# Economic Contribution of Ecotourism, Motivations and Satisfaction: the Case of Puerto El Morro (Ecuador)

Suleen Diaz-Christiansen

Universidad Casa Grande – Ecuador, Annabelle Figueroa Lizarzaburu

Universidad Casa Grande – Ecuador

#### Abstract

The scientific review of Natural Protected Areas as sites to perform economic activities related to tourism is recent. It is well known that ecotourism is a leading generator of business, the level of employment in certain sites depends upon it, and also helps to strengthen the household economy of vulnerable communities while preserving it. This paper presents an empirical research carried out in Puerto El Morro (Ecuador-South America). The purpose of this paper is to identify the socio-demographic profile of the visitors, their motivations and the level of satisfaction declared after the tourist experience. This analysis is based on 585 surveys collected from hikers after the visit. The results provide evidence and describe a majority of young and educated visitors who declared having obtained a university degree and a monthly income of less than US \$ 1500.00. The results highlight that contact with nature and bird and dolphin watching were respectively the main push and pull motivational factors. A high level of satisfaction is reported, which generates positive actions after the visit, such as: repetition of the visit, recommendation of the place and positive word of mouth. These findings are essential for the design or adaptation of tourism marketing strategies that respond to this segment, so that this site becomes a suggestive place as a natural destination that allows expansion in economic output and leads to positive impacts on gross capital formation for sustainable development within the community.

**Keywords**: economic impact, motivation, satisfaction, tourist marketing.

#### Introduction

Tourism, as such, has a very important weight in the economy of any country due to actions, mainly associated with the demand for goods and services that must be produced and offered to the large flows of people going to a certain destination (Ursache, 2015). The collection of foreign currency allows the investment in infrastructure necessary to provide tourism services and the diversification of the economy in general (Dzhandzhugazova, 2013). That is why, for decades, tourism has experienced a continuous growth and a deep diversification, until becoming one of the economic sectors of fastest grow in the world, forming part of one of the economic activities that generates more income in the destinations (Brida *et al.*, 2011). Tourism contributes, directly and indirectly, to an increase in the dynamism of economic activity, directly affecting the economy of the place (Gao, 2017). In addition to influencing society and local culture, it also generates strong impacts as a result of the various interrelationships maintained during the stay of visitors at the destination (Thomé Ortiz, 2008) and has an important role in raising human awareness regarding environmental protection (Ursache, 2015).

The development centered on tourism is based on the improvement of competitive advantages that are created under innovation capacities, the provision of quality services, safety levels, environmental quality and strengthening of tourism (Lillo-Bañuls et al., 2007); the latter should be able to attract and satisfy tourists (Torres Bernier, 2003, Lillo-Bañuls et al., 2007).

Tourism can be conceived as a main tool to improve the socio-economic conditions of determined rural communities. The World Tourism Organization (WTO) (2013) describes tourism as a mass social phenomenon that is increasingly important for the economy of countries worldwide. The World Tourism Organization (2002) program named Sustainable Tourism-Eliminating Poverty (ST-EP) searches, through tourism, to reduce the poverty of these rural and urban areas through the establishment of small businesses managed by the community of the site, which can provide goods and services to travelers and allow the enhancement of their cultural and environmental resources. This would imply the possibility of

generating jobs, especially for women and young people (Casas Jurado et al., 2012). In this sense, community-based tourism is a good manner to achieve these objectives.

The literature has advanced towards the concept of development achieved through tourism, expanding attention to related concepts such as equity, sustainability and obtaining benefits from tourism by the resident community (Scheyvens, 2002, Reid, 2003, Weaver, 2014). Alvarez Litben (2016) highlights sustainable tourism, responsible tourism and experiential tourism as a resource to reduce poverty, promoting the imaginations and practices of host populations on ancestral cultural heritage. Edgell (2016) states that sustainable tourism, properly managed, can be a vehicle for the realization of the highest aspirations of humanity, in the pursuit of economic prosperity while maintaining social, cultural and environmental integrity. The sustainability of a tourist destination depends on economic, ecological and socio-cultural sustainability (Rivas García & Magadan Diaz, 2012). Sustainable tourism tries to harmonize the interests of the local community, the environment and the benefit of the tourism industry (Inostroza & Cánoves, 2014). In this sense, ecotourism activities are a useful and sustainable strategy for the alleviation of poverty by improving the health of the communities (Bauer, 2017) and show a positive impact on the environment through the protection, preservation and management of natural resources (Chirenje, 2017). In the case of Ecuador, there is some academic research that deals with this economic sector. The most relevant

are from Ruiz-Ballesteros (2011), Erskine and Meyer (2012), Ruiz-Ballesteros and Brondizio (2013), Everingham (2015) and Gascón (2015).

Powell and Ham (2008) determine the four E's of conservation: Ecology, education, equity and economy. In this regard, Mieles Cevallos and Zambrano Burgos (2015) emphasize the need to maintain cultural and environmental pureness, the efficient use of natural resources that help increase biological diversity; this will minimize the impact of tourism operations and the existence of large infrastructures, but at the same time maintain the maximum satisfaction of visitors to promote the welfare of the local community in search of social equity and economic prosperity. In other words, nature tourists must, implicitly, be positively motivated to consume responsibly and have appropriate behavior during the experience.

This paper aims to present the analysis of the situation of tourism that is planned and managed by the local community in a natural protected area: Puerto El Morro, located in Ecuador (South America). This paper purports to identify the economic contribution of this type of tourism to the community, and also to identify the socio-demographic profile of the visitors, their motivations and the level of satisfaction declared after the tourist experience; this manner contribute to cover an area little discussed in the literature in the region through the discussion of a field study based on a survey conducted throughout the year 2018. In addition, the material may foster the debate about the tourist structuring in this geographical zone. The rest of this paper is organized as follows: After this introduction, we provide the theoretical framework; the third section presents a description of the area; the fourth section introduces the methodology used in the research; a fifth section reports the results of the empirical study and, the last section provides conclusions about the objective proposed.

## Theoretical review

The economy bases its activity on supply and demand, which arises from a need to cover (Palacio, 2018). In the tourism sector, the tourist offer refers to the goods and their satisfiers that are located in the place where consumers or visitors attend, which in turn interferes with the tourist activity that intervenes specifically in their preferences of the destination selection (Serrano & Pucha, 2017). In this way tourism is considered an economic activity, independent of its classification. This is an activity that has allowed the development of vulnerable sectors (Velandia, 2016). From natural richness such as flora and fauna, it creates a tourist attraction for the visitor, offering not only landscape but also different commercial transactions such as food, lodging and excursions (ESPAE, 2016). The economy directs their efforts in supporting a system within a political framework, regulation and institutional strengthening of the place where sustainability arises (Doen, 2016).

The economic impact caused by tourism is obtained through the consideration of supply and demand captured, which in turn triggers the activities heading to obtain a greater profit. In turn, the magnitude of this impact will depend on the development of these receiving communities where they are measured: attractive offers, volume of tourist expenditure, economic development of the sector, size of economic base, recirculation of tourist spending within the area and seasonality adjustment (Payeras & Sastre, 2015). The entry of foreign currency from tourism benefits people linked to this activity and proposes a multiplier effect of interdependence of several economic sectors, the demand for goods or services that the tourism sector generates and an increase in demand for services or goods from other sectors (World Tourism Organization,

1998). In this way tourism encompasses a value chain started from the starting point towards the tourist attraction, involving other actors that benefit from this activity.

In economic science, ecotourism is related to the theory of public goods (Samuelson & Nordhaus, 2016). Tourism continues to generate positive effects in the local economy (Diaconu et al., 2016). The work of Zhou et al. (2015) emphasizes the protection of ecological resources through its moderate and sustainable development through a multidimensional approach between economy, society and customs.

The responsibility for preservation is a concern of tourists in parallel with that of the providers of tourism services in the host communities, who should be concerned to control both the economic results and the conservation of the natural environment, its traditions and cultural values. In this sense, sustainability in an ecotourism site within a protected area is possible when providing tourist facilities that maintain a high level of care and satisfaction to visitors, ensuring a meaningful experience that responds to their needs, motivations and perceptions of a territory with unique value in itself, recognized for its extravagance and scenic beauty (Benson, 2014).

Tourism in protected areas is essentially motivated by the desire to spend time in a clean, quiet, less populated space to live an experience that includes adventure, cycling, natural photography, bird and animal observation and cultural learning (Newsome et al., 2013). Also, Minciu et al. (2012) considered the determinants in the purchasing decision and the effects of consumption of ecological vacations where the tourist profile also reflects the motivation to travel. At the same time, the characteristics of the location define a specific image of it. Minciu et al. (2012) consider the determining factors in the purchase decision of the tourists, their profile and the attributes of the place. Plog (2002) and Ryan (2003) emphasize motivations rather than behavior, so they describe a motivation for the novelty of the destination and the motivation to venture.

The growing number of tourists visiting natural protected areas is a consequence of the development of ecotourism; therefore, it is of great importance that travelers perceive the authenticity of the area as a necessary condition to satisfy tourist expectations about a natural place (Ryan et al., 2012). It is necessary to identify the different profiles of tourists who visit the natural areas, the motivations that lead them to prefer them compared to other tourist destinations and the frequency of visits and degree of loyalty that motivate future actions to repeat the stay (Do et al., 2015). Ecotourists, in general, have a university education and a high income which results in a greater willingness to spend money in the country of destination (Cheung & Jim, 2013). Its psychographic characteristics include the possession of an environmental ethic and the will to conserve the natural resource. This indicates the strong potential of ecotourism to nourish not only the income for conservation, but also the awareness among people who often visit these areas, generating and adopting conservation patterns after living an ecotourism experience (Coghlan et al., 2017).

Cheng et al. (2014) suggested that ecotourism is a type of alternative tourism that is closely related to areas that are sensitive in cultural and environmental spheres, and that ecotourists would positively influence the intention, interest and willingness to pay a higher price for ecotourism products and services; even, Kostakis and Sardianou (2012) reported that most tourists are willing to tolerate additional fees for technologies and services that could help offset the environmental impacts of their activities. Given that people's attitude towards ecotourism is considered one of the most important precursors of their intention to visit nature destinations or to participate in ecotourism activities (Lai & Nepal, 2006), understanding their purpose requires academic understanding and categorization of the attitudes that reflect the structural diversity with respect to the expectations and experiences of said individuals (Weaver, 2014). Although individuals have a high interest and favorable attitudes towards pro-environmental behaviors, many of them may not necessarily be willing to adopt them and pay relatively higher prices for activities and services that benefit environmental conservation (Min et al., 2017) such as reducing the consumption of water or electricity. In fact, some users may be reluctant to perform eco-friendly activities outside their home while staying in hotels (Han et al., 2017).

Motivation is an aspect of great importance in the tourist field, it is the trigger of the behavior of the individual and the explanatory factor of the design of tourist activities. Motivation allows us to answer three essential questions of the tourism cycle: (1) the reasons to travel (why), (2) the specific choice (where), and (3) the results obtained (level of satisfaction) (Castaño et al., 2003). If the expectations of the visitor do not harmonize with the image of the place, the experience is unsatisfactory. This topic is especially important for birders and specialized visitors who need to find the specific attractions

for which they have come, as otherwise their expectations would be frustrated, creating a disappointment that is difficult to restore, although there are other opportunities and attractiveness in the place (Viñals-Blasco & Alonso-Monasterio, 2016).

Devesa Fernández et al. (2010) analyze the relationships that may exist between three important components of the tourist decision-making process, such as travel motivation, satisfaction and loyalty, highlighting that there are multiple reasons that influence individuals when visiting a tourist destination. Likewise, it is emphasized that the influence of motivation on the behavior of individuals is not limited only to this previous phase of decision making, but transcends further, influencing the subjective perception of the experience and its assessment after consumption. Satisfaction is the emotional state of the tourist after having been exposed to that quality, which seems to show that there is a relationship between the quality, the level of satisfaction and the success of a tourist site. It is known that satisfaction can be influenced by a sociopsychological state that a tourist brings to the site (mood, disposition, needs) and by external agents (weather, social interactions) that are beyond the control of the provider.

It is perceived that a high quality and high level of satisfaction result in a high level of loyalty and future visit, a high level of tolerance to an increase in price and a good reputation (Oliver, 2015). It is reported that the relationship between satisfaction and loyalty is essential for the survival of an organization (Moliner-Velásquez et al., 2010) and that consumers expect tangible benefits in exchange for that loyalty, it is important to understand consumer satisfaction as the trigger of loyalty and to link it as a generator of profitability, then it is evident that different clients must be treated in different ways (Reinartz & Kuman, 2002). Through the knowledge of the profile of the tourist, the reasons to choose a natural protected area as an ecological destination and the satisfaction that they have behind the view, we try to contribute with the emerging literature in the region.

# Description of the geographical area

In recent years, Ecuador is becoming a more appealing destination in Latin America, mainly because of its patrimony richness (with two cities recognized as Cultural Patrimony of Humanity by UNESCO-Quito and Cuenca-), its variety of gastronomy, its natural protected areas and its cities with some relevance for business activities (the case of Guayaquil). In the year 2018, Ecuador received 2'428,000 foreigners, mainly coming from Colombia, United States, Peru, Argentina, Chile, Spain and Germany. This implies that tourism represents a great economic engine for this country with a level of contribution to the economy of \$ 2,392.10 million in 2018 (Ministry of Tourism of Ecuador, 2019). Tourism is the third contributing sector for the national economy after banana and shrimp, without considering the oiling sector. The evident economic importance of tourism and its development has been reflected in the academic researches performed by Erskine and Meyer (2012), Everingham (2015), Gascón (2015) and Croes and Rivera (2015), Diaz-Christiansen et al. (2016,2017,2018).

Puerto El Morro-Ecuador is a National Protected Area located at 106 kilometers from the city of Guayaquil. The territory covers an area of 270.1 km2. This port is divided into two sectors: 2,094 hectares of continental space of halophytic vegetation, flooding forest and tropical dry forest between the estuaries El Morro and El Salado which provides a habitat to various protected-by-national legislation species of animals and biological diversity; and 8,000 hectares of insular space that includes the Morro Canal and the surrounding water. The local community at Puerto El Morro is considered as ancestral inhabitants which protect wildlife that refuge at the four types of existing mangroves in Ecuador: red, white, jelí and black

The designation of the port as protected area has incited an Environmental Management Plan dependent on the conservation and sustainability of the location. Thus, policies and objectives were set in order to control the interventions of the community over the estuary. In the framework of national policies of environmental protection, it was declared as National Patrimony of Protected Areas in 2011 (Ministry of Environment of Ecuador, 2012). With the purpose of preserving this habitat, the Ministry of Environment of Ecuador regulates and allocates the sustainable usage of the estuary, where around 1500 inhabitants distributed in 260 houses, with an average of five to six members per house reside and are in charge of the conservation (Ministry of Environment of Ecuador, 2013). The majority of population is within a range of age of 18 to 25 years (Medina, 2017). In the absence of schools of secondary and higher education, only 15% of the inhabitants attended secondary education; while 53.40% have only primary education, and 5% of the population remain illiterate (Mite et al., 2017). Their source of economic income is artisan fishery and crustaceans gathering such as crabs and shells. It is a coastal marine area provided with countless marine and bird species. Tourist activities are also offered, such as bird sightings of various types (e.g. pink herons, frigates) and dolphin watching (Ministry of Tourism of Ecuador, 2017). In 2012,

Puerto El Morro inaugurated its pier, this new infrastructure corresponds to the urban renewal of the Municipality of Guayaquil. The construction has an extension of 120 meters, is based on a concrete-style platform and a rustic wooden

structure where tourist agencies operate, the interpretation center and 5 restaurants. Puerto El Morro received around 16000 national visitors and 250 foreigners during 2017 (Ministry of Environment of Ecuador, 2017)

Although there is a previous study conducted on 2016 about the economic contribution from community-based tourism at Santay Island-Ecuador, this represents only a closer approximation to the territory of study. The monetary range used for this type of hiking denoted an average of spending per visit of \$ 6.50, which positively influences the monthly income of the island, demonstrating the tourists contribute to the economic growth of the community (Díaz-Christiansen et al., 2017).

## Methodological aspects

Data collection and instrument

The research material for the study about the tourists' opinion at Puerto El Morro was obtained through surveys carried out from May to September 2018. The self-administered and anonymous questionnaire was distributed in Spanish and filled by national hikers with total independence. Nevertheless, researchers were present in case of any difficulties that arose. The first question made to the selected persons asked if their habitual residence was in Ecuador, excluding them if the answer was negative. A pretest of 15 surveys was done in order to detect possible deviations and errors. A convenience sample of 585 respondents among randomly selected visitors took part in the study, and the refusal rate was very low and of no significance. The population of this study is the 15,776 visitors to the site in 2017. The margin error for the investigated population, estimated for a significance level of 95% is  $\pm$  3.98%. Therefore, the results may be extrapolated to the entire population without reticence.

The analysis of tourism performed at Puerto El Morro has been conducted through a survey applied to a representative sample of visitors. The survey was based on previous papers related to the analysis of tourists's motivations (Yang & Wall 2009; Dodds, Gracia & Homes 2010; López-Guzmán, Sánchez-Cañizares & Pavón 2011; Do et al. 2015; Diaz-Christiansen et al., 2018) and responds to a group of variables with respect to the tourist's socio demographic profile, average expenditure, information sources, motivations to go, and satisfaction after visiting the destination. In this sense, respondents were asked to rate the importance of each of 7 different items connected with the motivations to visit the site and 12 items pertinent to the perceived satisfaction. To this end, both closed and Likert scale questions were included in the survey,

Data is analyzed by using statistical techniques: First, the Cronbach's Alpha as a statistical test of reliability to evaluate the metric properties of the instrument applied; second, the factor analysis and cluster analysis to reduce and group the set of variables in a dataset; and third, the analysis of variance (ANOVA) in order to compare groups of quantitative variables. The collected data is organized, tabulated and interpreted using the IBM SPSS Statistics 22.0 program.

## Results and discussion

Socio-demographic profile of the tourist

The socio-demographic profile of the tourists is shown in Table 1. The first data of interest is the age of the tourists visiting Puerto El Morro (Ecuador), as the average age is lower than 40, visitors were 48% female and rest were male. The employees stand out from the categories of professions, followed by independent workers and directors which are deeply related to the high level of education of the visitors. Also, when analyzing the level of education in relation to the age, there is a positive association between them (gamma statistic = 0.228; p = 0.000).

In regard of the tourist's region of origin, 74% of them come from the province of Guayas, evidently due to its proximity from the destination whilst the rest are mainly coming from two big provinces named Pichincha and Azuay and represent 12.65% of this category.

In the findings obtained in this research, 26% of respondents acknowledged a monthly income lower than US\$ 500 compared to the 11.5% that declared that they earn more than US\$ 2,000. There are differences on the declared income in relation to gender, a significant association has been detected (contingency coefficient= 0.234; p= 0.000) that implies

that the level of income declared by women is a 18% lower than men's. The minimum wage in Ecuador for 2018 was US\$ 386.00 and the average monthly income was US\$ 892.

Table 1: Socio-demographic profile of tourist

| Variables     |                                  | Percentage     |                | Variables             |                    | Percentage     |                |
|---------------|----------------------------------|----------------|----------------|-----------------------|--------------------|----------------|----------------|
|               |                                  | Male           | Female         |                       |                    | Male           | Female         |
| Age           | Less than 30                     | 15.9%          | 18.63%         |                       | Elementary         | 0.34%          | 3.5%           |
| (N = 585)     | 30-39                            | 19.83%         | 16.24%         | Educational level     | Secondary          | 12.48%         | 15.38%         |
|               | 40-49                            | 10.94%         | 6.84%          | (N = 585)             | University         | 29.06%         | 25.13%         |
|               | 50-59                            | 3.76%          | 3.59%          |                       | Postgraduate       | 9.91%          | 7.35%          |
|               | 60-69                            | 1.20%          | 2.56%          |                       |                    |                |                |
|               | Older than 70                    | 0.17%          | 0.34%          |                       |                    |                |                |
| Profession    | Student                          | 6.84%          | 8.03%          | Province of<br>origin | Guayas             | 37.09%         | 36.60%         |
| (N = 585)     | Independent professional         | 11.79%         | 9.91%          | (N = 585)             | Pichincha          | 3.76%          | 3.42%          |
|               | Employee                         | 15.56%         | 10.43%         |                       | Azuay              | 3.25%          | 2.22%          |
|               | Public servant                   | 4.79%          | 5.47%          |                       | Manabí             | 1.88%          | 0.85%          |
|               | Household chores                 | 0.17%          | 5.30%          |                       | Santa Elena        | 1.20%          | 1.54%          |
|               | Director/Entrepreneur<br>Retired | 9.91%<br>1.03% | 5,13%<br>2.05% |                       | Los Ríos<br>El Oro | 0.68%<br>0.51% | 0.34%<br>0.51% |
|               | Unemployed                       | 1.71%          | 1.88%          |                       | Tungurahua         | 0.17%          | 0.51%          |
| Monthly       | Less than 500                    | 8.7%           | 17.5%          |                       | Chimborazo         | 0.34%          | 0.68%          |
| Income        | 500 - 749                        | 7.4%           | 5.7%           |                       | Esmeraldas         | 0.0%           | 0.17%          |
| in US dollars | 750 – 999                        | 9.6%           | 5.8%           |                       | Napo               | 0.17%          | 0.0%           |
| (N = 583)     | 1,000 – 1,249                    | 8.2%           | 5.8%           |                       | Imbabura           | 0.17%          | 0.34%          |
|               | 1,250 – 1,499                    | 4.3%           | 4.5%           |                       | Cañar              | 0.17%          | 0.34%          |
|               | 1,500 – 1,749                    | 2.7%           | 2.4%           |                       | Cotopaxi           | 0.0%           | 0.17%          |
|               | 1,750 – 2,000                    | 4.1%<br>6.9%   | 1.7%<br>4.6%   |                       | Loja<br>Other      | 0.17%<br>2.44% | 0.17%<br>0.34% |
|               | More than 2,500                  | 0.370          | 4.070          |                       | Oulei              | Z.44 70        | 0.3470         |

Source: Own elaboration

The average expenditure during the visit to Puerto El Morro is US\$ 18.5 per person; there is not a positive association between the monthly income and the expenditure (gamma statistic = 0.130; p = 0.037), which means that tourists that earn more, do not necessarily spend more. Considering the number of tourists that visited Puerto El Morro during 2018 and the expenditure, we have calculated the estimated annual income derived from the tourist activity in this natural protected area. In this sense, the annual demand is estimated at US\$ 296,000, predominantly corresponding to national visitors.

# Motivations of the visit

The reasons why a hiker chooses a destination such as Puerto El Morro and travels there may be miscellaneous. On that matter, we designed a question in the survey with different items trying to know the most frequent and relevant motivations analyzed in previous investigations (Lee, Lee & Wicks, 2004; Yuan & Jang, 2008; Devesa, Laguna & Palacios, 2010), adapting them to the characteristics of this tourist destination and its visitors. After the pretest, we selected 12 items on a Likert-type scale of 5 points in which 1 means "Unimportant" and 5, "Very important" in order to determine the relative importance of a series of factors in their decision to visit the protected area (all the items are shown in Table 2). Internal and external factors were included, as established by Crompton's theory (1979) between pull and push reasons. The Cronbach's alpha coefficient of the final scale reaches a value of 0.835, which indicates a commendable internal consistency among the scale items. The critical level (p) associated with the F- statistic (362.909) in the analysis of the

variance to test the null hypothesis that all items on the scale have the same mean (ANOVA) is less than 0.001. This reveals that is not possible to maintain the hypothesis that the means of the elements are equal.

An interclass correlation analysis lets us, in general terms, identify four of the items that showed low correlations. Those items are omitted in the factor analysis, without implying a significant reduction of the level of consistency of the motivational variables (Cronbach's alpha= 0.777; F=259.662, < 0.001). A factor analysis is made using the reasons to visit or motivational variables as shown in Table 2. This made possible the extraction of 2 motivational dimensions to visit the ecosystem. While the interest lies in the factor scores derived from these components as a tool to establish the strength of the motivations of each visitor, it is useful to characterize each of the extracted factors.

Table 2: Rotated factor matrix - Motivation of the visit to Puerto El Morro

| Motivational variables                         |       | nts                                | Dimensions   |  |
|--|-------|------------------------------------|--------------|--|
| Wolfvational variables                         | 1     | 2                                  | Differisions |  |
| Contact with nature                            |       |                                    |              |  |
| Dolphin and bird sighting                      | 0.597 |                                    | Naturalist   |  |
| Disconnect from routine                        | 0.541 |                                    | ivaturanst   |  |
| Search of tranquility                          | 0.471 |                                    |              |  |
| The fame and reputation of tourist destination |       | 0.661                              |              |  |
| Affordable tourist destination                 |       | 0.587                              | Rational     |  |
| Closeness to the place of residence            |       | 0.4156                             |              |  |
| Auto values                                    | 3.895 | 1.368                              |              |  |
| % of variance                                  | 29.99 | 10.52                              |              |  |
| Cumulative %                                   | 29.99 | 40.52                              |              |  |
| КМО  |       |                                    |              |  |
| Bartlett's Test of Sphericity                  |       | Chi-square = 2134.149 Sig. < 0.001 |              |  |

Extraction method: Principal axis factoring.

Rotation method: Varimax with Kaiser normalization.

Source: Own elaboration

According to Table 2, the first factor is associated with the nature motivations, which are usual reasons in tourist destinations that have a diverse and rich ecosystem motives. This factor represents the tourists who see the visit as an instrument to expand their knowledge about nature and, at the same time, find a way out from the stress of everyday life. We have called this first factor as *Natural Reasons*, and it explains almost 30% of the total motivations' variance matrix. Cronbach's alpha coefficient (0.73) of the four items that make up this dimension of motivation reveals the reliability of the subscale. The second of the factors found, called *Rational Reasons* explains almost 11% of the total variance matrix of motivations and relates to a tourist who chooses to visit according to the knowledge he/she has about the destination. The value of Cronbach's alpha coefficient (0.616) is also a reliable subscale. These results demonstrate the existence of various motivational schemes to attend Puerto El Morro as a nature tourist destination, which are in line with the socio-psychological reasons, where the trip or the visit is a means of satisfying psychological type of needs from individuals; and, tangible reasons, where satisfaction would be obtained from the own attributes of the destination (Crompton, 1979).

#### Motivation and satisfaction of the visit

The satisfaction level declared by the visitors at Puerto El Morro is very high. It was measured in a scale from 1 to 5, being 1 "unsatisfactory" and 5, "very satisfactory", over the 12 items that aim to value different aspects related to the visit to the

site. We could study their satisfaction deeply by analyzing the relationship that may exist with the experienced sensations after the visit. A large majority of hikers agree that the best is the landscape beauty and the sighting of birds and dolphins (Table 3), this indicates that hikers appreciate nature above other material factors built by man such as the museum or the other infrastructure of Puerto El Morro. This result has a clear implication for tourism management of the local community concerning the efforts to increase and maintain the satisfaction and loyalty of visitors. They must be based on an analysis of the reasons for the trip to encourage the attendance and appropriate provision of the tourist product.

Table 3. Perceived satisfaction of tourists at Puerto El Morro.

| Motivational Variables                                | Male Female |      | F     | Sig. |
|---|-------------|------|-------|------|
| The landscape beauty.                                 | 4,49        | 4,54 | ,883  | ,348 |
| Birds and dolphin sighting                            | 4,46        | 4,49 | ,202  | ,653 |
| Conservation of natural patrimony.                    | 4,36        | 4,34 | ,076  | ,783 |
| Service of tourists guides and operators              | 4,20        | 4,32 | 2,919 | ,088 |
| Boat ride   | 4,25        | 4,31 | ,883  | ,348 |
| Kindness of the residents                             | 4,23        | 4,3  | ,961  | ,327 |
| Diversity, quality and service of the restaurants     | 4,08        | 4,08 | ,001  | ,970 |
| Cleanness and care of the visited places              | 3,91        | 4,01 | 1,662 | ,198 |
| Citizen security                                      | 3,89        | 3,98 | 1,195 | ,275 |
| Information points and signs for the visitor          | 3,81        | 3,9  | 1,140 | ,286 |
| Conservation of the infrastructure: pier and walkways | 3,76        | 3,77 | ,015  | ,903 |
| Interpretation center                                 | 3,3         | 3,23 | ,333  | ,564 |

source: own elaboration

It is noticed from table 3 that all motivations, except the one related to interpretation center, received a high score. We consider that these results reinforce the quality of this tourist destination. The three most valued motivations for both men and women are the landscape beauty, birds and dolphin sighting and the conservation of natural patrimony. As for women, the rest of motivational variables such as service provided by tourist guides and operators, boat ride, kindness of residents, etc, are more appreciated motivations than for men, and the quality of restaurants remains equal. Of these findings, we note that there is no significance between gender and the motivations to visit Puerto El Morro.

## Conclusions

The tourist that visits Puerto El Morro is mainly an Ecuadorian young person that expend an average of US\$ 18.5 per visitation; this may imply an annual estimated economic direct revenue of US\$ 296,000 to the community coming from the tourist activity. In respect to the satisfaction variable, the results indicate that the tourists have enjoyed the visit to Puerto El Morro. The visitors make a significantly different valuation of the experience depending on the reasons that motivated the visit. This fact has a clear implication on the management of the zone and the initiatives to increase the tourist satisfaction, which should be created from the analysis of the reasons that motivate the trip in order to influence the decision to travel to a place and the correct tourist service offering.

Knowing the main motivational factors become essential, since they allow adapting and modifying existing tourism products in order to improve the consumer experience. From the results obtained, it was possible to identify that people go to this destination mainly with the aim of connecting with nature (push motivations). It was also determined that the main attraction of this place is the sighting of birds and dolphins, this being the pull motivation that received a higher score.

On the other hand, the research also allowed us to identify that there are pull motivational factors that do not generate a great boost in hikers. The interpretation center is the first factor, followed by the maintenance of pier and walkways. Through the study, it was also possible to identify that the motivations of the hikers cannot be classified based on gender. Only two variables of the 12 investigated showed a level of significance, less than 0.05, this being the coefficient that allows to reject or accept the hypothesis. That is to say that if the level of significance exceeds 0.05 this will establish the hypothesis as null.

On the other hand, it was possible to identify that the motivations can be grouped into two main groups, the rationals and the naturalists ones. The rationals, select destinations that are recognized and offer an excellent experience at low rates. While the naturalists are those who seek to visit a destination with the aim of connecting with nature, flora and fauna, disconnecting from their daily routine and reaching a maximum level of relaxation.

It can be concluded that the hiker is satisfied with what is offered at Puerto El Morro, especially with the landscape, nature conservancy and the sighting of fauna. Puerto El Morro is a small but ambitious tourism project that matters be worked on in the long term, aiming to be self-sustaining. The results of this investigation guide the planning of a management model based on sustainable economy initiatives that may help the preservation of this protected area natural wealth, as well as increase and maintain the high satisfaction and loyalty of the naturalist tourists. For these purposes, the study gives direction to the planning of programs that minimize the negative impacts of tourism and to deal with human and economic resources for this site conservation. These programs on environmental monitoring, maintenance and preservation of the natural beauty, correct waste disposal, water treatment and pollution control to avoid fuel spills and noise control, will allow for peace and tranquility of fauna and the one searched by tourists and contribute to maintain the attributes that are most valued and which provide more satisfaction.

The organization and implementation of these actions must be performed through community involvement and cooperation of the tourists in pro of conservation of all ecosystems. The natural wealth existing in the natural space, which provides visitor's tranquility and relaxation from every day's routine demands such investment on natural protection. Management of this tourist destination may include the control of its suitability, adequacy and effectiveness of the plans in order to search continuous improvements that reinforce the positioning of Puerto El Morro as a place to visit, therefore those visits will yield in greater income to the local community. In any study of this nature, there are certain limitations in the data gathering. This work is centered in the information obtained from a sample of visitors to a specific zone in Ecuador. This limits the possibility of generalization and at the same time constitutes a motivation for contrasting with other comparable destinations. Despite these limitations, the results contribute to literature by offering key aspects of economic impact of tourism in a natural protected area.

#### References

- [1] Alvarez Litben, G. (2016). ¿Es posible un patrimonio cultural para el Sumak Kawsay?: un largo camino por recorrer. Pasos. Revista de Turismo y Patrimonio Cultural. 14(1), 285-299.
- [2] Baker, M., Davis, E. & Weaver, P. (2014). Eco-friendly attitudes, barriers to participation, and differences in behavior at Green hotels. *Cornell Hospitality Quarterly*, 55(1), 89-99.
- [3] Bauer, I. (2017). Improving global health-is tourism's role in poverty elimination perpetuating poverty, powerlessness and 'ill-being'. *Global Public Health*, 12(1), 45-64.
- [4] Benson, E. (2014). Cultural Tourism and Sustainability in Nigeria. Mediterranean Journal of Social Sciences, 5(14), 649-654.
- [5] Casas Jurado, C., Soler Domingo, A. & Jaime Pastor, V. (2012). El turismo comunitario como instrumento de erradicación de la pobreza: potencialidades para su desarrollo en Cuzco (Perú). Cuademos de Turismo, 30, 91-108.
- [6] Castaño Blanco, J., Moreno Sáez, A., García Dauder, S. & Crego Díaz, A. (2003). Aproximación psicosocial a la motivación turística: variables implicadas en la elección de Madrid como destino. Estudios Turísticos, 158, 5-41.
- [7] Chen, H., Chang, Y. & Chen, K. (2014). Integrated wetland management: An analysis with group model building based on system dynamics model. *Journal of Environment Management*, 146, 309-319.
- [8] Cheung, L. & Jim, C. (2013). Ecotourism service preference and management in Hong Kong. *International Journal of Sustainable Development & World Ecology*, 20(2), 182-194.
- [9] Chirenje, L. (2017). Contribution of ecotourism to poverty alleviation in Nyanga, Zimbabwe. Chinese Journal of Population Resources and Environment. 23. 1-6.

- [10] Coghlan, A. McLennan, C. & Moyle, B. (2017). Contested images, place meaning and potential tourists' responses to an iconic nature-based attraction "at risk": the case of the Great Barrier Reef. *Tourism Recreation Research*, 42(3), 299-315.
- [11] Croes R., & Rivera M. (2015). Tourism's potential to benefit the poor: A social Accounting Matrix model applied to Ecuador. *Tourism Economics*, online published. doi: 10.5367/te.2015.0495
- [12] Crompton, J. (1979). Motivations for pleasure vacations. Annals of Tourism Research, 6(4,) 408-424.
- [13] Devesa Fernández, M., Laguna García, M. & Palacios Picos, A. (2010). The role of motivation in visitor satisfaction: Empirical evidence in rural tourism. *Tourism Management*, 31(4), 547-552.
- [14] Diaconu, D., Vişan, M., Teodorescu, C., Rujoiu-Mare, M. & Simion, A. (2016). The economical capitalization of the Borsaroş - Sâncrăieni swamp and the perspectives of developing the touristic function. Paper presented at the International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management.
- [15] Diaz-Christiansen, S., Figueroa Lizarzaburu, A., & Delgado Montero, A. (2018). Aporte económico a la Isla Santay (Ecuador) procedente del excursionista que realiza turismo comunitario. Revista Arjé, 12(22), 345-357.
- [16] Díaz-Christiansen, S., López-Guzmán, T, & Pérez-Gálvez, J., (2016). Motivation and values attributes of ecotourism in natural protected areas: Santay Island (Ecuador). Mediterranean Journal of Social Science, 7(3), 240-249.
- [17] Díaz-Christiansen, S., Pérez-Galvez, J., & Ortega, M. (2017). Análisis de las motivaciones hacia el ecoturismo en Ecuador. Un estudio de caso de la Isla Santay. *Revista Turismo y Desarrollo Local*, 10(22), 2-15
- [18] Do, Y., Kim, S., Kim, J., & Joo, G. (2015). Wetland-based tourism in South Korea: who, when, and why. Wetlands Ecology and Management, 23(4), 779–787
- [19] Dodds, R., Gracia, S. & Homes, M. (2010). Does the tourist care?. A comparison of tourists in Koh Phi Phi, Thailand and Gili Trawangan, Indonesia. *Journal of Sustainable Tourism*, 18 (2), 207-222.
- [20] Doen, L. (2016). Financiamiento verde para el desarrollo sostenible. Economía y Desarrollo,156(1), 155-167.
- [21] Dzhandzhugazova, E. (2013). New Forms and Possibilities for Promotion of Russian National Parks in the Internet Environment. *Middle-East Journal of Scientific Research*, 16(9), 1.238-1.244.
- [22] Edgell, D. (2016). Managing sustainable tourism: a legacy for the future. Nueva York: Routledge.
- [23] Erskine, L. M., & Meyer, D. (2012). Influenced and influential: the role of tour operators and development organisations in tourism and poverty reduction in Ecuador. *Journal of Sustainable Tourism*, 20(3), 339–357
- [24] ESPAE. (2016). Industria Turística. Estudios Industriales, http://www.espae.espol.edu.ec/wp-content/uploads/2015/12/industriaturistica.pdf
- [25] Everingham, P. (2015). Intercultural exchange and mutuality in volunteer tourism: The case of Ecuador. *Tourist Studies*, 5 (2), 175-190.
- [26] Gao, J. (2017). Evaluation of the impacts of tourism industry under a linguistic hesitant fuzzy translation environment. C e Ca, 45(5), 2.136-2.140.
- [27] Gascón, J. (2015). Residential tourism and depeasantisation in the Ecuadorian Andes. The Journal of Peasant Studies, 1-18.
- [28] Han, H., Hwang, J. & Lee, S. (2017). Cognitive, affective, normative, and moral triggers of sustainable intentions among convention-goers. *Journal of Environmental Psychology*, 51, 1-13.
- [29] Inostroza, G., & Cánoves, G. (2014). Turismo sostenible y proyectos hidroeléctricos: contradicciones en la Patagonia chilena. Cuadernos de Turismo, 34, 115-138.
- [30] Kostakis, I. & Sardianou, E. (2012). Which factors affect the willingness of tourists to pay for renewable energy? Renewable Energy, 38(1), 169-172.
- [31] Lai, P. & Nepal, S. (2006). Local perspectives of ecotourism development in Tawushan Nature Reserve, Taiwan. *Tourism Management*, 27(6), 1117-1129.
- [32] Lambogglia, J (2014). Análisis del turismo y su importancia en el crecimiento económico en América latina: El caso del Ecuador. (Tesis de grado). Facultad Latinoamericana de Ciencias Sociales, Ecuador.
- [33] Lee, C., Lee, Y. & Wicks, B. (2004). Segmentation of festival motivation by nationality and satisfaction. *Tourism Management*, 25, 61-70.
- [34] Lillo-Bañuls, A., Ramón-Rodríguez, A. & Sevilla-Jiménez, M. (2007). El capital humano como factor estratégico para la competitividad del sector turístico. Cuadernos de Turismo, 19, 47-69
- [35] López-Guzmán, T., Sánchez-Cañizares, S., & Pavón V. (2011). Community-based tourism in developing countries: A case study. Tourismos: An International Multidisciplinary Journal of Tourism 6 (1), 69-84.

- [36] Medina, M. (2017). Análisis de los emprendimientos implementados en el área protegida manglares el Morro y sus incidencias en el desarrollo sostenible. (Tesis de pregrado), Universidad de Guayaguil, Ecuador.
- [37] Min, S., Lim, S. & Yoo, S. (2017). Consumers' Willingness to Pay a Premium for Eco-Labeled LED TVs in Korea: A Contingent Valuation Study, Sustainability, 9, 1-17.
- [38] Minciu, R., Padurean, M., Popescu, D., & Hornoiu, R. (2012). Demand for vacations /travel in protected areas dimension of tourists'ecological behavior. Amfiteatru Economic, 14(31), 99-113.
- [39] Ministry of Tourism of Ecuador. (2017). Rendición de cuentas 2017. Recuperado de www.turismo.gob.ec/informede-rendicion-de-cuentas-2017/
- [40] Ministry of Environment of Ecuador. (2013). Ecuador lo tiene todo para ser una Potencia Turística. Recuperado de: www.turismo.gob.ec/ecuador-lo-tiene-todo-para-ser-una-potencia-turistica/
- [41] Moliner Velásquez, B., Gil Saura, I. & Ruíz Molina, M. (2009). La formación de la lealtad y su contribución a la gestión de destinos turísticos. Cuadernos Administrativos, 22(39), 80-107.
- [42] Newsome, D., Moore, S. & Dowling, R. (2013). Natural Area Tourism: Ecology, Impacts and Management. Ontario: Channel View Publications.
- [43] Oliver, R. (2015). Satisfaction: a behavioral perspective on the consumer. New York: Routledge.
- [44] Palacio, L. (2018). Dirección estratégica (Segunda ed.). ECOE ediciones.
- [45] Payeras, M., & Sastre, F. (2015). El multiplicador turístico: su aplicación a la economía balear. Papers de Turisme.16. 15-29.
- [46] Plog, S. (2002). The power of psychographics and the concept of venturesomeness. *Journal of Travel Research*, 40, 244-251.
- [47] Reid, D. (2003). Tourism, globalization and development: Responsible tourism planning. London: Pluto Press.
- [48] Reinartz, W. & Kumar, V. (2002). The mismanagement of customer loyalty. Harvard Management Review, 80(7), 4-
- [49] Rivas García, J. & Magadán Díaz, M. (2012). Planificación turística y desarrollo sostenible. Oviedo: Editorial Septem Ediciones.
- [50] Ruiz Ballesteros, E. & Brondizio, E. (2013). Building negotiated agreement: The emergence of community-based tourism in Floreana (Galapagos Islands). Human Organization, 72(4), 323-335.
- [51] Ruiz-Ballesteros E (2011). Social-ecological resilience and community-based tourism: An approach from Agua Blanca, Ecuador. Tourism Management, 32 (3), 655-666.
- [52] Ryan, C. (2003). Recreational tourism-demand and impacts. Clevedon: Channel View Publications.
- [53] Ryan, C., Ninov, I. & Aziz, H. (2012). Ras Al Khor-Eco-tourism in constructed wetlands: Post modernity in the modernity of the Dubai landscape. Tourism Management Perspectives, 4, 185-197.
- [54] Samuelson, P. & Nordhaus, W. (2016). Macroeconomía. México: McGraw Hill.
- [55] Scheyvens, R. (2002). Tourism for development: Empowering communities. Harlow: Prentice-Hall.
- [56] Serrano, A., & Pucha, E. (2017). Indicadores Turístico: Oferta y demanda de la ciudad patrimonial de Cuenca -Ecuador, Revista Latinoamericana de Turismología, 3(1), 58-68.
- [57] Thomé Ortiz, H. (2008). Turismo rural y campesinado, una aproximación social desde la ecología, la cultura y la economía. Convergencia Revista de Ciencias Sociales, 15(47), 237-261.
- [58] Torres Bernier, E. (2003). Una aproximación a la sostenibilidad económica en los procesos de desarrollo turístico. In I. Valdés Peláez, J. Pérez Fernández y E. Del Valle Tuero. (Eds.), Experiencias públicas y privadas en el desarrollo de un modelo de turismo sostenible (pp. 95-103). Oviedo: Fundación Universidad de Oviedo.
- [59] Ursache, M. (2015). Tourism Significant Driver Shaping a Destinations Heritage. Procedia Social and Behavioral Sciences, 188, 130-137.
- [60] Velandia, M. (2016). Percepción de la comunidad del archipiélago de Bocas del Toro, Panamá, sobre el impacto de la industria turística. Turismo Y Sociedad, 19, 73-96.
- [61] Viñals-Blasco, M. & Alonso-Monasterio, P. (2016). Técnicas y estrategias para desarrollar el turismo experiencial en humedales. *Investigaciones Turísticas*, 12, 1-19.
- [62] Weaver, D. (2014). Asymmetrical Dialectics of Sustainable Tourism Toward Enlightened Mass Tourism. Journal of Travel Research, 53(2), 131-140.
- [63] World Tourism Organization (2002). Tourism and Poverty Alleviation. WTO publication service, Madrid.
- [64] World Tourism Organization (2012). Destination Wetlands. WTO Publication Service, Madrid.
- [65] World Tourism Organization, (2008). Introducción al turismo, Servicio de publicaciones de la OMT. Madrid, España.

- [66] Yang, L. & Wall, G. (2009). Authenticity in ethnic tourism: domestic tourists' perspectives. Current Issues in Tourism, 12(3), 235-254.
- [67] Yuan J. & Jang, S. (2008). The effects of quality and satisfaction on awareness and behavioral intentions: exploring the role of a Wine festival. Journal of Travel Research, 46(1), 279-288.
- [68] Zhou, W., Ma, J., Zhao, S. & Meng, S. (2015) Design responsibility based on tourism ethics: a study of the planning and design of Xijin national wetland park in Guangxi. Journal of Shanghai Jiaotong University, 49(11), 1736-1740.