IJCHT-23

Reopen, Rebuild, Revenge:
"Tourism and Hospitality Sustainable Development Goals"

GSTM
Graduate School of Tourism Management
NIDA

FULL PROCEEDING

The International Joint Conference on Hospitality and Tourism 2023

IJCHT-23

Reactivate, Rebuild, Resilience

Tourism and Hospitality Sustainable Development Goals

18 - 20 JULY, 2023
Graduate School of Tourism Management (GSTM),
National Institute of Development Administration (NIDA),
Bangkok, Thailand

IJCHT-23

Reopen, Rebuild, Revenge:
"Tourism and Hospitality Sustainable Development Goals"

Full Proceeding of The International Joint Conference on Hospitality and Tourism 2023

Reactivate, Rebuild, Resilience
Tourism and Hospitality Sustainable Development Goals

July 2023

Graduate School of Tourism Management
National Institute of Development Administration,
Bangkok, Thailand

Editorial Office
IJCHT-23 Publication Committee
Graduate School of Tourism Management
National Institute of Development Administration,
Bangkok, Thailand
Email: ijcht@nida.ac.th
Tel: 02-727-3671-3

Published by
Publication Unit
Research Center of International and Thai Tourism
Graduate School of Tourism Management
National Institute of Development Administration,
Bangkok, Thailand
Email: ijcht@nida.ac.th
Tel: 02-727-3671-3

Published online September 2023

ISBN (e-book) 978-616-482-120-0

Disclaimer
Although the editorial team have taken great care and efforts in reviewing the abstracts included in this conference proceeding, the responsibility of the contents still belongs to the respective authors.

TABLE OF CONTENTS

NO.	TITLE	PAGE
	Message from the IJCHT Founder	v
	Message from the Conference Chair IJCHT-23	vi
	Message from Conference Co-Chair IJCHT-23	vii
	Message from Rector of Thammasat University Bangkok, Thailand	viii
	Honorary Board	x
	Scientific Committee	x
	Organizing Committee	xi
1	**Role of Village Capacity Building in Increasing Original Village Income from the Tourism Sector: A Case Study of Organization Output** *Kartika Puspitasari, Enggar Shafira Agriska, Ardiansyah Bagus Suryanto, Kartini Sembel and Lutfiyah Nurlaela*	1
2	**Social Entrepreneurship: A Mission Driven Strategy for Local Economic Development in Sustainable Tourism The Case of Arya Kemuning Village-Owned Enterprise (BUM Desa)** *Ely Yani, Diana Maharani, Fujiartanto, Lutfiyah Nurlaela*	11
3	**Potential of Facial Recognition Technology Adoption in the Hotel Industry The Perspectives of Managers** *BaoNguyen LE, Norman AU*	23
4	**Local Food Festival: The Effect on Participants' Loyalty** *Karun Worrawitwan, Pattareeya Lakpetch*	37
5	**Social Sustainability In Music Festivals: The Case Of Rock Imperium** *David Siles Lopez*	61
6	**Tourism and ethnic identity contestation: case from a Karen ethnic village in Chiang Mai, Thailand** *Matahari Irandiputri*	78
7	**Study of Sustainable Tourism Development at Desa Wisata Apar, Pariaman, West Sumatera: A SDGs-Based Approach** *Nuria Dewi Larasat, Hendrik H. Simatupang*	92
8	**Sustainable Entrepreneurship Intention of Students in Ho Chi Minh City** *Huyen Pham and Thu Nguyen*	106
9	**Does Cute Advertising Affect Tourists' Intentions to Visit a Destination?** *Phoenix Wei Yang and Vincent Ting Pong Cheng*	126
10	**Acceptability of spent coffee grounds as an ingredient is selected bakery product** *Reinald A. Andaya,Jonathan Abad,Jose Miguel Contreras,Kobe Bryan Cristobal Kevin Esguerra,Jillian Kho,Keiko Cedrick Serrano and Agnes Jocelyn Bandojo*	132

SOCIAL SUSTAINABILITY IN MUSIC FESTIVALS: THE CASE OF ROCK IMPERIUM

David Siles Lopez

Abstract

Purpose

Event tourism has become popular in recent decades, with an increasing number of tourists attending music festivals every year, attracted by a wide range of concerts in different international destinations. At this situation, arises the need to analyse the sustainability of such events given the magnitude they have reached, while the vast majority of studies have focused on how this tourist movement affects environmental sustainability, in this article a deeper reflection is made, moving towards another dimension of sustainability: social sustainability.

Design/Methodology/approach

Three different surveys have been carried out to analyse the social sustainability of the event. A survey about the degree of acceptance was used in the social sustainability analysis from the residents; secondly, a panel of experts was designed to measure opinions about the social impact of the event; finally, the assistants' survey was carried out including questions such as type of tourist, expenditure profile, and satisfaction.

Findings

The attendance of tourists to a festival must maintain a harmony with the destination and its inhabitants, in this relationship, both should benefit, the residents of the destination expect to obtain an improvement in their standard of living thanks to what the tourists bring them, which through their socially sustainable behaviour describes a model which generates prosperity.

Originality

The model that represents social sustainability is the one that will be developed after confirming the hypotheses put forward from the point of view of the prosperity of the residents and the contribution of the tourists themselves to social sustainability.

Keywords Sustainability, Social Sustainability, Sustainable Tourism, Music Festivals, and Prosperity.

1. Introduction

A music festival is an event, usually held outdoors, that features numerous musicians or bands playing consecutively. Festivals may last only one day, but many of the most popular and well-known festivals extend over several days.

The idea of the festival seems to have arisen around 4,500 B.C. as celebrations in honour of the gods. The Egyptians were the first to hold these events, which were accompanied by music and dance. In the Middle Ages, musical competitions within festivals were born and events such as the German Bayreuth Festival began to proliferate.

When talking about the first modern rock festival, the Monterey Pop Festival in California, which took place in June 1967, is often mentioned. Some other festivals that are considered pioneers in this sense such as the iconic Woodstock Festival in 1969 in the United States or the Eurovision Song Contest since 1956. Today's most prominent festivals include Tomorrowland and it is estimated that over 400,000 people of almost 200 different nationalities attend annually, making it officially the largest festival in the world today.

In terms of economic impact, Coachella is a large music festival that takes place over three days in the last week of April in Indio, California, , the 2017 festival was attended by 250,000 people and raised 114.6 million dollars, as indicated by Chacko and Schaffer (1993) have a significant impact on the destination where they are developed. Additionally, a study by the Online Business School showed that music festivals generated 5.6 billion euros of economic impact per year in Spain before the pandemic.

According to the specialized literature, music festivals are part of what is known as experience tourism, also known as active tourism (Wright, Dickson, and Ajiee, 2021). In fact, festivals have become the main form of live music consumption, surpassing other types of organization such as concerts in venues or in the open air and surpassing other shows in number and attendance.

The growth of tourism as a consequence of the birth of new festivals and live music all over the world is an obvious fact. It is one of the most dynamic segments of the tourism market. Festivals bring a considerable economic impact in terms revenue where they are held, and represent themselves a way of economic development by registering not only visits, and consequently potential ambassadors of the tourist destination, but also a considerable media return.

Festivals, therefore, provide a new avenue for economic development to more traditional tourism. Despite the notable economic impact they generate, and the positive externalities on other types of tourism, it is a sub-sector that has not yet had a very long history and there is little research on its impacts, which makes documentary and comparative work difficult as there are no data and statistics with a considerable time interval, as is the case with other tourism sub-sectors.

The economic and touristic impact of such events has been proven, however, in addition to all the positive effects they produce, the impact of these festivals on society is not usually taken into account. Not all the effects of a festival are positive, there are variables to be analysed by the society surrounding the event that can be beneficial or detrimental to it.

These variables and their necessary analysis form part of what is known as the social sustainability of the event. A festival such as Rock Imperium, held in the city of Cartagena, in the southeast of Spain, must be, in addition to being profitable and a tourist attractor, a

generator of social sustainability for the inhabitants and society in general of the destination. To measure social sustainability, the focus should be on the effects that the festival has on the prosperity of the inhabitants of the destination (Rogers et al., 2012).

The variables that make up the social sustainability associated with the event should be questioned to the inhabitants of the destination themselves, including items that reflect satisfaction with the event, its suitability, its repercussion on society or the inconvenience it may cause.

It is possible to determine, given the literature review carried out in this paper, that a socially sustainable event will be one that manages to improve the prosperity of the inhabitants of the destination while generating socially sustainable tourism, that is to say, it attracts tourists who are satisfied with the event, promote its benefits and contribute to social welfare.

From what has been said so far, it can be deduced that in the analysis of the social sustainability of a music festival such as the one presented in this article, two hypotheses must be established. The first one should be that if the festival is socially sustainable, it will generate prosperity among the inhabitants and, by means of surveys of the residents themselves, the degree of well-being can be determined. The second one hypothesis has to do with the type of tourist who attends the festival and what impact it is having on the festival, if the tourist is socially sustainable, will contribute to the social sustainability of the event.

In the fulfillment of both hypotheses, it will be possible to determine the relationship between them described by a graphical model, where the prosperity of the residents is generated by the variables contributed by the tourists to a proven.

In the following lines, an in-depth review of the literature is analysed in order to clarify all the concepts described in this introduction, as well as the way in which they are linked in order to explain the social sustainability model proposed. Following the literature review, the analysis of the social sustainability of the residents will be shown by means of the surveys carried out, followed by the profile of the festival attendees obtained through the corresponding questionnaire. Finally, both hypotheses will be contrasted, given the results obtained, in order to determine the social sustainability in its graphic form and conclude the work with the final considerations.

2. Theoretical background

The concept of sustainability is widely known, one of its original definitions is provided by the World Commission on Environment and Development (1987): "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" and the concepts of maintaining, restoring and renewing have to be added to this definition (Sutton, 1999).

This meaning has evolved from sustainability of the natural environment to a multidimensional character that considers other factors, as Wilkinson, Hill and Gollan (2001) rightly point out, additionally, optimal and responsible management by governments and companies in this direction is necessary (Klassen, 2000).

Sustainability applied to tourism would be defined as: "Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of

visitors, the industry, the environment and host communities" (UNWTO, 2005), i.e. it includes several fundamental aspects that must be taken into account during the tourism experience, not only on the environment, but also on the inhabitants of the destination and its prosperity, it has a very decisive social component.

Initially described by the United Nations as sustainable development in tourism in the literature, this development implies a conservationist view of the environment, community or social, and economic. The addition of the role of society in this model would condition how to develop sustainable tourism.

These concepts converged in 1972, when the United Nations highlighted them at the Stockholm conference on the human environment, coinciding with the report of the Club of Rome (Meadows et al. 1972) and, from then on, all work on sustainable development followed this line of research.

Several authors have developed papers about this background, with Johnston and Tyrrell (2005) finding that sustainable tourism must maximize the combined benefit to the environment and social acceptance. Tourism, like other sectors of activity, must be sustainable, the links between tourism, sustainability and prosperity are complex, as Buckley (2012) rightly points out, and a balance between these factors can only be achieved through the appropriate social input.

Tourism research has grown significantly, but much more empirical studies than theoretical ones (Pritchard, Morgan, and Ateljevic, 2011). It is well known that a tourist destination does not behave like a product (Romer, 1986), it does not have to run out of steam to start a new cycle, it can follow other patterns and it can be managed. There is a common element in the later stages of tourism development, which leads to deterioration of the destination, destination managers begin to consider sustainability as a key variable, in fact, in some cases it is the only possibility according to Cooper and Jackson (1989).

Later, in 1993, Oppermann configured a model in which tourism development was affected by economic factors, so that tourism development models had to have a positive result on the economic model of the destination, its sustainability was conditioned by the prosperity of the destination.

The definition of sustainable tourism is established once Butler (1999), considering the dimensions of the word sustainability, states that sustainability measures have to be developed and applied to tourism development, which requires thorough research on social, economic and environmental aspects and focus on the sustainable future of the destination.

Based on how sustainable tourism theory has developed, Hardy, Beeton and Pearson (2002) state that any conceptualization of sustainable tourism must take into account the local community as well as the environment and the economy, which means that social sustainability will be an equally important factor as other historical factors such as economic development and environmental conservation.

The sustainability of the destination hosting an event, as seen through the well-being of the inhabitants, according to Andereck and Nyaupane (2011) comprises four dimensions: physical, social, psychological, and environmental. Through these dimensions, studies such as Pfitzner and Koenigstorfer (2016) were able to determine improvements in the quality of life of residents at the end of an event.

On a general level, it is concluded that analysing the economic, environmental, socio-cultural, and political dimensions related to the celebration of a festival has an impact on the quality of life of a community, as Arcodia and Whitford (2006) state that it will determine the future support for the festival.

These factors need to be detailed in order to determine their real impact on sustainability. The economic factor generates employment and income among residents, the social factor has a deep effect on the daily life of the inhabitants as it includes relations with visitors, tolerance or a sense of well-being, and constitutes any effect on the quality of life of the inhabitants (Fredline, Jago, and Deery, 2005).

Based on the assumption that the realization of a festival should not be fully sustainable per se, as any organized event entails a certain drain on resources (Zifkos, 2015), the organization of the Big Green Sustainable Music Festival defines its sustainability objectives in a way that collects good quality of life, prosperity, social justice, contribution to the local economy, and a healthy and natural environment. As Zifkos (2015) rightly points out, many festivals that are not defined as "green" apply sustainable practices without directly stating it.

The impact on the environment is very decisive, as it includes variables that can have a negative impact on the inhabitants. The control of sustainability is essential, many destinations avoid the tourism phase that leads to mass tourism and opt to use sustainability as a means to stay in another, more beneficial, phase, an issue that Karamustafa and Yilmaz (2020) address theoretically in their view on mass tourism.

Finally, it should be noted that according to the UNWTO, sustainable tourism must maintain a high level of tourist satisfaction and ensure a meaningful experience for tourists, increasing their awareness of sustainability. It is decisive to know the tourist's assessment at the end of this work in order to contrast if the tourism carried out has been sustainable, therefore two positions have to be confronted according to these concepts, the sustainability of the destination through the inhabitants versus the tourist's experience, if these two positions are close, it will be possible to determine that the objective of this research has been fulfilled.

Having defined the meaning of sustainable tourism on the basis of three common pillars, which are environmental, economic, and social sustainability, this article will focus its analysis on the last pillar. While all pillars are important and relevant, it is interesting to focus on social sustainability for several reasons, mainly because it is the pillar that directly indicates sustainability as measured by the inhabitants, taking into account their prosperity, and by the tourists attending and their socially sustainable behaviour.

On the other hand, it is the least analysed concept in this type of events, which tend to focus only on assessing the environmental and economic impact on the destination, cases usually analysed. However, social sustainability brings another dimension to these studies in music events where its consequences on the destination's society will determine its future well-being and continuity.

For the analysis of social sustainability, positive factors must be considered, Ritchie, Chien, and Shipway (2020) consider the perception of inhabitants and their support as decisive factors, and negative factors such as traffic, visitor congestion, noise, or the opportunity cost of other events (Chien, Ritchie, Shipway, and Henderson, 2012).

Over the years, tourism research has concretely defined the scope of tourism and with it some concepts have become misaligned. Agarwall (1997) already considered that new aspects of

tourism and new variables to be incorporated on both the supply and demand sides had emerged.

The concept of sustainable tourist is one of those factors that have been incorporated recently and that, from the demand side, brings new nuances to sustainable tourism, the sustainable behaviour of this tourist is well defined by Passafaro (2020), coinciding with the definitions of the UNWTO (2017) to determine that this tourist must consider variables on which he/she generates impact such as the environment, the economy or society in his/her tourist decision-making.

The sustainable tourist must understand the concept of sustainable tourism and interpolate it into his or her way of doing tourism. He/she must be a person concerned about sustainability during the tourist experience, someone who is not only looking for tourism of any type but also to be able to apply concepts related to sustainability that bring additional wellbeing to the visit.

Sustainable tourist behaviour is key to the sustainability of the destination (Juvan and Dolnicar, 2016), destination managers are looking for tourists who contribute to keeping their destination in the best conditions. From this contribution it can be concluded that the tourist who comes should not negatively influence the destination of his visit in accordance with the analysis of sustainable tourist behaviour carried out by Dolnicar (2010). Additionally, responsible tourist behaviour leads to conscientious action on travel plans (Lee, Jan and Yang, 2013).

As Buffa (2015) points out, young tourists are the new tourists entering the tourism market, tourists concerned about the future of tourism and its associated sustainability, their socio-cultural development makes them more sensitive to this concept, they like to enjoy but not harm as Poon (1993) details.

To analyse the characteristics of these tourists, it is necessary to know with which items they are positively related, for which the contribution of Passafaro et al. (2015) indicates that they seek activities which reduce the social and environmental impact caused by their visit, as well as defining these tourists as open, conscientious, and affable.

Continuing with the study of Juvan and Dolnicar (2016), it is obtained what kind of questions to ask tourists, these are based on two main concepts, behaviour and intention, on these two pillars, aspects such as the choice of destination are questioned, it has to be taken taking into account the behaviour of the tourist (Goodrich, 1978).

In this way, once the literature has been reviewed, conclusions, relevant definitions, and, in general, a guide, have been obtained to determine the questionnaires to be carried out to both parties involved in this work. This way, one can know what items should be described, the kind of questions that should be made depending the tourist or the resident and above all, the mail pillars of social sustainability in which this work must be based on. With the appropriate questions that allow the development of the hypotheses planted in the introduction.

3. Methodology

The next step in this work is to detail how the event has affected the city and its inhabitants in order to determine the social sustainability based on its prosperity.

The 1987 Brundtland report defined sustainable development as development that meets the needs of present generations without compromising the ability of future generations to meet their own needs. From a social point of view, a sustainable event should therefore leave a beneficial legacy for the host community and all those involved.

A socially sustainable event reinforces the cultural values of the population, enriches it and promotes understanding and tolerance. On the contrary, it can be said that an event is not sustainable from a social point of view if it generates rejection among residents, discrimination and problems of habitability.

Inhabitants' support for the event is analysed through questions about the benefits to them in particular and to society in general, their commitment to that particular event and their intention to support the event itself (Chien et al. 2012), variables that in the social sustainability analysis applied to Rock Imperium have been contrasted below.

One way of describing the fundamental variables to be surveyed is the one described in Pavlukovic', Armenski and Alcántara-Pilar (2019) in their work on the analysis of the impact of festivals, taking their work as one of the references, a questionnaire has been carried out in which items related to the social sustainability of Rock Imperium are assessed. To understand and determine the social factor, Waterman (1998) details it as social development in terms of benefit and well-being, being a consequence of the learning provided by the festival, the creation of interpersonal relationships, understanding of the theme of the festival, as well as the association of the festival with the city where it is held (Moscardo, 2008).

3.1 The residents' survey

The sustainability of the social impact of the Rock Imperium Festival was analysed by means of a survey of people who lived or worked in the city during the event. Among the surveys carried out, 125 valid surveys were selected, all of which contained affirmative answers to the question about whether they lived or worked in the city during the event. The responses were obtained during the first fortnight of July, only a few days after the event.

Respondents were given a series of statements to rate on a Likert scale of 1 to 5 their degree of agreement or disagreement with the statement, with 1 strongly disagreeing, 2 partly disagreeing, 3 neither agreeing nor disagreeing, 4 partly agreeing, and 5 strongly agreeing. Some of these statements imply a positive social impact and others a negative social impact, as will be discussed below.

[Table 1]

The majority of the residents consider that it has increased leisure opportunities in the city as well as the city's cultural offer.

As to whether the festival has created jobs, it has been an event that has created some employment.

Cartagena inhabitants are proud that the festival is held in their city, indeed, the residents of Cartagena are proud that the festival is held in their city. As to whether the festival

reinforces the image of Cartagena as a tourist destination, the 95.7% agreed. Also in terms of its impact the festival has raised the attention of the media.

Another aspect that shows a positive and sustainable social impact of the festival is that its organization and development has favoured the relationship and socialization between tourists and residents.

To the statement: I think it is good that the Administration allocates public funds to support the organization of the event, about the 80% agreed. Respondents were asked for their opinion on whether the local administration has contributed to the reduction of negative impacts, and half of them agreed.

The questions posed to respondents about the possible negative social impact of the festival are discussed below. On the question of whether the festival has generated traffic and parking problems, half of disagreed with the above statement, only 10.2% strongly agreed.

Regarding whether the festival has generated noise nuisance for the neighbours, about 67% disagreed, those who totally agreed that the festival has generated noise were only 3.4%. A project on environmental impact was carried out during the event (Peche, 2022) and concludes that the noise impact generated by the festival in the current location does not exceed the established legal noise levels and therefore does not have a negative impact.

Residents were also asked if during the days of the event the city was overcrowded and caused them inconvenience, the majority disagreed, only 2.6% agreed with this statement. In view of the responses, the event did not cause any significant inconvenience to residents.

In relation to public safety, it was asked whether the feeling of insecurity had increased during the days of the event, the majority of the respondents disagreed.

Finally, inhabitants' satisfaction is one way to measure prosperity, like Crouch and Ritchie (1999) showed, as a determining element of the residents' prosperity, the statement "the Rock Imperium Festival should be held every year in Cartagena" is where we find the greatest unanimity, since 87.9% totally agree and 6.9% partially agree, so that almost 95% of those surveyed think that the festival should continue to be held in the city.

In view of the opinions expressed by the residents surveyed, the Rock Imperium Festival has generated a social impact that could be described as positive and socially sustainable. In particular, it is worth noting that almost all residents believe that the festival should be held every year on an ongoing basis. Furthermore, they are proud that this event is held in their city, which improves its image and external projection, and generates jobs.

In addition, the negative aspects of the event were hardly mentioned at all. Only a certain percentage assigned somewhat more importance to traffic and parking problems.

3.2 The assistants' survey

The festival tourism has also been evolving as any other tourism form has, just as society has become more aware and sustainable in all areas, the tourists demands the same aspects in their visit to music festivals. Within this type of tourist, the aim of the article is to look for the characteristics of the socially sustainable tourist in the festival-goer, firstly defining the type of tourist and then detailing their socially sustainable profile.

The Rock Imperium tourist has been analysed through surveys, both at the festival itself and through social networks at the end of the festival, a total of 2,277 surveys that collect the following information segmented into two strata.

The geographical distribution of attendees comprised 42.2% of residents in Cartagena and near cities, 54.33% of national attendees from other regions, and 3.47% of foreigners.

The survey is then segmented into two segments to observe visitor characteristics according to origin and age.

3.2.1 Segment origin

Firstly, the survey is segmented by origin to confirm the well-known hypothesis of whether the attendee spends more if they come from outside the destination.

As a first point, it should be noted that those attending from Cartagena and surroundings have not spent any money on accommodation or traveland they also spend very little on culture, given that these attendees have already had the opportunity to visit the city easily. Regarding the length of stay, the more distant the origin, the longer the stay, with foreigners staying an average of 1.94 days.

In general terms, it can be observed that spending on accommodation is higher the further away the attendee's residence is, as well as spending on food and drink within the festival, travel expenses, internal transport, merchandising, trade, and culture. It can be concluded that the further the distance, the longer the stay and the higher the daily expenditure in general terms.

3.2.2 Segment age

The age group with the highest attendance at the festival is between 41 and 50 years old (41%), followed by 25-40 (35%), and over 50 (20.5%), the rest having a very low incidence.

When segmented by age, the length of stay of the three age groups analysed is very similar, although slightly higher in the youngest age group, all being in the interval 1.7 - 1.9 days.

In this case, it can be seen that the older segment (>50 years) has a higher average daily expenditure than the others. In general terms, it can be said that the older the age group, the higher the expenditure. Linking this data with sustainability, it is interesting to note that analysing the results of Dolnicar (2004) in his work on sustainable behaviour segmented by different items, pensioners are those who behave more sustainably than those who do not.

3.3 The panel of experts

Also carried out simultaneously with the social sustainability survey of residents, the panel of experts provides information on the medium-term impact of the festival, comprising 15 experts from different categories (managers, academicians, and politicians) who were questioned about the impact of different items grouped in five factors as recommended by Devesa, Báez, Figueroa, and Herrero (2012):

- Economic factor: related to economic impact.
- Touristic factor: where items such tourism attraction, assessment or satisfaction must be considered.

- Cultural factor: regarding cultural development and musical culture spreading.
- Social factor: must consider well-being, social ties, image, and knowledge.
- Physical factor: spatial characteristics of the festival and changes in the city.

The experts valued the items in a Likert scale from 1 to 5, all the results obtained are relevant, none of the experts rated any variable below three, so the selected variables were perceived as important.

It must be point out that variables related to investment, economic development, tourist attraction, promotion of the city, cultural ties, and location, were the most relevant while others were important but in a fewer degree.

4. Results

The next question is whether the tourist attending the Rock Imperium is socially sustainable, this tourist should be one who contributes positively to the elements of social sustainability described above. It is, therefore, a tourist who seeks culture, generates employment, gives a good image, contributes to publicity, fosters ties, increases investment in the destination given its volume, does not cause traffic or parking problems, does not disturb, does not overcrowd, provides security in the streets, and returns (is loyal).

The Rock Imperium Festival tourist is a tourist with a socially sustainable behaviour based on the following analysed items:

- They are cultural tourists, not only because of the type of event, which is musical culture, but also because during their stay they have visited other cultural sites in the city.
- It has generated a full-time equivalent employment of 62.5 employees, thus generating work over the two days of the event.
- It should be noted that the rating of the festival was 4 out of 5 on average, marked as "very satisfied" by the attendees, with a percentage of 54.5%, while 33% marked "totally satisfied" (5 out of 5), so the image of the destination because of the festival that will be reflected in all tourists is exceptionally good.
- The publicity, measured by its impact on social networks as of 20 April 2023, results in Rock Imperium's Facebook, Twitter, and Instagram pages accumulating 30,000 followers since its creation on 14 June 2021.
- To analyse whether social ties have been established between attendees and inhabitants, according to data from the survey of experts, the social relations of the attendees with the inhabitants are rated with 3.9 out of 5.
- According to data provided by the festival organizers, almost 300,000 euros have been invested in sponsorship.
- Regarding to the variables that try not to generate a negative impact on traffic and parking, we can conclude that there is a relevant percentage of attendees from Cartagena and surroundings who have travelled on foot or have used public transport.
- The noise analysis is rated positively by residents with 90.6% disagreeing that they have been disturbed by noise.

- As far as overcrowding is concerned, the number of people attending the Rock Imperium was 17,000, the destination that hosted the festival is a city of 217,000 inhabitants (INE, 2022) that usually hosts cruise ship stopovers, receiving a total of 172,500 tourists during the year 2022 (Spanish Ministry of Transport, Mobility, and Urban Agenda, 2022), it is a city used to these numbers of tourists, so it cannot be considered to have any degree of overcrowding during the event.
- Street safety, according to the expert panel, has improved during the festival with a response of 4 out of 5. This provides further added value to the event, as achieving safety in a tourist destination is essential for its positive valuation by the locals.
- It is a loyal tourist, the destination can count on their return in future editions as 95.5% have marked in the survey that they will return in the next edition, so the residents of the destination can positively assess that they will return to enjoy at least the same social sustainability for the next event.

5. Implications

In social sustainability there must be a relationship between destination inhabitants and tourists where their behaviour is determined by the social sustainability variables, this relationship describes a model where its results will determine the social prosperity obtained by the residents.

The social sustainability depends on some variables that have positive effects while others have negative effects, depending on the nature of the variables, therefore, these first concepts give an idea of how to represent the model in a graphic way. It is established as the negative relationship between the impact caused by the number of tourists and social prosperity, the lower the impact the more social prosperity.

On the other hand, variables with increasing returns contribute with a positive effect, the higher the number of socially sustainable attendees, the more aware and the more predisposed this tourist is to maintain and generate a positive impact on the destination, the more socially prosperous it will be.

The model can be described as the defining element of social sustainability, which is prosperity in the destination for its inhabitants, as derived from the literature review. This prosperity depends on the elements that tourists can provide and that residents themselves have previously described as socially sustainable, the variables included in the model are the following: prosperity as the outcome, cultural expenditure, employment, tourist satisfaction, publicity, social ties, investment, safety, and loyalty would be variables which contribute with positive effects, while traffic, noise, and relative mass tourism would be variables with negative effects.

[Figure 1]

Finally, must be considered the amount of assistants with a socially sustainable behaviour. The model proposed has an elasticity that indicates changes in prosperity in response to the socially sustainable behaviour of the attendees, the more socially sustainable the more robust is the model. According to the data analysed, the social sustainability function of the Rock Imperium festival is located at the point where the social prosperity of the inhabitants, measured by their desire for the festival to be held again at a given percentage, is 94.8% with 17,000 attendees.

6. Conclusions

The concept of social sustainability is sufficiently defined in the literature although it has not been widely studied, however, certain approximations can be obtained through studies of the social environment where the aim is to analyse such a vision. Taking into account the opinion of the residents of the destination and their well-being in its different dimensions, this will determine the convenience of holding a festival in their environment.

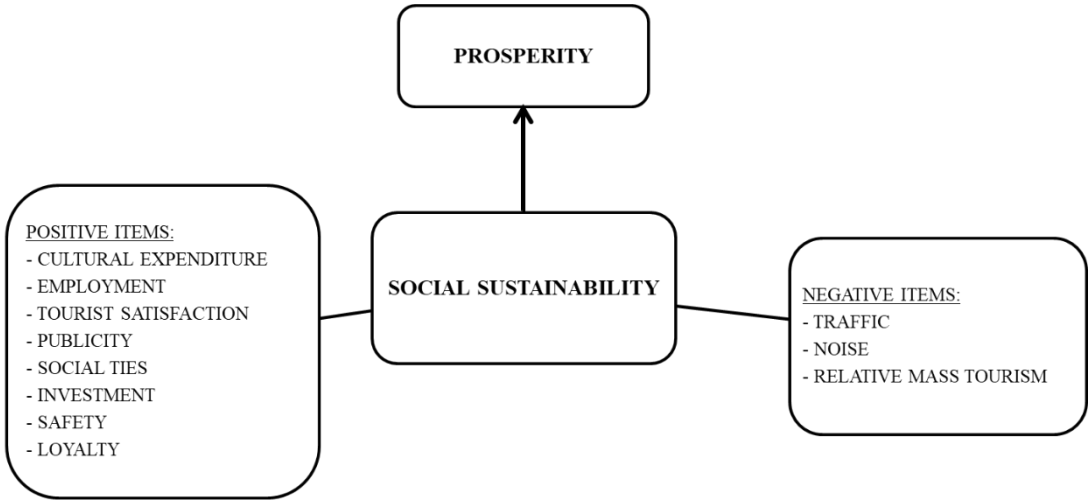
The social sustainability survey of residents has allowed us to determine the degree to which they agreed with certain items describing social sustainability values, concluding in this part of the study that the inhabitants have obtained a positive and robust degree of prosperity as measured by the values of their answers and by their affirmation of wanting the event to be held again in future editions.

As the surrounding literature confirmed, a key element for social sustainability when it comes to holding a festival in a given destination is the socially sustainable behaviour of the tourists who attend. The social profile of the Rock Imperium tourist has been determined by means of surveys of the attendees in which variables such as their satisfaction or their habits during the event have been taken into account, as well as by means of a panel of experts who assessed certain aspects of their contribution to social sustainability.

Given the surveys carried out and the contrast of the variables obtained with the literature reviewed, it has been possible to describe the items that affect social sustainability in such a way, there are variables that affect social sustainability positively and others negatively depending on the number of attendees and their contribution. The model represented has been described taking into account the determined variables, concluding that the socially sustainable tourist brings certain prosperity to the resident.

7. Limitations and future research

It would be interesting to carry out the same work in future editions of the festival to be able to determine an econometric model about the social sustainability of the event, building a time series model in order to contrast and to determine, to a more approximate degree, the representation of social sustainability for the case study presented.



Source: own elaboration.

Figure 1. Social sustainability model.

Table 1. Residents' responses on social sustainability of the event.

Socially Sustainable Event	Agree	Socially Unsustainable	Agree
Increases leisure and cultural opportunities	92%	Traffic and parking problems	22,2%
Generates jobs	83%	Noise nuisance	9,4%
It improves the image of the city	88%	Makes it known and is a source of pride for the people of Cartagena	95%
It favours the relationship between tourists and residents	82%	Feeling of insecurity	6,9%
The administration should support with public funds	79,6%	The Administration has reduced negative impacts	51,4%
To be continued in the following years	95%	Overcrowding in the city	5,2%

Source: own elaboration.

References

Agarwal, S. (1997), "The Resort Cycle and Seaside Tourism: An Assessment of its Applicability and Validity", *Tourism Management*, Vol. 18, No. 3, pp. 65-73, doi: 10.1016/S0261-5177(96)00102-1.

Arcodia, C., & Whitford, M. (2006), "Festival Attendance and the Development of Social Capital", *Journal of Convention and Event Tourism*, Vol. 8, No. 2, pp. 1-18, doi: 10.1300/J452v08n02_01.

Andereck, K. L., & Nyaupane, G. (2011), "*Development of a Tourism and Quality-of-Life Instrument"*, in M. Budruk & R. Phillips (Eds.), *Quality-of-life community indicators for parks, recreation and tourism management*, Dordrecht: Springer, pp. 95-113.

Buckley, R. (2012), "Sustainable Tourism: Research and Reality", *Annals of Tourism Research*, Vol. 39, No. 2, pp. 528-546, doi: 10.1016/j.annals.2012.02.003.

Brundtland, G. (1987), *Report of the World Commission on Environment and Development: Our Common Future*, United Nations General Assembly document A/42/427.

Butler, R. (1999), "Sustainable Tourism: A State-of-the-Art Review", *Tourism Geographies*, Vol. 1, No. 1, pp. 7-25, doi: 10.1080/14616689908721291.

Buffa, F. (2015), "Young Tourists and Sustainability. Profiles, Attitudes, and Implications for Destination Strategies", *Sustainability*, Vol. 7, pp. 14042-14062, doi: 10.3390/su71014042.

Chacko, H. E., & Schaffer, J. D. (1993), "The Evolution of a Festival: Creole Christmas in New Orleans", *Tourism Management*, Vol. 1, pp. 475-482, doi: 10.1016/0261-5177(93)90100-Y.

Chien, P. M., Ritchie, B. W., Shipway, R., & Henderson, H. (2012), "I Am Having a Dilemma: Factors Affecting Resident Support of Event Development in the Community", *Journal of Travel Research*, Vol. 51, No. 4, pp. 451-463, doi: 10.1177/0047287511426336.

Cooper, C., & Jackson, S. (1989), "Destination Life Cycle: The Isle of Man Case Study", *Annals of Tourism Research*, Vol. 16, pp. 377-398, doi: 10.1016/0160-7383(89)90051-0.

Crouch, G. I., & Ritchie, J. R. B. (1999), "Tourism, Competitiveness, and Societal Prosperity", *Journal of Business Research*, Vol. 44, pp. 137-152, doi: 10.1016/S0148-2963(97)00196-3.

Devesa, M., Baez, A., Figueroa, V., & Herrero, L. (2012), "Repercusiones Económicas y Sociales de los Festivales Culturales: El Caso del Festival Internacional de Cine de Valdivia", *Eure: Revista Latinoamericana de Estudios Urbano Regionales*, Vol. 38, No. 115, pp. 95-115, doi: 10.4067/S0250-71612012000300005.

Dolnicar, S. (2004), "Insights into Sustainable Tourists in Austria: A Data-based a priori Segmentation Approach", *Journal of Sustainable Tourism*, Vol. 12, No. 3, pp. 209-218, doi: 10.1080/09669580408667234.

Dolnicar, S. (2010), "Identifying Tourists with Smaller Environmental Footprints", *Journal of Sustainable Tourism*, Vol. 18, No. 6, pp. 717-734, doi: 10.1080/09669581003668516.

Fredline, L., Jago, L., & Deery, M. (2005), *Host Community Perceptions of the Impacts of Events: A Comparison of Different Event Themes in Urban and Regional Communities*, Australian Centre for Event Management.

Goodrich, J. N. (1978), "The Relationship between Preferences for and Perceptions of Vacation Destinations: Application of a Choice Model", *Journal of Travel Research*, Vol. 17, No. 8, pp. 8-13, doi: 10.1177/00472875780170.

Hardy, A., Beeton, R., & Pearson, L. (2002), "Sustainable Tourism: An Overview of the Concept and its Position in Relation to Conceptualisations of Tourism", *Journal of Sustainable Tourism*, Vol. 10, No. 6, pp. 475-496, doi: 10.1080/09669580208667183.

Johnston, R., & Tyrrell, T. (2005), "A Dynamical Model of Sustainable Tourism", *Journal of Travel Research*, Vol. 44, No. 2, pp. 124-134, doi: 10.1177/0047287505278987.

Juvan, E., & Dolnicar, S. (2016), "Measuring Environmentally Sustainable Tourist Behaviour", *Annals of Tourism Research*, Vol. 59, pp. 30-44, doi: 10.1016/j.annals.2016.03.006.

Karamustafa, K., & Yilmaz, M. (2020), "Destination Life Cycle: A Conceptual Approach Based on the Turkish Experience", *Journal of Tourism and Gastronomy Studies*, Vol. 8, No. 4, pp. 439-451, doi: 10.21325/jotags.2020.696.

Klassen, R.D. (2000), "Exploring the Linkage between Investment in Manufacturing and Environmental Technologies", *International Journal of Operations and Production Management*, Vol. 20, No. 2, pp. 127-147, doi: 10.1108/01443570010304224.

Lee, T., Jan, F., & Yang, C. (2013), "Conceptualizing and Measuring Environmentally Responsible Behaviors from the Perspective of Community-Based Tourists", *Tourism Management*, Vol. 36, pp. 454-468, doi: 10.1016/j.tourman.2012.09.012.

Meadows, D.H., Meadows, D.L., Randers, J., & Behrens, W.W. (1972), *The Limits to Growth; A Report for the Club of Rome's Project on the Predicament of Mankind*, New York: Universe Book.

Moscardo, G. (2008), "Analyzing the Role of Festivals and Events in Regional Development", *Event Management*, Vol. 11, No. 1-2, pp. 23-32, doi: 10.3727/152599508783943255.

Oppermann, M. (1993), "Tourism Space in Developing Countries", *Annals of Tourism Research*, Vol. 20, No. 3, pp. 535-556, doi: 10.1016/0160-7383(93)90008-Q.

Passafaro, P. (2020), "Attitudes and Tourists' Sustainable Behaviour: An Overview of the Literature and Discussion of some Theoretical and Methodological Issues", *Journal of Travel Research*, Vol. 59, No. 4, pp. 579-601, doi: 10.1177/0047287519851171.

Passafaro, P., Cini, F., Boi, L., D'Angelo, M., Heering, M., Mancini, L., Martemucci, V., Pacella, G., Patrizi, F., Sassu, F., & Triolo, M. (2015), "The Sustainable Tourist: Values, Attitudes and Personality Traits", *Tourism and Hospitality Research*, Vol. 15, No. 4, pp. 225-239, doi: 10.1177/1467358415576086.

Pavluković, V., Armenski, T., & Alcántara-Pilar, J. M. (2019), "The Impact of Music Festivals on Local Communities and Their Quality of Life: Comparison of Serbia and Hungary", in Campón-Cerro, A.M., Hernández-Mogollón, J.M., & Folgado-Fernández, J.A. (eds) *Best Practices in Hospitality and Tourism Marketing and Management*, Springer: Cham, pp. 217-237, doi: 10.1007/978-3-319-91692-7_11.

Peche, J. (2022), "Environmental Impact Generated by the Rock Imperium Festival Event in the Municipality of Cartagena and Quantification of its Impact on the Population", *Polytechnic University of Valencia*, available at: http://hdl.handle.net/10251/185519.

Pritchard, A., Morgan, N., & Ateljevic, I. (2001), "Hopeful Tourism: A New Transformative Perspective", *Annals of Tourism Research*, Vol. 38, No. 3, pp. 941-963, doi: 10.1016/j.annals.2001.01.004.

Pfitzner, R., & Koenigstorfer, J. (2016), "Quality of life of residents living in a city hosting mega-sport events: A longitudinal study", *BMC Public Health*, Vol. 16, pp. 1-10, doi: 10.1186/s12889-016-3777-3.

Poon, A. (1993), *Tourism, technology and competitive strategies*, Wallingford, UK: CABI.

Ritchie, B. W., Chien, P. M., & Shipway, M. (2020), "A Leg(acy) to Stand On? A Non-Host Resident Perspective of the London 2012 Olympic Legacies", *Tourism Management*, Vol. 77, doi: 10.1016/j.tourman.2019.104031.

Rogers, D., Duraiappah, A., Antons, D., Munoz, P., Bai, X., Fragkias, M., & Gutscher, H. (2012), "A vision for human well-being: transition to social sustainability", *Current Opinion in Environmental Sustainability*, Vol. 4, No. 1, pp. 61-73, doi: 10.1016/j.cosust.2012.01.013.

Romer, P. M. (1986), "Increasing Returns and Long-Run Growth", *The Journal of Political Economy*, Vol. 94, No. 5, pp. 1002-1037, doi: 10.1086/261420.

Sutton, P. (1999), "The Sustainability-Promoting Firm", *Greener Management International Journal*, Vol. 23, pp. 127-152, available at: https://www.jstor.org/stable/45259311.

United Nations World Tourism Organization (UNWTO) (2005), "Making Tourism More Sustainable - A Guide for Policy Makers", *UNEP publications*, pp. 11-12.

United Nations World Tourism Organization (UNWTO) (2007), "Davos Declaration on Climate Changes and Tourism - Responding to Global Challenges", Davos, Switzerland.

Waterman, S. (1998), "Carnivals for Elites? The Cultural Politics of Arts Festivals", *Progress in Human Geography*, Vol. 22, No. 1, pp. 54-74, doi: 10.1191/030913298672233886.

Wilkinson, A., Hill, M. & Gollan, P. (2001), "The Sustainability Debate", *International Journal of Operations & Production Management*, Vol. 21, No. 12, pp. 1492-1502, doi: 10.1108/01443570110410865.

World Commission on Environment and Development (WCED) (1987), *Our Common Future*, Oxford UP: Oxford.

Wright, R. K., Dickson, G., & Ajiee, R. O. (2021), "Active Tourism in the Active Economy", in D. Finch & D. Legg (Eds.), *Understanding the Active Economy and Emerging Research on the Value of Sports, Recreation, and Wellness*, pp. 119-137, IGI Global, doi: 10.4018/978-1-7998-7939-8.ch007

Zifkos, G. (2015), "Sustainability Everywhere: Problematising the "Sustainable Festival" Phenomenon", *Tourism Planning & Development*, Vol. 12, No. 1, pp. 6-19, doi: 10.1080/21568316.2014.960600.

Further reading

National Institute of Statistics (2022), *Population by municipality*, available at: https://www.ine.es (accessed 21 April 2023)

Online Business School (2019), "Los Festivales de Musica en España", available at: https://www.obsbusiness.school (accessed 10 May 2023)

Spanish Ministry of Transport, Mobility, and Urban Agenda (2022), *Pasajeros de cruceros*, available at: https://www.puertos.es (accessed 21 April 2023)

Corresponding author

Antonio García-Sánchez can be contacted at: a.garciasanchez@upct.es

David Siles can be contacted at: david.siles@um.es

María del Mar Vázquez-Méndez can be contacted at: mar.vazquez@upct.es