

Is there Demand for Sustainable Tourism?

A study for the World Tourism Forum Lucerne 2011

April 2011

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Abstract

This empirical study consists of two parts. The first goal of this study is to learn more about tourists' understanding of sustainable tourism. The empirical survey with 6,000 respondents in eight countries identifies the most relevant aspects of sustainable tourism from a tourists' perspective. Overall the perception is balanced over the different dimensions. Furthermore, five different types regarding tourists' understanding of sustainable tourism are identified in a cluster analysis and a potential market size of sustainable tourism of 22% of all tourists can be identified. A choice experiment with almost 5,000 Swiss respondents is conducted in the second part. It shows that tourists principally favour sustainable tourism products. Although there are clear preferences in favour of sustainable products, it can be shown that the respondents are only willing to pay a small premium for the inclusion of specific attributes in most cases.

Keywords

Sustainable tourism, understanding of sustainable tourism, clustering, demand, empirical survey, choice model, choice experiment, conjoint

Citation

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Management Summary

The first goal of this study is to learn more about tourists' understanding of sustainability, because everybody talks about sustainability – including in the tourism sector. But what exactly is sustainable development from a tourist's perspective, how do tourists interpret the term sustainability and how do tourists assess the importance of sustainable development in tourism? To clarify these questions, an empirical survey confronts travellers from eight countries with different statements which describe variable attributes of sustainable tourism.

In general, tourists are well informed about the important aspects of sustainable tourism. The main descriptive findings of the first empirical phase on tourists' understanding of sustainable tourism are:

- The overall perception is balanced over the different dimensions. There is no clear prioritisation of a dimension. The share of people agreeing to the statements about sustainable tourism is only below 50% for some economic attributes and for the attributes "prolonged stay" and "CO₂-compensation".
- The attribute "upkeep of a scenic view and the cultural heritage" is assessed as most sustainable. Generally, attributes referring to *local* products, *local* community and *local* culture are judged as most sustainable.
- Tourists rate what they can see, and/or experiences directly at the destination as more relevant for sustainable tourism in the ecological dimension.
- For 22 % of the respondents, sustainability is among the top three influencing factors while booking vacations. This group of tourists, the so-called sustainability aware tourists, presents an interesting target group.

Five different types regarding tourists' understanding of sustainable tourism are identified:

- The *balanced type* seriously observes all three dimensions and has above average shares of agreement in all dimensions. 33% of the respondents belong to the balanced type.
- The *sceptic* has a critical attitude and rates all attributes clearly lower. 25% of the respondents belong to the sceptic type.
- The *socio-economic type* considers the social and economic dimension in particular. 12% of the respondents belong to the socio-economic type.
- The *localised type* rates especially the attributes related to local aspects of sustainability and to culture as relevant for sustainable tourism. 15% of the respondents belong to the localised type.
- The *ecological type* considers in particular ecological aspects to be relevant for sustainable tourism. 15% of the respondents belong to the ecological type.

The second goal is to empirically investigate if there is a potentially interesting market for sustainable tourism products. The preferences of tourists and also the willingness to pay a premium for sustainable products are identified by employing a choice experiment. The choice experiment was conducted with almost 5000 respondents in Switzerland. Generally, the choice experiment shows that tourists would principally like to buy sustainable tourism products. The respondents consistently favoured the more sustainable levels of the proposed attributes. Although there are clear preferences in favour of sustainable products, it can be shown that the respondents are not willing to pay a substantial premium for the inclusion of specific attributes. However, there is some evidence that potential customers of sustainable tourism products demand completely sustainable products and they are less price sensitive for such a product.

Although customers are not willing to pay a significant premium, this study concludes that offering sustainable tourism products could be a successful differentiation strategy in order to gain

additional market shares. There is an interesting market segment with a target group of 22% sustainability aware tourists who consider sustainability as important when booking a holiday.

Finally, the understanding of sustainable tourism mostly does not influence the behaviour of tourists. Nevertheless, the identified types of tourists are important for providers of touristic offers because it helps to understand how to approach the potential customers of sustainable products.

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1. Introduction

Sustainability is becoming a more and more important issue in the tourism sector. Nowadays, it is well known that sustainability is an important subject for the tourism sector: On the one hand, natural and social resources such as landscape, flora and fauna, local culture, traditions, etc. are essential input factors for tourism. On the other hand, tourism often (over-)stresses these resources. In the worst case, this overstraining can lead to the self-destruction of tourism. Therefore tourism cannot only use these resources, but has to manage them carefully.

Nowadays, more and more sustainable tourism products are developed. However, often they are still niche products which are offered in the luxury segment. In order to have a greater impact, sustainable tourism products should also be offered in the mass market. Despite existing products, it is not really clear who belongs to the target group, how large the target group is and what the typical characteristics of customers of sustainable tourism products are. Furthermore, it is not well known what the potential customers' understanding of sustainable tourism is, i.e. what characteristics are important for them and should be considered when designing a new sustainable product in order to meet the needs of potential customers. Budaneau (2007) states that the knowledge about tourists' preferences is incomplete and hinders sustainable progress in the sector. Finally, the question remains whether tourists actually demand these products and if they are even willing to pay more for sustainable products compared to standard products. This study tries to give some answers to these fundamental questions.

There are several reasons why sustainable tourism is believed to become important in the future. A recent study of the SNV Netherland Development Organisations (SNV 2009) lists "generational shifts", "urbanisation", "need to connect with nature", "going green", "demand for authenticity", "search for fulfilment" and "emergence of experiential tourism" as lifestyle trends that favour responsible travel. There are a lot of studies which try to measure the potential of sustainable tourism or for eco-tourism. Adlawarth (2010) finds that 33% of the German travel active households are Corporate Social Responsibility (CSR)-interested and that 50% of the CSR interested travellers would spend up to 5% more money and the remaining 50% up to even 10-15% more. Most of the other studies only look at the demand for eco-tourism or ecological aspects of sustainable tourism. Examples are TripAdvisor (2010), travelhorizons (2009), Lonely Planet (2007), Deloitte (2008) and Rheem (2009). However, these studies, which mostly define price premiums for sustainable products, ask only about how much people are willing to buy in a simple question. These kinds of studies tend to clearly overstate price premiums because only intention is measured without looking at the actual behaviour or without making comparisons with other goods or prices.¹ In order to check for the behaviour, Adlawarth (2010) looks at the travel patterns for holidays of CSR-interested travellers and compares them with the pattern of non-CSR interested. For example, CSR-interested travellers choose significantly more frequently train travel and bus.

1.1. Goals and design of the study

The general research question is:

Is there demand for sustainable tourism?

¹ Rheem (2009) asks "how much of a premium would you be willing to pay for any environmentally friendly travel choices when travelling for leisure?" She presents different options to the respondents, as for example "travel (in general)", "air travel option", "train travel option", etc. and lists the willingness to pay for each option. This method is called contingent valuation.

The study consists of two parts. The first part investigates what tourists really understand by the term or concept of sustainable tourism. The second part looks in detail at whether tourists actually book sustainable products and are willing to pay more for such products. The corresponding goals and the design of these two parts are briefly presented in section 1.1.1 and section 1.1.2.

1.1.1. Understanding of sustainable tourism

The first goal of the study is to learn more about tourists' understanding of sustainable tourism, because everybody talks about sustainability – including in the tourism sector. But what exactly is sustainable development from a tourist's perspective, how do tourists interpret the term sustainability and how do tourists assess the importance of sustainable development in tourism? These questions are hardly ever addressed in the scientific literature on sustainable tourism and therefore this study adds important new insights to the literature. To clarify these unanswered questions, an empirical survey confronts tourists from eight countries with different statements which describe variable attributes of sustainable tourism.

It is important to note that the goal of this study is not to discuss the correct definition of sustainable tourism from a theoretical point of view. We are mainly interested in how travellers perceive and define sustainability. The empirical evidence should help in gaining a better understanding of the relevant aspects that should be considered when designing a new sustainable product. It is important to recognise the relevant aspects because first of all the fulfilment of the needs of sustainable tourists is essential for the success of a sustainable product on the market.

In a second step, and based on the results of the above mentioned empirical survey, different types of tourists relative to their understanding of sustainable tourism are identified. This typology puts tourists with a similar understanding of sustainable tourism together into one cluster. With the help of this typology and the shares of each type, interesting insights for tour operators, hotels and other companies who want to develop sustainable products can be derived, because knowledge about the importance of different types of customers and their understanding of sustainability is gained. This helps to address the needs of the customer in an efficient and more goal-oriented way, and to identify the most interesting group of potential customers for a specific new product. The methodology of this first empirical part of the study is explained in more detail in section 3.1.

1.1.2. Choice experiment: Do tourists book sustainable tourism?

The second goal is to investigate empirically if there is a potentially interesting market for sustainable tourism products. The preferences of tourists and also the willingness to pay a premium for sustainable products are identified by employing a choice model. This methodology allows the design of products which include specific characteristics of sustainable tourism and the ability to determine the preferences of customers relative to the different included characteristics of sustainable tourism. To our knowledge, there does not exist a study in the scientific literature which uses choice models to address questions related to preferences towards sustainable tourism products which consider all dimensions of sustainability. Only the influence of ecological aspects or aspects not related to sustainability has been determined in most of the existing studies which use choice models. Furthermore, most of the existing studies which look at the demand for sustainable tourism products in general use contingent valuation and related methods. Therefore, the second part of the study adds to the existing literature a more detailed derivation of the preferences and willingness to pay for sustainable tourism. Additionally, choice models overstate the willingness to pay less than the often used method of contingent valuation. The choice experiment was conducted with almost 5000 respondents in Switzerland. Its methodology is explained in more detail in section 4.1.

1.1.3. Structure of the article

The article is structured as follows: The attributes describing sustainable tourism which are selected for the first part of the empirical survey are presented in section 2. Section 3 presents the empirical survey and its results regarding tourists' understanding of sustainable tourism. Furthermore a ranking of factors influencing the booking decision is presented. This allows an initial insight to be gained into the market potential of sustainable tourism. Section 3 finishes with the presentation of the typology of tourists. This is followed by the presentation of the most important finding of the second empirical part, i.e. the choice experiment in Switzerland in section 4. At the beginning of section 3 and section 4 the relevant literature for the respective empirical phase is presented. Finally the conclusions are discussed in section 5.

This article is a short version of the whole study which only shows the most important results. The long version with more and more detailed results, more elaborated explanations, more references to the existing literature, etc. can be downloaded from the Homepage of the Institute of Tourism of Lucerne University of Applied Sciences and Arts.²

2. Attributes describing sustainable tourism

There are a lot of different definitions and interpretations of sustainable tourism in the literature. The definition of sustainable tourism from the World Tourism Organization UNWTO states that sustainable tourism is tourism that "meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to the management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems" (UNWTO, 1995, cited in Miller, 2003).³ This definition is used for this study firstly because it is near to the famous sustainability definition of the Brundtland report (World Commission on Environment and Development, 1987), secondly, focuses on the key element of sustainability, i.e. the "the needs of the present without compromising the ability of future generations to meet their own needs", and thirdly addresses the three dimensions economy, ecology and society in which the attributes of this study are also grouped.

The attributes describing sustainable tourism used for the first part of the empirical investigation have been derived in an interdisciplinary way including most departments of the Lucerne University of Applied Sciences and Arts.⁴ The participating departments derived the relevant attributes from their specific perspectives, e.g. the department of social work proposed socio-cultural and social attributes, etc. These proposals are based on an extensive literature research and on existing indicator systems for sustainable tourism. The major guideline to identify these attributes was the definition of sustainable tourism from the World Tourism Organization UNWTO as presented above. The respective results were discussed in a workshop with all involved researchers. The approved result of this workshop is a list of 23 attributes to be included in the survey. These attributes are considered as most important and relevant for tourism and represent all dimensions of sustainability. In this chapter, they are briefly presented. First, the ecological attributes will be introduced before presenting the social and economic attributes. The explanation why the attributes mentioned below are chosen is presented in the long version of the article.

² <http://www.hslu.ch/wirtschaft/w-outside-navigation/itw/w-itw-ueber-uns-2/w-itw-publikationen/w-itw-berichte-mobilitaet.htm>

³ We do not use the conceptual definition from the UNWTO (2004), because unfortunately this elaborate and long definition loses the clear focus from the definition presented above.

⁴ The departments involved are the department of business, social work, engineering and architecture, and art and design.

2.1. Ecological attributes

1. *Sustainable tourism is characterised by a good provision of public transport to and from, and at the destination.*
2. *Sustainable tourism compensates the CO₂-emissions caused by the arrival and the return journey through the support of climate protection projects which help to reduce CO₂-emissions.*
3. *Sustainable tourism encourages people travelling from far away to stay longer at the given destination.*
4. *Sustainable tourism is characterised by the use of renewable energy sources.*
5. *Sustainable tourism has an operational concept for its infrastructure and buildings which ensures that resources, especially water and energy, are used in an efficient way, avoiding the unnecessary waste of resources.*
6. *Sustainable tourism optimises resource use (energy, water, building materials, etc.) necessary for the construction and deconstruction of infrastructure.*
7. *Sustainable tourism offers products with a level of comfort (food, heating, etc.) which are adapted to the local conditions (climate, sea level, etc.).*
8. *Sustainable tourism minimises waste output and ensures appropriate waste management and sanitation.*
9. *Sustainable tourism takes the preservation of biodiversity into account.*

2.2. Social attributes

10. *Sustainable tourism does not discriminate against either employees or guests due to nationality, age, gender, religion, disability and/or political beliefs.*
11. *Sustainable tourism has fair working conditions regarding working hours, health, safety and possibilities for continuing education.*
12. *Sustainable tourism enhances a more equal income distribution within the local community.*
13. *Sustainable tourism involves the local community in the development of tourism.*
14. *Sustainable tourism communicates transparently and credibly.*
15. *Sustainable tourism provides an insight into the local cultural, social & economic development and into the local community.*
16. *Sustainable tourism considers the impact of tourists on the local population and their culture, respecting the needs and traditions of the local population.*
17. *Sustainable tourism places an importance on the upkeep of the scenic view of a place, as well as its cultural heritage.*

2.3. Economic attributes

18. *Sustainable tourism contributes to the preservation of long-term regional economic well-being.*
19. *Sustainable tourism contributes to the maintenance of regional employment and the development of new jobs within the region, which also offer adequate wages.*
20. *Sustainable tourism offers a large variety of different and independent products.*
21. *Sustainable tourism has a versatile and flexible infrastructure.*
22. *Sustainable tourism uses local products and services while paying an adequate and fair price for these products and services.*
23. *Sustainable tourism contributes to poverty alleviation within the destination.*

3. Understanding sustainable tourism

Looking specifically at the understanding of sustainable tourism, the definition and understanding of sustainable tourism from a tourist's perspectives is seldom discussed in the literature. Guyer and Pollard (1997) look at environmental quality and find that it is perceived differently by each tourist. Furthermore, they find that it differs not only with the individual, but also with the destination and the activity undertaken. However, there are no studies defining economic and social sustainability from a tourist's perspective.

3.1. Empirical Method

To clarify the tourists' understanding of sustainable tourism, an online survey was designed by the Lucerne University of Applied Sciences and Arts and was carried out by the research institute IPK International in Munich among travellers in eight countries (Brazil, Germany, Great Britain, India, Russia, Switzerland, Sweden, USA). The sample in the eight countries is a self-recruited random sample. The contacted persons are representative regarding the population of a specific country. Since only tourists who travel are allowed to answer the questionnaire, the sample of people finishing the survey is representative regarding the travelling population of a respective country and not of the whole population. Overall, 6,113 tourists answered the questionnaire completely. These respondents resulted from a random sampling from tourists who are over 15 years old.

The respondents were asked to assess the statements describing sustainable tourism as described in section 2 on a scale of 1 to 5, where the value 1 means "I strongly disagree" and the value 5 means "I strongly agree". Additionally, the usual socio-demographic questions and some question about travel behaviour were added.

The empirical phase has shown that most of the attributes are well defined and clearly explained. Nevertheless, there are some attributes that might have caused difficulties to the respondents such as the attribute which describes the adapted comfort⁵ and the attribute that describes prolonged stays⁶. They were too complicated for most respondents to understand because they try to describe a complex fact in one sentence. Therefore, interpretations regarding these two attributes should be made carefully and in most cases these two attributes are excluded from the analysis. Furthermore, it would have been interesting to separate the "up-keep of the scenic view and the cultural heritage".

One of the goals of this study is to identify different types of tourists related to their understanding of sustainable tourism. For this purpose, a cluster analysis with the mean-component-method (varimax rotation) is conducted to derive a typology of different types with differing attitudes towards sustainability in tourism. In the following, some descriptive statistics are presented before turning to the cluster analysis.

3.2. Descriptive results

The descriptive results of the rating of the attributes are presented in section 3.2.1 and the factors influencing the decision to book a holiday in section 3.2.2.

⁵ Sustainable tourism offers products with a level of comfort (food, heating, etc.) which are adapted to the local conditions (climate, sea level, etc.).

⁶ Sustainable tourism encourages people travelling from far away to stay longer at the given destination.

3.2.1. Rating of the attributes

In the following we will identify the most important aspects by looking at the share of people who rate an attribute with either the value 5 (“I strongly agree”) or 4 (“I agree”) as shown in Figure 1- Figure 3 below. The overall perception is balanced over the different dimensions. The share of people agreeing is only below 50% for some economic attributes and for the attributes “prolonged stay” and “CO2-compensation”. The highest share of agreement is recorded for the attribute “scenic view / cultural heritage”. This is not surprising because landscape and cultural heritage are often a very important motivation to travel to a certain place and it is in the tourists own interest that they are well maintained.

The most important findings in each dimension will be briefly discussed, starting with the ecological dimension, as shown in Figure 1 where the attributes are ordered according to the list presented in section 2.

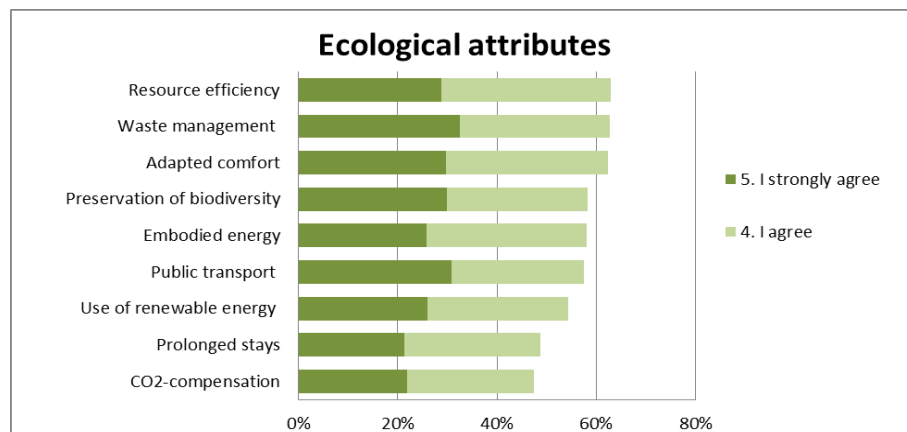


Figure 1: Ecological attributes of sustainable tourism products

From an ecological point of view, the attribute “resource efficiency”, i.e. the efficient use of resources, especially water and energy, avoiding the unnecessary waste of resources, is the highest rated attribute, with 63 per cent of the respondents in agreement, together with “minimisation of waste / waste management” (63%) and “adapted comfort” (62%), i.e. products with a level of comfort (food, heating, etc.) which is adapted to the local conditions (climate, sea level, etc.).⁷ These attributes can be regarded as equally important, because the Sidak-T-test shows that there is no significant difference in the observed mean values on the 95% significance level.⁸ However, the mean values of these three attributes are significantly different compared to all other ecological variables, which qualifies these three attributes as the most important topics in the ecological dimension. Comparing the characteristic of these top topics with the other attributes, we conclude that travellers rate what they can see, and/or experiences directly at the destination as more sustainable in the ecological dimension.⁹ The only exception is the provision of public transport which also directly influences holiday experiences.

⁷ This result partially confirms the results from TripAdvisor (2010) which finds that the most important factors for a hotel to be considered green are energy and water, conservation and the use of recycled paper.

⁸ The detailed statistical results of the Sidak T-test and all other statistical tests which are mentioned in this text are available upon request from the authors.

⁹ The last attribute that is related to the holiday experience is the availability of public transport. The mean value of this attribute is not statistically significantly different from the mean value of the three top topics. However, it is not listed among the top topics because the share of respondents agreeing is clearly lower.

It is an interesting result that CO₂-compensation was rated rather badly: CO₂-compensation is perceived as not sustainable by 53% of the respondents, although CO₂-emission is one of the hot topics in sustainability and most of the environmental externalities (i.e. CO₂-emissions) are caused by the journey to the destination. Another attribute with a high impact on the environment and which refers to the journey to the destination, i.e. prolonged stays, is also not seen as sustainable by most people, although traffic is one of the most important issues in the ecological dimension.

The most relevant attribute in the social dimension is “scenic view and cultural heritage” with 68 % of the respondents agreeing or strongly agreeing,¹⁰ followed by “involvement of local community” (65 %) and “considering impacts of tourists on locals” (64 %) and “no discrimination” (62%) (see Figure 2). Interestingly, equal income distribution is perceived as the least relevant aspect of sustainable tourism.

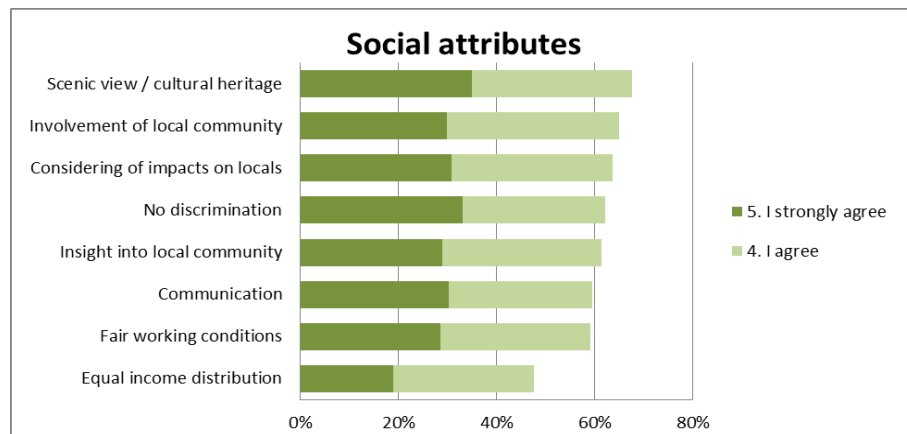


Figure 2: Social attributes of sustainable tourism products

Regarding the economic dimension, the use of local products and services, regional employment and long-term regional economic well-being are seen as relevant attributes for sustainable tourism by 66%, 64% and 62 % of the respondents respectively. This is not a straightforward result, because the economic dimension is often the least discussed and we therefore expected that economic attributes might not be as relevant compared to ecological and social attributes, since the latter ones are more often discussed in the public. The other economic attributes are perceived as less sustainable which is in line with our argumentation in section 2.3 of the long version of the article, that all other economic attributes than regional economic well-being are secondary economic attributes. However, the most important attribute in the economic dimension is the “use of local products and services” which supports the goal of a strengthening of the regional economic development. It is important to note that it is not a purely economic attribute because it includes social and ecological aspects.

¹⁰ This is confirmed by the Sidak T-test.

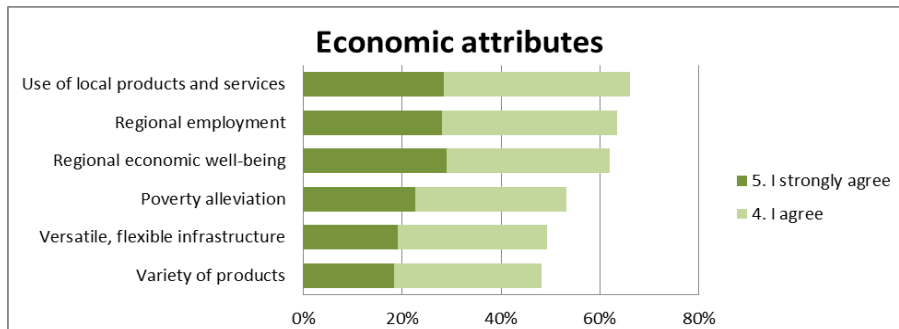


Figure 3: Economic attributes of sustainable tourism products

In general, it seems that local aspects are the most relevant attributes of sustainable tourism, since attributes referring to *local* products, *local* community and *local* culture are judged as most sustainable. The attributes referring to local aspects often address more than one dimension. For example, the use of local products ensures that income remains within the region (economic dimension), and lessens negative ecological externalities because they do not have to be transported from far away. Sims (2009) finds similar results focusing on the role local food can play within the holiday. She argues that “local food can play an important role in the sustainable tourism experience because it appeals to the visitor’s desire for authenticity within the holiday experience.” Local products link travellers to the region and give them the feeling of experiencing the destination and its specialties better.

3.2.2. Factors influencing the decision to book a holiday

In addition to the understanding of sustainable tourism, the people questioned were also asked how important sustainability is among other aspects when they book vacations. Therefore, the respondent had to rank eight aspects that are relevant for booking decisions. Before sustainability is considered in the decision to book a holiday, other factors are of importance: Tourists want to be sure that the weather/climate fits their need, that the price is good, that they can easily travel to the destination, etc. Sustainability is consequently second last in the resulting ranking:

1. Weather/climate
2. Price
3. Accessibility to and from the destination
4. Local culture
5. Landscape
6. Food
7. Sustainability
8. Local activities

Looking at the country level, sustainability is always second last or last except for Brazil and Russia, where it is ranked 4th and 5th respectively. This result can be explained by the high percentage of people with higher education in the samples from Brazil and Russia. Better educated people are more aware of the problems associated to the environment, society and economy caused by tourism, and are therefore more likely to consider sustainability when booking. More highly educated people with a higher income are included in these countries because is a sample of travellers. Only people from the upper classes can afford to travel whereas in Europe and the USA most people travel.

In general, the ranking above does not offer evidence for sustainability being important in booking decisions. The classical criteria such as “weather/climate”, “price”, and “accessibility to and from the destination” are clearly the most important ones. However, for 22% of the respondents, sustainability is among the top three factors. This 22% of respondents can therefore be considered as an important target group for sustainable tourism. This is some initial evidence, that there is potential for sustainable touristic offers. Those tourists which are called “sustainability aware tourists” in the following are described in more detail in section 3.3.3.

3.3. Typology of tourists with respect to their understanding of sustainable tourism

It is one of the aims of the study to identify different types of tourists who can be described by their different understanding of sustainable tourism. The applied factor analysis, as briefly described in section 3.1, leads to a typology of five clusters. An overview of these different types shows two major groups: the balanced type and its opposite, the sceptic (57.6 % in total). The balanced type has an above average share of agreement (values of 4 and 5) in all dimensions, and the sceptic type has below average shares in all dimensions. Furthermore, there are three strong minorities: the socio-economic, localised and ecological type (totally 42.4 %) as shown in Figure 4. These three types put stronger emphasis on some aspects of sustainable tourism, i.e. the ecologists considers ecological aspects to be particularly relevant for sustainable tourism, the localised type considers local aspects and aspects related to cultural attributes as being especially important, and the socio-economic type favours the other social and the economic attributes proposed in section 2.

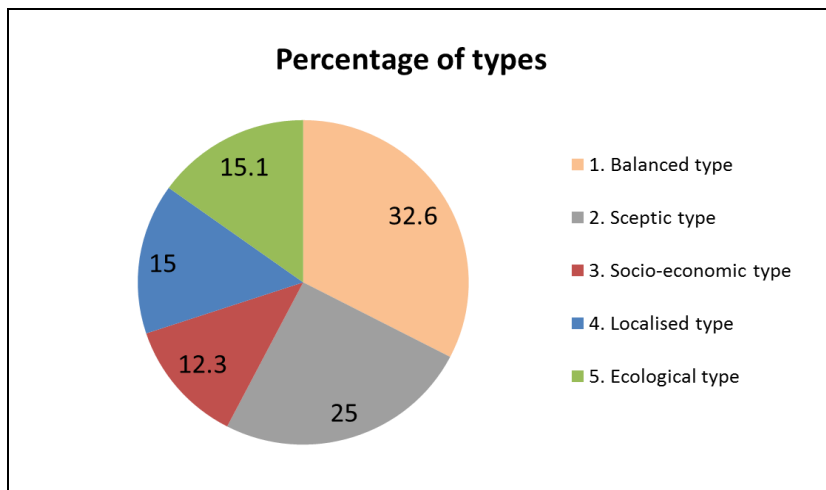


Figure 4: Types of tourists with respect to their understanding of sustainable tourism

Before explaining these types briefly in section 3.3.2, it is shown which attributes are of importance for which type in the next section.

3.3.1. Attributes related to the sustainability types

The factor analysis, which was conducted in order to find the sustainability types, assigns the attributes to one of three factors. These factors are equivalent to the socio-economic, localised and ecological types. There are no factors for the balanced and the sceptic type since the balanced type is characterised by an above average share of agreement in all dimensions. Similarly, the sceptic agrees much less with the statements about sustainable tourism in all dimensions. The greenly shaded areas indicate which attribute is assigned to which cluster.

	Socio-economic	Localised	Ecological
Ecological Attributes			
Public transport			
CO ₂ -compensation			
Prolonged stays			
Renewable energy			
Resource efficiency			
Embodied energy			
Adapted comfort			
Minimisation of waste / Waste management			
Biodiversity			
Social Attributes			
No discrimination			
Fair working conditions			
Equal income distribution			
Involvement of local community			
Transparent and credible communication			
Insight into local community and culture			
Consideration of impact on locals and their culture			
Scenic view / cultural heritage			
Economic Attributes			
Long-term regional economic well-being			
Regional employment			
Variety of products			
Versatile, flexible infrastructure			
Use of local products and services			
Poverty alleviation			

Table 1: Assignment of attributes to clusters

Most of the ecological attributes are assigned to the ecological type, as can be seen in Table 1. Only CO₂-compensation, prolonged stays and adapted comfort are not assigned to the ecological type. However, it should be noted that the last two attributes should be interpreted carefully, as noted before in section 3.1. These three attributes are assigned to the localised type. However, it is more important that all attributes of the social dimension which cover cultural aspects are assigned to the localised type. The other social attributes and all economic attributes are allotted to the socio-economic type.

3.3.2. A brief description of the sustainability types

The *balanced type* seriously observes all three dimensions and has above average shares of agreement in all dimensions: Perhaps it is not possible to respect all three dimensions in every single decision of everyday life, but this type tries to find a balance between them in the course of time. 33% of the respondents belong to the balanced type.

The *sceptic type* has a critical attitude, and rates all attributes clearly lower, i.e. agrees much less with the statements about sustainable tourism in all dimensions. One possible reason could be that these people find the proposed attributes not strict enough, i.e. they are not sustainable enough for them. Another possible reason is that these people find the idea too complicated or too sophisticated. Furthermore some of the sceptics might think that the related problems, for example of climate change, are not so dangerous or that one person alone cannot have any effect on such global problems and that it is the responsibility of politicians and the states. 25% of the respondents belong to the sceptic type.

The *socio-economic type* prioritises in particular the social and economic dimension: These people are focused on good relations and partnerships between human beings. It seems to be clear that the socio-economic type recognises better than the other types – apart from the balanced type – the links between sustainability and long-term regional economic well-being and poverty alleviation. The socio-economic type hopes more than the others that sustainable tourism leads to a more equal income distribution within the local community and in general to a fairer society. 12% of the respondents belong to the socio-economic type.

The *localised type* rates the attributes related to local aspects of sustainability and to culture as especially relevant for sustainable tourism. They want to enjoy an authentic holiday experience and to consume local products. Sustainable tourism offers interesting cultural experiences which are authentic and match with the history and traditional culture of the region without simply conserving it. It is important for them that sustainable tourism provides an insight into the local cultural, social and economic development and into the local community and that it considers the impact of tourism on the local population and their culture, respecting the needs and traditions of the local population. Furthermore, the cultural heritage, for example buildings and monuments and the landscape should be taken care of. 15% of the respondents belong to the localised type.

The *ecological type* considers the ecological dimension in particular: The relationship between men and nature or environment is fragile. Taking care of the environment and better and efficient management of energy and other resources is crucial. This type has a remarkably high share of agreement with CO₂-compensation (67%).¹¹ Besides estimating the environment, the ecological type also often considers the upkeep of the landscape and the cultural heritage as relevant for sustainable tourism and the other two main attributes of the localised type, “insight into local community and culture” and “considering of impacts on locals and their culture”. However, the other social attribute and the economic attributes are judged less relevant for sustainable tourism. 15% of the respondents belong to the ecological type.

3.3.3. The key target group: Sustainability aware tourists

22 % of all respondents rank sustainability among the top three factors influencing their decision to book a holiday, as already stated in section 3.2.2. These tourists who are called sustainability aware tourists are the key target group, because they consider sustainability when booking holiday. This interesting group is discussed in this section.

If we look at the share of respondents who rank sustainability among the top three factors influencing their decision to book a holiday at the level of each cluster, the following shares are observed:

¹¹ Only the balanced type has with 79% a higher share of agreement with CO₂-compensation, whereas only 13% of the cultural type, only 12% of the sceptic type and 54% of the social type agree with it.

- 26 % of the balanced type
- 20 % of the sceptic type
- 21 % of the socio-economic type
- 18 % of the localised type
- 18 % of the ecological type

This is again evidence that the balanced type has the highest potential to buy sustainable products. It is surprising that a higher share of sceptics rank sustainability among the top three factors compared to the ecological who are actually more sensitive to sustainable tourism when we look at the ratings of the attributes. Some sceptics actually consider sustainability as important when booking, but are very critical when assessing if a product is sustainable.

The ranking of factors influencing the decision to book a holiday does not show large deviations from the average over the whole sample:

1. Sustainability
2. Weather / climate
3. Accessibility
4. Price
5. Local culture
6. Landscape
7. Food
8. Local activities

Sustainability is the most important factor. The order of the other factors has not changed, except that price is less important than accessibility and no longer belongs to the top three factors.

In general, the sample of sustainability aware tourists is characterised by a slightly higher rate of agreement with the attributes describing sustainable tourism, compared to the sample including all respondents. However, the sustainability aware tourists consider mostly the same attributes as most relevant as the average respondent of the whole sample, as can be seen further below. The higher rate of agreement can be explained by the higher share of the balanced type compared to the total sample including all respondents (see Figure 5).

Besides the clearly greater share of balanced types, the shares of the sceptic type and the localised and ecological types are slightly lower. However, we cannot identify a typical type which is clearly more likely to consider sustainability in his/her booking decision. All types are still considerably represented. It can therefore be concluded that the consideration when booking is independent of the sustainability type. However it should be kept in mind that different aspects of sustainable tourism are important for the different types which will influence their booking behaviour when they face a real sustainable tourism offer. An ecological type, for example, is more likely to book a product that is sustainable from an ecological point of view but does not explicitly consider economic aspects.

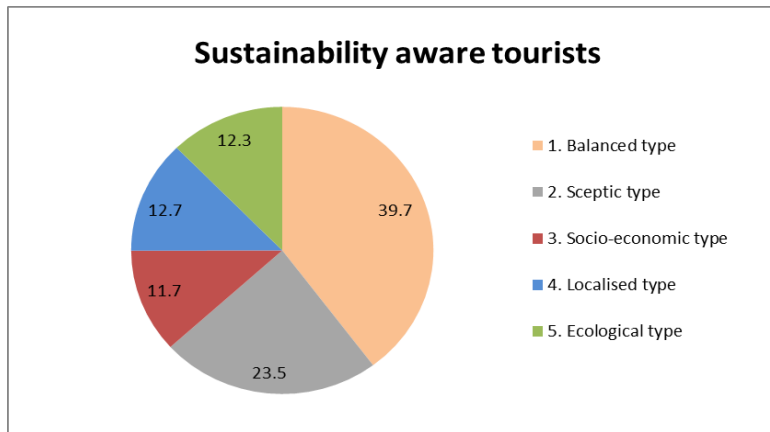


Figure 5: Types of sustainable aware tourists with respect to their understanding of sustainable tourism

Sustainability aware tourists are also more likely to know sustainable tourism products (50% compared to 34% over all respondents) and to book sustainable tourism products (36% compared to 20% over all respondents). It is interesting that it is from the sustainability aware tourists that relatively more persons belonging to the balanced type book sustainable tourism products: 42% have already booked such a product. Again as in the case of the booking behaviour of all respondents (see section 3.3.4 in the long version of the article), the balanced type could be called the key target group of sustainable tourism, looking at booking behavior in the past.

3.4. Specifics of countries

In this section, the most interesting differences of the responses of some specific countries compared to the average over all countries are presented without going into a detailed interpretation. The detailed analysis for each of the eight countries can be found in the appendix of the long version of this article.

3.4.1. Differences in the assessment of the attributes

Generally, the Germans are most critical and almost all attributes have lower shares of agreements. The British are also more critical than the average: They assess the ecological and the social attributes more critically, and it is astonishing that less than 50% judge the upkeep of a landscape and the cultural heritage as an attribute of sustainable tourism, because it is one of the most important attributes for all other countries. Also the Russians are more critical regarding the presented attributes of sustainable tourism. They are especially critical regarding energy related ecological attributes such as “CO₂-compensation”, “use of renewable energy”, etc. The answers of the respondents from the USA (and the distribution of the different types) correspond mostly to the average, except that lower agreement rates for ecological attributes are observed.

There are generally higher shares of agreement from Brazilian respondents and there is a higher agreement with social attributes from Indians. The attribute “equal income distribution” has an especially higher share of respondents from Brazil and also India agreeing. This is not surprising, since poverty is a more relevant issue in these developing countries, and the respondents are therefore more sensitive to it compared to the respondents in the richer western industrialised countries.

There are interesting differences in the assessment of the sustainability of CO₂-compensation in the different countries (see Figure 6): If we compare the outcome in the different countries, the Germans are most critical, with 65% of the respondents who do not assess it as sustainable. The US-Americans and Russians are also very critical with respect to CO₂-compensation. The assessment of the Russians is especially interesting, since they rate it very badly and are clearly more critical compared to the other ecological attributes (70% of respondents do not agree). The same holds for the attribute “use of renewable resources” with which 67% of respondents do not agree.

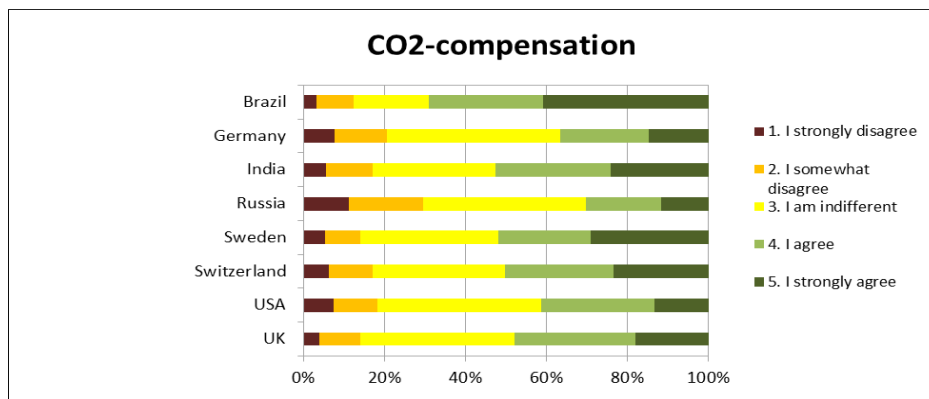


Figure 6: Rating of CO₂-compensation

3.4.2. Differences in the distribution of the types of tourists

If the representation of the five identified types in the eight countries is compared, the following country-specific results can be observed:¹²

- The different types have more or less the same proportions in Sweden and the USA, and do not heavily deviate from the average over the whole sample.
- Brazil and India have the greatest percentage of balanced types. In Brazil more than half of the respondents belong to the balanced type group. However, these two countries differ in importance regarding the other types: In Brazil, the ecological type is the second most important type (22%) whereas in India, the sceptic is the second most important type (22.5%) and the ecological type plays a minor role.
- Germany has the biggest number of sceptics, and in Great Britain, the sceptic is also the most important type.
- Russia has the highest share of the localised type. It amounts to 38% and is the most important type in Russia.
- Russia and India have the lowest share of the ecological type.
- Switzerland has the highest share of the ecological type, whereas the balanced type is still the most important type.

4. Do tourists book sustainable products? – A choice experiment

The question remains if sustainable products are actually bought by tourists and if they are willing to pay more for sustainable products, because often sustainable products are more costly. To answer this question, a choice experiment with 4,796 Swiss travellers was conducted.

¹² The graphics related to these findings can be found in the long version of this article.

4.1. Empirical method

A choice experiment is employed in this second empirical phase because there is not enough real data from the tourism market to measure the demand of tourists regarding sustainable tourism products. Questions related to the booking of sustainable tourism products and to the willingness to pay can therefore only be answered by employing so-called “stated preference” methods. A choice model is used in this study because it is best suited for analysing the influence of characteristics of a product (the so-called attributes) on demand for a product.

Two surveys using different offers were conducted in Switzerland. The first one is regarding a safari in South Africa, lasting two weeks, as offered by Kuoni during winter 2011. The guided safari leads the tourists through the unique landscapes of South Africa, starting in the North in the famous Kruger National Park, further through Swaziland and the Hluhluwe National Park and finally following the famous Garden route to Cape Town. The minimum standard for all overnight stays is a four star hotel. The basic offer costs 4,900 Swiss Francs (\$ 5,440). This price is all inclusive, also including the flight from Switzerland to South Africa. The second basic product is a two week beach holiday in a bungalow in the Maldives with a price of 3,300 Swiss Francs (\$ 3,663), as offered by Kuoni. The choice experiment using the example of South Africa is discussed first in the following. Subsequently, only the differences of the Maldivian example compared to the example of South Africa are presented.

The basic products described above are altered in the choice experiment: Some attributes describing sustainable tourism are added to the normal description in the Kuoni prospectus in order to compare different products on different sustainable levels. However, it is impossible to include all 23 attributes of the first phase of the understanding of sustainable tourism. Therefore, the most relevant attributes of the first phase were identified and the following attributes of sustainable tourism are used in the choice experiment:

- Use of local products
- Environmental management (energy, water and waste)
- Working conditions
- CO₂-compensation

During the choice experiment, the respondents had to make 14 choices. Each choice was composed of two products which considered the included attributes of sustainable tourism differently and a zero option. Table 2 presents the attributes and a detailed description of the levels of the attributes.¹³ Please note that the prices for the experiment using the example of South Africa are listed and that the lowest price is the official price in the catalogue of Kuoni. With each higher price level, the price increased again by 50 Swiss Francs (\$ 55.5).

300 different questionnaires with different selections of products and choice sets were created by using the Choice Based Conjoint (CBC) software of Sawtooth. Each questionnaire consists of 14 choice sets and questions related to travel behaviour and socio-demographics. Two of the 14 choice sets are fixed choice sets which are presented to every respondent, whereas the other twelve choice sets differed according to the 300 generated questionnaires. The link to the online survey was sent to a total of 29,123 customers of Kuoni and Helvetic Tours, two Swiss tour operators. Half of them received a link to the choice experiment with the safari in South Africa and the other half the experiment with the beach holidays in the Maldives. The response rate of completed surveys was 16%.

¹³ Some screen captures of some pages of the original online survey in German are shown in Appendix A1 in order to allow for a clearer picture of what the survey looked like.

Variable name	Level	Description
Price	4'900 CHF	
	4'950 CHF	
	5'000 CHF	
	5'050 CHF	
	5'100 CHF	
	5'150 CHF	
	5'200 CHF	
CO2-compensation	No CO2-compensation	
	CO2-compensation	The CO ₂ -emissions caused by the arrival and the return journey are compensated through the support of climate protection projects.
Local products	Almost no local products	Almost no local products are used.
	Local food	There are predominantly meals made from local products on the menu.
	Local food and local building material	There are predominantly meals made from local products on the menu and the hotel was built by using mainly local building material.
Environmental management	No measures	Waste lies partly around, there are no sewage plants, and the energy use is not controlled.
	Some measures	No waste lies around, sewage does not flow without treatment into the sea and first measures towards an efficient use of energy are taken as for example the use of energy-saving lamps.
	A lot of measures	Waste is minimised, separated, composted and recycled, sewage is completely treated in sewage plants and the energy is used efficiently.
Working conditions	Unclear working conditions	The working conditions were not controlled.
	At least fair wages	Fair wages are paid. The other working conditions were not controlled.
	High international standards	Fair wages are paid and the working conditions satisfy international standards.

Table 2: Attributes and levels used in the choice experiment "South Africa"

4.2. Result of the choice experiments

The results of the choice experiment are presented in this chapter. The case of the safari in South Africa is discussed in detail. The results of the case of the Maldives are presented only if

there are some major deviations and new insights compared to the South African case.¹⁴ Generally, the two experiments deliver quite similar results.

The preference shares, which show how often a single level of an attribute has been chosen relative to the other levels of the same attribute, show a clear picture: The more sustainable levels of all attributes are chosen significantly more often. Looking at the attribute “environmental management” for example, the level “a lot of measures” has a preference share of 44.3%, “some measures” 41.2%, whereas the completely non-sustainable level “no measures” has only 14.4%.¹⁵

In order to derive the marginal willingness to pay (MWTP), first, an empirical estimation of a model which describes the probability of choosing a given product as a function of its attributes is made. For this purpose, a logit model was estimated, as presented in Table 3. If a higher price is expected to lead to a lower demand, i.e. a lower probability of choosing a specific product, then the estimated coefficient should be negative. If more sustainable levels of a product are expected to increase the probability of choosing a product, the estimated coefficients for the attributes should be positive. Price is linearized in this estimation, because the price steps between the levels are constantly \$ 55.5 (CHF 50).

Coefficient	t ratio	Attribute
Test for significance of the model: Chi-Square: 11860		
-0.02752	-5.54540	Price
0.24331	27.09240	CO2-compensation
		Local products
0.25550	19.05440	Local food
0.40047	29.89110	Local food and building material
		Environmental management
0.47919	35.88900	Some measures
0.60838	45.38630	A lot of measures
		Fair working conditions
0.22090	16.68810	At least fair wages
0.58993	44.15830	High international standards
-0.03818	-2.63260	None

Table 3: Results from the logit model

Each coefficient significantly has the expected value: Price has a negative influence on the probability of buying a product, i.e. the higher the price, the lower is the demand for a specific product. The attributes which describe aspects of sustainable tourism all have positive coefficients. This indicates that the more sustainable a product is, the higher is the probability that customers will buy the product.

¹⁴ The detailed results and tables from the case of the Maldives are presented in the appendix of the long version of this study report.

¹⁵ The tables showing the preference shares for each attribute can be found in the long version of this study report.

The marginal willingness to pay for an increase in the level of an attribute is calculated by dividing the coefficient of an attribute β_i and the coefficient of the price γ .

$$MWTP = \frac{\beta_i}{\gamma}$$

This calculation leads to the following marginal willingness to pay for the attributes as presented in Table 4.

Attribute	MWTP in US dollar ¹⁶	MWTP in percent of price
CO2-compensation	9.8	0.18%
Local products		
Local food	10.3	0.19%
Local food and building material	17.3	0.32%
Environmental management		
Some measures	20.6	0.38%
A lot of measures	26.2	0.48%
Fair working conditions		
At least fair wages	8.9	0.16%
High international standards	23.7	0.44%
Total (sum of highest level of each attribute)	77.0	1.42%

Table 4: Marginal willingness to pay (MWTP) for selected attributes (in US dollars)

The MWTP for the attributes is between \$ 8.9 and \$ 26.2. The respondents are only willing to pay \$ 9.8 for CO2-compensation of the journey to and back from the destination. CO2-compensation from MyClimate¹⁷ for a return flight to South Africa costs 138 US dollars (MyClimate, 2011). This is a large gap and their willingness to pay is clearly lower and clearly below the market price. This explains why only a small number of tourists actually compensate CO2-emissions of the journey as mentioned in Broderick (2008). Furthermore there is a continuing discussion and criticism about the credibility and effectiveness of CO2-compensation (Broderick, 2008). Therefore a lot of consumers are not willing to buy CO2-compensation.

The MWTP for the other attributes are also low, although a preference for more sustainable levels of the attributes was found. In total, the sum of the MWTP for the highest level of each attributes leads to a total willingness to pay of \$ 77.1. This value is comparable to other studies. Casey et al. (2010) find in a choice experiment a mean willingness to pay for a “coral fund” in the Riviera Maya region of Mexico’s Yucatan Peninsula of \$55, and Brau and Cao (2008) find in a choice experiment a mean willingness to pay 64.65 Euros for environmental quality at the beaches in Sardinia. However, Brau and Cao say that this high WTP exists only where losses with respect to original conditions are expected.

The fact that people would prefer aspects of sustainability to be included in the product but are not willing to pay a significant mark-up is a common finding in the literature of sustainable consumption (Priskin, 2009). Vermeir and Verbeke (2006 and 2008) looking at food consumption find evidence for this so-called “attitude – behaviour gap”. They even find that a lot of people with a positive attitude towards sustainability do not intend to buy such products.

¹⁶ The prices in the experiment are in Swiss Francs. The exchange rate of 1 CHF = 1.10979 USD from March, 18, 2011 is used to calculate the prices in US dollars.

¹⁷ MyClimate is one of the leading providers of CO2-compensations in Switzerland (see www.myclimate.org).

The absolute values of the MWTP for all levels of all attributes are higher in the experiment for South Africa (see Table 4) compared to the respective value in the experiment for the Maldives. The values are between \$ 5.8 and \$ 19.0 in the case of the Maldives. The MWTP is again lowest for “CO2-compensation” and the highest value is observed for environmental management. Although the absolute values of MWTP are higher in the case of South Africa, the relative values are almost the same since people are willing to pay almost the same relative MWTPs in both experiments. The price of the baseline offer of beach holidays in the Maldives lasting two weeks was \$ 3,663, as offered this season by Kuoni, whereas the price of the baseline offer of safari vacations in South Africa was \$ 5,430. Therefore, using these base prices, relative MWTP for sustainable aspects are calculated in Table 4. The only remarkable difference between the two experiments is that the respondents are willing to pay a higher relative premium for environmental management (“a lot of measures”) in the case of the Maldives.

The willingness to pay for sustainable tourism products is low compared to the willingness to pay for “green” food. Galarraga et al. (2004) find that consumers are willing to pay 0.003 Euro (11.26%) per gram of coffee more due to the inclusion of green characteristics and Loureiro et al. (2005) find a maximal MWTP of \$3 per pound of coffee for an organic and fair trade labelled coffee. There are two main reasons for these higher MWTPs compared to this survey. First, the above mentioned studies in the food market also state that this high level premiums are only realized in this small niche markets, whereas this study considered the whole tourism market and not only the niche market of sustainable tourism. Second, consumers are less willing to behave sustainably during holidays than during their everyday life. They want to forget their daily life, enjoy their holidays without privations and don’t want to think about the effect of their behaviour (Becken, 2007, Weaver, 2008).

The low MWTPs in this study indicate that there is not much potential to substantially increase prices due to the inclusion of a specific aspect of sustainable tourism in a product. However, two fixed choice tasks were proposed to all respondents in order to concretely observe if tourists are willing to buy a specific product. In both choice sets, a variant with all attributes on the unsustainable level is compared with a more sustainable product. In the first case, the more sustainable product included CO2-compensation and the use of local product and building materials, in the second case, the levels of all attributes are set on the most sustainable value. The fully sustainable product is clearly preferred to the basic product. 85% choose the perfect sustainable product compared to the basic product. This indicates that people have a strong preference for a completely perfect sustainable product and that in this case, their price sensitivity might be lower.

5. Conclusions

In the first part of the study, tourists’ understanding of sustainable tourism has been investigated with over 6,000 respondents from eight countries. In general, tourists are well informed about the important aspects of sustainable tourism. The main descriptive findings of the first empirical phase on tourists’ understanding of sustainable tourism are:

- The overall perception is balanced over the different dimensions. There is no clear prioritisation of a dimension. The share of people agreeing to the statements about sustainable tourism is only for some economic attributes and for the attributes “prolonged stay” and “CO2-compensation” below 50%.

- The attribute “upkeep of a scenic view and the cultural heritage” is assessed as most sustainable. Generally, attributes referring to *local* products, *local* community and *local* culture are judged as most sustainable.
- Tourists rate what they can see, and/or experiences directly at the destination as more sustainable in the ecological dimension.
- For 22 % of the respondents, sustainability is among the top three influencing factors while booking vacations.

Five different types regarding tourists’ understanding of sustainable tourism are identified:

- The *balanced type* seriously observes all three dimensions and has above average shares of agreement in all dimensions. 33% of the respondents belong to the balanced type.
- The *sceptic* has a critical attitude and rates all attributes clearly lower. 25% of the respondents belong to the sceptic type.
- The *socio-economic type* rates in particular the social and economic dimension. 12% of the respondents belong to the socio-economic type.
- The *localised type* rates especially the attributes related to local aspects of sustainability and to culture as relevant for sustainable tourism. 15% of the respondents belong to the localised type.
- The *ecological type* considers in particular ecological aspects to be relevant for sustainable tourism. 15% of the respondents belong to the ecological type.

A gap between thinking and acting can be observed in the choice experiment undertaken in Switzerland. Generally, the choice experiment shows that tourists would principally like to buy sustainable tourism products. The respondents consistently favoured the more sustainable levels of the proposed attributes. Although there are clear preferences in favour of sustainable products, it can be shown that the respondents are not willing to pay a substantial premium for the inclusion of specific attributes. The range of the premium for a specific attribute is between \$ 5.8 and \$ 26.2. These small premiums for the inclusion of a specific aspect of sustainable tourism indicates that from a financial point of view it is not profitable to include only some selected attributes of sustainable tourism in an existing product. There is some evidence that potential customers of sustainable tourism products demand completely sustainable products and they are less price sensitive for such products. This indicates that there is only a potential market for a completely sustainable product. People are only willing to pay substantially more if they know that their vacations are sustainable in all dimensions. Some respondents also reported as a qualitative feedback that they do not understand why they should pay more for a product which is not completely sustainable.

The understanding of sustainable tourism does mostly not influence the behaviour of tourists. There are only some differences regarding the share of tourists who have already booked a sustainable product. More of the balanced type (26%) and the localised type (23%) have already booked a sustainable product. However, not only the past behaviour but especially the potential customers for the future should be considered, i.e. the sustainability aware tourists considering sustainability as important factor when booking a holiday. The distribution of the types among the 22% sustainability aware tourists does not differ largely from the average distribution, since the importance of sustainability during the booking process is ranked in a similar way by all types. Furthermore, it was not possible to identify large differences during the choice experiment. Therefore, no group with a higher preference for sustainable products and/or a higher willingness to pay can be identified. Nevertheless, the above presented types of tourists are important for providers of touristic offers because it helps to understand how to

approach potential customers of sustainable products. The different types could be approached as follows:

- A product which should be advertised to the balanced type should be balanced over all dimensions of sustainability.
- The sustainability of a product should be documented clearly and traceably in a product which has the sceptic type among its target groups, because they are sceptical and need information in order to be convinced.
- A product for the ecological type should especially include ecological aspects.
- A product for the localised type enables the enjoyment of an authentic holiday experience, focusing on local and cultural aspects of sustainable tourism. It especially considers local products and the involvement of the local population, and allows for insights into the local community. Finally cultural aspects are emphasised.
- A product for the socio-economic type should in particular include aspects of the social and economic dimension.

This study concludes that sustainable tourism is an interesting market segment with a target group of 22% sustainability aware tourists. These tourists consider sustainability as important when booking a holiday. Typically, these customers are well-educated and have a high income. But there is no large market for products with high premiums because the willingness to pay for attributes of sustainable tourism is low. However, offering sustainable tourism products could be a successful differentiation strategy. The diversification of the existing array of products by developing sustainable products could help to increase the market share of a company relative to its competitors, because the preferences in this study indicate that tourists strongly prefer sustainable products. Hence customers are expected to switch to sustainable offers as long as these products are not substantially more expensive than the non-sustainable or less sustainable products of the competitors.

Although this study offers new insights, there remain still a lot of questions for further research:

- First of all it would be interesting to observe the changes of the share of sustainability aware tourists, of the tourists' understanding of sustainability and of their willingness to pay for it over time.
- Furthermore, 66 % of all respondents have no knowledge of sustainable tourism products. But 55% of those who know a sustainable tourism product have already booked such a product. It would be interesting to analyse whether these tourists who have already booked such a product think differently and behave differently compared to tourists who have not.
- The sustainability aware tourists could not be identified in the choice experiment because in order to keep the questionnaire shorter, the relevant question was not asked. It would be interesting to investigate if sustainability aware tourists have a higher willingness to pay a premium for the proposed attributes describing sustainable products.
- There is some evidence that tourists are less price sensitive when a completely sustainable product is offered. Hence, it would be interesting to make a new choice experiment with products that are either completely sustainable or do not mention sustainability in the description of the product to verify this guess.

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Appendix A1 The basic products and a screen capture of a choice set

The following screen captures show the basic offer of the Safari in South Africa (see Figure 7) and the beach holidays in the Maldives (see Figure 8) as offered by Kuoni. The last Figure 9 shows a screen capture of the online survey with a representative choice set.

KUONI



Giraffe

Diese Rundreise führt Sie durch die einzigartigen Landschaften Südafrikas, beginnend im Norden des Landes, im berühmten Krüger Nationalpark und weiter durch Swaziland und den Hluhluwe Nationalpark, entlang der bezaubernden Gardenroute bis zum Kap der Guten Hoffnung. Übernachtungen ausschliesslich in 4-Stern Hotels.

IHR REISEPROGRAMM

1. TAG: JOHANNESBURG ► PRETORIA ► (ca. 150 km) Am Flughafen werden Sie von Ihrer deutsch sprechenden Reiseleitung begrüsst. ► HIGHLIGHT: Willkommen in Südafrika
2. TAG: PRETORIA ► KAPAMA ► (ca. 550 km) Heute fahren Sie in Richtung Nordosten in die Provinz Mpumalanga. Nachmittags können Sie bereits an einer ersten Pirschfahrt teilnehmen. (F/M/N) ► HIGHLIGHT: Auf den Spuren der Big 5
3. TAG: KAPAMA ► Bereits frühmorgens gehen Sie auf Pirschfahrt und kehren zu einem ausgiebigen Frühstück in die Lodge zurück. (F/M/N) ► HIGHLIGHT: Auf den Spuren der Big 5
4. TAG: KAPAMA ► WHITE RIVER ► (ca. 500 km) Am heutigen Tag fahren Sie der beliebten Panoramaroute mit ihren atemberaubenden Ausblicken entlang. (F) ► HIGHLIGHT: Panoramaroute
5. TAG: WHITE RIVER ► SWAZILAND ► (ca. 350 km) Die Reise führt Sie heute in das kleine Königreich Swaziland,

unterwegs besuchen Sie ein traditionelles Swazi Dorf. (F/M) ► HIGHLIGHT: Swaziland

6. TAG: SWAZILAND ► HLUHLUWE ► (ca. 400 km) Die Fahrt geht weiter in Richtung Indischer Ozean. Sie unternehmen eine Bootsfahrt im iSimangaliso Wetland Park (ehemals St. Lucia) und können mit etwas Glück zahlreiche Flusspferde und Krokodile bestaunen. (F/N) ► HIGHLIGHT: Bootsfahrt im iSimangaliso Wetland Park
7. TAG: HLUHLUWE ► Sie brechen heute Morgen bereits im Morgengrauen in den Hluhluwe-Umfolozi Nationalpark auf und verbringen den ganzen Tag auf Pirschfahrt. (F/M/N) ► HIGHLIGHT: Spitzmaulnashörner
8. TAG: HLUHLUWE ► PORT ELIZABETH ► (ca. 320 km) Fahrt nach Durban und kurze Stadtrundfahrt (zeitbedingt). Flug nach Port Elizabeth. (F/N) ► HIGHLIGHT: Durban
9. TAG: PORT ELIZABETH ► GEORGE ► (ca. 350 km) Heute besichtigen Sie den Tsitsikamma Park und das Monkeyland. ► HIGHLIGHT: Tsitsikamma Park
10. TAG: GEORGE ► (ca. 120 km) Am Morgen besuchen Sie das Diaz Museum in Mossel Bay. Den Nachmittag verbringen Sie im kleinen Küstenstädtchen Knysna. (F) ► HIGHLIGHT: Gardenroute
11. TAG: GEORGE ► FRANSCHHOEK ► (ca. 550 km) Durch die kleine Karoo Wüste gelangen Sie ins Zentrum der Straussenzucht, nach Oudtshoorn, wo Sie eine Straussenfarm sowie die bekannte Tropfsteinhöhle Cango Caves besichtigen. ► HIGHLIGHT: Straussenfarm und Tropfsteinhöhle
12. TAG: FRANSCHHOEK ► KAPSTADT ► (ca. 170 km) Heute Morgen erkunden Sie das Weinland und besuchen eine

Weinkellerei, danach fahren Sie in die Mutterstadt Kapstadt am Fusse des Tafelberges. (F) ► HIGHLIGHT: Südafrikanischer Wein und Tafelberg

13. TAG: KAPSTADT ► (ca. 200 km) Am Morgen Besuch einer Diamantschleiferei, danach geht die Fahrt entlang der spektakulären Küstenstrasse ans Kap der Guten Hoffnung. ► HIGHLIGHT: Kapstadt und das Kap der Guten Hoffnung
14. TAG: KAPSTADT ► (ca. 30 km) Individuelles Anschlussprogramm oder Transfer zum Flughafen für Ihren Rückflug in die Schweiz. (F)

SÜDAFRIKA ► GEFÜHRTE RUNDREISEN




**14 TAGE
AB JOHANNESBURG BIS KAPSTADT**

► Johannesburg ► Pretoria ► Kapama ► White River ► Swaziland ► Hluhluwe ► Port Elizabeth ► George ► Franschhoek ► Kapstadt

**IM PREIS
INBEGRIFFEN**

- Reise im klimatisierten Fahrzeug
- Flug Durban–Port Elizabeth
- Unterkunft gemäss Programm
- Mahlzeiten gemäss Programm: F=Frühstück, M=Mittagessen, N=Nachtesse
- Eintrittsgebühren für Besichtigungen und Ausflüge gemäss Programm
- Lokale deutsch sprechende Reiseleitung
- Preis- und Programmänderungen vorbehalten

Figure 7: Catalogue page with the safari in South Africa

KUONI

MALEDIVEN • REETHI BEACH 21



1 Deluxe Villa
2 Standard Villa



Reethi Beach Resort

BAA-ATOLL. «Reethi» bedeutet «schön» in der Landessprache der Malediven. Wenn schon die Einheimischen diese Insel so nennen, so muss sie dem Paradies ziemlich nahe kommen. Nur 15 Prozent ihrer Fläche sind bebaut, sie ist umgeben von unbewohnten Nachbar-Eilanden. Starten Sie Ihre eigene Robinsonade, gehen Sie auf Entdeckertour, suchen Sie sich Ihren ganz persönlichen Lieblingsplatz.

LAGE • Am nordöstlichen Rande des Baa-Atolls, umgeben von kleinen, unbewohnten Inseln. Die Insel ist 600 Meter lang und 200 Meter breit.
INFRASTRUKTUR • 70 meist frei stehende Bungalows und 30 Water Bungalows über der Lagune verteilt. Hauptrestaurant, Grill-Restaurant, 2 Spezialitäten-Restaurants A-la-carte-Restaurant/ Coffee-Shop (24-Std.-Betrieb), 4 Bars. Souvenirgeschäft und Boutique, Spa. Pool beim Sportzentrum und Poolbar.

UNTERKUNFT • *Standard Villa:* komfortabel eingerichtet, Open-air-Badezimmer mit Dusche/WC, Föhn; Klimaanlage, Deckenventilator, TV, Kühlschrank, Safe, Terrasse.
SPORT / WELLNESS • *Ohne Gebühr:* Beachvolleyball, Tischtennis. *Gegen Gebühr:* Coconut Spa. Gut ausgestatteter Fitnessraum. 2 Tennisplätze mit Flutlicht, Squash, Badminton. Kanu, Katamaran, Bananenboot, Windsurfen, Wasserski, Kitesurfen, Fun Tube, Parasailing, Glasbodenboot, Schnorchelausrüstung, Tauchen.

BESONDERES • Bootsausflüge, Picknicktouren und Abendunterhaltung. Ein Arzt steht den Gästen 24 Std. zur Verfügung. **TRANSFER** • Flughafen-Resort: 125 km/ca. 35 Min. mit Wasserflugzeug

TAUCHEN • SPA • BARFUSSINSEL

KUONI
EXCLUSIVE

Angebot exklusiv bei Kuoni.

KUONI
INFO

Hausriff: nur 50 m entfernt
Spezialitäten: Korallengärten und Grossfische

Wellness
Das gemütliche Coconut Spa liegt direkt am Strand, mit einer Ruheterrasse und wunderschöner

Meersicht. 5 Behandlungsräume (Doppel-, Einzel-, Innen- und Aussenräume).

Figure 8: Catalogue page with the offer in the Maldives

Studie zu nachhaltigem Urlaub

Wenn es nur die untenstehenden Angebote für eine zweiwöchige Safari in Südafrika gäbe, um in die Ferien zu verreisen, welches würden Sie auswählen?
Klicken Sie für die Auswahl einen der Buttons an.

Preis	SFr. 5'200	SFr. 5'050	
CO2-Kompensation	Keine	CO2-Kompensation: Die bei der An- und Abreise verursachten CO2-Emissionen werden durch die Unterstützung von Klimaschutzprojekten abgegolten.	Ich würde keines dieser Angebote auswählen.
Lokale Produkte	Fast keine	Lokale Speisen und lokale Baumaterialien: Es sind vorwiegend lokale Speisen auf dem Speiseplan und die Hotels wurden weitestgehend aus lokalen Baumaterialien gebaut.	
Umweltmanagement (Energie, Wasser, Abfall)	Viele Massnahmen: Der Abfall wird vermindert, getrennt, kompostiert und recycelt, das Abwasser wird in Kläranlagen vollumfänglich geklärt und die Energie wird effizient genutzt.	Keine Massnahmen: Abfall liegt z.T. herum, es gibt keine Anlagen zur Behandlung des Abwassers und der Energieverbrauch wird nicht kontrolliert.	
Arbeitsbedingungen	Hohe internationale Standards: Es werden faire Löhne bezahlt und die Arbeitsbedingungen genügen den internationalen Standards.	Mindestens faire Löhne: Es werden faire Löhne bezahlt. Die weiteren Arbeitsbedingungen wurden nicht überprüft.	

0% 100%

Hochschule Luzern

Figure 9: Screen capture of a representative choice set