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Inclusiveness in the Caribbean-Locals' Perceptions about Nature, Tourism and Recreation in Bonaire

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Abstract: The economies of small tropical islands often benefit from large-scale tourism, attracted by the guarantee of beach facilities, sun and warmth, landscape beauty, and cultural and underwater life. While these are highly valued assets, it is unclear how local communities benefit from tourism, or how they perceive their natural environment, which has been the basis for their rich cultural history. Against this background, the main aim of this article is to investigate inhabitants' perceptions about locals' inclusiveness in tourism and recreation on a small island called Bonaire. A total of 400 households were interviewed during the period November 2021–February 2022. Inclusiveness in tourism and the welfare it brings are judged as low, based on the findings in this study. With a share of around 40% of the population of Dutch Caribbean islanders living in poverty, the challenge of inequality is urgent. While environmental degradation contributes to inequality, inequality can also contribute to environmental degradation. To reduce inequalities, while ensuring life below water and life on land, the handling of poverty is one of the most critical bottlenecks in this society.

Keywords: small islands; Caribbean; Bonaire; inclusiveness; tourism; nature inclusiveness; household survey



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1. Introduction

The literature informs us that the economy of many small tropical islands benefits from large-scale tourism attracted by sun, sand, and the beauty of the natural environment [1–3]. While the term "responsible tourism" refers to making use of tourism as a means to improve living standards and qualities of tourism in the visited places, the so-called "overtourism" refers to the opposite, namely "the impact of tourism on a destination, or parts thereof, that excessively influences perceived quality of life of citizens and/or quality of visitors' experiences in a negative way" [4] (p. 4). Overtourism highly depends on context-specific factors such as urban, rural, and coastal spaces, among others, that are used extensively for tourism purposes with adverse impacts on quality of life and well-being of local residents [5–8]. Hence, with overtourism, inclusion of local populations to benefit from tourism often fails.

In the Caribbean islands, context-specific factors include unique nature values [9], such as turtle's cycles of laying eggs [10], terrestrial nature diversity [11], coastal nature diversity [12] and birds [13]. Moreover, a rich culture, heavily shaped by the trade and exploitation of enslaved Africans from the seventeenth to the nineteenth century exists [14]. As such, interactions between tourism, unique nature and cultural history of this region are complex. Because of the complexities of the economic, social, and environmental systems and the extensive influx of tourists [15], it is particularly challenging for specific Caribbean islands to ensure inclusiveness of local communities in tourism, and at the same time preserve existing marine and terrestrial unique nature values, when aiming at economic

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growth by means of escalated tourism. The existing literature is poor in addressing these complexities in the context of Caribbean islands.

Different uses of "inclusiveness" exist in the literature. For instance, measures described as nature-inclusive address societal, cultural and economic challenges while providing benefits to nature [16]. Moreover, inclusiveness is interpreted as synonymous to concepts used for standards of living [17]; for instance, (1) "economic development", addressing income distribution, inequalities, labour force qualities, participation and the role of institutions; (2) "inclusive growth", covering issues of productive employment, overall standards of living and economic well-being of host population; and (3) "inclusive development", focusing on non-income aspects, such as the social and environmental aspects including labour participation, education and environmental protection.

In this study, a social—ecological system (SES) approach is applied to address the complexities of inclusiveness in tourism, and of unique nature values and local communities, which links a nature-based resource system and a human-based governance system through human actions leading to impacts and change through the interactions of the systems [18,19]. The SES is applied on Bonaire, an island that is part of the Dutch Antilles in the Caribbean, where the tourism sector has different branches, such as cruise tourism, as well as stay-over tourists arriving by flight to relax on the beaches or snorkelling across the beautiful coral reeves around the island. Moreover, Bonaire's population is currently rising by 4% per year; on 1 January 2022 Bonaire had 22,573 inhabitants [20], while the number of tourists, particularly cruise tourists, has risen dramatically in the past few years (cruise tourist visitation went from 158,000 in 2012 to 458,000 in 2019 [21]). At the same time, communications on the island and in a series of Dutch newspapers, confirmed by the Dutch Ombudsman, state that poverty is still prevalent for about 40% of Dutch Caribbean islanders [22] (p.6). It is unclear to what extent Bonaire's inhabitants are confronted with tensions between overtourism, poverty, and degradation of the natural environment.

Against this background, the main aim of this article is to investigate inhabitants' perceptions about locals' inclusiveness in tourism and recreation in the island of Bonaire. More specifically, this article investigates three objectives:

- Bonaire's inhabitants' perceptions about inclusiveness in natural resource-related recreation;
- Bonaire's inhabitants' perceptions about inclusiveness in the tourist sector, and their support to a selection of different measures;
- Differences in perceptions among Bonaire's population born in Bonaire, Aruba or Curaçao (ABC countries), and in the Netherlands.

Analysing the inhabitants' perceptions on tourism, nature, and social well-being across neighbourhoods of Bonaire, a total of 400 interviews of households in Bonaire were carried out during the period November 2021–February 2022.

2. The Social-Ecological System (SES) in Bonaire

Complex contexts complying with multiple challenges were targeted by a total of 17 sustainable development goals (SDGs) when introduced by the United Nations General Assembly for achievements of a better and more sustainable future for all [23]. Although many of the SDGs are relevant to a Caribbean context, for this study, the following are of particular relevance; (1) No poverty (SDG1), given that the growth of tourism is not necessarily synonymous with poverty reduction. Contrarily, existing inequalities can be further escalated by it (SDG1) [24,25]; (2) life below water (SDG14), referring to the needs to conserve unique nature values below water including corals and diversity in marine ecosystems [26]; and (3) life on land (SDG15), including unique diverse flora on land, involving turtles and flamingos [16].

According to Ostrom [18,19], all humanly used resources are embedded in complex, social—ecological systems (SESs), that consist of interlinked social, economic, and political settings and natural ecosystems. SESs are composed of multiple subsystems and internal variables within these subsystems at multiple levels. The subsystems include natural

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resource systems, resource units, institutional systems and actors. See the illustration in Figure 1 (inspired by [18,19]).

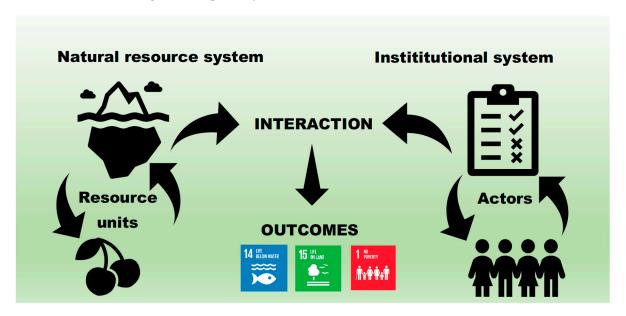


Figure 1. A social–ecological system approach for small tropical islands.

A resource system refers to the interactions and feedback loops of resources, including the cycles of climate, water and nutrients, which are critically important to sustaining our lives and ensuring resilience in our wellbeing. The resource units are the ecosystem services that are of interest to people and their wellbeing. The institutional system refers to formal and informal rules, norms and regulations that decide on when and where and why actors interact or not [18]. The actors include all different roles of a society, including citizens, market actors, public administration, policy makers, cities, etc. These four main components interact and lead to specific outcomes, which include the outcomes of the SDGs, such as no poverty (SDG1), as well as ensuring life below water (SDG14) and life on land (SDG15) [23]. In Figure 2, these dimensions have been captured by a picture of Bonaire.



Figure 2. Social–ecological system in Bonaire (Shutterstock).

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Through interactions and dialogues by and among people, the natural and institutional systems are impacted in different ways. In Bonaire there has been a changing emphasis on tourism and nature, made visible in different policy strategies [16]. For instance, in the years 1992–2017, the European, especially Dutch, policy makers emphasized the need for more stringent strategies for conserving the environment, while in 2017, the US contributed to a blue growth tourism plan [27]. In this plan they made a distinction between mass tourism and sustainable growth, with nature used as a marketing strategy for the multinational tourism industry.

3. Methods and Materials

During the period November 2021–February 2022, a total of 400 households responded to a questionnaire survey. The draft questionnaire was distributed for comments to academic experts on, among others, natural resources and economics, as well as to a network in Bonaire including representatives of the local government, businesses and environmental non-governmental organisations (NGOs), including both natural resource and tourism representatives. The questionnaire was translated from English to Dutch, Spanish, and Papiamento, the most spoken languages on Bonaire. The selection of interviewees was performed by five local people employed to conduct the interviews, applying a so-called random walk strategy, bearing in mind a distribution of age, gender, and background to be as diverse as possible. The interviews were conducted in person and answers were recorded on tablets (using Survey Monkey software) or written on paper. The draft questionnaire in English can be provided upon request to the main author. Respondents could fill in the questionnaire themselves or be interviewed by an interviewer who filled in the responses on a paper version of the questionnaire, while explaining each question carefully. When the survey was conducted as an interview, the answers from the completed paper forms were copied onto the tablets in the office. The tablet software only supported English. In Figure 3, inhabitants are filling in the questionnaire.



Figure 3. Collection of questionnaires in Bonaire, March 2022.

The geographical scope of the study includes a total of 22 regions in Bonaire (Amboina, Belnem, Entrejol Pabou, Entrejol Pariba, Guatemala, Hato, Lagun Hill, Lima, Mexico, Nawati Noord, Nawati Zuid, Nikiboko, Noord Saliña, Playa, Playa Pabou, Playa Pariba, Rincon Noord, Rincon Zuid, Sabadeco, Sabana, Santa Barbara, Tera Kora). The exact number of households interviewed in each area is provided in Figure 4.

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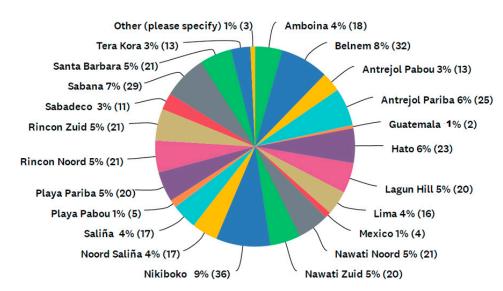


Figure 4. Overview of locations of each of the 400 questionnaires conducted in this study.

Of the interviewees, a total of 37% were born in Bonaire, 25% were born in Curaçao, 21% were born in the Netherlands, and about 5% came from Aruba, and an equal number came from South America. The remaining 7% were born in other European countries, Canada, New Zealand etc. The years of having lived in Bonaire differed, with 15% having lived there less than 5 years, 30% between 5 and 19 years, 36% between 20 and 39 years, and 19% between 40 and 80 years. The age of the respondents differed, with the youngest being 15 years old, and the oldest 80 years old. Only 18 respondents were more than 65 years old. Furthermore, the respondents represented the following age categories: 14% in the category 15–24 years, 40% in the category 25–39 years, 36% in the category 40–59 years, and 11% in the category 60–80 years.

Moreover, a total of 59% were women, and 61% of the interviewees reported that they were the head of the household. Thirteen percent lived in a household with one person, and 56% lived in a household with 2–3 people, whereas 27% and 4% lived in a household with 4–5 people, and more than 5 people, respectively. Education level was reflected by 27% of respondents having finalised secondary school, 32% having had high school (or MBO) and 40% university (or HBO) level. The remaining 1% included some who had not yet finalised their education.

About 8% of the interviewees had more than one income-generating occupation, while 7% did not work, including retirement. An overview of main income-generating occupations among respondents is provided in Figure 5.

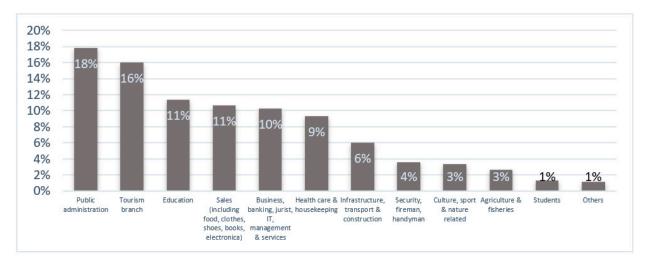


Figure 5. Overview of occupations of respondents in the survey.

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In addition to presenting the results of average perceptions of Bonaire based on a series of the questions asked visually in a series of figures, this study applied descriptive statistics to test the difference-in-means t-test to find whether the responses between two groups were significantly similar or different. The data were analysed using Stata software [28] to process the data, while analyses were made using a statistical programme called "R" [29]. The two groups were identified by means of discussing with Bonaire representatives, (1) people born in Bonaire, Aruba, or Curaçao (ABC-countries), and (2) people born in the Netherlands.

4. Results

This section presents the results of the household survey. The section is distinguished according to the three main objectives of Bonaire's inhabitants' perceptions about: (1) natural resource-related recreation and inclusiveness; (2) inclusiveness in the tourist sector; and (3) applicability of measures to Bonaire.

4.1. Natural Resource-Related Recreation and Inclusiveness

In this section the local inhabitants' engagement with nature on Bonaire was investigated, with five main questions, including a series of sub-questions. The first question was: "What is your favourite area to recreate?" In Figure 6 it can be seen that the coastal areas are favoured over others (41%). This is followed by the Kunuku landscapes (34%) and Slagbaai nature park (32%).

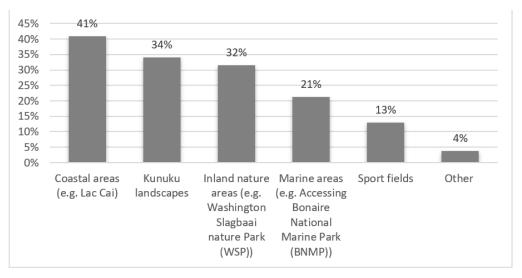


Figure 6. Favourite recreational nature areas among inhabitants of Bonaire.

The second question asked was: "What are your favourite types of nature in Bonaire?" In this case respondents were instructed to select three options. While the option marine coastal landscapes (57%) scored the highest, this was followed by cultural landscapes (44%), under water seascapes (37%), the national park (33%), and aesthetics (28%). The priorities provided are visualized in Figure 7.

The third question asked about nature in this study was: "Which nature-related activities do you carry out the most?" Similar to the previous question, they were asked to select three options. The three most-favoured options were swimming (45%), enjoying the view (42%), and hiking (33%). These were followed by getting fresh air (27%), being in nature (25%), and car driving (24%). Figure 8 gives a full overview of the relative priority differences across the different options.

The fourth question was: "How often do you carry out nature-related activities?" As Figure 9 shows, some 70% of the population carry out nature-related activities once a week or every day. Also, in the "other category", half of the respondents informed that they do so twice a week.

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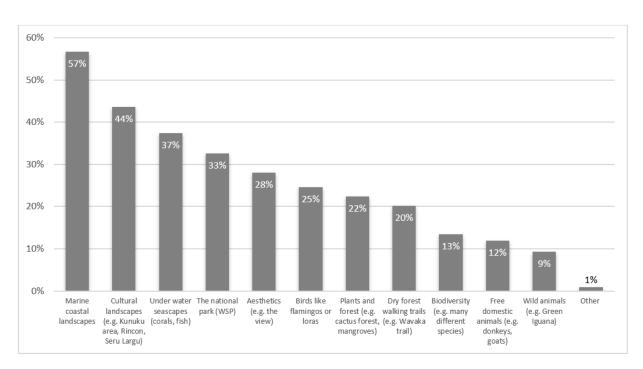


Figure 7. Favourite types of nature among inhabitants of Bonaire.

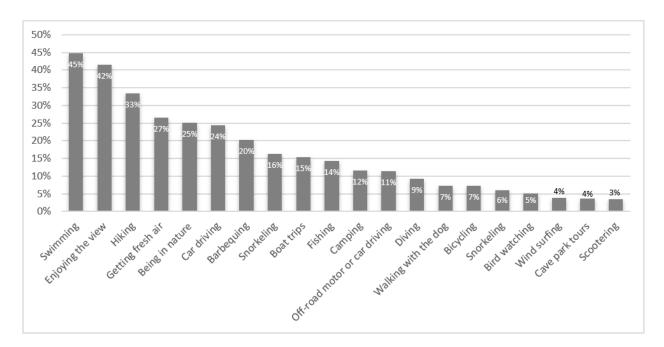


Figure 8. Favourite nature-related activities among inhabitants of Bonaire.

The sixth question was: "Which facilities would you like to see improved for your nature experiences?" They were asked to select the most-liked option. More than half of the respondents reported that they would like to see picnic tables, benches, and barbeque facilities (54%), and hiking trials (29%) and interpretive signs (24%) would be highly welcomed. See Figure 10.

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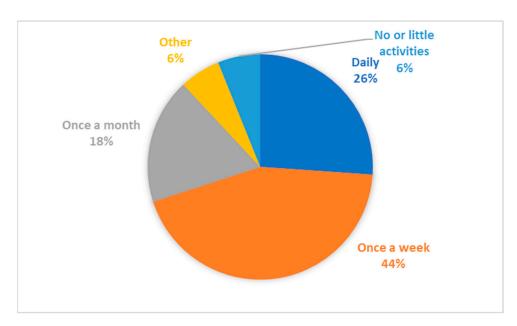


Figure 9. How often inhabitants of Bonaire carry out nature-related activities.

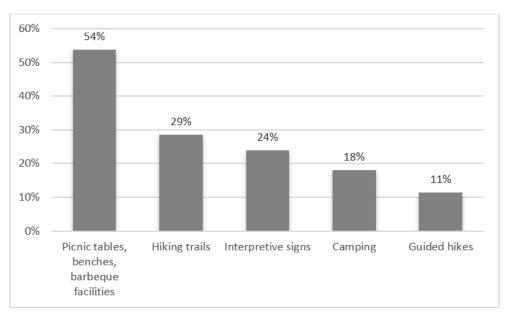


Figure 10. Facilities that can improve nature experience of inhabitants.

4.2. Inclusiveness in the Tourist Sector

In this section the local inhabitants' perceptions about tourism in Bonaire are investigated, with a total of three questions. The first question was: "How does cruise tourism affect welfare on Bonaire locally?" This question involved a series of statements. For each statement, the respondents were required to inform whether they fully disagreed, slightly disagreed, did not agree nor disagree (neutral), slightly agreed or fully agreed. More than 70% of the respondents agreed to the statements about cruises contributing to employment and opportunities for sales of locally produced products, while a bit less than 70% agreed with the increased opportunities for sharing local culture, and with the opportunity for Bonaire's economy with increased cruise tourism. The inhabitants agreed to lower extents to the statements about potential negative impacts of cruise tourism, mostly so with impacts on agriculture and price levels on housing (about 20% agreed). About 40% disagreed that profit benefits the off-island entrepreneurs, and that cruise tourism provides a good

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100% 12% 90% 15% 80% 44% 16% 18% 16% 70% 23% 60% 50% 27% 29% 32% 40% 17% 16% 19% 20% 30% 17% 20% 31% 29% 8% 9% 7% 24% 22% 10% 6% 18% 9% 9% 9% 7% 0% Increase in Increase in Increase in cruise tourism provides provides provides increases leads to a too mainly profits gives a good leads to higher restrains employment opportunities for opportunities for welfare by the high influx of the off-island atmosphere general price opportunities for entrepreneurs locally sales of local sharing local extra income permanent offlocally and levels for using land for products island inspires local housing and agricultural culture (e.g. inhabitants dances, theater, neighborhoods commodities purposes dishes) (entrepreneurs, fortune hunters) ■ I fully disagree ☐ I slightly disagree ■ I do not agree nor disagree (neutral) I slightly agree

atmosphere on Bonaire. The influx of permanent off-island inhabitants seems to have no dominant agreement or disagreement category. See Figure 11.

Figure 11. Locals of Bonaire's perceptions on cruise tourism.

Distinguishing between the local inhabitants born in Bonaire, Aruba, and Curação (ABC countries), and people born in the Netherlands, the levels of significance show that the two groups have different or similar opinions (Table A1). Comparing difference-in-means, people born in the ABC countries were more positive, and the Dutch-born more negative about the statement "cruise tourism is giving a good atmosphere locally inspires local neighbourhoods" (p-value < 0.01). Furthermore, the ABC-born respondents on average agreed more with the statement that "increase in cruise tourism provides opportunities for sharing local culture" (p-value = 0.05) but responded more negatively to the statement "higher general price levels for housing and commodities" (p-value = 0.10), compared with the Dutch-born respondents.

The second question was: "How does stay-over tourism affect welfare on Bonaire locally?" This question involved a series of statements. For each statement, the respondents had to inform whether they fully disagreed, slightly disagreed, did not agree nor disagree (neutral), slightly agreed or fully agreed. About 80% of the respondents agreed to the statements about stay-over tourism contributing to employment and opportunities for sales of locally produced products, while about 75% agreed with the increased opportunities for sharing local culture, and with the opportunity for Bonaire's economy with increased cruise tourism. About 60% agreed that with the influx of permanent off-island inhabitants the price levels of housing would increase, and 45% agreed that stay-over tourism provides a good atmosphere for Bonaire. The inhabitants were indifferent when asked about the impacts on agriculture and on profit benefits for the off-island entrepreneurs. The most obvious differences were a relatively higher share of the population being in favour of stay of tourists than cruise tourists, and a higher impact on house prices and more influx of people as a result of the stay-over tourists. See Figure 12.

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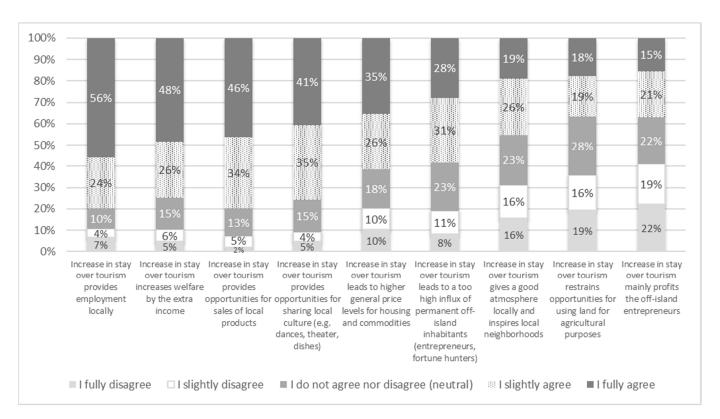


Figure 12. Perceptions of the locals on Bonaire about stay-over tourism.

Testing the differences in perceptions between the local inhabitants born in Bonaire, Aruba, and Curaçao (ABC countries), and people born in the Netherlands (Table A2), differences have been confirmed for the statements about stay-over tourism. For instance, the ABC-born respondents disagreed more than the Dutch-born respondents on average about the statement "increase in stay-over tourism restrains opportunities for using land for agricultural purposes" (p-value < 0.01), and about the statement that an increase in stay-over tourism leads to "higher price levels" or "extra income" (p-values < 0.10). Moreover, those born in the Netherlands agreed on average more with "increase in stay-over tourism is providing employment locally" and "…is leading to a too high influx of permanent off-island inhabitants", compared with the ABC-born respondents. However, Dutch-born disagreed more on average with "stay-over tourism is giving a good atmosphere locally" and "…is inspiring local neighbourhoods" (p-value < 0.05).

The third question was: "How does tourism affect infrastructure and the environment on Bonaire locally?" This question involved a series of statements. For each statement, the respondents were required to inform whether they fully disagreed, slightly disagreed, did not agree nor disagree (neutral), slightly agreed or fully agreed. About 75% of the respondents agreed to the statements about an increase in tourism leading to time getting lost in queuing due to high traffic, and overcrowded roads, traffic, and beaches. About 60% agreed to the statement about degradation and pollution of coastal and marine resources because of tourism, and that higher standards on roads and infrastructure are likely consequences of tourism. More than 50% agreed to tourism causing degradation to Bonaire's nature on land, and about 50% agreed to tourism leading to overcrowded impacts on privately owned properties. Notably, the disagreement to this is relatively low, with a large share having no opinion. The local inhabitants on the island were most indifferent on the question about tourism causing noise. See Figure 13.

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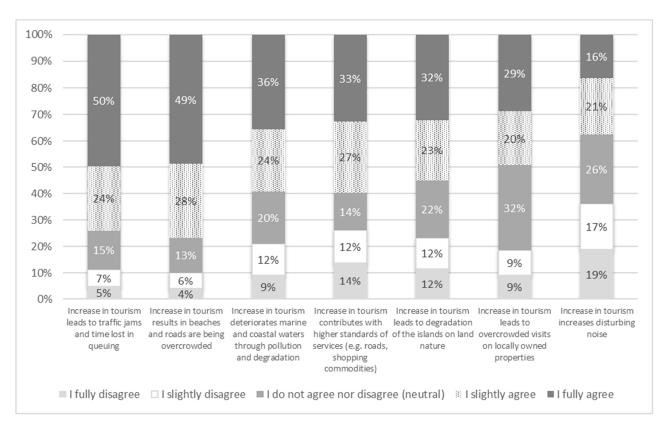


Figure 13. Perceptions of the locals of Bonaire about how tourism affects infrastructure and the environment of Bonaire locally.

Testing the differences in perceptions between the local inhabitants born in Bonaire, Aruba, and Curaçao (ABC countries), and people born in the Netherlands (Table A3), differences have been confirmed for a series of perceptions about infrastructure and the environment. The tests show that the respondents from the Netherlands agree on average more with the statements about "tourism leading to degradation of the islands on land nature" and "... in marine and coastal waters" through pollution and degradation, as well as leading to more "traffic jams and time lost in traffic" (p-value < 0.01) compared with the ABC-born respondents (p-value < 0.01).

4.3. Applicability of Measures to Bonaire

In this section, the local inhabitants' perceptions about measures needed for tourism in Bonaire are investigated, with a total of three questions. The first question was: "To which extent do you agree or disagree with the following statements about potential measures on Bonaire?" This question involved a series of statements. For each statement, respondents were required to inform whether they fully disagreed, slightly disagreed, did not agree nor disagree (neutral), slightly agreed or fully agreed. More than 80% of the respondents agreed to the statements that the increase in tourism must result in more investments in infrastructure, and a little less than 80% agreed to investing in regulating traffic. More than 70% agreed to the issue of water quality, which becomes more urgent with increased tourism. While 60% agreed to the increased taxing of tourism, about 55% agreed that cruise tourism should be reduced from the present level, and more than 40% agreed that stay-over tourism should be limited. The locals were more indifferent about the resulting lacking influence of locals on policy makers given increase in tourism. See Figure 14.

The local inhabitants born in Bonaire, Aruba, and Curaçao (ABC countries), and people born in the Netherlands (Table A4), had different perceptions about some of the statements. For instance, the tests of significance showed that the ABC-born respondents agreed on average more with "the need for increasing taxes on tourism", than the respondents born

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in the Netherlands (p-value < 0.05). Moreover, the Dutch agreed on average more with "the need to invest in infrastructure" (p-value < 0.10), "the need for ensuring good water quality" and "the need for limiting cruise tourism" compared with the perceptions of the ABC-born respondents (p-value < 0.05).

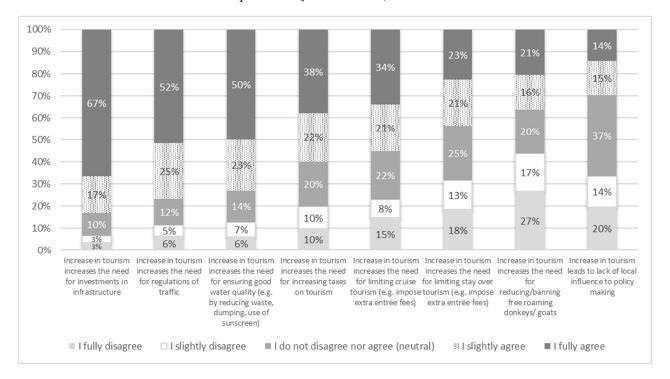


Figure 14. Perceptions of the locals of Bonaire on statements about potential measures in Bonaire.

The second question was: "How do you think information provision can contribute to Bonaire?" This question involved a series of statements. For each statement, the respondents were required to inform whether they fully disagreed, slightly disagreed, did not agree nor disagree (neutral), slightly agreed or fully agreed. The agreement with the statements about information provision and opportunities for contributing to information provision was very high, including for providing valuable insights on the nature values of Bonaire (86%), for contributing to increased local inclusiveness in tourism with more information-sharing about slavery, colonial times, culturally cherished species (82%), assisting in balancing nature conservation, tourism and local welfare (83%), and information contributing to preserving nature values on Bonaire (82%). Only the statement about information-sharing resulting in ever more overcrowding in Bonaire was slightly less favoured by the locals of Bonaire. See Figure 15.

The third question was: "What is your perception about economic growth, tourism and population, nature conservation on Bonaire?" This question involved a series of statements. For each statement, the respondents were required to inform whether they fully disagreed, slightly disagreed, did not agree nor disagree (neutral), or slightly agreed or fully agreed. More than 70% of the respondents agreed with the statement that it is important to allow growth of tourism to increase the welfare of Bonaire. A total of 60% agreed that it is important that the tourists should have the possibility to move freely on Bonaire, and slightly more than 50% supported the statement population growth should be restricted on Bonaire (52%) and that it is more important to conserve nature than to ensure economic growth (51%). Only 20% agreed with the statement that it is more important to focus on economic growth than conserve nature, which was disfavoured by a total of 61%. The locals were more indifferent toward the statement that it is important to designate specific areas to tourism, with only 35% being in favour. See Figure 16.

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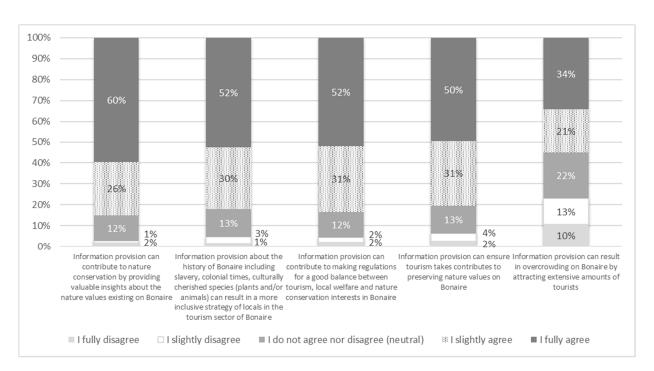


Figure 15. Perceptions of the locals of Bonaire on statements about information provision in Bonaire.

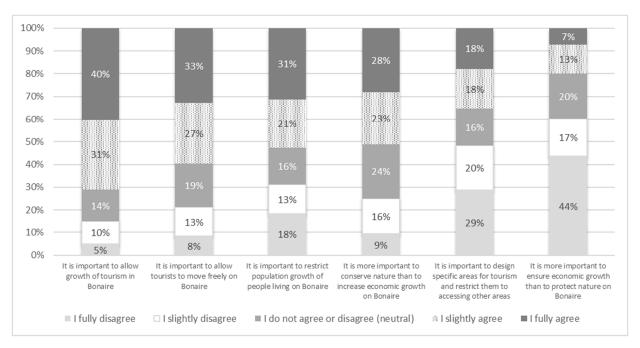


Figure 16. Perceptions of the locals of Bonaire on statements about economic growth, tourism and population, nature conservation in Bonaire.

The local inhabitants born in Bonaire, Aruba, and Curaçao (ABC countries), and people born in the Netherlands have different perceptions about the statements addressing economic growth, nature conservation, tourism and population in Bonaire (Table A5). For instance, it was found that the ABC-born respondents agreed more on average to allowing "growth of tourism in Bonaire" (p-value < 0.01) and "to ensure economic growth than to protect nature" (p-value < 0.01). In contrast, those born in the Netherlands agreed more on average that it is more important "to conserve nature than to increase economic growth in Bonaire" (p-value < 0.01) and "to restrict the population growth of people living in Bonaire" (p-value < 0.05).

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5. Discussion

The social–ecological framework connects the challenges observed as nature-based and human-based interactions in this study [18,19], interactions which have direct consequences for the SDGs on no poverty(SDG1), life below water (SDG14), and life on land (SDG15). In this article tensions between overtourism, poverty, and degradation of the natural environment were investigated by analysing the perceptions of the local inhabitants of Bonaire. A total of 400 residents were interviewed, including a total of 67% born in Aruba, Bonaire, or Curação (i.e., the ABC-born residents of Bonaire), and a total of 21% were born in the Netherlands. The remaining 12% of the interviewees were born all over the world, including South American countries, other European countries, Canada, and New Zealand. While the survey provides a wealth of information and results, limitations include that details of income levels have not been investigated for reasons of politeness, and the most vulnerable groups have not been included, given illiteracy among these inhabitants.

The inhabitants of Bonaire are aware of the risk of overtourism on the island. The specific questions about overcrowding confirmed that about 75% of the population agreed that increase in tourism results in traffic jams, time lost in queuing, and beaches and roads being overcrowded. A total of 60% agreed that overtourism deteriorates marine and coastal water through pollution and degradation, while equally many also agreed that an increase in tourism would lead to higher standards of services on the islands (e.g., roads). The literature informs us that, even if everyone agrees to existence of overtourism, setting an explicit limit on the development of tourist accommodation should be avoided because it can result in boosted excursionism [8]. Instead, taxing opportunities and attractions with less degradation impact on local nature values should be considered, such as more focus on local communities and their cultural assets, to change the behaviour of tourism to the benefit of islands' resiliency, in accordance with responsible tourism.

In the literature it is explained that small islands often are dependent on tourism to ensure income [8,9]. Also, the institutional system in Bonaire is highly centred around tourism, which consists of two large sectors: the cruise tourists and the stay-over tourists. However, looking at tourism-related activities, only 27% of the respondents work for the tourism sector, and only 4% rent out rooms for tourism. Notably, a total of 18% did not know if they would rent out rooms in future, thus in a category with people who may be willing depending on the opportunities. These findings indicate that inclusiveness in nature seems to be relatively high, covering a series of nature-related activities, while inclusiveness in tourism is low. Based on recent literature, it appears that income from tourism has failed to alleviate poverty and has not contributed to reducing inequalities [17,30,31].

At the same time, concerns on the island about the increase in tourism after 2017 putting extra pressures on the biodiversity of Bonaire are still highly prevalent. Currently the dry forest and coral reef ecosystems on Bonaire are in a poor state [32]. If nothing is done to safeguard these systems against several stressors, including feral livestock, coastal development, trampling, overfishing, and overexploitation of nature areas due to recreational use, all increasingly contributing to the current state of nature on Bonaire, its status as a natural pearl will be at risk. Also, the ever-rising population, the number of tourists, particularly cruise tourists, is causing risk factors to the sustainability of Bonaire's nature. Because of these concerning trends, Bonaire's government has acknowledged its intentions to develop sustainably with a "Blue Destination" concept, although a concrete plan for how to do this without further jeopardizing Bonaire's coral reefs and nature is still lacking.

The two different worries, one related to nature degradation and the other to poverty, have different impacts on different groupings. The study reveals that the natural resource systems for the inhabitant are the most valuable in terms of marine coastal landscapes, cultural landscapes (e.g., Kunuku area, Rincon, Seru Largu), underwater seascapes (corals, fish) and the national park (WSP), while the most carried out nature-related activities ranked the highest are swimming (45%), enjoying the view (42%), hiking (33%), getting fresh air (27%), being in nature (25%), car driving (24%), and barbequing (20%). These activities

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are carried out on a daily or weekly basis for 70% of the people. Moreover, in this study, two groups have been distinguished, namely Dutch-born and ABC-born residents. The Dutch-born residents are more supportive of statements about nature conservation, and less supportive of statements about economic growth. They are favourable toward restricting population growth on the island, worrying about effects of tourism on degradation of land and deterioration of coastal areas, as well as believing that tourism restrains opportunities for using land for agricultural purposes and increases the influx of the number of permanent people living on the island. In contrast, the ABC-born residents are more favourable toward statements favouring both cruise and stay-over tourism contributing to a good atmosphere and creating opportunities to share culture, and they welcome growth in tourism and economic growth more than the Dutch-born residents. The perceptions differ in the two groups, explained by the core worries they are struggling with related to nature degradation on the one hand, and poverty on the other hand.

The question is whether an increase in tourism will increase local earning and employment and reduce poverty levels [25]. The interplay between the local tourism network of Bonaire and the larger transnational network of cruise tourism is reflected by the interaction between a global level cruise network and the locality of Bonaire's tourism [33]. Looking at the projected earnings of the tourism sector of Bonaire, considering indirect businesses such as taxis, restaurants, and over-nights, it has been estimated that the sector will bring about from USD 398.2 m to USD 456.7 m in 2024, depending on which scenario is considered [34] (p 35). In all scenarios, per capita household consumption per year stabilizes at about USD 12,500. The larger share of this earning is going somewhere other than to the inhabitants of Bonaire, given the very small share of direct engagement in tourism (16% of the respondents). The purpose of presenting this number is not to begin a discussion about these absolute values, but to address the critical issue of inequality, since thousands of people in Bonaire remain living in poverty while profits are made. This fits into a trend indicated by Chanke and Piketty [35] (p 19) at a global level; "within-country inequality dropped in 1910–1980 (while between-country inequality kept increasing) but rose in 1980–2020 (while between-country inequality started to decline)".

Social implications related to tourism include requirements of a more inclusive and sustainable approach that reduces income inequalities, benefits local communities, and contributes to development of human capital [36].

6. Conclusions

This study contributes to the field of research addressing complexity [15,37] by analysing interactions between the tourism, unique nature, and cultural history of the Caribbean islands, which are complex, given the economic, social, and environmental systems attached to them, including the extensive influx of tourists. Although a rich culture exists on these islands, linked with trade and exploitation of enslaved Africans from the seventeenth to the nineteenth century [14], it is particularly challenging to ensure inclusiveness of local communities in tourism, and at the same time preserve existing marine and terrestrial unique nature values when aiming for economic growth by means of escalated tourism. The main aim of this article was to investigate inhabitants' perceptions about locals' inclusiveness in tourism and recreation on the small island of Bonaire.

This study applied the social–ecological system (SES) framework for investigating inclusiveness from two different angles [18,19]: (1) from a nature inclusiveness angle, and (2) from the angle of inclusiveness in tourism, which is the largest source of welfare in Bonaire. A general finding is that while residents are relatively included in the natural resource system of Bonaire, they are largely excluded from the tourism industry, with only 16% of the respondents working for the sector, while at the same time, the tourism industry alone makes profits that could contribute an average of USD 12.500 per year per capita [34]. Moreover, although most inhabitants are concerned about the impacts overtourism can have on the islands, there is a significant difference between the ABC-born residents and the Dutch-born residents. While the Dutch-born residents seem to be more worried about

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the unique nature values on the island, the ABC-born residents are more concerned about reducing poverty and increasing income levels. There is thus a tension in perceptions regarding economic and environmental sustainability.

The business model adopted by many small islands is based on mass tourism strategies, for which transnational corporations are the primary beneficiaries, and often the local communities and the natural environment suffer [30]. As such, it can be argued that Bonaire, although not necessarily worse than other islands in the Caribbean such as for instance Antigua and Barbuda [38], suffers from overtourism, which can be explained as "destinations where hosts or guests, locals or visitors, feel that there are too many visitors and that the quality of life in the area, or the quality of the experience has deteriorated unacceptably" [39] (p.1). The literature informs of increasing problems caused by overtourism, escalated by uncontrolled demand and a concentration in destinations where impacts are negative to territories and local communities, among others [40]. Given the findings in this study, in order to achieve resilient and sustainable social—ecological systems, the impacts of tourism must be distinguished from what they are based on mass tourism, compared with impacts of community-based tourism.

A main barrier facing developments towards a more resilient social–ecological system is the lack of opportunities for access financial systems for local populations [41]. Greater emphasis should be put on supporting local-level collaboration and innovation in tourism, support of "my own backyard" initiatives to local tourism, especially when popular awareness of climate and environmental degradation is part of small-scale business strategy [9]. Moreover, social innovation is needed to restructure existing institutional capacities to be more inclusive, by means of changing: (1) attitudes and perceptions; (2) action in terms of learning, networking, and collaboration; and (3) scale, scope, and resonance, referring to number of people included, institutional change, and beliefs in what is possible, respectively [42,43].

Inclusiveness is not only a matter of financial opportunities but is also a matter of heritage justice in the greater Caribbean, where cultural heritage often connects with a colonial past, involving brutal regimes of slavery systems, developed into needs for emancipation and further to independence and a shared sense of ownership [31]. As such, inclusiveness is not only a contemporary ethical thought, but a justification based on history.

Assessing the extent to which the institutional setting is improving can be performed according to the following critical conditions [44,45]: (1) inclusiveness to demonstrate economic, social, and territorial cohesion based on a high-employment economy; (2) sustainability to ensure a natural resource-efficient, greener, and more competitive economy; and (3) smartness to provide an economy with high level of knowledge as well as technological, social, and organisational innovations. As Stieglitz [46] states, natural resource degradation is a general problem, but more so for low-income groups. While environmental degradation contributes to inequality, inequality can also contribute to environmental degradation. Distributional concerns of both outcomes and opportunities require explanation to be able to successfully reach resiliency and sustainability in social—ecological systems, through pathways of transitions. To reach that end, in this article the following research topics are recommended for future follow-ups:

- The interlinkages between poverty and natural degradation on small tropical islands, with the large influx of tourism and a large share of low-income groups, need more investigation.
- Inclusiveness is a concept with multiple meanings and needs further investigation to define why it is of relevance for transitional pathways aiming for resiliency and sustainability in social–ecological systems, and how to ensure inclusiveness in future developments.
- The inequalities of the world have been put on the agenda [e.g., 16,26], and should be regarded a cross-cutting theme to research on, among others, climate change, natural degradation, as well as food insecurity, hunger, malnutrition, and lack of wellbeing for future generations.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: In this survey, no name or contact information has been selected in any way. In preparing for this survey, close cooperation took place with the coordinator of privacy and ethical matters (Carla Brinkman) of the WUR, to confirm of any protection measure to be taken according to the WUR code of conduct (see BS 7799, ISO/IEC 17799 and ISO/IEC 27002:2017. https://www.wur.nl/en/about-wur/integrity-and-social-safety.htm).

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Appendix A. Difference-in-Means t-Test to Find Whether the Responses between Two Groups Were Significantly Similar or Different: (1) People Born in Bonaire, Aruba and Curação (ABC-countries), and (2) People Born in The Netherlands)

Table A1. Two-sample t-test for differences in responses about cruise tourism by origin.

How Does Cruise Tourism Affect Welfare in Bonaire Locally?	Born ABC Isl		Born in NL		t-Test		
in bonaire Locarry:	Mean	N	Mean	N	Difference	<i>p-</i> Value	Sig.
Increase in cruise tourism provides employment locally.	3.862	268	4.069	87	-0.207	0.191	
Increase in cruise tourism increases welfare by the extra income.	3.775	267	3.529	87	0.247	0.115	
Increase in cruise tourism provides opportunities for sales of local products.	4.067	268	3.908	87	0.159	0.263	
Increase in cruise tourism leads to higher general price levels for housing and commodities.	2.627	268	2.920	87	-0.293	0.096	*
Increase in cruise tourism mainly profits the off-island entrepreneurs.	2.825	268	3.035	85	-0.211	0.231	
Increase in cruise tourism provides opportunities for sharing local culture.	3.933	267	3.571	84	0.361	0.025	**
Increase in cruise tourism gives a good atmosphere locally and inspires local neighbourhoods.	3.015	267	2.172	87	0.843	0.000	***

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Table A1. Cont.

How Does Cruise Tourism Affect Welfare in Bonaire Locally?	Born ABC Isl		Born in	NL	t-Test		
in bonaire Locarry.	Mean	N	Mean	N	Difference	<i>p</i> -Value	Sig.
Increase in cruise tourism restrains opportunities for using land for agricultural purposes.	2.515	266	2.632	87	-0.117	0.492	
Increase in cruise tourism leads to a too high influx of permanent off-island inhabitants.	3.030	265	3.103	87	-0.073	0.664	

Note: We present statements and ask if respondents: fully disagree (1), slightly disagree (2), do not agree nor disagree (neutral) (3), slightly agree (4) or fully agree (5). Significance level: *** p < 0.01, ** p < 0.05, * p < 0.1.

Table A2. Two-sample t-test for differences in responses about stay-over tourism by origin.

How Does Stay-Over Tourism Affect Welfare in Bonaire Locally?	Born ABC Isl		Born in NL		t-Test		
in bonaire Locarry:	Mean	N	Mean	N	Difference	<i>p-</i> Value	Sig.
Increase in stay-over tourism provides employment locally.	4.059	269	4.407	86	-0.347	0.018	**
Increase in stay-over tourism increases welfare by the extra income.	3.959	268	4.198	86	-0.239	0.098	*
Increase in stay-over tourism provides opportunities for sales of local products.	4.193	269	4.012	86	0.182	0.135	
Increase in stay-over tourism leads to higher general price levels for housing and commodities.	3.587	269	3.872	86	-0.285	0.081	*
Increase in stay-over tourism mainly profits the off-island entrepreneurs.	2.866	269	3.081	86	-0.215	0.211	
Increase in stay-over tourism provides opportunities for sharing local culture.	4.067	269	3.860	86	0.206	0.116	
Increase in stay-over tourism gives a good atmosphere locally and inspires local neighbourhoods.	3.179	268	2.826	86	0.354	0.032	**
Increase in stay-over tourism restrains opportunities for using land for agricultural purposes.	2.784	269	3.349	86	-0.564	0.001	***
Increase in stay-over tourism leads to a too high influx of permanent off-island inhabitants.	3.519	268	3.884	86	-0.365	0.018	**

Note: We present statements and ask if respondents: fully disagree (1), slightly disagree (2), do not agree nor disagree (neutral) (3), slightly agree (4) or fully agree (5). Significance level: *** p < 0.01, ** p < 0.05, * p < 0.1.

Table A3. Two-sample t-test for differences in responses about how tourism affects infrastructure and the environment by origin.

How Does Tourism Affect Infrastructure and the Environment in Bonaire Locally?	Born ABC Isl		Born in NL		t-Test		
Environment in bonaire Locary:	Mean	Mean N	Mean	N	Difference	<i>p-</i> Value	Sig.
Increase in tourism contributes with higher standards of services.	3.410	268	3.686	86	-0.276	0.113	
Increase in tourism results in beaches and roads are being overcrowded.	4.067	267	4.186	86	-0.119	0.381	
Increase in tourism leads to traffic jams and time lost in queuing.	3.978	267	4.256	86	-0.278	0.051	*
Increase in tourism leads to degradation of the islands on land nature.	3.367	267	3.802	86	-0.435	0.009	***
Increase in tourism deteriorates marine and coastal waters through pollution and degradation.	3.431	267	4.035	86	-0.604	0.000	***
Increase in tourism leads to overcrowded visits on locally owned properties.	3.396	268	3.628	86	-0.232	0.127	
Increase in tourism increases disturbing noise.	2.899	267	3.105	86	-0.206	0.211	

Note: We present statements and ask if respondents: fully disagree (1), slightly disagree (2), do not agree nor disagree (neutral) (3), slightly agree (4) or fully agree (5). Significance level: *** p < 0.01, * p < 0.01.

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Table A4. Two-sample t-test for differences in responses about perceptions of the locals on statements about potential measures on Bonaire by origin.

To What Degree Do You Agree or Disagree with the Following Statements about Measures on Bonaire?	Born ABC Isl		Born in NL		t-Test		
ronowing Statements about Measures on bonaire:	Mean N	N	Mean	N	Difference	<i>p</i> -Value	Sig.
Increase in tourism increases the need for investments in infrastructure.	4.356	270	4.570	86	-0.214	0.093	*
Increase in tourism increases the need for regulations of traffic.	4.149	269	3.907	86	0.242	0.102	
Increase in tourism increases the need for ensuring good water quality.	3.959	270	4.267	86	-0.308	0.038	**
Increase in tourism increases the need for increasing taxes on tourism.	3.815	270	3.430	86	0.385	0.017	**
Increase in tourism increases the need for limiting cruise tourism.	3.341	270	3.733	86	-0.392	0.024	**
Increase in tourism increases the need for limiting stay over tourism.	3.141	270	3.116	86	0.024	0.889	
Increase in tourism increases the need for reducing/banning free roaming donkeys/goats.	2.896	270	2.814	86	0.082	0.656	
Increase in tourism leads to lack of local influence to policy making.	2.903	269	2.977	86	-0.073	0.643	

Note: We present statements and ask if respondents: fully disagree (1), slightly disagree (2), do not agree nor disagree (neutral) (3), slightly agree (4) or fully agree (5). Significance level: ** p < 0.05, * p < 0.1.

Table A5. Two-sample t-test for differences in responses about perceptions of the locals on statements about economic growth, tourism and population, nature conservation by origin.

To What Degree Do You Agree or Disagree with the Following Statements with Respect to Economic Growth,	Born ABC Isl		Born in NL		t-Test		
Tourism and Population, Nature Conservation?	Mean	N	Mean	N	Difference	<i>p-</i> Value	Sig.
It is important to allow growth of tourism in Bonaire.	4.037	271	3.563	87	0.474	0.001	***
It is important to allow tourists to move freely on Bonaire.	3.565	271	3.667	87	-0.102	0.521	
It is important to restrict population growth of people living on Bonaire.	3.296	270	3.678	87	-0.382	0.036	**
It is more important to conserve nature than to increase economic growth on Bonaire.	3.314	271	3.828	87	-0.514	0.001	***
It is important to design specific areas for tourism and restrict them to accessing other areas.	2.733	270	2.828	87	-0.094	0.605	
It is more important to ensure economic growth than to protect nature on Bonaire.	2.406	271	1.667	87	0.739	0.000	***

Note: We present statements and ask if respondents: fully disagree (1), slightly disagree (2), do not agree nor disagree (neutral) (3), slightly agree (4) or fully agree? (5). Significance level: *** p < 0.01, ** p < 0.05,

References

- 1. Walker, B.T.; Lee, T.J.; Li, X. Sustainable development for small island tourism: Developing slow tourism in the Caribbean. *J. Travel Tour. Mark.* **2021**, *38*, 1–15. [CrossRef]
- Mestanza-Ramón, C.; Pranzini, E.; Anfuso, G.; Botero, C.M.; Chica-Ruiz, J.A.; Mooser, A. An Attempt to Characterize the "3S" (Sea, Sun, and Sand) Parameters: Application to the Galapagos Islands and Continental Ecuadorian Beaches. Sustainability 2020, 12, 3468. [CrossRef]
- 3. Rubio-Cisneros, N.T.; Montero-Muñoz, J.L.; Rubio-Cisneros, I.I.; Morales-Ojeda, S.; Pech, M.; Ruiz-Ayma, G.; Gonzá-lez-Rojas, J.I. Tourists perceptions of Caribbean islands facing environmental threats before the COVID-19 health crisis: Holbox Island and Archipelago of Bocas del Toro. *PLoS ONE* **2022**, *17*, e0262014. [CrossRef] [PubMed]
- 4. United Nations World Tourism Organisation (UNWTO). *Overtourism: Understanding and Managing Urban. Tourism Growth Beyond Perceptions*; United Nations World Tourism Organisation (UNWTO): Madrid, Spain, 2018; Volume 12, Available online: https://www.e-unwto.org/doi/pdf/10.18111/9789284420070 (accessed on 16 October 2022).
- 5. Buitrago, E.M.; Yñiguez, R. Measuring Overtourism: A Necessary Tool for Landscape Planning. Land 2021, 10, 889. [CrossRef]
- García-Buades, M.E.; García-Sastre, M.A.; Alemany-Hormaeche, M. Effects of overtourism, local government, and tourist behavior on residents' perceptions in Alcúdia (Majorca, Spain). J. Outdoor Recreat. Tour. 2022, 39, 100499. [CrossRef]

Sustainability **2022**, 14, 14167 20 of 21

7. Milano, C.; Novelli, M.; Cheer, J.M. Overtourism and tourismphobia: A journey through four decades of tourism development, planning and local concerns. *Tour. Plan. Dev.* **2019**, *16*, 353–357.

- 8. Bertocchi, D.; Camatti, N.; Giove, S.; Van Der Borg, J. Venice and Overtourism: Simulating Sustainable Development Scenarios through a Tourism Carrying Capacity Model. *Sustainability* **2020**, *12*, 512. [CrossRef]
- 9. Lester, J.-A.; Weeden, C. Stakeholders, the natural environment and the future of Caribbean cruise tourism. *Int. J. Tour. Res.* **2004**, *6*, 39–50. [CrossRef]
- 10. Mejías-Balsalobre, C.; Restrepo, J.; Borges, G.; García, R.; Rojas-Cañizales, D.; Barrios-Garrido, H.; Valverde, R.A. Local community perceptions of sea turtle egg use in Tortuguero, Costa Rica. *Ocean Coast. Manag.* **2021**, 201, 105423. [CrossRef]
- 11. Smith, S.R.; Davaasuren, N.; Debrot, A.O.; Simal, F.; De Freitas, J.A. *Preliminary inventory of key terrestrial nature values of Bonaire (No. C003/12)*; Report number C003/12; IMARES: Yerseke, The Netherlands, 2012; p. 88. Available online: https://library.wur.nl/WebQuery/wurpubs/fulltext/200210 (accessed on 16 October 2022).
- 12. Van Duyl, F.C. Atlas of the Living Reefs of Curacao and Bonaire (Netherlands Antilles)—Foundation for Scientific Research in Surinam and The Netherlands Antilles, Utrecht, No. 117. 1985, pp. 1–90. Available online: https://www.dcbd.nl/sites/default/files/documents/Duyl%201985%20Atlas%20living%20reefs%20Caracao%20and%20Bonaire.pdf (accessed on 16 October 2022).
- 13. Wunderle, J.M., Jr. Birds of Aruba, Curacao and Bonaire. Ornitol. Neotrop. 2013, 23, 607–609.
- 14. Best, M.N. Freedom footprints: The Barbados story'—A slavery heritage trail. J. Herit. Tour. 2017, 12, 474-488. [CrossRef]
- 15. Farsari, I. Exploring the nexus between sustainable tourism governance, resilience and complexity research. *Tour. Recreat. Res.* **2021**, 1–16. [CrossRef]
- Verweij, P.; Cormont, A.; Nel, J.; De Rooij, B.; Jones-Walters, L.; Slijkerman, D.; Soma, K.; Van Eurpen, M. A Nature Inclusive Vision for BONAIRE in 2050 (No. 3023); Wageningen Environmental Research: Wageningen, The Netherlands, 2020; p. 46. Available online: https://library.wur.nl/WebQuery/wurpubs/fulltext/526467 (accessed on 14 October 2022).
- 17. Peterson, R.R.; DiPietro, R.B.; Harrill, R. In search of inclusive tourism in the Caribbean: Insights from Aruba. *Worldw. Hosp. Tour. Themes* **2020**, 12, 225–243. [CrossRef]
- 18. Ostrom, E. A General Framework for Analyzing Sustainability of Social-Ecological Systems. *Science* **2009**, 325, 419–422. [CrossRef] [PubMed]
- 19. Vogt, J.M.; Epstein, G.B.; Mincey, S.K.; Fischer, B.C.; Mccord, P. Putting the "E" in SES: Unpacking the ecology in the Ostrom social-ecological system framework. *Ecol. Soc.* **2015**, 20, 55. [CrossRef]
- 20. CBS. Caribbean Netherlands; Population, Births, Deaths, Migration. Central Burau of Statistics (CBS): The Netherlands, 2022. Available online: https://www.cbs.nl/en-gb/figures/detail/83774ENG?dl=498AF (accessed on 14 October 2022).
- 21. CBS. Cruise passengers Bonaire, 2012–2020*. Available online: https://www.cbs.nl/en-gb/custom/2021/07/cruise-passengers-bonaire-2012--2020- (accessed on 14 October 2022).
- 22. NOM; KOM. Caribische kinderen van de rekening—Een onderzoek naar armoedegerelateerde problematiek van alleenstaande ouders en hun kinderen in Caribisch The Nederlands; Reportnumber: 2022/058. National Ombudsman (NOM) and Child ('Kinder') Ombudsman (KOM): The Hague, The Netherlands, 2022; p. 43. Available online: https://www.nationaleombudsman.nl/system/files/bijlage/Rapport%20Caribische%20kinderen%20van%20de%20rekening.pdf (accessed on 14 October 2022).
- 23. UN-GA. *Transforming our world: The 2030 Agenda for Sustainable Development*; A/RES/70/1. Department of Economic and Social Affairs, Sustainable Development United Nations General Assembly (UN-GA): Rome, Italy, 2016; p. 41. Available online: https://sdgs.un.org/sites/default/files/publications/21252030%20Agenda%20for%20Sustainable%20Development% 20web.pdf (accessed on 14 October 2022).
- 24. Scheyvens, R.; Momsen, J.H. Tourism and Poverty Reduction: Issues for Small Island States. *Tour. Geogr.* **2008**, *10*, 111–129. [CrossRef]
- 25. Oviedo-García, M.; González-Rodríguez, M.R.; Vega-Vázquez, M. Does Sun-and-Sea All-Inclusive Tourism Contribute to Poverty Alleviation and/or Income Inequality Reduction? The Case of the Dominican Republic. *J. Travel Res.* **2019**, *58*, 995–1013. [CrossRef]
- 26. Laffoley, D.; Baxter, J.M.; Day, J.C.; Wenzel, L.; Bueno, P.; Zischka, K. Marine Protected Areas. In *World Seas: An Environmental Evaluation*; Academic Press: Cambridge, MA, USA, 2019; pp. 549–569.
- 27. University of Central Florida. Tourism Corporation Bonaire (TCB) plan. Florida, US, 2017; p. 112. Available online: https://www.tourismbonaire.com/strategictourismplan (accessed on 14 October 2022).
- 28. R Core Team. *R: A Language and Environment for Statistical Computing*; R Foundation for Statistical Computing: Vienna, Austria, 2017; Available online: https://www.R-project.org/ (accessed on 1 June 2021).
- 29. StataCorp. Stata Statistical Software: Release 14; StataCorp LP: College Station, TX, USA, 2015.
- 30. Hampton, M.P.; Jeyacheya, J. Tourism-Dependent Small Islands, Inclusive Growth, and the Blue Economy. *One Earth* **2020**, *2*, 8–10. [CrossRef]
- 31. Fortenberry, B.R. Heritage justice, conservation, and tourism in the Greater Caribbean. *J. Sustain. Tour.* **2020**, 29, 253–276. [CrossRef]
- 32. DCNA. State of nature in the Caribbean Netherlands. Dutch Caribbean Nature Alliance (DCNA), 2018; p. 20, DCNAnature.org. Available online: https://www.dcnanature.org/wp-content/uploads/2020/01/BioNews-StateofNature.pdf (accessed on 14 October 2022).

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33. van Bets, L.K.J.; Lamers, M.A.J.; van Tatenhove, J.P.M. Governing cruise tourism at Bonaire: A networks and flows approach. *Mobilities* **2017**, 12, 778–793. [CrossRef]

- 34. Wolfs, E.; Schep, S.; Gallegos, V.L.; van Beukering, P. What is Bonaire's cruise tourism worth. Institute of Environmental Studies, VU: Amsterdam, The Netherlands, 2015; 72. Available online: http://www.wolfscompany.com/wp-content/uploads/2016/02/Whats-Bonaires-Cruise-Tourism-Worth-Wolfs-Company-Revised-report-Aug-2015.pdf (accessed on 14 October 2022).
- 35. Chancel, L.; Piketty, T. Global Income Inequality, 1820–2020: The Persistence and Mutation of Extreme Inequality. *J. Eur. Econ. Assoc.* **2021**, *19*, 3025–3062. Available online: https://halshs.archives-ouvertes.fr/halshs-03321887/document (accessed on 14 October 2022). [CrossRef]
- 36. Spencer, A.J.; McBean, L.M. Alignment of tourism investment to the SDGs in Jamaica: An exploratory study. *Worldw. Hosp. Tour. Themes* **2020**, 12, 261–274. [CrossRef]
- 37. Manson, S.M. Simplifying complexity: A review of complexity theory. Geoforum 2001, 32, 405–414. [CrossRef]
- 38. Ramsey, V.; Cooper, J.A.G.; Yates, K.L. Integrated Coastal Zone Management and its potential application to Antigua and Barbuda. *Ocean Coast. Manag.* **2015**, *118*, 259–274. [CrossRef]
- 39. Goodwin, H. The challenge of over tourism. Responsible Tour. Partnersh. 2017, 4, 1–19.
- 40. Capocchi, A.; Vallone, C.; Pierotti, M.; Amaduzzi, A. Over tourism: A literature review to assess implications and future perspectives. *Sustainability* **2019**, *11*, 3303. [CrossRef]
- 41. Carrillo-Hidalgo, I.; Pulido-Fernández, J.I. Is the financing of tourism by international financial institutions inclusive? A pro-posal for measurement. *Curr. Issues Tour.* **2019**, 22, 330–356. [CrossRef]
- 42. Soma, K.; van den Burg, S.W.; Hoefnagel, E.W.; Stuiver, M.; van der Heide, C.M. Social innovation–A future pathway for Blue growth? *Mar. Policy* **2018**, *87*, 363–370. [CrossRef]
- 43. Soma, K.; van den Burg, S.W.; Selnes, T.; van der Heide, C.M. Assessing social innovation across offshore sectors in the Dutch North Sea. *Ocean Coast. Manag.* **2018**, *167*, 42–51. [CrossRef]
- 44. Soma, K.; Dijkshoorn-Dekker, M.W.C.; Polman, N.B.P. Stakeholder contributions through transitions towards urban sus-tainability. *Sustain. Cities Soc.* **2018**, *37*, 438–450. [CrossRef]
- 45. Soma, K.; Obwanga, B.; Kanyuguto, C.M. A New Rural-Urban Fish Food System Was Established in Kenya–Learning from Best Practices. *Sustainability* **2021**, *13*, 7254. [CrossRef]
- 46. Stiglitz, J.E. Inequality and environmental policy. In *Green Planet Blues–Critical Perspectives on Global Environmental Politics*, 6th ed.; Conca, K., Dabelko, G.D., Eds.; Routledge: New York, NY, USA, 2019; Chapter 30; pp. 381–384. Available online: https://www.taylorfrancis.com/chapters/edit/10.4324/9780429322204-37/inequality-environmental-policy-joseph-stiglitz (accessed on 14 October 2022).