Residents’ Attitude Towards the Development of Ecotourism in Saudi Arabia: Evidence from Farasan Island

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Abstract
The aim of the present paper is to investigate the impact of residents’ attitude on ecotourism in Farasan Island in KSA (Kingdom of Saudi Arabia). In overall, ecotourism is recognized as a strategic highway to increase growth and to realize a sustainable development without harming the ecosystem. Thus, we considered it as convenient to implement in Farasan because of the natural potential of the island. In the beginning of the paper, the authors provided an extensive literature review regarding the effect of expectations of residents for developing tourism in several economies. In the empirical research, the authors carried out a questionnaire to collect the opinion of residents regarding ecotourism in their region. Utilizing the method of PLS, the empirical findings authorized to underline the positive attitude of residents of Farasan regarding the development of touristic activities. The outcome also revealed that local population had positives expectations that ecotourism would improve the quality of life and the infrastructure of the island.

Key Words: Ecotourism, Nature-Based Tourism, Responsible Tourism.

Introduction
Tourism made up a significant source of jobs and creation of value, it is also recognized as highway to increase wealth and economic development. In fact, several countries are extending tourism activities without considering the environmental sustainability. Although, the issue of environment deterioration became the major purpose of several international institutions, for example: United Nations Development Program (UNDP), United Nations Environment Program (UNEP). Due to the importance of the issue of ecology for international community, we saw the advent of a new tourism industry that preserves environment and contributes to accelerate growth and economic development, called ecotourism.

The thorough analysis allowed to underline that tourism activities depend on socio-economic, traditional and cultural features of the residents. Thus, ecotourism should positively affect growth and economic development, without harming the ecosystem of the host region and convenient with the culture and traditions of local population. The thorough analysis of previous studies enabled to underline the pivotal role of acceptance of residents to develop tourism in their region. Acceptance includes foreign visitors and private investors that would contribute in the production of goods and services.
Literature Review

Tourism industry: Opportunities and Harmful Effects

Previous studies assumed that tourism contributed to raise growth and development by creating new jobs for youth and improving the quality of services to satisfy the visitors, for instance, the study of Balaguer & Cantavella-Jorda (2002), the authors underlined the positive association between tourism and economic growth in long run. Lean and Tang (2010) found also that tourism is a stable factor that contributed to stimulate growth in Malaysia. The beneficial effects of tourism depend on the expectations of local population that made up the major concern of several empirical researches.

Although, tourism seems to be sharply associated to environment deterioration, the conclusion made up the principal issue of several papers. Referring to the survey of Michailidou et al (2015), the utilization of life cycle analysis authorized to draw the conclusion that tourism industry and climate change are firmly associated. The findings of their survey are in line with those of Gössling (2010) and Scot et al (2008). These authors concluded that tourism industry represents a principal cause of environment deterioration and climate change phenomenon.

In other context, we underline the advent of several studies to assess the ecological effects of tourism industry in KSA by focusing on Jazan region, as the survey of Al-sheikh, A. B. Y. (2012). Referring to his study, the ecological deterioration is the direct result of the spread of tourists in KSA. The author puts emphasis on the negative repercussions of tourism on environment in the region of Jazan. These findings authorized us to recommend the implementation of ecotourism in KSA as highway to stimulate growth and to improve development without harming the ecosystem.

Tourism and Climate change:

The advent of ecotourism is the direct effect of several findings regarding the negative repercussions of tourism on environment. Several authors conducted surveys about the issue and concluded that tourism and climate change are correlated, as underlined in the study of Schott et al (2010). The authors utilized the method of life cycle analysis to conclude that usual tourists and visitors had harmful effects on nature of host countries. Also, some researchers argued that the change in climate would negatively affect touristic sector in developing countries. There are many authors sharing the same conclusion that we could cite as: Haden, L. (2007), or Hamilton, J. M. (2005).

Ecotourism is a new pattern of touristic activities that preserves the environment and enhancing the quality of life of human\(^9\). The firm analysis of literature review regarding environmental economics enabled to highlight the importance of the environmental dimension in sustainable development. In other terms, to improve the infrastructure and the quality of life without harming the environment and without debt for forthcoming generations. Allowing to consider ecology as a major variable to introduce in the durable economic development formula. Thus, the United Nations made a declaration concerning the “Millennium Development Goals” and attributed a whole objective for the protection of environment and ecology in developing countries.

**Previous Studies**

According to Korça (1998)\(^{11}\), the local population contributed in the extension of touristic activities in the region of Antalya in Turkey. The author underlined that the jobs of the majority of residents are firmly related to tourism activities. Referring to Allen et al (1993)\(^{12}\), the rural residents’ of Colorado had affected positively the tourism development. In the empirical research, the authors utilized 4 different categories of residents. They found that all categories of residents’ attitudes are in favor of improving the quality of life and developing tourism.

In the study of Burns (1996)\(^{13}\), the author conducted a survey to identify the attitude of residents towards developing tourism in Australia, through considering various styles of cooperation: economic, social, cultural and environmental. The majority of residents are in favor of developing tourism, qualified as tool to improve the quality of life in the region of “Marovo Lagoon” in Australia.

For Davis et al (1988)\(^{14}\), the development of tourism in Florida focuses on the efforts of the residents. The authors carried out a survey that authorized to denote that 90% of the respondents agree that tourism is a source of wealth and employment opportunities. The authors found that 77% of residents think that tourism facilitated the recreation of cultural and economic facilities.

Getz et al (1994)\(^{15}\) carried out their study over the period 1978 and 1992 to elucidate the impact of the attitudes of residents in Scotland on tourism development. The authors found that most of the local population have positive position towards the creation of touristic activities in “Spey Valley” region. The positive attitude of residents is motivated by their beliefs that tourism creates wealth and benefits of local population. The same conclusion is shared by Lepp (2007)\(^{16}\), the author found that residents are pro-tourism industry development in Bigodi village in Uganda, over 6 months of observations. Although, according to Lankford (1994)\(^{17}\), the factor analysis of the attitude of local population in “Columbia River Gorge of Oregon”, allowed to denote that noise, pollution and crime are the direct impact of tourism.

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authors denoted that government employees did not share the same opinion. Thus, developing tourism in the region would be the choice of public authority and politicians, due to the negative attitude of the majority of the local population. The negative expectations of residents for tourism is consolidated in the survey of Teye et al (2002)\(^{18}\). The authors applied the method of factor analysis, they put emphasis the negative aspirations of residents regarding tourism development in Ghana.

In the survey of Tyrrell (1984)\(^{19}\), the author classified residents by cultural, economic and social criteria. It arose that residents have positive attitude regarding the development of tourism in “Rhode island”, especially among households. According to the study, the local population is in favor of developing more touristic activities, because it is source of more jobs and wealth. The same approach utilized by Sinclair-Maragh et al (2015)\(^{20}\), applying the method of factor-cluster analysis. The authors revealed that older residents demonstrated favorable attitude towards tourism in their region.

Referring to Kendall and Tarakcioglu (1985)\(^{21}\), the factor analysis of the questionnaire authorized to underline the negative attitude of residents that made up a major obstacle to develop tourism. The authors found that more than 55% of the residents think that tourists affected the ecological environment of Marmaris in Turkey. Also, the survey showed that 84% of the respondents found some difficulties to exchange the tourist money. In the study of Zamani-Farahani and Musa (2008)\(^{22}\) focusing on a questionnaire, it arose that residents of Mansooleh in Iran are supporting the development of Tourism in the region. The authors recommended to include the local population in the future planning of tourism, less involved in the planning and managing tourism activities. Woo et al (2015)\(^{23}\) utilized the structural equation model and found that residents are in favor of tourism, because it positively affected the quality of life and growth.

**Empirical Research**

In the present paper, we attempted to find out the attitude of residents of “Farasan Island” through conducting a questionnaire. The survey focuses on analyzing the opinion of local population regarding the implementation of Ecotourism in the island.

**The questionnaire**

We carried out a questionnaire including 28 questions reflecting 4 different components, representing the variables of the empirical model: local population, resources and infrastructure, ecotourism and tourists.

**The latent variables**

The latent variables of the model are measured through the utilization of the questionnaire and we could put forward them as following:


• Resources and Infrastructure: the component described the material resources and natural potential to satisfy tourists and the quality of infrastructure in the island of Farasan.
• Local population: the element attempted to measure the attitude of residents of the island regarding the introduction of touristic industry in the region. The variable attempted to analyze the acceptance of visitors through considering the natural, economic, social and cultural matters.
• Ecotourism: reflected the potential of satisfaction in the island allowing to create a touristic industry in line with the preservation of nature.
• Tourists: the component is utilized to measure the satisfaction of tourists and their opinion about the island.

The Model

We adopted the approach of simultaneous equations model (SEM) through the utilization of partial least squares method (PLS). The PLS estimation approach is highly suggested for empirical model with limited number of responses. The model to estimate in the present paper has the following form:

Graph1

Legend: The simultaneous equation model (SEM) of the empirical investigation
Source: Elaborated by the authors of the present paper

The Findings

After making the estimation through the utilization of the software SmartPLS²⁴, we obtained the outcomes presented table 1:

Table 1. Findings from estimating the SEM

<table>
<thead>
<tr>
<th>Effects</th>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t-Statistic</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources -- Ecotourism</td>
<td>0.382***</td>
<td>0.148</td>
<td>2.577</td>
<td>0.010</td>
</tr>
<tr>
<td>Tourists -- Ecotourism</td>
<td>-0.112</td>
<td>0.102</td>
<td>-1.095</td>
<td>0.274</td>
</tr>
<tr>
<td>Tourists -- Resources</td>
<td>0.098</td>
<td>0.126</td>
<td>0.779</td>
<td>0.436</td>
</tr>
<tr>
<td>Population attitude -- Ecotourism</td>
<td>0.682***</td>
<td>0.164</td>
<td>4.153</td>
<td>0.000</td>
</tr>
<tr>
<td>Population attitude -- Resources</td>
<td>0.857***</td>
<td>0.106</td>
<td>8.08</td>
<td>0.000</td>
</tr>
<tr>
<td>Population attitude -- Tourists</td>
<td>0.754***</td>
<td>0.076</td>
<td>9.891</td>
<td>0.000</td>
</tr>
</tbody>
</table>


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Table 1 shows the coefficients representing the nature of the relationship existing between the two latent variables. It also provides the statistical significance of the coefficients found from the SEM.

Table 2: Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>Ecotourism</th>
<th>Ressources</th>
<th>Tourists</th>
<th>Population’s Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotourism</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ressources</td>
<td>0.382</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourists</td>
<td>-0.075</td>
<td>0.098</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Population’s Attitude</td>
<td>0.953</td>
<td>0.931</td>
<td>0.754</td>
<td>1</td>
</tr>
</tbody>
</table>

The correlation matrix revealing the relationships of dependency among the latent variables, bare out the harmful repercussions of tourists in the region of Farasan. Although, the negative effect remains limited (coefficient is less than 0.1). The same matrix underlined the positive attitude of local population regarding the implementation of ecotourism in their island and their expectations for the improvement of infrastructure and the enhancement of their quality of life.

From table 2, the attitude of local population and its acceptance of foreign visitors in Farasan, the coefficient is positive. The result bare out the positive expectations and attitude of the residents for the introduction of tourism in their island.

Table 3: Tests of validity

<table>
<thead>
<tr>
<th></th>
<th>Cronbachs Alpha</th>
<th>Average Variance Extracted</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>0.902</td>
<td>0.632</td>
<td>0.923</td>
</tr>
<tr>
<td>Tourists</td>
<td>0.913</td>
<td>0.740</td>
<td>0.934</td>
</tr>
<tr>
<td>Ressources</td>
<td>0.950</td>
<td>0.770</td>
<td>0.959</td>
</tr>
<tr>
<td>Ecotourism</td>
<td>0.871</td>
<td>0.795</td>
<td>0.921</td>
</tr>
</tbody>
</table>

Table 3 made up the evolution of the statistics of Cronbachs alpha, their values are exceeding 0.8, above the critical value. Thus, the indicator revealed that the variables utilized in the model reflected the sharp correlation with their factor grouping.

Table 3 elucidated the statistics of Average Variance Extracted (exceeding the value of 0.6), allowing to measure the validity of items utilized in the questionnaire. For the model, the statistics are all exceeding the critical value, authorizing us to underline the convergent validity of the model. For the composite reliability, the statistics found exceeded 0.7 confirming the measurements of the variables by items. Thus, they bare out the reliability of the conducted model.

**Discussions and Recommendations**

The thorough analysis of the findings from table 1 authorized to put forward that resources had a positive impact on Ecotourism, statistically significant at 1%. In fact, the region of Farasan is recognized by its wonderful natural locations and considered as the Arabic Hawaii. The residents had confidence that natural resources and infrastructure of Farasan will attract tourists and visitors from all the world. The present statement is in line with the conclusion drawn by Khadaroo and Seetanaha (2007). The authors underlined the beneficial effect of infrastructure and transportation facilities on tourism in Mauritius.

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The findings showed a harmful impact of tourists on ecotourism, the effect is not statistically significant. It authorized to deduce that residents expect that tourists would not harm the environment in their island. We would also mention that the effect of tourists on resources is positive but non-significant from statistical perspective. The positive impact is the direct result of the increase in the financial revenues generated from visitors. The wealth collected should contribute in improving the infrastructure of the island and to facilitate the finance of new services in the region.

For the impact of residents’ attitude on implementing an ecotourism, it is positive and statistically significant at 1%. The illustration of the finding relies on the behavior of people in Farasan. In fact, the residents of the island are so tied to their environment and to preservation of ecology. Thus, developing a tourism that creates more jobs and wealth associated to the preservation of nature would be highly appreciated by local population. Referring to Lindberg et al (1996)\(^{26}\), the authors found a high level of cooperation from residents to preserve nature. They argued that local population in Belize (Australia) supported the creation of protected areas to reduce the negative repercussions of foreign visitors.

For the effect of residents on the resources of the island, it arose that local population would contribute to preserve the environment and to enhance the standards of living in their island. The big improvements in infrastructure and quality of services in Mecca and Medina introduced positive awareness in the mind of local population regarding tourism. Thus, they thought that tourism will contribute to finance the development of infrastructure and the quality of life in their island. The paper of Kweka (2004)\(^ {27}\) puts emphasis on the beneficial effects from expanding touristic activities on the improvements of infrastructure in Tanzania.

Regarding the positive impact of residents’ attitude on tourists, we could illustrate it by the fact that local population had the belief that tourists would create some vitality in markets of Farasan, through stimulating the demand. The number of visitors is highly related to the revenues generated from touristic activities. The revenues of tourism increased the awareness of residents in Farasan to accept visitors as guests, to be social with them as doing in Mecca and to attract them to enjoy life in their Island. Choi and Sirakaya (2005)\(^ {28}\) found similar findings, the authors stressed that hospitality and acceptance of residents play a pivotal role to attract tourists to their regions.

**Conclusion**

The Island of Farasan has an important natural potential to make up the prime destination for tourists to enjoy beaches and natural landscapes. Although, the region needs more efforts from the government to improve the quality of living and the infrastructure to facilitate the habitation of visitors. The private investors had a pivotal role to enhance the quality of services and transportation inside the island, to effectively respond to the needs of tourists and create profits in counter party.

Saudi Arabia is recognized by its religious tourism, source of valuable financial revenues. Although, the implementation of new aspect of tourism made up a big challenge, especially for the south of the country, where there are needs for more enhancements in infrastructure and in the quality of life. The present survey attempted to provide a new framework of investigation regarding the attitude of residents to accept foreign visitors in their Island. The study focusing on solid knowledge and scientific foundations, bare out the positive attitude and expectations of local population for introducing new economic activities, preserving


nature and environment. Unfortunately, the intervention of policy makers and government would be decisive for the economic future of the Island.

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