Economic development versus environmental sustainability: The case of tourist marinas in Andalusia

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Abstract

Economic development generated by business activity has traditionally been analyzed without looking at its environmental impact. However, in the last few years new trends in economic thinking have emerged, such as environmental economics, that provide convincing proof of the inter-relationship of the economy to the environment. This thinking is even more evident in some areas of the economy such as tourism. This article reviews the existing literature on the subject, and then makes a new empirical contribution to the relationship between environmental management and economic results by limiting the field work to tourist marinas in Andalusia, one of the foremost tourist destinations in Spain. A two-pronged – quantitative and qualitative – methodology will be used to discover the specific characteristics of this tourist product and critical aspects of it relating to environmental management by the organizations developing it and the stakeholder groups involved in this activity. This way the hypothesis on whether environmental sustainability is compatible with economic development may be tested. If it proves true, then proposals will be formulated to improve the competitiveness of nautical tourism in Andalusia in line with sustainable development.

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Introduction

Traditionally, the science of Economics has been defined as the science of allocation of scarce resources among competing uses (Robbins, 1932), and goods from nature, or natural goods, were not included among them. However, given the changes in our surroundings, and specifically our environmental surroundings, at present many

of these goods – water, clear air and energy – have become scarce resources, and a new branch of economics has emerged called 'Environmental Economics'.

Environment Economy is defined by Kneese and Russell (1987) as a new field of study and knowledge prevalent in the present generation of economists. But the origins of it

are found in Pigou's theory of externalities –it argues that market faults may be corrected by the government intervention with aids and taxes-; Wicksell' and Bowen's theory of public goods (it argues that government intervention is convenient for an optimum allocation of resources that satisfy social needs); Walras' theory of general equilibrium (it analyses the necessary conditions to be all the markets in equilibrium simultaneously and so obtain the highest profit for customers and enterprises); and the field of application of cost-benefit analysis. In the latter approach, the physical environment behaves at times as a factor of production destined to produce goods and service, and at others as a good in itself resulting in a series of services just by existing, for example, a nature area that attracts tourists to a destination.

Even though there is a convincing argument for the inter-relationship between the economy and the environment, a problem does arise here: since the environment is a public good that may be enjoyed by all without the necessity of bearing a cost in doing so, it could only be integrated into business management with difficulty under market performance parameters. This explains why companies are generally not motivated to contribute to environmental conservation since it is not a specific benefit to a business. However, in the long and medium term, using up or contamination of these resources may jeopardize the survival of many companies, especially those in the tourist sector which largely depend on the environment. Hence the desirability of a change in corporate culture that would give rise to the development of corporate strategies and activities attuned to sustainability. By limiting this study to the tourism sector, tourism may be observed as one of the economic activities with the highest growth rate worldwide, but it is also one of the business industries that depends on the environment where it takes place, and that is why it is important to promote sustainable tourist development.

In line with these approaches, this article takes up the findings of a research study that analyzes the sustainability of tourist marinas

in the region of Andalusia, Spain. Given Spain's importance as the world's second highest income earner from tourism and tourists, and that within Spain Andalusia is one of the main, established tourist destinations, this is a convincing argument for focusing this study on this geographical region. Also, the fact that it is a mature "sun-and-sand" (beach) destination but has hardly developed nautical tourism is the main reason for this study as it provides a major opportunity to re-launch this mature destination and, as it is still an emerging product, we have arrived in time to develop it in a sustainable manner. That is the point of this work.

After briefly developing the conceptual framework and the state of the issue insofar as regards sustainability and tourist marinas, this article will present the results of an empirical study the goals of which are to:

- ✓ Identify the specific characteristics of Andalusian marinas and the critical aspects relating to sustainable development of these organizations.
- ✓ Identify the opinions and activities of stakeholder groups such as brokers, nautical companies or users of marina facilities relating to sustainability.
- ✓ Based on all the compiled information, test the hypothesis of whether environmental sustainability is compatible with business profitability, and, if it is, draw up proposals to improve the competitiveness of nautical tourism in Andalusia according to the sustainable development. Some of the proposals may be extrapolated to other tourist destinations with a similar series of problems to the ones analyzed here.

Literature Review

Prior to beginning of the field work for this research, the existing literature was reviewed and the concepts of sustainable development and nautical tourism were defined. Then, the limits to the study of the series of issues raised by the sustainable development of the marinas in Andalusia were set. In this article, sustainable development in tourism is understood as development that satisfies the needs of present generations without

jeopardizing the satisfaction of the needs of future generations as set out under Article 5.2 of the World Tourist Organization: "Tourism policies shall be planned in such a way as to contribute to improving the standard of living of the populations of the regions visited and respond to their needs".

Effects arising from the interaction of enterprise with its social and natural surroundings were for a time viewed as falling outside the purview of the economic system (Rachman, Mescon, Bovée and Thill, 1991; Ludevid, 2000). The late 20th century saw the beginning of greater awareness of environmental issues by companies, sparking off a broad debate in the literature on whether environmental efforts by companies produce negative effects on their profitability levels (Walley and Whitehead, 1994) or, on the contrary, are profitable (Porter and Van der Linde, 1995; Becker and Gerhart, 1996; Delaney and Huselid, 1996). This led to many applied studies being carried out that do not allow for generalizations about companies in any sector of the economy. Some of these studies point to the existence of a negative relationship between environmental and corporate management and the business results of companies or they do not provide sufficient evidence to confirm this hypothesis (Williams, Medhurst and Drew, 1993; Worrell, Gilley, Davidson and El-Yeli, 1995; Cordeiro and Sarkis, 1997; Thornton, Kagan and Gunningham, 2003). Still others come to the conclusion that this relationship is positive. (Cormier, Magnan and Morard, 1993; Hart and Ahuja, 1996; Klassen and McLaughlin, 1996; Youndt, Snell, Dean and Lepack, 1996; Russo and Fouts, 1997; Judge and Douglas, 1998; Waddock and Graves, 1997).

After reviewing the existing literature, it has been come to the conclusion that no consensus exists regarding the sign of the relationship between environmental management and business results. Arguments in defense of a positive relationship here include:

1. Cost reduction stemming from present and future non-compliance with regulations

(Dechant and Altman, 1994; Hart, 1995; Shrivastava, 1995b).

2. A more efficient use of resources, which reduces operating costs (Russo and Fouts, 1997; Shrivastava, 1995b).

3. The creation of competitive advantages through differentiation strategies by the development of ecologically sound products (Shrivastava, 1995b).

4. Elimination of costs brought about by adversarial reactions from stakeholders (employees, customers, public sector, local community, etc.) and, at the same time, improvement of corporate image, which impacts the process of building customer loyalty. (Dechant and Altman, 1994; Hart, 1995; Shrivastava, 1995b).

But on the other hand, planning and carrying out an environmental protection strategy by companies presupposes they must accept and adhere to a series of principles and restrictions on their conduct that at times are legal requirements and at others are voluntarily adopted by them in order to respond to stakeholder groups (Henriques and Sadorsky, 1999; Miller, 2001a). These restrictions may set conditions on, or limit, the most economically profitable way of undertaking an activity and negatively impact company results. (Walley and Whitehead, 1994).

Although one may not draw generalizations based on the state of this issue, it may be said that there are sectors that are more sensitive than others to the series of issues this study is scrutinizing. For example, the relationship that exists between tourist activity and the environment in which it is immersed makes efficient management of environmental resources a fundamental issue in creating competitiveness strategies for companies and tourist destinations (Cronin, 1990; Goodall, 1994), and even authors such as Butler (1980) acknowledge the possibility of a decline in destinations due to environmental deterioration. In this sense, it is right to be nuanced here, environmental protection activities are carried out in isolation but relate to other corporate decisions and their contribution to profits may change, influencing revenues as well as costs (Dechant and

Altman, 1994). This approach enables this research to hypothesize that the economy/ecology pair in the tourism sector may be combined.

As regards nautical tourism, the material subject of this study, "it includes those recreational activities that involve travel away from one's place of residence and which have as their host or focus the marine environment" (Orams, 1999; p. 9). In this sense, it may be defined as the set of personal relationships that arise when a trip lasting less than one year is made, with the characteristic that the main reason for the trip is the undertaking of one or more water-related activities.

Nautical tourism is a small-scale activity characterized by engaging in light nautical sports in and along simple coastal structures and natural areas such as beaches or along banks. Furthermore, larger-scale nautical tourism requires a series of facilities for tying up craft, re-supply and visiting the destination. These facilities are also, on the one hand, light facilities such as boarding docks, natural or artificial shelters, and, on the other hand, tourist marinas, that is, a separate area of sheltered water located in a coastal region designed to provide support and services to craft requesting it in exchange for services from the owners of the sheltered areas.

In the last years, nautical tourism and all activities relating to it have experienced significant growth rates. The demand in this sector is not limited to a small core of individuals. Everyday this kind of tourism is becoming more popular and that is why there is an interest in this research, given the enormous potential of the activity.

However, it must be considered the economic impact, but also the socio-cultural and environmental impacts of nautical tourism. That's why Dr. Auyong (Oregon State University and Sea Grant Oregon) and Professor Miller (School of Marine Affairs, University of Washington) founded Coastal & Marine Tourism Congress, first held in 1990 in Hawaii; subsequent CMTs were held in Hawaii (1996), Vancouver (1999), Cesme/

Turkey (2005) and Auckland/New Zealand (2007). These conferences emphasized that "tourism based on coastal and marine environment continues to grow rapidly and spread geographically; we must try to increase our understanding of our impacts on the marine world and discover effective ways of minimising those that are negative" (Orams, M; 1997, p. 117). Authors like Miller, Auyong and Hadley (1999, p. 10) think that "throughout the world, coastal tourism is managed by regulatory entities in accordance with the structure and procedures of the prevailing political system. In practice, coastal tourism management is conducted by public sector brokers at all levels of government, by private sector brokers in businesses, and by some NGOs and environmental and social movement brokers". In this sense, Lück (2005) thinks what must be considered are economic opportunities and threats (opportunities like cash influx to region, contribution to governmental tax revenues, generation of employment, and threats like leakages, inflation, infrastructure burden on local population), socio-cultural opportunities (it can create new jobs related to previous jobs, can enhance the living standard of a town, can foster cultural identity) and threats (migration/influx of foreign workers, sell-off of culture) and environmental opportunities (contribution to conservation, it can finance conservation) and threats (pollution, erosion, increasing pressure on wildlife).

In the particular case of Spain, nautical tourism has been grown a lot in some regions like Balearic Islands, and it has been analysed by authors like Garau-Vadell (1995; 2005). In Andalusia specifically, a well-known Spanish tourist region, the supply of marinas numbers 42, with locations over six provinces, with the number of moorings in the overall supply set numbering 14343. The provinces of Malaga, Cadiz and Almeria have the most (Table 1). Furthermore, there is a plan to increase the number of moorings to 25000 before 2016. Therefore, the nautical industry is a growing sector as the practice of water sports is becoming increasingly popular and boat charters or rentals are peaking. At this point in the examination of this issue, a study

Table 1: Andalusian Marinas

Almería (8)	Cádiz (12)	Granada (2)	Huelva (7)	Málaga (11)	Sevilla (2)
Adra Almerimar Roquetas de Mar Aguadulce Almería San José Garrucha Villaricos	Chipiona Rota Pto. Sherry Pto.Sta.María Pto. América Pto. Cádiz Gallineras Sancti Petri Conil Barbate Algeciras Sotogrande	Pta. la Mona Motril	Sanlúcar Guadiana Ayamonte Isla Canela Isla Cristina El Rompido Punta Umbría Mazagón	La Duquesa Estepona Pto. Banús Dptvo. Marbella La Bajadilla Cabopino Fuengirola Benalmádena Málaga El Candado Caleta Vélez	Gelves Náutico Sevilla

Source: Public Company of Andalusian Marinas

on tourist marinas in Andalusia is necessary for purposes of testing whether economic development is compatible with environmental sustainability.

Methodology

The goal of this research is to make a new empirical contribution to the relationship that exists between environmental management and corporate results, in this case, by limiting the field work to tourist marinas in Andalusia. This was done by using a two-pronged methodology that is both quantitative and qualitative, according with the opinion of authors that have researched into this theme, like Miller (2001.a; p. 4): "Traditionally, quantitative data have been used because these were seen as more rigorous and credible. However, some phenomena are inherently difficult to measure in a manner satisfactory to the end users" or institutions like World Tourism Organization (1995, p.7): "indicators of sustainability are not always quantifiable and may necessarily be somewhat subjective. This limitation, however, does not in any way detract from their utility as management information in promoting sustainable tourism".

The quantitative methodology started by asking a sample of Andalusian marina managers to answer a survey questionnaire with 15 closed-end questions related to environmental management and its costs or, on the contrary, its social benefits and profits. The survey universe included 42 marinas and 38 marinas composed the sample, it was a sample size with 95% accuracy rate and a 5% allowable margin of error. This questionnaire was elaborated bearing in mind the findings of

other researches that were mentioned before or in the reference of this papers (WTO, 1993; WTO, 1995; Miller, 2001a, 2001b; Cronin, 1990; Klassen and McLaughlin, 1996; Judge and Douglas, 1998; Henriques and Sadorsky, 1999; Ludevid, 2000; Russo and Fouts, 1997; Shrivastava, 1995a; 1995b; Thornton, Kagan and Gunningham, 2003, etc.), and also the recommendations of public sector brokers and private sector brokers, after having semi-structured interviews with them. The questionnaires were developed by email with a letter attached with the instructions to answer the questions, but, previously, managers were telephoned to be explained to the goal of this research and the subject matter of the questionnaire.

However, as environmental management in nautical tourism does not depend only on marinas but also involves users of these facilities and other stakeholder groups that also participate in nautical activities, rounding out the quantitative analysis with qualitative analysis was seen as necessary. This was done by having researcher keep field diaries and by interviewing marina managers as well as representatives of stakeholder groups and users, according to the opinions of authors like Miller, Auyong and Hadley (1999, p 10): "coastal tourism management is conducted by public sector brokers at all levels of government, by private sector brokers in businesses, and by some NGOs and environmental and social movement brokers".

Authors such as Glaser and Strauss (1967), Eisenhardt (1989), Yin (1988) or Miles and Huberman (1994) point out that a qualitative methodology is recommended when a

contemporary phenomenon in the context of real life is being analyzed and when the boundaries between the phenomenon and the context are unclear. Authors Miles and Huberman (1994, p.10) add that "this is the most suitable methodology for finding out about, or exploring, a new area, as in our case, or for hypothesis development".

In line with these approaches, it has been followed the case study method, defined by Yin (1988, p. 23) as "empirical research that studies the current phenomena within its real context, especially when the boundaries between the context and phenomenon are fuzzy, with particular validity for asking "how" and "why" questions, when the researcher has little control over the events and the topic is a contemporary one". Stake (2000) points out that it is the study of a unique case, of what is particular. The main characteristics of this method, according to authors such as Merriam (1988), are that the researcher must be particular by focusing on a specific situation, descriptive by providing a detailed, drilled-down description of the phenomenon being studied, and inductive to be able to make generalization based on the data obtained.

According to all these definitions, the use of this methodology is justified in this research as it is perfectly adapted to the goal that has been set. The selection of cases and groups to work with was made based on locations and the distinctive characteristics of the marinas available to the overall population and the main stakeholder groups relating to nautical activity. Thus, three marinas in three provinces with significant differences between them were selected to be studied so that the results would be representative of the overall Andalusian supply. Semi-directive interviews were conducted with their managers, asking them about the history of the marina, main activity, Organizational Culture, type of tourists, sustainable strategies developed, relationships with Government/NGOs/Trade Associations, etc, and annual reports of these companies were analysed. The following marinas were selected:

→Marina A, stands out as being one of the oldest, most emblematic worldwide due to its characteristic of being a "live marina", since it is a nautical/business/tourist center that operates 24x7x365 and is located in one of the most internationally well-known Andalusian tourist areas.

→Marina B, selected for its location in the most maritime of Andalusia's provinces with the greatest number of marinas and for its prestige and reputation, well known for its nautical facilities but also for the complex of property, hotel and complementary supply of services (heliport, golf course, restaurants, etc.) surrounding it.

→Marina C, one of the smallest in Andalusia but with a distinct personality as it is a nature park in a Protected Natural Spaces area (under Law 2/89 of July 18); another step in the characterization and protection of this natural space was its inclusion, as declared by UNESCO under the Barcelona Convention, as a Specially Protected Area of Mediterranean Interest in 2003 in the region of Andalusia. This characteristic, along with the fact that it is above all a sporting marina rather than a commercial or tourist destination port, explains the interest in studying it.

Lastly, given that the sustainability challenge may not be met without taking into consideration the involvement of the other social agents, the case study was rounded out through interviews with nautical activity-related stakeholder groups such as brokers, craft sellers and charterers, interviews with marine facility users and field diaries kept by the researcher on 42 Andalusian marinas. There were been interviewed a craft broker and a manager of a shipbuilder's marine subsidiary, asking them about the opportunities and threats of their activity, relationships with trade associations related with nautical tourism, type of clients, sustainable development of their activities, etc., and 50 marine facility users from the 42 marinas, asking them about the equipment and if they are satisfied with the service and the environmental quality of marinas. Regarding the field diaries, the researcher visited the 42 marinas, and analyzed the

access to marinas, localization, environment, services, equipments, infrastructure, social and sporting activities developed there, type of tourists, etc. (Table 2).

Results of the Quantitative Analysis

After the questionnaires answered by the marina managers were compiled, the following results were obtained.

✓ 71% consider that environmental sustainability is possible.

✓ 81.5% think that achieving sustainability requires a joint effort by government administrations, companies and society as a whole.

✓ 63.15% believe that changing attitudes and values of an organization is fundamental to achieving sustainability.

✓ 89.4% assert that this challenge is being attained in his organization.

✓ 44.7% believe that it is compatible with economic growth.

✓ 55.26% responses found that it is not too costly.

✓ With regard to knowledge and setting up of environmental quality systems, 81.5% know about ISO certification 14001 and 71% about environmental reporting.

✓ 89.47 % of the marinas have adopted environmental management, and, also, 18 of the 42 marinas in Andalusia are flying the "2006 Blue Flag" from the European Federation for Environmental Education.

✓ With regard to the main reasons for having environmental management, 81.5% said it improved the image of their organizations, with 63.15% considering other reasons such as increased satisfaction of their management and employees, and customer satisfaction and loyalty. Fifty five point percent said they developed this type of management to comply with legal obligations.

✓ Taking into consideration the last five years, 71% of the respondents said that customer loyalty has grown as a consequence of greater awareness of environmental management by their organizations.

✓ In the last five years, 29% of the respondents said their profits had risen as a consequence of better environmental management, while the remaining

respondents said their business results had not been affected positively or negatively.

✓ Over the last five years, the development of better environmental management has increased sales according to 44.73% of the respondents whereas for the remaining respondents it has not influenced this fact.

Results of the Qualitative Analysis

Qualitative analysis results are taken from three case studies on Andalusian marinas that identify the specific characteristics of these organizations and other critical aspects of sustainability. This study includes a separate section on critical incidents showing the opinions and activity of stakeholder groups such as brokers, nautical companies or marina facility users. A report was drawn up on each of the selected marinas, according to annual reports and interviews with marina managers, and the results of which are summarized below:

1) *Marina A*

- It is one of the oldest, most emblematic marinas worldwide.

- It is a nautical/business/tourist-type center that operates 24/7/365 with the slogan of "Live Marina" that best defines it; it is practically a small city.

- It has a marked identity and corporate image the main distinctive features of which are the "glamour" that one inhales in the facilities, the high purchasing power and social status of many of its visitors and the intermingling of local and foreign qualities that lends it an entirely cosmopolitan feeling.

- A strong corporate culture has been identified since the current managing director participated in the project to create this company and has been at the helm for twenty-seven of the thirty-seven years this organization has been in existence. This has encouraged the persistence of a homogeneous culture throughout its history though the organization has adapted to demands that characterize new times.

- The corporate culture shared by the members of the company is comprised of a series of values, among which are the importance given to the quality of service and the environment. These values are enshrined

in facts such as having ISO 9000 quality certification, ISO 14001 environmental quality certification and the distinction of having had the Blue Flag since 1987. For these reasons, it can be said to be an example of environmental sustainability.

- Among its identified corporate cultural values are also customer, member and employee satisfaction, adherence to human rights, and good relations with the local community and contribution to the improvement in the standard of living and quality of life. These values are enshrined in a code of ethics and activities such as charity, cultural, sporting and sponsorship events.

- This is a tourist marina that is completely integrated into its surroundings and interacts with the different social and institutional forces around it. It is an exemplar of sustainability in the broadest sense: environmentally, socially and economically.

- Even though the diagnosis that emerges from analyzing this case is quite positive, marketing strategies aimed at empowering the sustainability image were found to be lacking.

2) Marina B

- This marina has the most privileged surroundings and includes a variety of activities such as water sports, golf and polo. Being a resort is one of its distinctive features.

- Activity: tourism and sports.

- The marina users are upscale customers seeking peace, security and the privacy afforded by this marina's surroundings.

- The organization is strongly committed to the environment since sustainability is one of its key management points.

- Its goals include finishing enlargement of the marina by adding 1000 more moorings to the 575 existing ones, and setting up an environmental quality system such as ISO standards for better facilities' management and, as a result, greater competitiveness.

- Nevertheless, marketing strategies needs to be proposed and developed so that the sustainability actions and environmental measures being undertaken by the marina, and the place these actions have within its management, may be publicized to the outside, general public who is unaware of this reality.

Table 2: Research Data Chart

Research Goals:

- ✓ Identify the special features of Andalusian marinas and critical aspects relating to their sustainable management.
- ✓ Identify the opinions and activities in matters of sustainability of stakeholders groups and users of marina facilities.
- ✓ Verify the hypothesis of whether sustainable management is compatible with business profitability. If it is, draw up proposals to improve the competitiveness of tourist marinas in agreement with sustainable development.

Information Sources:

- ✓ Secondary sources: papers and reports from the organizations, web sites, bibliography on nautical tourism and sustainability, articles in the press and periodicals.
- ✓ Primary sources: questionnaires with closed-end questions to marina managers; semi-structured interviews with marina managers, craft broker, manager of nautical craft sales' company and users; direct observation by the researcher.

Methodology:

- ✓ Quantitative:
 - Descriptive statistics. SPSS for survey analysis
 - Survey Universe: 42 Andalusian marinas.
 - Sample: 38 marinas. It is a sample size with a 95% accuracy rate and a 5% allowable margin of error
- ✓ Qualitative based on case study and field diaries:
 - Survey Universe: marinas and nautical companies in Andalusia.
 - Sample: 3 representative marina managers, 1 nautical broker, 1 craft sales and rental company, field diaries for direct observation by researcher on the 42 Andalusian marinas and interviewing 50 users from the 42 marinas.

Period of Field Work: December 2006-August 2007

Source: Author

3) Marina C

- This is one of Andalusia's smallest marinas but is also one with the most distinctive features.

- Its greatest difference compared to the others is that it is a resort next to a nature area.
- Its main activity is sports with tourism ranking second.
- The marina users are loyal customers who return every year.
- The organization is strongly committed to its surroundings with sustainability as one of its key management points.
- Future activities of the marina will include setting up a environmental quality system to contribute to better management and, as a result, greater competitiveness.

Given the cross-organizational nature of this research, these results were rounded out with interviews with stakeholder groups such as brokers, nautical company managers and users. In this vein, it was interviewed a craft broker, who has been in the maritime chartering business since 1997, and a manager of a shipbuilder's subsidiary, whose main business is yacht and ship sales' brokering and also chartering out craft from its own fleet, he has been in business since 2004. In summary, the following results were obtained from these interviews.

Andalusia is a community with little development in the area of nautical tourism and has a density of 569 inhabitants per mooring. Consequently, there is no strong traditional boat/yacht-selling industry which is why these nautical companies also do charters and rentals. However, nautical tourism is a major business opportunity in Andalusia since it is one of the highest-earning market segments on a per-visitor-per-day basis in addition to complementing other types of tourism such as golfing or going to the beach. Also, given the climate conditions in the region and its calm waters, this activity would contribute to breaking the seasonal nature of tourism. The multiplier effect of other businesses such as hotels and restaurants located in marina and leisure facilities should also be added.

The profile of a customer who buys a yacht is an upper class business man, and the ratio of Spaniards to foreigners is 50:50. On the other

hand, boat charter customers are generally upper-middle class as this is more affordable than purchasing a boat, but it is also favoured by rich people who have not thought it feasible to purchase a boat due to scarcity of moorings or believe the additional outlay in taxes is excessive. With regard to sustainability, the growth in this sector, as long as it takes place in a controlled manner, is perfectly compatible with environmental and social sustainability. First, these customers are quite respectful of the environment although, in some cases, wastewater elimination facilities in some marinas are lacking. Second, the supply of moorings could be increased in a controlled manner, and another solution could be found to the unmet demand such as building dry docks; this would be principally for shallow and medium-draft craft, whose owners live or have a second residence in the marine area, along with facilities on the beaches for launching craft kept in dry dock. Likewise, in some marinas there are boat graveyards occupying moorings that could be made better use of if they were used for boats that are still being sailed; the out-of-commission craft, while waiting for overhaul, could be stored on ships, an indirect activity that in turn would generate employment besides resolving the problem of visual pollution. Lastly, a series of moorings could be set aside for chartered craft, which would generate work and income associated with this activity, and contribute in this manner to social and economic sustainability of the region.

In addition to the networks created between companies involved in the nautical business – boat/craft sales, charters, sailing schools, workshops, etc. – a greater effect could be generated in the area through cooperation with other tourism-based companies, especially by empowering charterers since their customers generally spend at least one night in a hotel, and require restaurant/catering services. Business alliances could be created with other companies to offer tourist packages including other products such as golfing, polo, etc. Finally, charter boats could be used for corporate incentive events or

even for activities that grow awareness of the environment such as “scientific ecotourism sea trips” (for example, dolphin and whale counting, etc.).

However, many of these business opportunities, that are compatible with sustainability, have not been developed due to a series of barriers that have hampered them. Among them are the lack of coastal facilities and dry docks to make up for the shortage of moorings; complex legal regulations involving excessive red tape and high taxes, and consequently, the difficulty of purchasing craft as well as overhauling others that are not in use and take up mooring space in ship graveyards in some marinas; and excessively rigid licensing procedures for running charter boats with crews, which encourages operating them illegally.

Finally, with regard to the proposals formulated to improve the competitiveness of nautical tourism within sustainability parameters, in addition to eliminating the barriers mentioned, improving the quality of beaches was emphasized, not only with regard to their waters but also with regard to facilities (showers, changing rooms, services, etc.) as nautical tourists are also users of these items and demand better services.

Lastly, this qualitative study was rounded out with field diaries by visits to all 42 marinas and by interviewing 50 mooring owners. The interviews were open ended and they were asked about the state of the marina facilities where they had moorings and about the ones where they made stop overs. Opinions were very diverse depending on the individual companies, which have very different characteristics. For this reason the results presented below summarize the main weakness detected in some of them.

It is not possible to make a general statement about the state of the 42 Andalusian marinas but in some of them infrastructure problems were detected such as no near-by gas pumps for refueling, the lack of adequate changing rooms and rest rooms, or the scarcity of moorings for stop overs from visiting craft. At

times the sea currents drag in sand to the channels making it impossible for boats to sail out. The removal of this sand requires permits that often take too much time to get, making the marina users go up to several months without sailing since they cannot make their way out to sea. Finally, it was detected that basic services such as supermarkets and pharmacies and ground transportation (taxis, buses, vehicle rental companies) for sailors mooring their boats are not close by in some marinas.

Discussion

After analyzing the cases based on document study and direct study by the researcher who wrote up field diaries and interviews with managers of marinas, users and stakeholder group, the first two goals of this research were achieved: to identify the specific characteristics of this tourist product and the critical aspects relating to environmental management by the organizations developing it and the stakeholders groups involved this activity. On this basis, the following statements may be made:

→The variety of Andalusian marinas comprises an attractive supply in and of themselves, ranging from facilities that are tourist/nautical/business in nature to others that are purely for sailors. In the same manner, the surroundings of these marinas display great variety; some are located in very developed resorts that are completely touristy in nature while others border peaceful nature areas. This gives rise to varied supply that may be adapted to the tastes and needs of a broad spectrum of customers.

→Generally speaking, the state of marinas or port facilities is satisfactory, except in some cases where infrastructure problems were detected.

→Andalusia is a community with a low level of nautical tourism development. This product is still in the development phase if compared to other geographical areas but it is an advantage as there is still time to develop it in a sustainable and socially responsible manner. This is supported by the level of awareness about environmental protection

detected in users and the increasingly closer concern by the organizations analyzed towards a culture of quality service and environmental quality.

→Nautically-focused business is a major opportunity for the Andalusian tourism sector, above all, if we consider the high purchasing power of this type of tourist. Moreover, given the climate in the region and its calm waters, this activity would contribute to breaking the seasonality of tourism. The multiplier effect must be also added that would be generated by and in other business sectors such as hotels, restaurants and shops located in the marina and leisure facilities, among others.

→Despite all the potential for this activity, many business opportunities are not being taken advantage of due to the series of barriers hindering them such as the lack of coastal facilities and dry docks to make up for the scarcity of moorings; complex legal regulations with excessive red-tape and high taxes, which complicate boat/craft purchases and the overhaul of some out-of-commission craft that are taking up mooring space in boat graveyards in some marinas; and excessively rigid licensing terms for running charter boats with crews, to name a few.

For all these reasons, nautical tourism may be called “an uncut diamond” within the Andalusian tourism sector, which could be made profitable but always within the parameters of sustainability. In this sense, it should be pointed out that environmental impacts on marinas are indisputable since they result in occupancy of public land for purposes of private operation and enjoyment. Furthermore, in many cases, facilities cause coastal changes that affect the quality of beaches or increase contamination due to increased sea traffic. And, if we add to this, the fact that ordinarily these facilities spring up around major urban development and golf courses, we may conclude that their environmental impact is high. For this reason ecologists demand that special attention be paid to projects for new marinas or enlargement of existing ones. In the face of these restrictions, there is an increase in the demand for moorings along the Andalusian

coastlines and all the marinas studied here are planning enlargement. Nevertheless, managers who were interviewed are aware of the value of well-kept natural surroundings to their customers, and thus, they pay special attention to them. However, even though 43% of the marinas have Blue Flags and environmental quality systems are increasingly known about and being set up, it is appropriate to continue insisting on care for the coastlines as one of the most relevant tourist attraction factors.

The economic and social impact of marinas is also indisputable and, in this case, clearly positive. Marinas are a core tourist attraction with an upper-middle class customer base, with greater purchasing power and less price sensitivity than the traditional “sun-and-sand” beach tourist. Moreover, these marinas are authentic sources for flows of employment and wealth in the populated areas in which they are located and offer local populations alternatives to the traditional ways of making a living by offsetting, for example, the decline in employment occurring in the fishing industry. Likewise, the prestige of the marinas helps to build up the image of tourist destinations and the sporting events they organize are showcases for the local areas where they unfold, the reason for this, in most cases, is that marinas have close relationships to stakeholder groups, and their actions contribute to the cultural and, above all, sporting activity of their surroundings. This study found that marinas have intense social activity.

Offsetting this is the fact that not all this activity occurs with strategic approaches in mind or is not integrated into part of institutional management, but rather is undertaken because the organization or its managers have this awareness. In this sense, it is recommended that the expected return be planned for on a long term basis through the creation of close ties with the local community in exchange for a mutual benefit that may guarantee the survival of all the agents involved.

With regard to the third goal, the hypothesis that environmental sustainability is compatible with economic development was found to be true according to the results obtained in the qualitative analysis corroborated by the quantitative one, which shows, according to the surveys, that environmental management has a positive effect on customer loyalty in 71% of the cases studied. This relationship is also positive for sales and benefits obtained in 44.73% and 29% of the cases, respectively. In the remaining companies, this positive relationship was not seen, but it was also not negative, so that the compatibility of economic development and environmental sustainability was shown to be true (See Table 3).

Finally, now this hypothesis has been verified, the following proposals are formulated to improve the competitiveness of nautical tourism in Andalusia in accordance with sustainable development:

✓ Even though a good many of these companies have a culture of quality and sustainability in their sights, their activities in these areas are generally undertaken spontaneously and without strategic planning. That is why it is advisable that, in addition to sharing this culture, they create a corporate image attuned to these values and philosophy. Along these lines, it is recommended they be encouraged to publish reports and papers that focus on the actions they are undertaking. It is also recommended that marketing be developed to include these aspects as the distinctive feature of Andalusian nautical tourism.

✓ Encourage training and information on environmental management, above all in the smaller institutions, and try to get the various marinas to "learn from the best" through their trade associations by developing benchmarking to take advantage of the knowledge and experience of the marinas that are pioneers in the subject.

✓ There are non-exploitative possibilities in tune with sustainability such as nautical charters. For example, low season incentive boat trips or packages combined with golf, or

polo, would break through the seasonality issue.

✓ One problem is the lack of moorings, that should be developed in a sustained manner or at least there should be other solutions offered such as, for example, dry docks and nautical charters, with the accompanying infrastructure. Also, ship graveyards should be eliminated.

✓ Improvement of beach facilities by encouraging their managers to obtain quality certifications for them.

✓ Creation of networks of tourist and nautical companies, based on cooperation agreements and alliances that would contribute to improving tourism competitiveness and social and economic sustainability in the region by involving local agents and creating wealth and employment for the local population.

Conclusion

In line with this analysis, the final conclusion reached is that marinas comprise a differentiated supply of tourist products and services in Andalusia with major, environmentally sustainable development opportunities that could have a very positive economic and social impact.

Unlike the image that much of society has of this activity, the agents involved in the development of nautical tourism share a culture that has its sights set on respect for the environment and, moreover, show this in their activities. Nevertheless, these same agents have not yet created a corporate image to reflect this culture and have not carried out strategic planning of their activities related to this series of issues, a weak point that they should correct.

Now, although the creation of a differentiated supply of nautical tourism in Andalusia should begin by marina managers integrating their environmental actions into their strategic planning and then communicating this to the outside by using a correct corporate image and marketing actions, it should be considered that, according to an overall approach, there are many agents involved in the development of this activity. And the

activities of them all must be coordinated: marinas, companies related directly or indirectly to nautical tourism, given the multiplier effect of this activity, and government agencies, in order to achieve synergies that spur on a profitable tourist product that is both competitive and profitable.

A limitation of the present research is that it has not established a quantitative model that included actual variables of these companies related to sustainability and business profitability, but it shall do in future studies and too future researches will contrast these

results with those of other studies that this author has undertaken on this series of issues in other destinations in the Mediterranean Basin and Latin America, so that conclusive results may be obtained that may be extrapolated to other tourist regions.

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Table 3: Survey findings

<p><i>Special features of Andalusian marinas and critical aspects relating to their sustainable management:</i></p> <p>→ The variety of Andalusian marinas comprises an attractive supply in and of themselves, ranging from facilities that are tourist/nautical/business in nature to others that are purely for sailors.</p> <p>→ In general, the state of marinas or port facilities is satisfactory, except in some cases where infrastructure problems were detected.</p> <p>→ Andalusia is a community with a low level of nautical tourism development and it is an advantage as there is still time to develop it in a sustainable and socially responsible manner. This is supported by the level of awareness about environmental protection detected in users and the increasingly closer concern by the organizations analyzed towards a culture of quality service and environmental quality.</p> <p>→ Nautically-focused business is a major opportunity for the Andalusian tourism sector, above all, if we consider the high purchasing power of this type of tourist. Moreover, this activity would contribute to breaking the seasonality of tourism. To all this must be added the multiplier effect that would be generated by and in other business sectors located in the marina.</p> <p>→ Many business opportunities are not being taken advantage of due to the series of barriers hindering them such as the lack of coastal facilities and dry docks to make up for the scarcity of moorings, complex legal regulations, excessively rigid licensing terms for running charter boats with crews, etc.</p> <p>→ Managers who were interviewed are aware of the value of well-kept natural surroundings to their customers. Even though 43% of the marinas have Blue Flags and environmental quality systems are increasingly known about and being set up.</p> <p><i>Opinions and activities in matters of sustainability of stakeholders groups and users marina facilities:</i></p> <p>→ Environmental impacts on marinas are indisputable since they result in occupancy of public land for purposes of private operation and enjoyment. That's why ecologists demand that special attention be paid to projects for new marinas or enlargement of existing ones.</p> <p>→ Economic and social impact of marinas is clearly positive. These marinas are authentic sources for flows of employment and wealth in the populated areas in which they are located, and they have too close relationships to stakeholder groups and their actions contribute to the cultural and sporting activity of their surroundings. However, not all this activity occurs with strategic approaches in mind or is not integrated into part of institutional management, that is a weakness.</p> <p><i>The hypothesis of whether sustainable management is compatible with business profitability was verified:</i></p> <p>Results obtained in the qualitative analysis were corroborated by the quantitative one, which shows, according to the surveys, that environmental management has a positive effect on customer loyalty in 71% of the cases studied. This relationship is also positive for sales and benefits obtained in 44.73% and 29% of the cases, respectively. In the remaining companies, this positive relationship was not seen, but it was also not negative, so that the compatibility of economic development and environmental sustainability was shown to be true.</p>

Source: Author

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