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Does luxury indicate sustainability?

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Item Type	Article
Authors	De-Miguel-Molina, Blanca;De-Miguel-Molina, Maria;Rumiche-Sosa, Mariela
Publisher	Business and Organization Ethics Network (BON)
Rights	With permission of the license/copyright holder
Download date	2026-11-14 10:45:05
Link to Item	http://hdl.handle.net/20.500.12424/178169

Does Luxury Indicate Sustainability? An Analysis of the Maldives

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Abstract

The environment of small tourism islands, as climate and coastal resources, make them favourable locations for luxury resorts. However, tourism can cause a threat to these islands' local environment. Thus, the Maldives government has developed regulations to ensure a balance between resource protection and use. This study examines, from the conceptual framework of sustainable tourism, whether luxury indicates sustainability in the Maldives, that is, if there is a link between luxury and sustainability. To perform this analysis we have studied 91 deluxe and non-deluxe resorts in the Maldives using content analysis methodology. Then we have applied a Principal Components Analysis to determine whether the resorts can be grouped according to their tourist attractions and sustainable activities. Results show that we can not affirm that luxury implies sustainability, but we might conclude that both are possible.

Keywords

Small islands, Sustainable Tourism, Business Social Responsibility, Environmental Impact of Recreational Activities

Introduction

Tourism is a major economic driver in many small islands (Shareef and McAleer, 2005; Nurse and Moore, 2005; Belle and Bramwell, 2005; McElroy, 2006; Clampling and Rosalie, 2006). However, the economic and environmental aspects of tourism need to be balanced (Henderson, 2001) to guarantee long-term benefits to communities (UNWTO, 2004). While tourism can bring many economic advantages to small islands, there are many examples of rapid, unplanned tourist development which have produced over-reliance on this one industry, environmental degradation and excessive concentration at the lower quality end of the mass tourism market. As a result, in the 1990s many islands started to remedy this situation by showing greater commitment to planning, upgrading their facilities and developing new markets (Bull and Weed, 1999).

Both internal (tourism impact: Zubair et al., 2010; Belle and Bramwell, 2005; Georges, 2006) and external (climate change: Briguglio, 1995; Belle and Bramwell, 2005; Roper 2005) factors can have an impact on the environment of small islands, which can reduce the attractiveness of these coastal tourism destinations and may reduce the number of people who want to visit small islands in tropical and subtropical regions (Nurse and Moore, 2005). In an attempt to preserve its local ecosystem, the Maldives signed all the major international agreements promoted by the UN Environment Programme, and the Maldives Government established specific regulations to develop sustainable tourism: the Environmental Protection and Preservation Act of Maldives (Maldives Government, 1993), the Tourism Act of Maldives (Maldives Government, 1999) and the Regulation on the Protection and Conservation of Environment in the Tourism Industry (Maldives Government, 2006).

Small island states should readily accept on one hand that they are unlikely to be in a position to access substantial external resources to adapt their model of tourism to an eco-tourism model and on the other, that their strategies to combat climate change should be integrated into existing plans and programmes (Nurse and Moore, 2005). For example, municipal solid waste is the most significant waste stream in many small islands (Georges, 2006). In this sense, small islands could set an example for the rest of the world (Roper, 2005).

Up until now, studies about small islands, including the Maldives, have not analysed every island separately. When studying sustainable tourism, indicator analyses are based on national data so as to compare different countries (Buzzigoli, 2009). Thus, we have not found any studies that focus on the eco-friendly image that the resorts in the Maldives give to tourists or on whether luxury and sustainable tourism are compatible in the Maldives.

Thus, our paper's goal is to examine, from a conceptual sustainable tourism framework, whether luxury indicates sustainability in the Maldives, that is, if there is a link between luxury resorts and sustainability.

Small islands and the environment

Despite the literature on these small islands (Figure 1), there is no common definition about them in either quantitative or qualitative terms. Authors refer to them as SIDS – Small Island Developing States (Nurse and Moore, 2005; Roper, 2005; Fry, 2005; Belle and Bramwell, 2005; Clampling and Rosalie, 2006; Van der Velde et al, 2007) or SITEs – Small Island Tourism Economies (Shareef and McAleer, 2005; McElroy, 2006). McElroy and Albuquerque's definition of small islands (1998) included islands that have less than 500,000 inhabitants and a surface area of less than 2,000 km2 while McElroy (2006) included those with a population of less than one million inhabitants in a land area of less than 5,000 km^2.

Scheyvens and Momsen (2008) summarized the features that different authors have noted in the cases of the islands that have been studied. These characteristics are related to their economic and environmental vulnerabilities (McElroy and Albuquerque, 1998), including the effects on tourism activities associated with scarce natural resources and waste man-

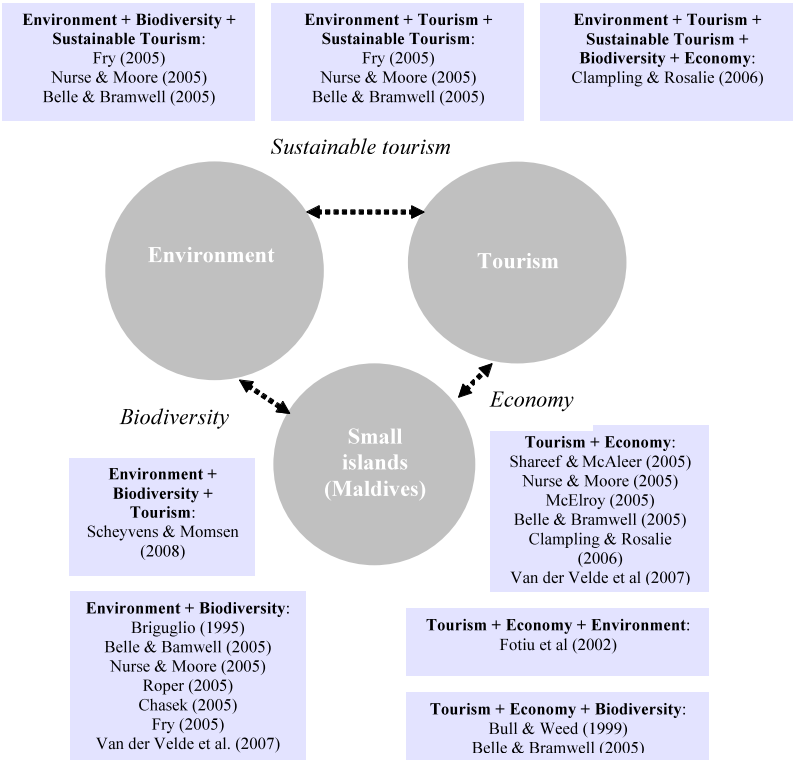


FIGURE 1 Literature that combine small islands, environment and/or tourism. Source: Author's own from the literature analysed.

agement. Moreover, in small islands like the Maldives, where most resorts are luxury resorts, although tourism is a major factor for development as small islands have little industry, it may create threats to their environment (Sathiendrakumar and Tisdell, 1989; Yahya, Parameswaran and Sebastian, 2005).

However, vulnerabilities may be used to show the capabilities that small islands have to develop their economies through tourism, which in many cases is their main economic activity (Nurse and Moore, 2005; McElroy 2006). The Maldives is a group of small isolated islands which have become an attractive tourist destination for their exoticism (Scheyvens and Momsen, 2008) and biodiversity (Clampling and Rosalie, 2006), including coral reefs. Hence, the relationship between biodiversity protection and sustainable tourism is a major issue in small islands (Fry, 2005), as the lack of protection would affect their tourism revenue in the future (Nurse and Moore, 2005; Belle and Bramwell, 2005).

In 1987, the UN World Commission on Environment and Development created the term Sustainable Development to refer to development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Later, in 2004, the UNWOT also established the definition of Sustainable Tourism as an enterprise that achieves an effective balance among the environmental, economic, and socio-cultural aspects of tourism to guarantee long-term benefits to communities. Recently, climate change (including global warming) has been added to these definitions so that sustainable tourism now has a "quadruple bottom line" (Buzzigoli, 2009), although there is no common thinking about the reality of sustainable tourism and even less so if we try to link this to luxury. However, positive implementations in the luxury hotel[1] sector include, for example, the first eco-friendly luxury resort in the Mexico Caribbean, the Hacienda Tres Ríos Resort, located in the heart of the Riviera Maya.

From economy to sustainable tourism

The importance of tourism as an economic activity in small islands has been referenced in various studies. Shareef and McAleer (2005) indicated that small islands tend to specialize in one or two economic activities, with tourism being the primary sector (Nurse and Moore, 2005; McElroy 2006), which usually includes intensive labour (Van der Velde et al, 2007). Authors such as Clampling and Rosalie (2006), and Belle and Bramwell (2005) considered that there are few economic alternatives to tourism in small islands. In addition, the tourism resources that tend to be concentrated on the coast make these islands particularly vulnerable to climate change impacts (Belle and Bramwell, 2005). The advantages of small tourist islands are the climate and coastal resources, usually sandy beaches (Belle and Bramwell, 2005). However, the adverse effects of this tourism are beach erosion, lagoon salinity, reef damage, water and energy consumption, and waste disposal (Scheyvens and Momsen, 2008).

Scheyvens and Momsen (2008) stated that isolated small islands are a tourist attraction because they are the most exotic destination available. They refer to the Maldives as an example, with its strategy of "one island, one resort", which reduces the number of tourists who share the island. The attractiveness of the islands explains the various activities that have been offered to attract tourists. Bull and Weed (1999) refer to water sports

[1] According to the UNWTO (2001, p. 331), luxury tourism includes five-star hotels (deluxe hotels) and four-star hotels (first class hotels). Thus we have centred in the first group in our analysis about the Maldives.

as an alternative form of tourism for small islands, as they take advantage of their coastal resources. The activities cited in the case of Malta, for example, but which are also found in other islands such as the Maldives, include diving, yachting, windsurfing, dinghy sailing, water skiing and scuba-diving. However, the characteristics of the islands are different, which means we need to take into account the negative effects that some of these activities can have if, for example, they damage coral reefs. Fotiu et al. (2002) believed that tourism can be a solution to fund marine and coastal protected areas of small islands, but that this requires the involvement of both public and private organizations to protect the natural environment as for many of these stakeholders it is the islands' main attraction. One way to encourage hotels to provide such protection is the utilization of an ecolabel or a certificate that also warns customers about what to expect before booking. However, not all certificates have the same prestige and sometimes there is a difference in information between hotel and resort websites and the certification websites.

From biodiversity to sustainable tourism

Since 1990 some of the literature on small islands has focused on their economic and environmental vulnerabilities (Briguglio, 1995; Nurse and Moore, 2005; Roper, 2005; Chasek, 2005; Fry, 2005; Belle and Bramwell, 2005; Van der Velde et al, 2007), whilst other works have centred on socio-cultural factors (Clampling and Rosalie, 2006).

Briguglio (1995) noted some environmental disadvantages for small islands. Global warming and rising sea levels, along with erosion by waves and wind, end up reducing land surface area, especially in "low-lying coral atoll small islands". Aware of their vulnerability to climate change, some SIDS created a coalition in 1990 called AOSIS, the Alliance of Small Island States, to establish a work schedule in the planning and implementation of sustainable development. Tourism resources were identified as being one of their priority areas (Chasek, 2005). In 2004, the new focus was the relationship between biodiversity protection and sustainable tourism (Fry, 2005). This protection includes coral reefs, one of the attractions of small islands, whose loss can affect income-generating activities, such as diving and snorkelling (Nurse and Moore, 2005; Belle and Bramwell, 2005).

Clampling and Rosalie (2006) indicated that resources for the environmental conservation and protection of biodiversity of small islands are dependent on tourism revenues, which in turn depend on the biodiversity of the islands. However, their size means that the per capita costs of environmental conservation and biodiversity protection are high.

Tourism involves a high consumption of drinking water, which is a limited resource in most small islands (Belle and Bramwell, 2005). In addition, tourists staying in hotels generate more trash, which can hinder waste management (Georges, 2006). In the case of water, one solution would be to desalinate seawater (Stuart, 2006).

Finally, Roper (2005) considers the problem of global warming in the case of the Maldives. He emphasizes the use of renewable energy by small islands and the benefits it would bring, such as the conservation of tourism resources.

Luxury resorts in small islands: the Maldives case

Even though some travellers are not yet aware of the risks they are going to subject nature to during their trips, there is a myriad of information available about being environmentally friendly on their travels (the so-called 'Responsible Traveller'). For example, the EC3 Global certifies sustainable tourism organizations with the EarthCheck certification which can be checked on the EC3 website or included on hotel and resort websites. However, small island resorts normally try to attract tourists with exotic communication. For example, according to the Maldives Tourism Promotion Board (MTPB), which is responsible for promoting the tourist industry in the Maldives, visiting the Maldives is like going to paradise: tropical islands with infinite shades of blue and turquoise and dazzling underwater coral gardens. This is also a normal message aimed at attracting luxury tourism. According to Low (2010), "luxury hotels for some guests, would act as a vehicle for this escapism through their more refined and aesthetically pleasing designs". Although luxury resorts includes five-star hotels (deluxe hotels) and four-star hotels (first-class hotels) (UNWTO, 2001), in our analysis we have selected the first group as half of the resorts in the Maldives are deluxe.

Tourism to the Maldives began in 1972 and, since then, it has grown quickly according to a national expansion plan. However, this kind of tourism, despite being a factor for development in less developed countries, has been shown to create threats to their environment. The key is thus how this type of destinations can combine a bipolar view to develop their economies without destroying their environment (Jamal and Lagiewski, 2006). In the Maldives, most of the resorts offer scuba diving as the most important leisure service, while fishing yellow tuna, which is the food of the main animals in extinction (up to 30 percent of shark species are threatened), is the second main economic activity of the country. On the other hand, efforts are being made to revive reefs not only because they are a tourism attraction but also because they constitute a natural protection barrier for these islands.

The current President, Mohamed Nasheed, suggested the idea of a Wild Tourism Fund to be supported with the proceeds of tourism. He has begun to divert a portion of the country's billion-dollar annual tourist revenue into buying a new homeland as an insurance policy against climate change which threatens to turn the 300,000 islanders into environmental refugees. The Government is encouraging forestation to prevent beach erosion and is backing a plan to clean litter and debris from the country's coral reefs - a natural barrier against tidal surges. Environmental science is taught in all national schools in the Maldives. All new resorts are subjected to a rigorous environmental impact study and developers/planners are restricted to building on just 20% of the islands.

Today, tourism in the Maldives provides over 22,000 jobs. This means that less global warming and fewer environmental problems are issues of major concern to the Maldivian people. However, environmental premises are not the only concerns which must necessarily extends to the local people's right to work.

Tourism, the Maldives' largest industry, accounted for around 28% of GDP in 2009. Almost over 90% of government tax revenue comes from import duties and tourism-related taxes. The Maldivian Government began an economic reform programme in 1989 initially by lifting import quotas and opening up some exports to the private sector. It has subsequently liberalized regulations to allow more foreign investment. In late December 2004, as a result of the tsunami, the Maldives GDP contracted but a rebound in tourism, post-tsunami reconstruction, and development of new resorts helped the economy recover quickly. Diversifying beyond tourism and fishing, reforming public finance, and increasing employment are the major challenges facing the government. However, the Maldivian authorities worry about the impact of erosion and possible global warming on their low-lying country; 80% of the area is 1 metre or less above sea level

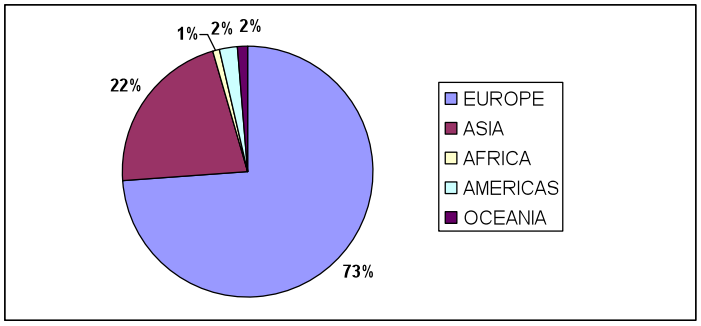


FIGURE 2 Visitors to the Maldives by continent (2008). Source: Author's own from Ministry of Planning and National Development data, 2009.

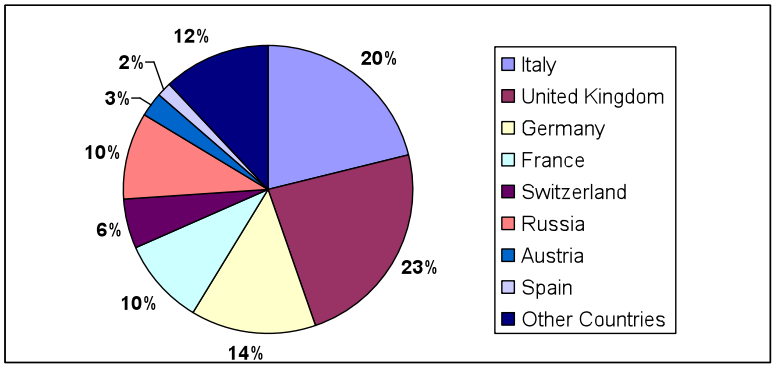


FIGURE 3 European visitors to the Maldives by country (2008). Source: Author's own from Ministry of Planning and National Development data, 2009.

(Ministry of Planning and National Development, 2009).

According to the Department of Immigration & Emigration, Ministry of Tourism, Arts and Culture of Maldives (Ministry of Planning and National Development, 2009), in 2008, the majority of tourists came from Europe (Figure 2).

Within Europe, most tourists come from Italy, United Kingdom, Germany, Russia and France (Figure 3).

Thus, we can say that the Maldives main target groups are Europeans who come from the aforementioned countries. This is relevant because European tourists are expected to have the necessary knowledge about environmental protection.

In relation to the local labour market, although literacy in Maldives has been improved and specific higher education studies in tourism are available, trained specialist employees are still young and many people working in the tourism industry are expatriates. According to a survey held in 2006 to study the human resource situation in the Maldives tourism industry, which was answered by 92.5% of the resorts operating at that time, the number of locals employed in resorts is only higher than the number of foreigners at an operational level. The highest salaried jobs, which correspond to the managerial and supervisory echelons, are occupied by expatriates. The number of female employees in the industry is still marginal with locals contributing only 2% to the workforce. The bed-staff ratio stood at 1:1, however, the up-market resorts had a higher ratio of 1:4 (Ministry of Tourism & Civil Aviation of Maldives, 2008).

Environmental objectives in the Maldives

In 1968, the Maldives Sultanate was replaced by a Republic although political parties were not legalized until 2005. Some key indicators in the Maldives have improved since then (education, employment) or at least have been made public. In June 2008, a constituent assembly - the "Special Majlis" - finalized a new constitution, which was ratified by the president in August. The first-ever presidential elections under a multi-candidate, multi-party system were held in October 2008. A Supreme Court was established, judicial power was separated from state power and legislative power is now mainly reached by popular vote.

However, before this new democratic period, in order to preserve its ecosystem, the Maldives signed all the most important international agreements promoted by the UN Environment Programme, and the Maldives Government established specific regulations to develop sustainable tourism: the Environmental Protection and Preservation Act of Maldives (1993), the Tourism Act of Maldives (1999) and the Regulation on the Protection and Conservation of Environment in the Tourism Industry (2006). However, as we can see, these acts and regulations were quite basic.

Regulation does not seem to be sufficient for the future conservation of the Maldives' ecosystem. Since 2008, this regulation has had less power due to weak application as a result of the inadequacies of the Maldives environmental impact assessment (EIA) procedures. According to Zubiar, Bowen and Elwin (2010), the procedure lacked transparency, responsiveness and accountability.

Thus, the Third National Environment Action Plan (2009-2013), conducted by the Ministry of Housing, Transport and Environment, Government of the Maldives, includes, among other goals: to reduce climate-related risks in the tourism sector, to develop regulations and conflict resolution mechanisms for resource use among competing industries – such as tourism – to ensure a balance between resource protection and resource usage, and to develop environmental guidelines for the selection of islands for resort development. These goals will need to be coordinated with another objective in mind: to strengthen EIAs to ensure that all significant impacts associated with new developments are understood and accounted for, taking stakeholders' participation into consideration, as recommended by Zubair et al. (2010).

Moreover, the Maldives will need to review its Regulation on the Protection and Conservation of Environment in the Tourism Industry (2006) and increase its penalties. Even if its GNP is higher than other South Asia countries (such as India) it is way below that of developed countries, such as members of the European Union or the USA. For big companies, it is "cheap" to contaminate because the highest fine is 100,000.00 MRF which is less than 6,000 euros. The next step is to revoke a resort's license, but as there is a lack of monitoring mechanisms this is quite unlikely.

For this reason, many measures will depend on the resorts' corporate social responsibility (CSR), and thus we have checked which resorts report specific eco-friendly initiatives to their visitors.

Study of luxury resorts in the Maldives

Data collection and research methodology

In 2008 there were 94 resorts in the Maldives, with a total of 19,860 beds (Tourism Yearbook, 2009). The list of resorts to study and some additional data were obtained from the Maldives' Ministry of Tourism statistics and the Tourism Yearbook 2009 in particular. We rejected 3 resorts that currently do not exist (at least online). 44% of all the resorts are luxury (deluxe) class. The remaining data were obtained using a content analysis methodology of the Maldives resorts' websites. Data was compiled from November 2009 to March 2010. The type of content analysis used was a conceptual analysis (Cohn, 2009), which studies the presence of concepts and not the frequency with which they appear. The selection of concepts, and some variables, was carried out before the websites were searched based on empirical studies and existing theory on sustainable tourism and small islands (McElroy and Albuquerque, 1998; Bull and Weed, 1999; Fotiu et al., 2002; Fry, 2005; Belle and Bramwell, 2005; Nurse and Moore, 2005; Roper, 2005; Georges, 2006; Stuart, 2006; Scheyvens and Momsen, 2008). For example we selected the use of an ecolabel based on Fotiu et al. (2002), waste management from Georges (2006), or renewable energy from Roper (2005). In the case of water activities, we included some of the activities that Bull and Weed (1999) refer for Malta, taking into account that some of them could harm the environment of the Maldives.

Then the variables related to these concepts were looked up on the resorts' websites from November 2009 to March 2010, taking into account Weber's criteria (1990) that "a variable is valid to the extent that it measures or represents what the investigator intends it to measure". Therefore, we did not use the standard indicators proposed by various organizations as a reference because they do not fit our objectives (Buzzigoli, 2009) (i.e. United Nations environment indicators for SIDS include also CO2 emissions, energy consumption per capita and threatened species).

The selected variables are shown in the following table (Table 1). In theory, the activities and services offered are good for tourism, but this does not mean that they are necessarily good for sustainable tourism. Thus, the values given to the categories when an activity or service is not sustainable have a negative value. Furthermore, we assumed that the Maldives is an exotic destination and does not have massive tourism (at least not the cases of mass tourism which McElroy and Albuquerque studied in the small Caribbean islands in 1998) where, for example, too many rooms detract from the exotic view of the resort (Scheyvens and Momsen, 2008).

Taking into account the potential massive tourism of the islands we mean to avoid seeking for mass tourism. That is the "creation of mass demand for specific locations or experiences, as well as the accommodation and transport to meet such necessary demand" (UNWTO, 2001, p. 333).

This concept leads to tourism carrying capacity: "composite early warning measures of key factors affecting the ability of the site to support different levels of tourism" (UNWTO, 2001, p. 293). Anyway, the concept has reached several interpretations. For example, MacLeod and Cooper (2005) refer to four categories: physical, ecological, social, and economic[2]. In our study, we found that the Maldives Government has fixed a physical carrying capacity with only 2% of islands potentially to have resorts. In the case of islands, land use/spatial planning is a process par excellence to implement carrying capacity assessment (European Union, 2001, p. 23). Anyway, we think that spatial carrying capacity could also be related to ecological and social carrying capacities in the sense that if the islands maintain their isolation focus to preserve paradise image, environment will be benefited and harmful effects of tourism will decrease. For this reason, we have selected some of the thematic areas that are supposed to have high priority while analyzing physical-ecological indicators of the islands (European Union, 2001, p. 25): Natural environment and biodiversity, Energy, Water, Waste, Tourist infrastructure and Land.

In our study we reviewed the potential of sustainable tourism in the Maldives, depending on the behaviour of their resorts, and particularly deluxe resorts. Finally, it should be noted that the diving variable has not been included in the statistical analysis because it is offered by all the resorts and this fact generates difficulties for statistical calculations.

Subsequently, to calculate the relationships between the variables for the 91 deluxe resorts together, we used the Principal Component Analysis method (Hair et al, 1999; Peña, 2002) with the SPSS program (Pérez, 2001). The analysis results are shown in tables 2, 3 and 4.

Within the concept of "Environmental Policy" we have included the use of an ecolabel for tourist accommodation services, taking into account the concept of ecolabel given by the European Union (2010). The standard criterion for the certification of an Eco-Resort will depend on its design and construction, water conservation, liquid waste management, solid waste management, energy production and conservation, natural areas and conservation, lawn and gardens, protection of flora and fauna, contamination of air, water and soil, environmental education and quality standards. In our study, we found 7 deluxe resorts or 15% (2 of them belonged to the same chain) that are supposedly eco-friendly and have one or more environmental international awards and certifications and 2 non-deluxe resorts or 4% with an ecolabel (Table 2). However, we also have to point out that

[2] Physical carrying capacity is a measure of the spatial limitations of an area and is often expressed as the number of units that an area can physically accommodate. Ecological carrying capacity is a measure of the population that an ecosystem can sustain, defined by the population density beyond which the mortality rate for the species becomes greater than the birth rate. In a recreational context, ecological carrying capacity can also be defined as the stress that an ecosystem can withstand, in terms of changing visitor numbers or activities, before its ecological value is unacceptably affected. Social carrying capacity is a measure of crowding tolerance. Economic carrying capacity defines the extent to which an area can be altered before the economic activities that occur in the area are affected adversely.

TABLE 1 Definition of variables and categories

Concept	Variable	Categories
Category	Deluxe	If the resort has 5 or more stars : 1; Others: 0
Activities	A1: Scuba diving	If the resort offers this activity: -1; If it doesn't offer it: 0
	A2: Windsurfing	If the resort offers this activity: 1; If it doesn't offer it: 0
	A3: Catamaran Sailing	If the resort offers this activity: -1; If it doesn't offer it: 0
	A4: Parasailing	If the resort offers this activity: -1; If it doesn't offer it: 0
	A5: Canoeing	If the resort offers this activity: 1; If it doesn't offer it: 0
	A6: Water Skiing	If the resort offers this activity: -1; If it doesn't offer it: 0
	A7: Wake boarding	If the resort offers this activity: -1; If it doesn't offer it: 0
	A8: Ringo Riding	If the resort offers this activity: -1; If it doesn't offer it: 0
	A9: Banana Riding	If the resort offers this activity: -1; If it doesn't offer it: 0
	A10: Submarine diving	If the resort offers this activity: -1; If it doesn't offer it: 0
	A11: Jet Skiing	If the resort offers this activity: -1; If it doesn't offer it: 0
	A12: Aerobics	If the resort offers this activity: 1; If it doesn't offer it: 0
	A13: Badminton	If the resort offers this activity: -1; If it doesn't offer it: 0
	A14: Tennis	If the resort offers this activity: -1; If it doesn't offer it: 0
	A15: Beach Volley	If the resort offers this activity: 1; If it doesn't offer it: 0
	A16: Excursion	If the resort offers this activity: 1; If it doesn't offer it: 0
	A17: Big Game Fishing	If the resort offers this activity: -1; If it doesn't offer it: 0
Services/features	S&F1: Air Con. in rooms	If the resort has it: -1; If it doesn't have it: 0
	S&F2: Spa	If the resort has it: -1; If it doesn't have it: 0
	S&F3: Jacuzzi	If the resort has it: -1; If it doesn't have it: 0
	S&F4: Sauna	If the resort has it: -1; If it doesn't have it: 0
	S&F5: Swimming Pool	If the resort has it: -1; If it doesn't have it: 0
	S&F6: Water Villas	If the resort offers this service : -1; If it doesn't offer it: 0
	S&F7: Online Brochure	If the resort has it: 1; If it doesn't have it: 0
	S&F8: Other languages in addition to English	If the resort has it: 1; If it doesn't have it: 0
	S&F9: Internet	If the resort has it: 1; If it doesn't have it: 0
	S&F10: All inclusive	If the resort has it: 1; If it doesn't have it: 0
	S&F11: Medical care	If the resort has it: 1; If it doesn't have it: 0
	S&F12: Child care/ children's area	If the resort has it: 1; If it doesn't have it: 0
	S&F13: Distance from Airport over average	If the distance is over the total average: 1; If the distance is under the total average: 0
	S&F14: Number of beds over average	If the number of beds is over the total average: -1; If the number of beds is under the total average: 0
Environmental Policy	EP1: Ecolabel	If the resort has it: 1; If it doesn't have it: 0
	EP2: Water Management	If the resort has it: 1;If it doesn't have it: 0
	EP3: Waste Management	If the resort has it: 1; If it doesn't have it: 0
	EP4: Alternative energy	If the resort has it: 1; If it doesn't have it: 0

Source: Author's own from website content analysis.

we checked other information on the websites (water management, waste management and alternative energy) because some resorts do not have a specific certification or even if they do not all the awards and certifications which appear are trustworthy. On the other hand, some environmental awards and certifications, such as the Green Globe certification, have changed or have disappeared on a new browsing of the websites in June 2010. For example, the Green Globe certification is being replaced by EarthCheck and within this there are different levels of certification, from partial to full requirements.

Results

First of all, from the data obtained from the variables of the 91 resorts, we confirmed the existing differences between a luxury and a standard resort. It should be pointed out that in Table 2 we can see that luxury resorts offer proportionately more activities and services that are not sustainable, even though the 7 resorts (2 of them were counted as one) that are more sustainable and environmentally responsible are also found in this category. This means that sustainability depends on the control of these activities and not on offering them.

On the basis of the data input into the SPSS programme, the mean, standard deviation, variance, principal components (Tables 3 and 4) and correlation matrices were obtained. We performed a separate analysis for deluxe hotels and for non-deluxe hotels. In the analysis of the relationships between variables, 11 factors explained 81% and 77% of the total variance of indicators included in the deluxe resort analysis and the non-deluxe resort analysis. The communalities had initial data equal to 1 and extractions were higher than 0.68, thus all the variables reached acceptable levels of explanation. The coefficients with absolute values of less than 0.45 were suppressed. Factor loadings and

TABLE 2 Differences between deluxe resorts and others

Variable	5 stars or more hotels and resorts	%	Hotels ≤ 4 stars	%
A1: Scuba diving	40	100%	51	100%
A2: Windsurfing	38	95%	47	92%
A3: Catamaran Sailing	37	93%	47	92%
A4: Parasailing	9	23%	7	14%
A5: Canoeing	37	93%	45	88%
A6: Water Skiing	24	60%	27	53%
A7: Wake boarding	21	53%	13	25%
A8: Ringo Riding	13	33%	11	22%
A9: Banana Riding	18	45%	16	31%
A10: Submarine diving	7	18%	7	14%
A11: Jet Skiing	6	15%	5	10%
A12: Aerobics	23	58%	22	43%
A13: Badminton	21	53%	33	65%
A14: Tennis	23	58%	20	39%
A15: Beach Volley	33	83%	48	94%
A16: Excursion	39	98%	50	98%
A17: Big Game Fishing	31	78%	32	63%
S&F1: Air Con. in rooms	40	100%	49	96%
S&F2: Spa	32	80%	30	59%
S&F3: Jacuzzi	25	63%	16	31%
S&F4: Sauna	18	45%	14	27%
S&F5: Swimming Pool	29	73%	17	33%
S&F6: Water Villas	35	88%	33	65%
S&F7: Online Brochure	16	40%	8	16%
S&F8: Other languages in addition to English	13	33%	8	16%
S&F9: Internet	30	75%	35	69%
S&F10: All inclusive	6	15%	13	25%
S&F11: Medical care	8	20%	6	12%
S&F12: Child care/ children's area	11	28%	5	10%
S&F13: Distance from Airport over average	20	50%	31	61%
S&F14: Number of beds over average	15	38%	20	39%
EP1: Ecolabel	6	15%	2	4%
EP2: Water Management	5	13%	1	2%
EP3: Waste Management	5	13%	1	2%
EP4: Alternative energy	3	8%	1	2%

Source: Author's own from website content analysis.

TABLE 3 Components Matrix for Deluxe Resorts

Variables	Mean	SD	Components										
			1	2	3	4	5	6	7	8	9	10	11
A2	.9500	.22072	-.499			.680							
A3	-.9000	.30382				-.512							
A4	-.2250	.42290	.583										
A5	.9250	.26675									-.486		
A6	-.6000	.49614	.739										
A7	-.5250	.50574	.763										
A8	-.3250	.47434	.572					.489					
A9	-.4500	.50383	.728										
A10	-.1750	.38481		.465									
A11	-.1500	.36162	.466										
A12	.5750	.50064	-.519										
A13	-.5250	.50574			.551								
A14	-.5750	.50064			.460								
A15	.8250	.38481								-.597			
A16	.9750	.15811				.743							
A17	-.7750	.42290	.596										
S&F2	.8000	.40510	-.522										
S&F3	-.6250	.49029	.699										
S&F4	-.4500	.50383	.713										
S&F5	-.7250	.45220	.663										
S&F6	-.8750	.33493										.480	
S&F7	.4000	.49614			.485								
S&F8	.3250	.47434			.454		-.464						
S&F9	.7500	.43853				.533			-.495				
S&F10	.1500	.36162											
S&F11	.2000	.40510			.506						.519		
S&F12	.2750	.45220									.517		
S&F13	.5000	.50637					-.775						
S&F14	.2750	.96044											.489
EP1	.1500	.36162		.751	-.532								
EP2	.1250	.33493		.844	-.481								
EP3	.1250	.33493		.844	-.481								
EP4	.0750	.26675	.068	.698									
Variance explained (%)			18.587	13.920	8.942	7.559	6.407	5.377	4.849	4.365	4.082	3.777	3.412
Cumulative variance explained (%)			18.587	32.507	41.449	49.008	55.415	60.792	65.641	70.006	74.089	77.865	81.277
Cumulative variance explained (%)			20.637	31.030	40.058	46.823	53.032	58.018	62.883	66.920	70.767	73.941	77.002

Coefficients lower than 0.45 are not shown.
Extraction method: Principal Component Analysis
Source: Compiled from SPSS 16

TABLE 4 Components Matrix for Non-Deluxe Resorts

Variables	Mean	SD	Components										
			1	2	3	4	5	6	7	8	9	10	11
A2	.9216	.27152					.457						
A3	-.9216	.27152		.485					-.465				
A4	-.1373	.34754	.659										
A5	.8824	.32540			.481								
A6	-.5294	.50410	.460		.530								
A7	-.2549	.44014	.744										
A8	-.2157	.41539	.816										
A9	-.3137	.46862	.684										
A10	-.1373	.34754			.483								
A11	-.0980	.30033	.622										
A12	.4314	.50020											
A13	-.6471	.48264										.459	
A14	-.3922	.49309	.589										
A15	.9412	.23764					-.579						
A16	.9804	.14003				.450							
A17	-.6275	.48829											
S&F1	-.9608	.19604											
S&F2	.5882	.49705			.684								
S&F3	-.3137	.46862	.554										
S&F4	-.2745	.45071	.583										
S&F5	-.3333	.47610	.476		-.552								
S&F6	-.6471	.48264											
S&F7	.1569	.36729									.644		
S&F8	.1569	.36729		.629									
S&F9	.6863	.46862					.452						
S&F10	.2549	.44014											
S&F11	.1176	.32540				.657							
S&F12	.0980	.30033	-.573										
S&F13	.6078	.49309				-.459				.547			
S&F14	.2157	.98618				.620							
EP1	.0392	.19604	-.645										
EP2	.0196	.14003	-.618	.696									
EP3	.0196	.14003	-.618	.696									
EP4	.0196	.14003	-.618	.696									
Variance explained (%)			20.637	10.393	9.028	6.765	6.209	4.986	4.865	4.037	3.848	3.174	3.061
Cumulative variance explained (%)			20.637	31.030	40.058	46.823	53.032	58.018	62.883	66.920	70.767	73.941	77.002

Coefficients lower than 0.45 are not shown.
Extraction method: Principal Component Analysis
Source: Compiled from SPSS 16

percentages of total variance explained by the factors are included in Tables 3 and 4. The results show that dimensions related to sustainable tourism are strongly related, i.e. the resorts that have water and waste management also have some kind of ecolabel or use alternative energy.

In the study of the component matrices we paid special attention to the variables that had factor loads with values of ±0.45 or greater (Tables 3 and 4). The components that generated more consistent results in the deluxe resort group were 1, 2, 3, 4, 5 and 9 (Table 3). Component 1 refers to the activity and service-related variables. It would seem logical for deluxe resorts to have a large number of both. Component 2 refers to the sustainable tourism-related variables, i.e. the sensitivity of the resorts in the efficient use of water, energy and recycling. However, it related positively to submarine diving. Component 3 is related to tennis and badminton. These two are related positively with the existence of an online brochure that could cater for tourists who travel in groups. Component 4 includes the positive relation between variables such as windsurfing, trips and Internet access, which could be linked to young tourists. Component 5 shows a relation between the diversity of languages on the website with longer distances from the airport. Finally, Component 9 associates two variables (the presence of children's areas with the availability of medical care) positively, and relates canoeing negatively.

The components that generate the most consistent results in the case of non-deluxe resorts are 1, 2, 3, 4 and 5 (Table 4). Component 1 includes services and activities which we have considered as non eco-friendly. Component 2 relates to variables included in the environmental policy that the website advertises in several languages. Component 3 relates to indoor and outdoor water sports. Component 4 relates to variables that may indicate more conservative tourism or travel with children, as it relates the number of beds, medical care and trips. Finally, Component 5 seems to relate variables that follow young tourists looking for windsurfing and the Internet.

Thus, the relations obtained show the existence of different segments of tourists based on the activities and services offered by hotels. However, in the case of the sustainable tourism-related variables, it seems clear that the main niche is in luxury (deluxe) tourism where there are a few resorts positioned as environmentally-responsible according to their websites. Moreover, the relations obtained show that resorts which follow one of these sustainable practices often implement several of them. This result is important from the point of view of the possible application of public incentives (Fotiu et al., 2002).

Therefore, the empirical results have demonstrated that luxury does not imply directly sustainability, although luxury can go hand in hand with it. The answer is in the deluxe resorts that have identified a market niche where it is feasible to combine luxury with sustainable tourism. In the case of non-deluxe resorts, it is clear that more activities is related to less possibilities of having an ecolabel.

Conclusions and limitations

Small islands, despite the vulnerabilities that most literature points out (Briguglio, 1995; McElroy and Albuquerque, 1998; Nurse and Moore, 2005; Roper, 2005; Chasek, 2005; Fry, 2005; Belle and Bramwell, 2005; Van der Velde et al, 2007), have taken advantage of their geography by using it as an exotic tourist attraction (Belle and Bramwell, 2005; Scheyvens and Momsen, 2008). In 2004, the focus in small island literature centred on the relationship between biodiversity protection and sustainable tourism (Fry, 2005), as part of the exoticism of the islands is due to their biodiversity.

However, the Maldives, like many other small islands, has a huge economic dependence on tourism, thus the key lies in how to combine economic prosperity and biodiversity, and this is part of the sustainability tourism concept (Bull and Weed, 1999; Belle and Bramwell, 2005; Clampling and Rosalie, 2006). Thus, this study has tried to reflect how the resorts of the Maldives approach the dilemma between tourism and sustainability. Although the Maldives signed all the most important international agreements promoted by the UN Environment Programme, and the Maldives Government established specific regulations to develop sustainable tourism, these acts and regulations were quite basic and regulation does not seem to be sufficient for the future conservation of its ecosystem.

The Third National Environment Action Plan (2009-2013) of the Maldives, includes some goals which aim to reduce climate-related risks in the tourism sector which will need to be coordinated by strengthening EIAs to ensure that all the significant impacts associated with new developments are understood and accounted for, taking stakeholder participation into consideration, as recommended by Zubair et al. (2010).

Our study has been carried out by scanning the websites of 91 resorts located in the Maldives, from November 2009 to March 2010, based on the contents we aimed to find. We applied a principal component analysis to the data obtained to establish the relationships between variables, and differentiate between luxury and non-luxury resorts. There were two main conclusions. Firstly, the islands are an exotic destination which is reflected not only in their biodiversity, but also in the characteristics, activities and services offered by the resorts. Luxury resorts have more activities and services in general, although many of them are not sustainable. However, as a second conclusion we found that this category of resorts includes the few resorts that have an ecolabel and more environmental policy practices. We can not affirm that luxury implies sustainability, but we might conclude that both are possible. Therefore, even if at present the Maldives is an exotic and luxury destination, it has the potential to be a luxury sustainable tourism destination. Whether to reach this status will depend on the coordination of the various stakeholders involved and on the incentives given to the resorts in order to make them both sustainable and profitable. At this point, policy makers could enhance the application of environmental policies as an incentive for resorts to be sustainable and profitable (Fotiu et al., 2002). Moreover, the luxury resorts that would like to attract responsible travellers should communicate their environmental policies through their websites.

The main limitations of our study are, on one hand, that the information provided by the resorts and the Maldives Government on their websites changes frequently, especially as far as the ecolabels are concerned. Moreover, some of the resorts we contacted informed us about some environmental management policies that they are developing but which do not appear on their websites. On the other hand, the regulation and policy changes carried out by the young democratic Maldives Government and its recent newly elected President would seem to bring hope for the islands' future environment.

Although both deluxe and non-deluxe resorts offer activities and services that are not sustainable, it seems that deluxe resorts are more aware about to obtain an ecolabel. But if the Maldives Government wants to reduce tourism impact on its ecosystem, because a lack of protection would affect their tourism revenue in the future (Nurse and Moore, 2005; Belle and Bramwell, 2005), it should de essential that public and private

tourism organizations become involved in protecting the natural environment of the islands (Fotiu et al., 2002). Policymakers should consider that planning in advance is more efficient than working on environmental degradation. In fact, there are many examples around the world of unplanned tourist development in some destinations which has produced tourism market of lower quality. Taking into account that in the Maldives half of the resorts are deluxe, its Government should prevent to loose this market by protecting its environment.

Acknowledgements

The authors would like to thank participants at the EBEN Research Conference 2010 held in Tampere, Finland, and especially Professor Lilian Wanderley of the NHTV, The Netherlands, for all their comments. The Research Conference was attended thanks to the financial support of the Faculty of Business Administration and Management, Universidad Politécnica de Valencia.

References

Belle, N. and Bramwell, B. (2005),"Climate change and small island tourism: policy maker and industry perspectives in Barbados", Journal of Travel Research, No. 44, pp. 32-41.

Briguglio, L. (1995),"Small Island Developing States and Their Economic Vulnerabilities", World Development, Vol. 23, No. 9, pp. 1615-1632.

Bull, C. and Weed, M. (1999),"Niche markets and small island tourism: the development of sports tourism in Malta", Managing Leisure, No. 4, pp. 142-155.

Buzzigoli, L. (2009)," Tourism Sustainability: conceptual issues, data and indicators", in Ferrari, Mondéjar, Mondéjar and Vargas (Eds.), Principales tendencias de investigación en turismo, Septem ediciones, Oviedo, pp. 135-158.

Chasek, P.S. (2005),"Margins of Power: Coalition Building and Coalition Maintenance of the South Pacific Island States and the Alliance of Small Island States", Review of European Community & International Environment Law, Vol. 14, No. 2, pp. 125-137.

Clampling, L. & Rosalie, M. (2006). Sustaining social development in a Small Island Developing State? The case of Seychelles. Sustainable Development, No. 14, pp. 115-125.

Cohn, Ellen G. (2009),"Citation and Content Analysis", 21st Century Criminology: A Reference Handbook, SAGE Publications. Available http://www.sage-ereference.com/criminology/Article n45 .html

European Union (2001). Defining, Measuring and Evaluating Carrying Capacity in European Tourism Destinations. B4-3040/2000/294577/MAR/D2 Final Report.

European Union. European Commission, Environment DG (2010), "EU Ecolabel. What is the Ecolabel?" Available http://ec.europa.eu/environment/ecolabel/index_en.htm

Fotiu, S., Buhalis, D. and Vereczi, G. (2002),"Sustainable development of ecotourism in small island developing states (SIDS) and other small islands", Tourism and Hospitality Research, Vol. 4, No. 1, pp. 79-88.

Fry, I. (2005),"Small Island Developing States: Becalmed in a Sea of Soft Law", Review of European Community & International Environment Law, Vol. 14, No. 2, pp. 89-99.

Georges, N.M. (2006),"Solid Waste as an indicator of Sustainable Development in Tortola, British Virgin Islands", Sustainable Development, No. 14, pp. 126-138.

Hair, J.F et al. (1999), Análisis Multivariante. Prentice Hall, Madrid.

Henderson J.C. (2001). Developing and managing small islands as tourist attractions. Tourism and Hospitality Research, v. 3, No. 2, pp. 120-131.

Jamal, M.M. and Lagiewski, R.M. (2006),"A Bipolar View of Island Tourism Planning. A Case of Maldives Islands", 24th EuroCHRIE Congress, Greece.

Low, T. (2010), Sustainable Luxury: A Case of Strange Bedfellows?, THRIC 2010 Tourism and Hospitality Research in Ireland Conference. Available http://www.shannoncollege.com/wp-content/uploads/2009/12/THRIC-2010-Full-Paper-T.-Low.pdf

MacLeod, M. and Cooper, J.A.G. (2005). Carrying Capacity in Coastal Areas, In M. Schwartz (ed.), Encyclopedia of Coastal Science. Springer, p. 226.

Maldives Government (1993). Environmental Protection and Preservation Act Of Maldives. Act No. 4/1993.

Maldives Government (1999). Maldives Tourism Act. The Tourism Act of Maldives 1999.

Maldives Government (2006). Regulation on the Protection and Conservation of Environment in the Tourism Industry.

Maldives Government (2009)."Aneh Dhivehi Raajje": The Strategic Action Plan National Framework for Development 2009 – 2013.

McElroy, J.L. and Albuquerque, K. (1998)," Tourism penetration index in small Caribbean islands", Annals of Tourism Research, Vol. 25, No. 1, pp. 145-168.

McElroy, J.L. (2006),"Small island tourist economies across the life cycle", Asia Pacific Viewpoint, Vol. 47, No. 1, pp. 61-77.

Ministry of Planning and National Development of Maldives, Statistics Section (2009). Statistical Yearbook of Maldives 2008. Available http://planning.gov.mv/yearbook2008/yearbook.html

Ministry of Tourism & Civil Aviation of Maldives, Statistics & Research Section (2008). Human Resource Situation in the Tourism Sector of Maldives 2006. Available http://www.tourism.gov.mv/downloads/reports/survey_report_final_2008.pdf

Nurse, L. and Moore, R. (2005),"Adaptation to Global Climate Change: An Urgent Requirement for Small Island Developing States", Review of European Community & International Environment Law, Vol. 14, No. 2, pp. 100-107.

Peña, D. (2002), Análisis de Datos Multivariantes, McGraw-Hill, Madrid.

Pérez, C. (2001), Técnicas Estadísticas con SPSS, Prentice Hall, Madrid.

Roper, T. (2005),"Small Island States – Setting an Example on Green Energy Use", Review of European Community & International Environment Law, Vol. 14, No. 2, pp. 108-116.

Sathiendrakumar, R. and Tisdell, C. (1989)," Tourism and the economic development of the Maldives", Annals of Tourism Research, Vol. 16, No. 2, pp. 254-269.

Scheyvens, R. and Momsen, J. (2008)," Tourism in Small Island States: From Vulnerability to Strengths", Journal of Sustainable Tourism, Vol. 16, No. 5, pp. 491-510.

Shareef, R. and McAleer, M. (2005),"Modelling International Tourism Demand and Volatility in Small Island Tourism Economies", International Journal of Tourism Research, No. 7, pp. 313-333

Stuart, E.K. (2006),"Energizing the Island Community: a Review of Policy Standpoints for Energy in Small Island States and Territories", Sustainable Development, No. 14, pp. 139-147.

UNWTO (2001). Thesaurus on Tourism and Leisure Activities.

Secretariat of State for Tourism of France: World Tourism Organization (WTO).
UNWTO (2004), "Sustainable Development of Tourism, Mission statement, Conceptual Definition". Available http://www.unwto.org/sdt/mission/en/mission.php?op=1
Van der Velde, M., Green, S.R., Vanclooster, M. and Clothier, B.E. (2007), "Sustainable development in small island developing states: Agricultural intensification, economic development, and freshwater resources management on the coral atoll of Tongatapu", Ecological Economics, No. 61, pp. 456-468.
Weber, R.P. (1990), Basic Content Analysis, Sage, United States of America.
Yahya, F., Parameswaran, A., and Sebastian, R. (2005), "Tourism and the South Asia littoral: Voices from the Maldives", South Asia-Journal of South Asian Studies, Vol. 28, No. 3, pp. 457-480.
Zubair, S., Bowen, D. and Elwin, J. (2011), "Not quite paradise: Inadequacies of environmental impact assessment in the Maldives", Tourism Management, Vol. 32, No. 2, pp. 225-234.

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