

# An Exploratory study of niche market potential of German tree-planting ecotourists to Kenya

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## Abstract

Climate change is having drastic effects on various areas of the planet, including extreme impacts on weather and rainfall, in various Sub-Saharan East African countries (Hendrix, C. S., & Glaser, S. M. (2007). The willingness (and need) of a niche market to actively improve the damaged ecosystems in small ways is rising. Weaver and Lawton (2007, p 1170) maintain that ecotourism should satisfy three core criteria: “(1) attractions should be predominantly nature-based; (2) visitor interactions with those attractions should be focused on learning or education, and (3) experience and product management should follow principles and practices associated with ecological, socio-cultural and economic sustainability.” In this study, the niche market of active German “tree-planters” is to be defined and the potential willingness to travel to, learn from and invest in the ecosystem through tree-planting, specifically in Kenya, is explored.

## 1. Introduction

“Ecotourism is not a synonym for sustainable tourism” (Goodwin, p.1, 2001). Goodwin a World Tourism Organization expert explains, that the WTO has consistently argued in the past that all forms of tourism, being cultural tourism, nature tourism, mass tourism, business travel and other forms ought to be made sustainable. Hereby, nature tourism may be divided into adventure and sports tourism, passive scenery viewing as well as ecotourism. Goodwin then considers that ecotourism has some linkages with the concept of cultural tourism due to the provided opportunities for interactions with the local communities.

Over the past decades, the meaning and definition of ecotourism itself has been the subject of many debates and discussions. The debates were not only about what ecotourism is, but also about what it is not.

Weaver and Lawton (2007, p. 1170) maintain that ecotourism mostly satisfies three main criteria. Namely, “(1) attractions should be predominantly nature-based; (2) visitor interactions with those attractions should be focused

on learning or education, and (3) experience and product management should follow principles and practices associated with ecological, socio-cultural and economic sustainability.”

Martha Honey, former Director of the International Ecotourism Society and now Co-Founder and Executive Director of the Center for Responsible Travel, considered authentic ecotourism and its relationship to sustainability. Honey's framework for ecotourism is divided into seven components, instead of three. The definition includes the following seven components (pp. 28-31): (1) involves travel to natural destinations; (2) minimizes impact; (3) builds environmental awareness; (4) provides direct financial benefits for conservation; (5) provides financial benefits and empowerment for local people; (6) respects local culture; and (7) supports human rights and democratic movements.

Ross and Wall (1999) on the other hand, outlined five functions of ecotourism; namely (1) protection of natural areas; (2) education; (3) generation of money; (4) quality tourism and (5) local participation. In similar fashion, Donohue and Needham (2006, p. 192) identify six key criteria of ecotourists, being “(1) nature-based; (2) preservation/ conservation; (3) education; (4) sustainability; (5) distribution of benefits; and (6) ethics/ responsibility/ awareness.” In contrary, Cater (2001, p. 4166) again reduces the main criteria of ecotourism to three: ecotourism should not only be “green”, but it should also be “responsible” and it “must recognize the interests of all stakeholders”.

The United Nations World Tourism Organization (UNWTO) defined ecotourism, in a study about The German Ecotourism Market in 2001, as a form of tourism with the following characteristics: “(1) All nature-based forms of tourism in which the main motivation of the tourists is the observation and appreciation of nature as well as the traditional cultures prevailing in natural areas. (2) It contains educational and interpretation features. (3) It is generally, but not exclusively, organised for small groups by specialized and small locally-owned businesses. Foreign operators of varying sizes also organize, operate and/or market ecotourism tours, generally for small groups. (4) It minimizes negative impacts on the natural and socio-cultural environment. (5) It supports the protection of natural areas by: (a) generating economic benefits for host communities, organizations and authorities that are responsible for conserving natural areas; (b) creating jobs and income opportunities for local communities; and (c) increasing awareness both among locals and tourists of the need to conserve natural and cultural assets.”

For the purpose of this study Weaver and Lawton's three core criteria of what ecotourism is, will be used.

Community-Based Ecotourism (CBET) can be subordinated to ecotourism. The International Ecotourism Society defines ecotourism as “responsible travel to natural areas that conserves the environment, sustains the well-being of the local people, and involves interpretation and education” (TIES, 2015). Just like ecotourism, community-based tourism means many different things to different people. In the context of conservation theory and practice, community-based tourism refers more specifically to tourism organizations or activities that involve “local communities, occur on their lands, and are based on their cultural and natural assets and attractions” (Nelson, 2004, p8). It therefore focuses on travel to areas with natural attractions and which contributes to environmental conservation and local livelihoods.

Self-proclaimed ecotourism operators often cover a wide range, when considering them from an environmental perspective. On the one hand there are some, which actively invest in protecting the natural areas or threatened species. On the other hand, there are those, who simply practice some environmental or cost-saving measures,

such as renewable energy or water recycling (Honey, 2002). Community-based tourism implies going beyond benefiting the local communities through employment or by contributing to community projects. It much more means “anything from regular consultations to ensuring that at least some community members participate in tourism-related economic activities, to partial or full community ownership of whole ecotourism enterprises” (Kiss, 2004, p232). The evaluation of the results of the conservation and community development objectives is challenging, due to the wide range of interpretation. Being a project that helps reduce poaching or that creates local employment: every project can either be seen as a success story or a disappointment, depending on what it set out to achieve. If one is following the determined core criteria of both, ecotourism and CBET, there is no such thing as right or wrong, as long as the set goals are achieved.

## **2. German Ecotourists**

In 2016 alone, a total of 58 million tourists travelled to the continent of Africa, making up a 5% share of all tourists in 2016. Coming fourth in the global ranking after Europe, Asia and the Pacific, Americas and just 4 million in front of the Middle East. A total 1,235 million tourists travelled across the globe in 2016. Compared to the world’s top tourism spenders in 2016, Germany was ranked in third place with a total spending of US\$ 81 billion, even before the UK with US\$ 64 billion (UNWTO 2016, p 12-13).

The impact and importance of ecotourism or more so sustainable tourism in Germany is supported by a number of government-funded studies. At the request of the German Bundestag’s Committee on Tourism, the federal competition on the different possible sustainable tourism regions in the years 2012 and 2013 was held. The aim was to provide incentives for sustainable tourism in Germany and to support rural regions. The competition focused not only on fostering sustainable tourism as a means of strengthening the economies of structurally weak areas, but also at the same time conserving biological diversity and other natural capital and supporting cultural heritage, resource and energy efficiency (DTV,2016).

Two years later, the German report “Reiseanalyse 2014”, conducted by the German “Forschungsgemeinschaft Urlaub und Reisen e.V.” and government-funded by the German Federal Environment Ministry, was published. The study on the domestic demand for sustainable tourism has shown that while many Germans wish to travel in an ecologically and socially sustainable way, they frequently find this impossible in practice due to insufficient availability. Sustainable products and services on offer are few and far between and access to reliable information is poor. Moreover, the study identified, that in 2013 one million German travellers stated, that sustainability was the main core criteria for their chosen destination. A total of six million travellers stated that sustainability was one of the criteria for their travel-planning. Looking at the different dimensions of sustainability, of which ecotourism can be part of, 22 million German travellers look for an ecologically flawless holiday experience, whereas 26 million Germans mainly seek social compatibility. Asked about the future, 36 million German travellers stated that they would like to book a sustainable trip.

On the questions about when they would plan a sustainable holiday, Germans between the age of 14 and 70 indicated the following: (1) 55% would travel sustainably if there would be no extra costs, compared to a “normal” holiday. (2) 49% would travel sustainably if their holiday requests would still be fully satisfied. (3) 43% would travel sustainably if they had more information about sustainable tourism. (4) 32% would travel sustainably

if there were more offers to choose from. (5) 20% would travel sustainably if their travel companion would want it as well. On the whole, the study makes up good assumptions about the sustainable travel habits.

### **3. Tree-planting**

Ecology and the protection of the environment are important topics in Germany. There are several German organizations, whose core capabilities refer to ecological topics. All those organizations are trying to establish a general awareness of what everybody can do to protect our environment. Even for the German government environmental protection is a substantial topic (BMUB, 2017). 67% of the German population could imagine paying for services, which reduce the CO<sub>2</sub> emissions. 11% of the German population have already used offers connected with costs, such as tree-planting (Statista, 2017). Subsequently, it is not surprising that there are a lot of associations and organizations such as Trees of Life, Greenpeace and the World Wildlife Fund, whose main task is tree-planting with the aim of reducing the effects of climate change.

The United Nations Environment Program (UNEP) initiated the pilot project Billion Tree campaign in November 2006.

In 2007 the nine-year-old German pupil Felix Finkbeiner founded the student initiative "Plant-for-the-Planet Foundation", with the aim of kids reducing the CO<sub>2</sub> emissions whereas adults were just talking about it. In March 2007, the first tree of the Plant-for-the-Planet Foundation was planted in Starnberg, Germany. In November 2007, the billionth tree had already been planted in Ethiopia. Just a year later, in May 2008, the campaign planted its two billionth tree, resulting in the UNEP changing its tree-planting goal to a total of seven billion trees worldwide. This goal was achieved in September 2009. This meant that there was practically a tree planted for every person on earth. In February, the children opened the International Year of Forests at the UN in New York. Nine months later in November, a total of 12 billion trees had been planted across the globe by the Plant-for-the-Planet Foundation. Just one month later in December, the initiative was handed over to the children and youth of Plant-for-the-Planet at the 17th meeting of the Conference of the Parties (COP17), the 2011 United Nations Climate Change Conference, in Durban South Africa. At the Youth Summit in 2015 in Tutzing, Germany called out for the biggest afforestation project so far. As of April 2016, more than 14,2 billion trees have been planted worldwide by this organization (Plant-for-the-Planet Foundation, 2017). Since 2017 Felix Finkbeiner and the current German Federal Minister for Development Dr. Gerd Müller are setting out calls for planting trees and participating in competitions among schools.

Besides the Billion Tree Campaign, which is funded by the UNEP, there are also plenty of interesting private companies around Germany, who care about sustainable production of their products and environmental protection. A big German company which has been active in the field of protecting the environment is Faber-Castell. It is one of the oldest industrial companies and family-owned businesses in the world. Their success began in 1769 and continues until nowadays. According to Faber-Castell's sustainability report from 2011, a third of the earth's landmass is covered by forest. The forests are home to around two thirds of the world's wildlife and vegetation. Unfortunately, every year an area bigger than Germany, around 13 million hectares, are still being destroyed. This can be compared to the deforestation of about 35 football fields every minute. For Faber-Castell, wood is the most important resource, being the world's biggest single producer of wood-cased pencils, which

needs up to 150,000 tonnes of wood every year. One of the company's biggest future challenges is to ensure a secure and planet friendly wood supply. The German company has shown over the past three decades, that their unique wood supply program in south-eastern Brazil has been more than successful. In the course of time, millions of seedlings have been planted on approximately 10,000 hectares, resulting in the growth of 20 cubic meters of wood every hour. In addition to the company's own wood supply, about 2,700 hectares are left wild and untouched to protect the ecosystems and biodiversity. (Faber-Castell, 2011)

Besides these two named German tree-planting initiatives, many more have been established all around the world. Several different organizations plant trees worldwide. Developing countries make quite extensive efforts to preserve the tree wildlife of their country.

Mukuna (2016) argues that it is a widely recognized fact, "that climate change poses significant serious threats to sustained economic growth and agricultural development, poverty reduction, food security and political stability globally". Especially in Africa, where two-thirds of all available land is either categorized as desert or dry land, are these challenges more marked (Mukuna, 2016). The World Bank's (2013) report *Turn down the Heat: Climate Extremes, Regional Impacts, and the Case for Resilience*, which focused on sub-Saharan Africa among three world regions, also confirmed that Africa faces huge financial challenges in adaptation to climate change. The AMCEN (African Ministerial Conference on the Environment), UNEP and Climate Analytics (2013) state, that the adaptation challenge for Africa will be much larger, if the emission gap is not closed and mitigation beyond 2020 falls short. Moreover they imply, that this will result in a 4°C warmer world at the end of the century. The continent's environment ministers met at the African Ministerial Conference on the Environment in Libreville, Gabon in June 2017. They collaboratively passed the Libreville Declaration, in which they committed to reinvest a larger proportion of revenue into improving Africa's natural capital, including land and soils, forests, fisheries, water and biomass fuels, on which the continent's development depends. In a set of four decisions, Africa's environment ministers tackled the continent's major environmental issues, such as climate change, healthy oceans, pollution, land degradation and drought, illegal trade in wildlife and renewable energy (UNEP, 2017). In terms of desertification, land degradation and drought, the governments committed to strengthen sustainable land management, particularly to address land tenure issues, and the empowerment of women and youth. The ministers agreed to speak at the 13th Conference of Parties to the UN Convention to combat desertification, especially on regional issues, such as enhancing drought resilience and the proposed land degradation neutrality fund (UNEP, 2017). Mully Children's Family (MCF) for example, a Christian-based non-profit making charitable organization that caters for children who are orphaned, abandoned, abused, desperate and neglected regardless of their religion, sex, color and tribe has its origin in the Machakos County, Kenya. It was founded by Dr. Charles Mulli and his wife Esther in 1989 and currently has over 2,500 children in Kenya. Some of the MCF main projects include: Rehabilitation, Education and Training, Counseling and Mentorship, Outreach Programs, Agriculture and Sustainability, Environmental Development, Climate Change and Mitigation projects. MCF also has its own environmental reclamation and tree-planting campaign. The two major centers in Yatta and Ndalani in Machakos County, located in Eastern Kenya, are characterized by high temperatures, low average rainfall and perennial droughts (MCF, 2016, p.23). All of the previously stated have affected the livelihoods of inhabitants in the past. MCF is committed to address the harsh climatic conditions, through reclamation of MFC projects and tree-planting campaigns, which

threaten the survival of the inhabitants. Water conservation projects in MCF Ndalani and MCF Yatta were sustained and continued to support irrigation farming and related domestic use. A successful upgrade of the irrigation system was accomplished with a high capacity pump and a piping system, as well as an irrigation reservoir dam. MCF Ndalani commissioned the first Irrigation Reservoir Dam, constructed in 2016. Increased production of tree seedlings at the MCF Yatta propagation and production unit, facilitated increased tree-planting within MCF and at a community level. The nursery produces around one million seedlings per year to enable the realization of the tree-planting campaigns. Tree-planting activities and sustained awareness on environmental conservation have continued as a strategy to transform MCF project locations and neighboring communities (MCF, 2016, p.24). Those projects have created an oasis within this arid land. (MCF, 2017)

#### **4. Methodology:**

This study is a case study of leveraging the efforts of the Mully Children's Family (MCF) **environmental reclamation and tree-planting campaigns and the** United Nation Environment Program, short UNEP "Plant-for-the-Planet – Billion Tree Campaign". This study is an exploratory study of the niche market potential of German tourists, willing to spend time tree-planting as "ecotourists" in the semi-arid regions of Kenya, in cooperation with a private Kenyan initiative (MCF), as part of their holiday in Kenya. As such, knowledge generated is interpretive and contextual, and is not meant to be generalizable, but may offer a basis of comparison for other case studies and further studies conducted in the future. MCF was selected as a base for research, because it has been identified as successful in the ecotourism tree-planting task among ecotourism projects in Kenya. An online survey, representing ecological active Germans of the largest German ecological associations, is analyzed, to assess the marketability and potential of German tree-planting ecotourists in Kenya. The online survey consisted of a total of 10 questions and was conducted over a period of ten consecutive days. It was spread through e-mail, social media, partner universities and personal contacts, and was thereby able to reach a total of 170 eligible participants.

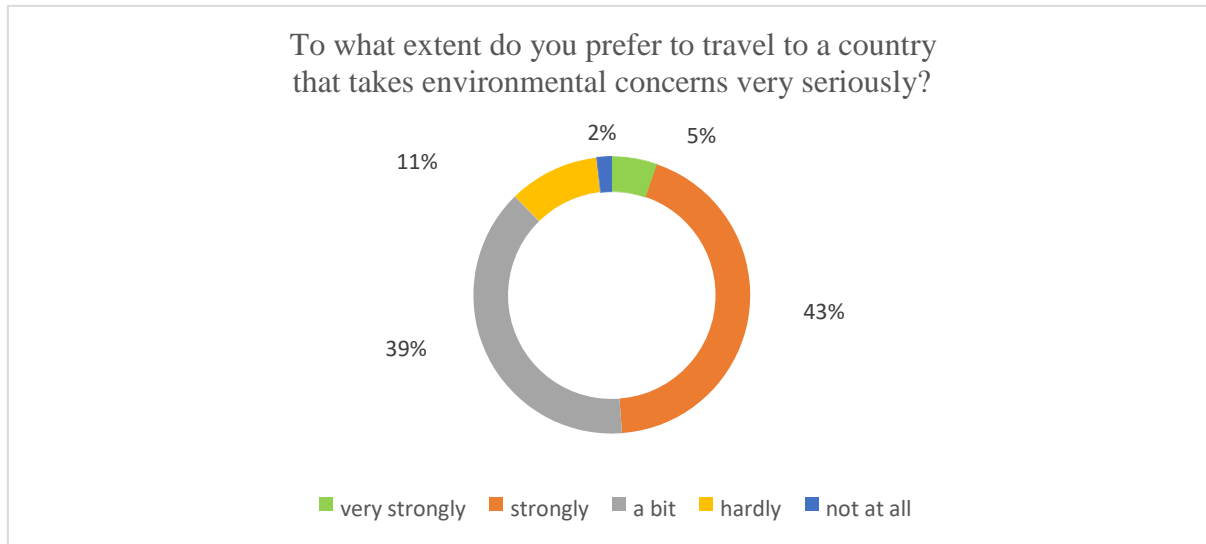
#### **5. Limitations**

There are characteristics of design or methodology that impacted or influenced the interpretation of the findings from the research. The main limitations are expressed as follows. 170 participants are not a representative number for a survey, and might not represent the majority of the German population. The authors shared the survey among environmental protection organizations and Kenya related communities on social media, as well as family members and friends. The authors have not systematically examined which particular group of people is represented by the named organizations and communities, which limited the ability to make statements about the socio-demographic background of the participants. The survey can be seen as a pretest to discover, whether there is enough potential to widen this area of research.

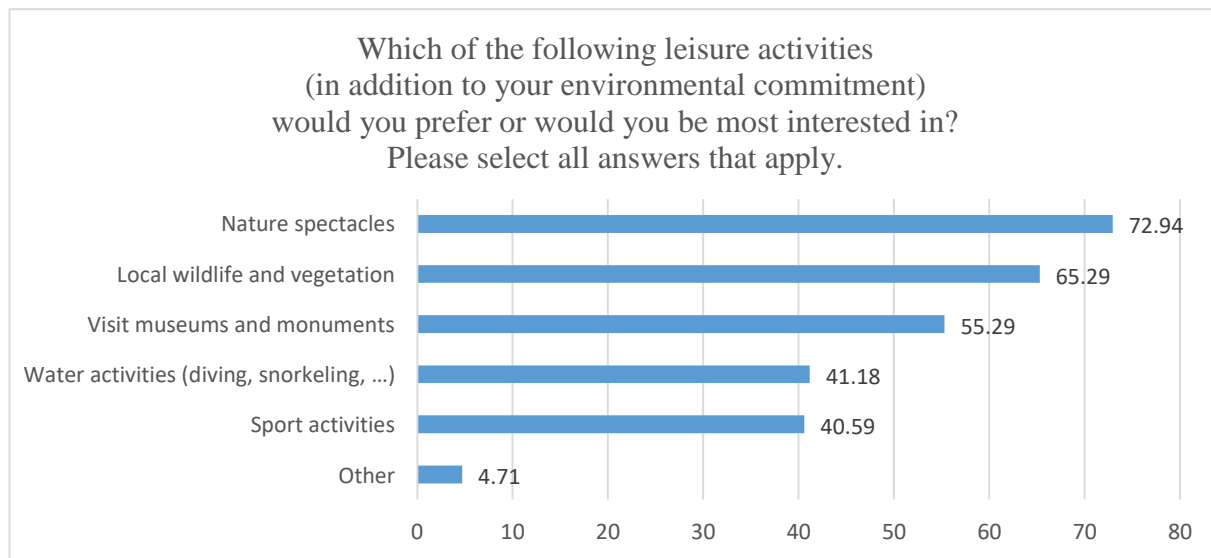
#### **6. Findings**

The first question of the survey was meant to find out, to what extend the participants preferred to travel to a country, that takes environmental concerns very seriously. The results showed clearly, that 43.53%, a total of 74

persons, strongly cared about environmental concerns. A total of 38.82%, a number of 66 persons, stated that they only cared a bit.



Furthermore, the survey was set to find out, which possible leisure activities the participants would select in addition to their environmental commitment. They were able to choose all applying answers from a list of suggestions and also had the possibility to give individual answers. In addition to the suggested answering possibilities, some of the participants stated in their individual answers, that they were interested in meeting friends, enjoying nice local dishes, going on a motorcycle tour, sailing and interact with the local culture and their

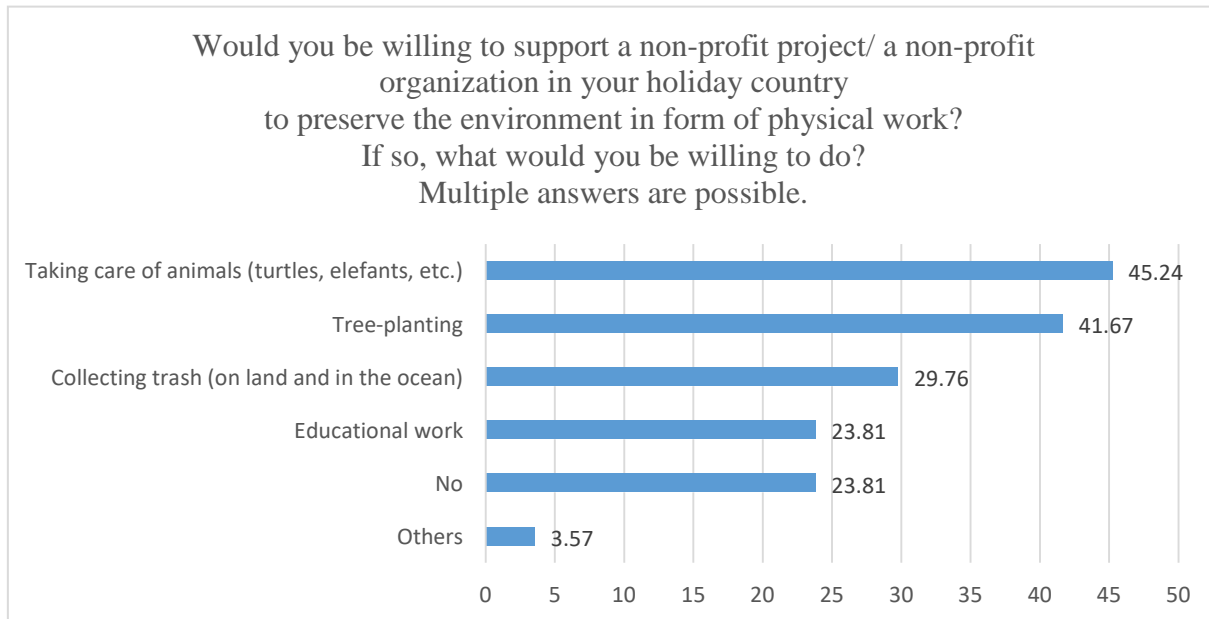


inhabitants.

The third question wanted to find out, whether the participants are actively supporting non-profit organizations, which deal with the preservation of the ecosystem, the wildlife or the vegetation. More than half of the

participants chose no as their answer. However, almost 60 persons specified that they supported NPOs with monetary donations.

The next question of the survey, was closely linked to the previous one, but wanted to find out, what the travelers would be willing to do in their chosen holiday destination and country. It stood out, that most of the questioned participants would be interested in taking care of animals in need, such as turtles, elephants and other endangered species, closely followed by the interest in planting trees.



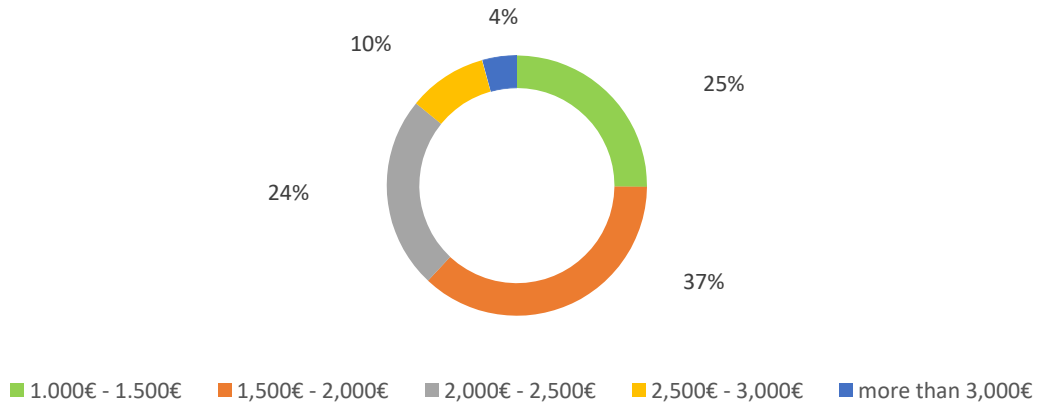
Questioned about the importance of the educational aspect during their holiday, almost 53%, on a scale from 1 to 4, 1 being very important and 4 being of no importance to them, have chosen 2 as their answer.

All of the suggested answer possibilities, to the question of how they would be willing to educate themselves about their holiday destination, were rated very highly. More than 85% were keen on visiting sights and monuments as well as standing in contact with the locals, closely followed by informing themselves about the nature and museums. A handful of participants stated that they are highly interested in learning the local language. Additionally, it was mentioned that there was interest in acquiring a local guidebook about the vegetation and wildlife.

The aim of the final part of the survey was to find out more about the possible German ecotourists. The seventh question dealt with the expenditure of an average ten-day long trip to a safe African developing country, including flights and accommodation. It was not surprising that most of the participants (36.81%) would be willing to spend 1,500-2,000€.

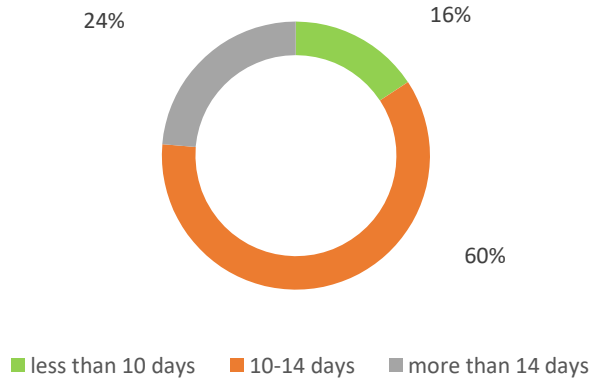


How much would you be willing to spend on a 10 day long trip to a safe African developing country including flights and accommodation?



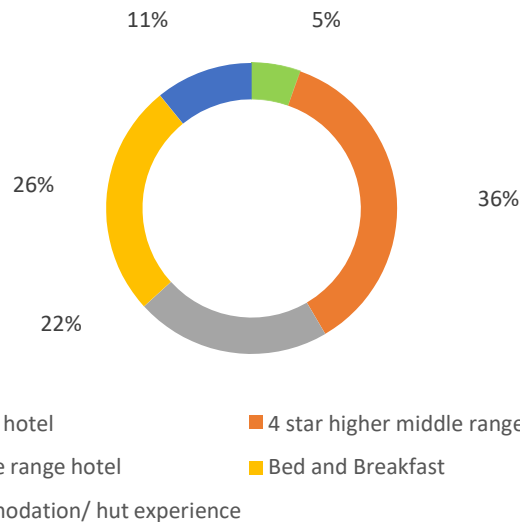
Questioned about their preferred duration of stay 100 out of 165 questioned participants would stay about ten to 14 days.

How long would you prefer to stay in a safe developing country?



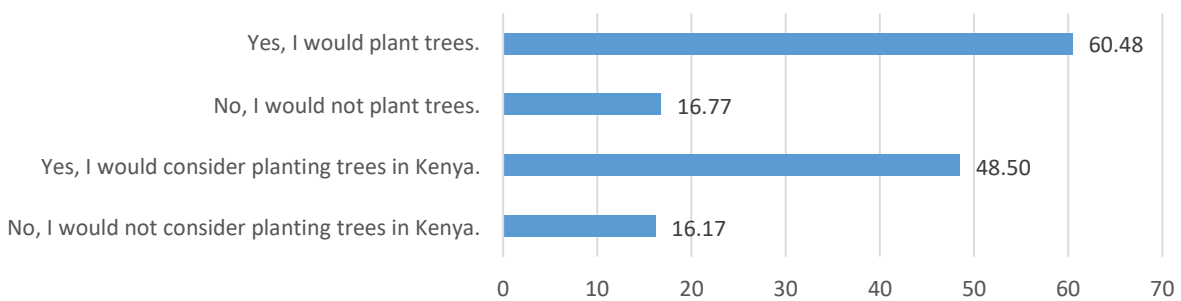
During their stay, most of the participants (36.14%) would chose a four-star higher middle range hotel as their accommodation, followed by Bed and Breakfast with 25.90% and three-star middle range hotels with 21.69%. All the results were based on the German standards for accommodation. Considering all the results, it can be noticed that there is a potential for all the suggested types of accommodation, catering for all needs of potential German ecotourists.

During your stay, what type of accommodation would you prefer in a safe developing country according to German standards?



The tenth and final question should reveal the original aim of the online survey. It should find out, if the participants were willing to plant trees, especially in Kenya, if they could change the microclimate by 2°C for the better. The results positively showed, that 60.48% were willing to plant a tree to support the preservation of the ecosystem. Furthermore, the results showed that almost 50% were considering planting trees in Kenya to support the Kenyan ecosystem.

If you could improve the microclimate by 2°C for a particular region by planting trees, would you be willing to do so?  
 Would you consider Kenya for your tree-planting?  
 Please choose two answers.



## 7. Conclusion

The authors identified the potential of German ecotourist tree-planters for a Kenyan project and potential suggestions of further sustainable tourism, which impacts the environment positively. The online survey was evaluated and cross-checked with Weaver and Lawton's (2007, p. 1170) three core criteria, being "(1) attractions should be predominantly nature-based; (2) visitor interactions with those attractions should be focused on learning or education, and (3) experience and product management should follow principles and practices associated with ecological, socio-cultural and economic sustainability." Referring to the first core criteria of Weaver and Lawton, the results of the conducted survey proved, that German ecotourists prefer destinations with predominantly nature-based attractions, such as watching nature spectacles, local wildlife and vegetation, as well as visiting monuments and ruins and carrying out water activities, like diving, snorkeling and swimming. The results, stated by the participants of the survey, such as taking care of endangered species like turtles and elephants, tree-planting, collecting trash on land and in the ocean, educational work, interacting with the local culture and some other individual answers, confirmed the second core criteria. It is much easier to fully understand the whole meaning of Weaver and Lawton's last core criteria, once one experienced a working ecotourism concept, implemented in the local everyday life. As mentioned before, Mully Children's Family in Machakos County is a pioneer in this field. In 2017, they built their own guesthouse, catering for the ecotourists, that visit them. They not only provide accommodation for their visitors, but also supply them with local produces. Most of these, such as green beans, corn and sugar supplements are grown on their own land and harvested, processed and distributed by local workforce. The authors identify MCF as a well-working ecological organization interested in sharing their knowledge, across visitors and the local community likewise. By integrating the locals and enabling them to interact with their guests, they show a great interest in bringing different cultures together and proving once more that all people, regardless of color, religion, appearance and sex, have the same impact on the local wellbeing of a community. All of MCFs earnings are used for the well-being and development of the local families, being the best possible way of behaving in an economic and sustainable manner.

The pretest, in form of the online survey carried out, confirms the literature mentioned at the beginning, that Germans are interested in eco-touristic activities. Although not representative, the findings suggest, that there would be interest in activities to support the environment, specifically in Kenya. Almost half of the respondents would even consider planting trees in Kenya, as part of their travel experience. Slightly more respondents showed they would be interested in care for endangered animals. The study would suggest that there is a market for tourists willing to plant trees in Kenya, and an even larger market if combined with animal protection.

## **8. Recommendation**

To follow-up on this pretest survey, a representative study on the same topic should be carried out. This study should not only go into greater depth, regarding the exact eco-activities that could be carried out by German ecotourists, but also include a more in-depth study of the needs of the German ecotourist. Furthermore, a market study of possible suppliers and partners in Kenya need to be found, who could meet the German ecotourist expectations, concerning opportunities to plant trees and assist in saving wildlife in an organized manner, as well as provide accommodations that meet the German ecotourism expectations.

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