantages generated are well known by the sector. Even so, the tendency is to transfer responsibility to third parties. As per the hypothesis of the research, in a first approximation it can be concluded that the environmental awareness of the sector is still very weak, very little is known about the Environmental Management Plans and Corporate Social Responsibility has not penetrated.

Companies do not show initiative to change its structures or take responsibility. UNWTO Corporate Social Responsibility approach is positive, but does not appear to effect significant change and to establish real change in sustainable tourism, The State is the one that must legislate.

Overall, the proposals generated by the panelists in the second questionnaire are oriented towards sustainable development especially focused on planning better and in cooperation with all agents. Furthermore, the need to implement renewable energy systems, the creation of a specific environment department in the company and environmental education is essential to reach the goals toward sustainability development.

There is no consensus on several topics such as beach limited access, avoid price wars or that the sun, sea and sand operators are prepared to carry out sustainable practices. This opens the way for future studies to analyze why it is not ready yet, to what extent a company and its workers have familiarized themselves with the impacts that its activity generates and how much a company would be willing to invest in the environment.

To conclude, there is a positive trend towards sustainable development. Environmental ideas, as well as the specific vocabulary to it, are beginning to be known by the sector. The use of this terminology among the panelists denotes how little by little the environmental awareness is gaining ground, although not at the desired or necessary speed. Whilst the growth of awareness is positive, true social transformation will likely require several generations.



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