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# Quality and sustainability of tourism development in Copper Canyon, Mexico: Perceptions of community stakeholders and visitors



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#### ABSTRACT

The assessment of tourism development, based on the perspectives and opinions obtained from hosts and visitors could be considered as a basic requirement for the participatory management of destination sustainability. The general objective of this research is to study the contrasted perceptions of tourism development in Copper Canyon Park, according to the opinions of hosts and visitors, with the purpose of evaluating the perceived quality and sustainability of the destination within the context of an implanted territorial tourism development model. In this study, a characterization of the tourism development of Copper Canyon Park was conducted, local public opinion relating to the implanted tourism development model was studied, and perceptions of visitors regarding the destination were analyzed. Utilizing this methodology allowed the identification of compatibilities and incompatibilities, relating to the convergence between the community's perceptions, the visitors' experiences, and the characteristics of the receiving environment.

# 1. Introduction

The assessment of tourism development, based on the perspectives and opinions obtained from hosts and visitors could be considered as a basic requirement for the participatory management of destination sustainability (Clausen & Gyimóthy, 2016; Grybovych, 2012). Such assessment is needed to determine sustainable development outcomes when the interests of different parties are juxtaposed within a given space-time dimension of a tourist destination, particularly when the expectations of tourists and local community and characteristics of the destination's natural and/or cultural environment do not coincide (Crosby, 2015; Wang, Zhou, Lee, & King, 2014). Under this conceptualization, the synergies and divergences between social actors could greatly influence the sustainability of the destination. Hence, it is of utmost importance for destination planners to manage the convergence of interests and expectations of stakeholders (Silva, Agapito, & Pinto, 2017) in a manner that yields positive memorable experiences for both visitors and hosts, and creates advantageous destination productivity, sustainability, competitiveness, and profitability outcomes (Crosby, 2015). In order to achieve cooperation between the main stakeholders of the destination, it is essential to address their respective interests and expectations (Bhat & Gaur, 2012; Byrd, 2007; Peric & Djurkin, 2014), based on which models of sustainable tourism development that provide more opportunities for synergies versus incompatibilities (Crosby, 2015) can be created and promoted.

With relevance to the social dimension of sustainability, it is important to examine the multiple and diverse interactions taking place between hosts and visitors for the purpose of minimizing adverse impacts and managing incompatibilities (González & Palafox, 2014; Yu, Cole, & Chancellor, 2016) at the destination. Accordingly, it is necessary to understand the perceptions of both participants, i.e., hosts and visitors, regarding tourism development within the destination, as well as the vision of local business owners in order to know their points of view as well (Montaño, Núñez, & Pérez, 2016). Past studies have systematically examined the relationship between hosts and guests at tourism destinations, deducing that residents' attitudes towards tourists and tourists' behaviors at a destination are directly influenced by the types of contacts and interactions taking place between the two groups as well as the emotional solidarity and social distance between the groups (Joo et al., 2018; Tasci, 2009; Woosnam, 2012; Yilmaz & Tasci, 2013). Destination models which systematically address and consider the opinions and preferences of local communities and visitors

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regarding tourism development facilitate establishment of grassroots initiatives for promoting integrated and active community-based participation in planning and decision-making (Guccio, Lisi, Martorana, & Mignosa, 2017; Lekaota, 2015; Pulido-Fernández & Pulido-Fernández, 2017), beginning from the early stages of tourism entrepreneurship in the area.

Based on the prior statements, two questions have been formulated for this study: Are the local community and visitors' perceptions convergent in regard to the sustainability and quality of tourism development at Copper Canyon? What is the utilitarian value of tourism development information provided by the local community and the visitors through their direct responses and online opinions? This research assumes that the concept of quality and sustainability of tourism development, as perceived by different social participants can be studied through a theoretically grounded empirical investigation of their opinions and evaluations made directly or through websites (No & Kim, 2015). In that sense, this study addresses the perceptions of stakeholders toward tourism development in Copper Canyon Adventure Park, located in Chihuahua, Mexico, including the influential localities of Creel, Divisadero, and other small townships and dispersed populations in the region.

The general objective of this research was to study the contrasted perceptions of tourism development in Copper Canyon Park, according to the opinions of hosts and visitors, with the purpose of evaluating the perceived quality and sustainability of the destination within the context of an implanted territorial tourism development model. For the purpose of this research, Copper Canyon is assumed as a tourist public space that enables social transformation, where the information and knowledge from visitors and hosts can be used for destination planning and decision-making and for the improvement of the experiences and satisfaction of both groups with regard to the quality and sustainability of tourism development in the region. It is necessary to develop tourism strategies that allow the confluence of interests and expectations in Copper Canyon Park and stimulate the development of memorable experiences and the progressive recognition of the destination as a sustainable mountain resort of high international attractiveness. In this study, a characterization of tourism development of Copper Canyon Park was conducted; public opinion relating to the implanted tourism development model was studied; and perceptions of visitors regarding the destination were analyzed. Utilizing this methodology allowed the identification of compatibilities and incompatibilities, based on the levels of convergence between the community's perceptions, the visitors and the receiving environment.

From a practical perspective, this study sheds light on the significance of considering the perceptions of various local stakeholders regarding tourism development in order to ensure a participatory planning process and support long-term destination sustainability. Theoretically, the paper serves to augment existing knowledge by conceptualizing a new model for understanding visitors' and hosts' perceptions regarding tourism development within the framework of a territorial tourism plan. The main contribution of this research is the in-depth analysis of Copper Canyon Park as a public space primarily for tourist use, and an important setting for stimulating social transformation. This study approached the examination of public perceptions regarding tourism development in a holistic manner, as it incorporated the opinions of settlers in different locations of the destination, as well as the perspectives corresponding to the visitors. Consequently, this study also highlights the high potential offered by information and communication technologies (ICTs) as a platform to foment the design of increasingly relevant tools that favor sustainable tourism development and management (Ali & Frew, 2014; Berné, García-González, García-Uceda, & Múgica, 2015; Soteriades, 2012), assuming that the pursuit of sustainability is only possible through the participation of all stakeholders involved in the tourism system (Waligo, Clarke, & Hawkins, 2015; Zmyslony, 2014). Additionally, the methodological procedure used could be implemented in other tourism contexts with similar issues.

Owing to the geographical location of this region and restricted access to communities, this study considered only the most vulnerable and important territories impacted by tourism development in the area. By including specific communities, it is intended that the findings will provide relevant information and recommendations to the local government and shall demonstrate that local communities need to be mobilized and empowered for the implementation of sustainable tourism and local communities' and visitor's perceptions need to be considered as a part of the tourism planning and decision-making process. The analysis of the integrated perceptions of the destination incorporating the totality of all local communities and canyons impacted by tourism development is declared as a future task to be conducted in coordination with the local and regional government and other related institutions.

The principal challenges that this study had to overcome included the lack of organized/official tourism information about the region as well the non-existence of official plans related to the development of tourism in the region. At present, no central tourism information database is available for the region and there is a lack of presence of an official Destination Management Organization for Copper Canyon. Additionally, the lack of interest among some stakeholders in participating in tourism planning demonstrates insufficiencies in participatory planning for sustainable tourism development in the region. Findings from this investigation will be utilized to plan future studies, with enlarged geographical scope, for analyzing the integrated perception of the destination, incorporating all local communities and stakeholders, including those that were not included in the present research, and to provide specific local-level results for guiding sustainable tourism development initiatives in the region.

# 2. Literature review

# 2.1. Conceptual model of perceptions regarding territorial tourism development

The theoretical underpinnings of this study are oriented towards the comprehension of existing contradictions between the local community's and visitors' perceptions in terms of quality and sustainability of tourism development at a destination. Therefore, a paradigm of tourism development is presented to establish the relationships among the conceptual variables addressed in the study (Fig. 1); this model explains the role of the principal transdisciplinary concepts involved in the social transformations taking place at the destination. The literature review includes various concepts which subsequently are reintroduced in the methodological procedure. In the conceptual model shown in Fig. 1, the relationships between various indicators of tourism development perceptions relating to quality and sustainability have been established. Corresponding to these variables, three concepts that shed light on the relationship between the indicators are presented: 1) Perceptions of the local stakeholders in relation to the development of tourism: quality and sustainability of tourism development; 2) Stakeholder engagement in the development of tourism at the local destination: visitors' and hosts' motives and interests, experiences, expectations, satisfaction levels and future intentions; and 3) Mechanisms to incorporate the perceptions of local stakeholders within strategies for the development of tourism: management tools and information for participatory planning and decision-making in the implementation of sustainable tourism development.

In recent years, several studies have attempted to provide a better understanding of the operationalization of concepts relating to quality and sustainability of tourism development (Cabrini, 2014) by "emphasizing sustainable tourism as a strong paradigm and vision for alternative development" (Perona & Molina, 2016, p. 527). Within this context, community tourism emerges as a sustainable option for economic and social development, coupled with balanced distribution of the benefits in the local space (Hamilton & Alexander, 2013; Perona &

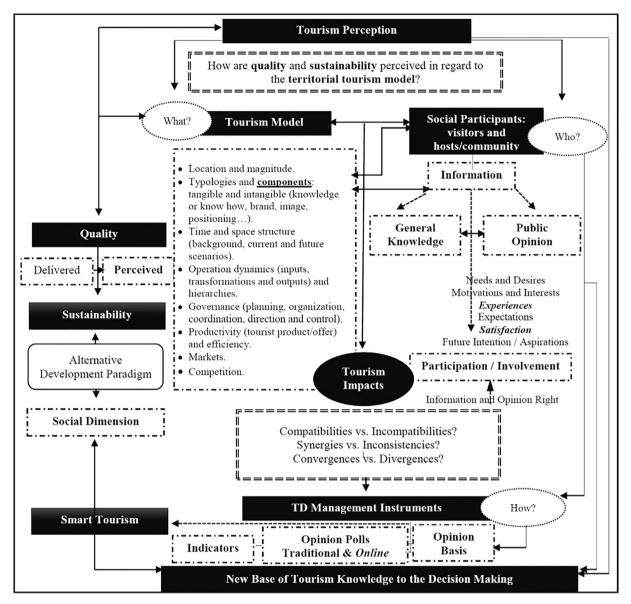


Fig. 1. Conceptual model for understanding visitors' and hosts' perceptions regarding tourism development (TD) within the framework of a territorial tourism plan (authors' own elaboration).

Molina, 2016). This approach has been recently advocated as "a sustainable alternative to the mass tourism models that have commodified territories, displaced human populations and transformed their living spaces and conditions" (Villavicencio, Zamora, & Pardo, 2016, p. 6). Apropos, numerous institutions and organizations have been making guiding proposals; such as the Global Sustainable Tourism Council (GSTC), which has recommended that such efforts should be organized around four main topics: effective sustainability planning, maximization of social and economic benefits to local communities, appreciation of cultural heritage, and the attrition of negative impacts on the environment (GSTC, 2012). As a result of the GSTC recommendations, the Global Sustainable Tourism Criteria for Hotels and Tour Operators was developed.

The Global Sustainable Tourism Criteria accentuate the need to "maximize social and economic benefits to the local community and minimize negative impacts" to encourage community social development, employment opportunities, fair trade, sustainable products, policies against sexual harassment and exploitation, and equal employment opportunity; recognizing that tourism should not negatively affect quality of life (GSTC, 2012). In addition, the criteria highlight the need

to "maximize benefits to cultural heritage and minimize negative impacts," support the adoption of codes of behavior and conduct at vulnerable sites, and the usage of local art elements, architecture or cultural heritage, while ensuring that the community's intellectual property rights are respected at the same time (GSTC, 2012). Perceptions regarding these criteria, among different social groups that interact within the destination, are feasible indicators for examining varying opinions regarding the quality and sustainability of tourism development (Cárdenas, Byrd, & Duffy, 2015).

Although social sustainability is regarded as a significant component of sustainable tourism, proper analyses of this important dimension are lacking due to the complexities associated with delineating all social interactions within a destination (García, 2007). In their research addressing tourism in Iberoamerica, González and Palafox (2014) showcase the insufficiencies in evaluating the social dimension of sustainable tourism development (Cohen & Cohen, 2012). Nonetheless, it has been shown that citizen participation is a platform to deepen democracy through means that emphasize social justice and human dignity, and building solidarity to end social exclusion (Rodríguez, 2015) and to optimize the relationship between emotional solidarity and social distance (Joo et al., 2018; Woosnam, 2012). It is recognized that engaged citizenship "is directly related to the capability to make social citizenship effective, and the social initiative entities play an important role" (Rodríguez, 2015, p. 13).

Furthermore, civic citizenship is seen as a "decisive empowerment approach to community engagement, as it promotes participation and construction of a civil society, contributing to generate creative answers for problems through existing resources and boosts development processes and personal growth of people" (Rodríguez, 2015, p. 13). Therefore, participation of all involved actors at the local/destination level constitutes an appropriate framework to utilize the various synergies produced at the confluence in a given space or territory (Grybovych, 2012), including people, groups, public and private institutions, programs, services, business, etc. (Rodríguez, 2015; Tuohino & Konu, 2014). This approach has become an important success factor for tourism projects in order to facilitate the involvement of every participant in destination management (Postma, Cavagnaro, & Spruyt, 2017), configure the desired projection of local identity, and determine the image and positioning of the destination (Dioko, 2016; WTO, 2007).

For the purpose of this study, perception is conceptualized as "the process through which a person selects, organizes and interprets the stimuli to shape a significant and coherent image of the world...how we see the world that surrounds us" (Schiffman, 2010, p. 157). With respect to destination management, perception creation is the process through which visitors and hosts create an image related to tourism development, which in turn is intrinsically tied to the implemented territorial tourism model (see Fig. 1). Such perceptions could also be interpreted as imagined or potential impacts by visitors and hosts in relation to tourism development.

The conceptual model developed for this qualitative study integrates variables selected from the aforementioned theoretical constructs for the purpose of systematically examining visitors' and hosts' perceptions regarding tourism development within the framework of a territorial tourism plan and applying these findings to improve the model while confirming its overall practical effectiveness. The tourism perception model presented in this study incorporates several destination characterization attributes (see Fig. 1). The principal tangible components include: resources/attractions, infrastructure and equipment, human resources, consumers, business and local community; while the intangibles are: knowledge or know-how, hospitality, quality, security, brand, information, prices and accessibility (WTO, 2007). Adding value to the conceptual model are the tourism development components consisting of visitors and hosts (Bimonte & Punzo, 2016), who receive the information about the destination, develop a general knowledge regarding the area, generate public opinions and engage in varying levels of participation.

# 2.2. Quality and sustainability of host-visitor experiences

Scientific literature from the 1960s categorizes the most used tourism typologies into two groups: 1) space structure of tourism development (analysis of the space usage) and 2) role played by the tourist (activities, encounters and impacts) and suggests that tourism typologies and classifications should be grouped in two categories: 1) interactional or behavioral type due to the emphasis in the relationships established between visitors and destination areas; and 2) cognitive-normative or motivational type, since it accounts for the previous motivations to travel (IIT, 2013). Thus, both categories should be addressed with the purpose of managing participation from all parties at the destination.

Subsequently, the ULSA Tourism Investigation Institute characterized different interpretative models of tourism development in order to understand the complexity of social interactions using theoretical systems, such as Smith's model which links the volume and type of tourists to the degree of adaptation to the local norms; Doxey's Irridex that postulates that the interaction of local residents with a large number of tourists generates tension and finally leads to antagonism; Plog's Psychographic Profile which associates the evolution of the destination with the travelers' psychology; and Butler's Host Attitudinal Response model, in which social interactions are based in the different stages of evolution within the tourism area life cycle (IIT, 2013).

Cohen and Pearce also suggested an interpretive model of the social impacts of tourism development on the host community based on satisfaction and behavior in which tourists' satisfaction drifts from their interaction with the local population and the visited community environment (IIT, 2013). The model also refers to proportionality to explain the evolution of a locality based on the volume of tourist interrelationships with the local community. In these tourism typologies, the perceptions of visitors and hosts as they relate to the interpretation and promotion of tourism development are considered as an essential category of evaluation (Palafox-Muñoz, Sánchez, & Ortiz, 2013, p. 127) within the assessment of tourism's social impacts. Although such typologies have been of great utilitarian value to evaluate tourism's social impacts, the development of a holistic framework that integrates more social interaction variables is needed (Lin, Chen, & Filieri, 2017). Moreover, a better comprehension of the factors influencing the perceptions of visitors and hosts (regarding tourism development) is required to create guiding strategies for improving visitors' and hosts' satisfaction levels.

In order to explain the impact of the experiences of visitors on their travel satisfaction levels, Oz, Ihtiyar, Ahmad, and Ali (2015) put forth the following series of constructs: intercultural communication competence, comfortable interaction, inter-role congruence, cultural distance perception, previous experiences and visitor's satisfaction. These factors directly influence the perceptions of visitors regarding the destination, and mainly, quality and sustainability opinions based on their experiences relating to the place of visit. Therefore, questions addressing perceptual factors relating to visitors' evaluation of quality and sustainability of tourism development at a destination on online opinion sites that have a high impact on general market behavior may be instrumental to the smart management of tourism at the destination level (Boes, Buhalis, & Inversini, 2016; Budeanu, 2013; Buonincontri & Micera, 2016; Errichiello & Marasco, 2017). According to Revinate (2015), 93% of international travelers have stated that online opinions have an impact on their hotel booking decisions; 79% consider that a bad review increases their distrust on the hotel; thus, the traveler's opinions have a strong competitive pressure, a high booking impact and influences over the reputation of hotels and tourist destinations.

Similarly, the impact of hosts' previous experiences on satisfaction levels is a determinant factor for the comprehension of this complex phenomenon, which Soria-Leyva (2014, p. 132) confirms as needing a higher degree of examination, insomuch as every 'event that requires a great cognition to its prediction tends to be an ensemble of perceptions of the environment in response to the received stimuli.' Soria-Leyva (2014, p. 132) states that "such elements are assimilated according to the needs, motivations, tastes and preferences of the population, affecting the perceptions of tourists, delimiting their personal expectations and inducing over their general satisfaction," therefore, the local population's attitude towards tourism is "the branch of a convergent process on which psychological, cultural, social and personal factors interact..."

Simultaneously, in recent years, there has been a significant increase in the use of ICTs among tourism enterprises to interact with visitors (Del Chiappa & Baggio, 2015); this is because consumers, including tourists, are becoming more and more social and mobile, at the same time as their expectations regarding services are getting higher. Tourism businesses, mainly hotels, also utilize ICTs to obtain information about their clients ahead of their visits for the purpose of generating more personalized experiences and to reinvent the guest experience. For example, "Spoint" or "satisfaction point" prompts clients to reflect on their experience and expectations by providing online opinions using an internet-based platform which can be personalized by

the business entity to make the interaction and feedback process appealing to the clients. This allows the business to obtain valuable information regarding customers, such as their needs, interests, preferences, and consumption habits, among others.

In addition to utilizing technology to track information regarding the experiences of visitors and their perceptions pertaining to the quality and sustainability of the destination, monitoring "online" visitor concerns and opinions published via social media, is also becoming a prevalent mechanism for tourism information management (Brandt, Bendler, & Neumann, 2017; Xiang, Du, Ma, & Fan, 2017). Nonetheless, it should be noted that online criteria generally used by visitors for the assessment of the quality of their tourism experiences with commercial entities do not include sustainability indicators. Hence, a more holistic measurement of the quality of tourism experiences could also include sustainability criteria such as the one recommended by GSTC.

Building upon the findings of the research studies mentioned above, this study examined the contrasted perceptions of tourism development in Copper Canyon Park, according to the opinions of hosts and visitors, with the purpose of evaluating the perceived quality and sustainability of the destination within the context of an implanted territorial tourism development model.

# 3. Methodology

## 3.1. Research focus and design

The methodology of this study was designed with the purpose of conducting an assessment of the quality and sustainability aspects of the territorial tourism development model being implemented in Copper Canyon Adventure Park, by taking into consideration the involvement and experiences reported by hosts and visitors, respectively. The findings obtained through this methodology can potentially make the participatory management of sustainable tourism easier at the destination level, in which visitors and hosts interact within the same space-time dimension. Accordingly, qualitative research methodology applying a deductive explanatory approach (Sampieri, Collado, & Lucio, 2010), from general theory to a case study, was utilized for this study. This investigation took into consideration the integration of the contrasting perceptions of visitors and local residents regarding the quality and sustainability of tourism development in the area. Luna and Rodríguez (2018), in their study utilizing perceptions as analysis indicators for alternative tourism in Veracruz, Mexico, corroborate the methodological and practical merits and contributions of the aforementioned qualitative research technique.

Since a qualitative paradigm was adopted for this study, the strategies to determine the composition and size of the sample during the data collection process was focused on obtaining valid qualitative data such as words and texts (Luborsky & Rubinstein, 1995) based on personal opinions of hosts and visitors. The sample for this study comprised of groups of local residents and tourists who were selected randomly, without necessarily being representative of the universe or population. A non-probabilistic by convenience or intentional type of sampling strategy (Sampieri, Collado, & Lucio, 2010) was used, in which the subjects were selected based on their accessibility and proximity to the researchers according to the purpose of this study.

## 3.2. Methods and procedures

The examination of the research problem was based on literature review and published documents, use of secondary data, consultation with key informants, and the analysis of similar cases, thereby, making it possible to understand theoretical gaps and to identify appropriate methods and procedures. Various theoretical models were utilized for the construction and development of a scientific theory that served as the basis for the research and determination of regularities and essential characteristics of the studied problem (see Fig. 1). In this study, the Interpretative Phenomenological Analysis (IPA) Approach (Finlay, Peacock, & Elander, 2018; Sutton & Austin, 2015) was used to understand the attitudes, opinions, habits and motivations of tourism stakeholders, i.e., locals and visitors in relation to their involvement and experiences within the destination, taking into consideration that the IPA approach "gives researchers the best opportunity to understand the innermost deliberation of the 'lived experiences' of research participants" and "allows the interviewees (research participants) to express themselves and their 'lived experience' stories the way they see fit without any distortion and/or prosecution" (Alase, 2017, p. 1). During the research process, several qualitative techniques were implemented for the collection, measurement, analysis and interpretation of information regarding the involvement and experiences of the stakeholders, such as observation, analyses of documents, surveys with openended questions, semi-structured interviews, group interviews, consultations with specialists, case studies and discussion groups.

The assessment of perceptions among stakeholders regarding tourism development was performed by conducting semi-structured interviews and administering open-ended surveys among local residents, and obtaining visitors' opinions of the destination through various online platforms. Data was obtained through interviews with 12 specialists from the Cooper Canyon Adventure Park and the tourism department of the state and municipality, 23 national and international researchers consulted through social and research networks, 11 social science academics with specialization in tourism, geography, sociology, economics, administration and community work, and 6 managers from 4 hotels and 2 local travel agencies. Additionally, 328 surveys were carried out with local inhabitants of different townships (6 in total), as well as 185 informal consultations (WHO, 2007) with residents in public spaces of their communities at all localities. Information was also collected through 16 small debate groups from the tourism private sector with the participation of 3 to 5 people in each group; this is a qualitative group technique of social research that fosters an in-depth understanding of various phenomena in social settings, which allowed the researchers to immerse themselves in the subjective world of the participants in order to interpret and understand reality from the beliefs and meanings provided by the participants (Castro, Lain, Genovés, Moñino, & Jiménez, 2010). The aforementioned stakeholders were chosen based on the following criteria: stakeholder had been directly or indirectly related to local tourism, had been living in the locality for at least the last 5 years, and was willing to participate in the study.

These primary source information compilation tools were also used at Creel, Divisadero, 9 small townships of the region and among more than 60 inhabitants from the dispersed populations residing in Urique and Otero Canyons, respectively. The qualitative information compiled through these data sources allowed the researchers to obtain the main findings presented in this paper; therefore, the information obtained was refined by taking into consideration the credibility, confirmability and transferability of the data resulting from the methods, techniques and tools (Kumar, 2011) utilized during the data collection process.

The implemented methodological procedure included (1) design and validation of the interview and survey instruments oriented to understand the involvement and experiences of visitors and residents, (2) data collection though the implementation of the designed instruments, (3) database generation for manual treatment of data, (4) data coding to examine emerging patterns (categories, groupings, variables), (5) analysis of the information gathered, and (6) interpretation according to the objective of this research.

For the operationalization of this study and the design of interview structure and survey instrument, five main variables were identified to assess the experiences and *perceptions of the host population* regarding tourism development, considering the following criteria:

1. Project type: hosting communities' perceptions regarding the Copper Canyon Adventure Park project (opinions, suggestions, improvements).

- 2. Community needs and desires: improvements in urban and tourism infrastructure of the destination desired by the community.
- 3. Community implication: hosting communities' perceptions regarding the importance of their role and involvement in local tourism activities.
- Aspirations of the community to feel involved in tourism development: desire from the community to learn how important they are for tourism development.
- 5. Local tourism development value and importance: local community perceptions regarding the impacts of building tourist infrastructure.

For the analysis and interpretation of the qualitative data, different categories were established according to the main issues raised in the research (conceptual variables) and the participant's viewpoint. This stage included transcribing and checking data, reading between the lines, coding, theming, and data synthesis (Sutton & Austin, 2015). To facilitate the analysis and synthesis of the information reported by different stakeholders, a database (Excel Matrix) was created for later use. For the purposes of the qualitative data analysis, the step by step analytic process developed by Pineda, Leyva-Moral, and Moya (2011) was followed, taking into consideration these stages: "The whole: developing ideas; From the whole to the parts: separating and grouping; From the particular to the general: re-grouping; Decomposing the whole into its parts without losing the whole: integrating and relating; Relating the parts that give meaning to the whole: identifying the central category" (Pineda, Leyva-Moral, & Moya, 2011, page 1). The semistructured interviews were audio-recorded and surveys (open-ended questions) were completed with the respondent's consent, transcriptions of the interviews were made, and finally the interpretation of each survey and interview was undertaken. The interpretation of data was oriented towards the search for meanings and relationships among the variables. With this purpose, the process of attaching meaning to the data took into consideration the significance and limitations of the findings, identification of trends and regularities, examination of the relationship between the research questions and data obtained, based on which conclusions were drawn within the context of the research objectives (Bengtsson, 2016).

To study the *perceptions of the visitors*, it was considered feasible to use their online opinions (Udayapuram & Gavirneni, 2015). An online opinion survey was posted on websites including, Expedia.com, Hotels. com and Tripadvisor.com, through which information regarding travelers' opinions was collected. This analysis made it possible to identify the visitors' impression of Copper Canyon Park in accordance with the websites' respective evaluation criteria, which generally were: hotels (service and personnel, room cleanliness, general hotel conditions and room comfort); nature and parks; tours and activities; and attractions and places of interest.

### 4. Results and discussion

# 4.1. Territorial tourism model characterization

To obtain a better understanding of the territorial tourism model currently being implemented in Copper Canyon Park, the main characterization parameters selected for this research were used (Fig. 1) with the purpose of identifying its composition, structure, dynamics, function and hierarchy. The description of the area is based on the identification of the following aspects: geolocation, dimensions, properties, typologies, life cycle, demand, offer, commercialization, participation, investment and impacts. Various documents, such as the Development Plan manuscript, press releases, and general information regarding the area were also utilized for the characterization, which is as follows.

Copper Canyon Adventure Park is a natural area located on the Canyon's Butte, Divisadero, Urique Municipality, Sierra Madre Occidental of Mexico, has a territorial extension of 147.5 ha and adjoins the Creel-Divisadero tourist corridor. It constitutes an acquired land by the Federal Government through the National Fund for Tourism Promotion (FONATUR), on which the park's installments occupy 2.7 ha. This project signed a lease for 30 years with Ejido San Alonso in 2009, even though the park records go back to 2005, the year in which ecotourism development investments started. In the first phase, the project included a 1.5 km scenic walkway, 1 suspension bridge, 3 viewpoints and 2 restroom areas. In 2009, the project initiated a partnership with Doppel-Mayer and subsequently inaugurated a cableway in September 2010.

The current development process of the park officially started on September 25, 2010 and focuses on the development of sports installations for an open space adventure market segment. Currently, the park has a cable railway of 3000 m length with no middle towers (world's third largest of its type); a circuit of 7 zip-lines and two suspension bridges of a 5 km length, which makes it one of the largest in Latin America; a 2225 m length zip-rider (chair type harness that overflies the canyon up to a 135 kmh speed); a ferrata via (rappel, semiclimbing, Tarzan jump); bicycle route (an indigenous people's project subsidized by the State's Government); quad biking; and guided walks through the Bacajipare community. The average number of visitors to the park is approximately 80,000 tourists per year, but the seasons of highest visitation are Easter, July, August and December (Copper Canyon Adventure Park, 2018).

The park experiences high seasonality as the maximum demand occurs during Easter and during the vacation period of July and August, with considerable reduction in demand for the rest of the year. Promotion of the park is mainly conducted through social media (Facebook, Twitter, website); printed media (magazines and newspaper publications); and TV commercials. These distribution channels are considered by park administration as important promotional tools for reorientation of management towards creating a smart destination. At present, the park administration does not utilize a survey system to measure the satisfaction levels of visitors, but they keep track of the opinions of visitors through compliments, complains and suggestions directly received by mail and ratings obtained through TripAdvisor.

One implication of Copper Canyon Park to the local communities and related institutions and organizations is that some Rarámuri people work in the park, which is open to the indigenous that desire to enter and commercialize their crafts, demonstrating limited self-managed participation among these native groups. Since 2010, the state's investment through agreements with the federal government for community development projects to date, has totaled over 38 million pesos. The supplies for the park's restaurant as well as the needed materials for the park's maintenance are bought from suppliers and vendors in the region and 150 regional settlers were hired for the construction of the park's built facilities. Promoters and development advocates highlight the positive effects of the park as being economic growth for the communities, increase in business due to visitors, and the use of the cable railway for community members to transfer to the plateau and commercialize their crafts, at no cost.

Based on interviews with promoters regarding actions planned for the future, including extensions and/or new projects, it became evident that several proposals for development are currently being considered by FONATUR – converting the park into a sustainable Mountain Resort, integral improvements to the park's image (access, paths, viewpoints) and impacts on the environment, community, etc., indicating that strategic planning was being conducted in an effective manner and in favor of the region.

#### 4.2. Local communities' perceptions regarding tourism development

The research also characterized the experiences and satisfaction levels of the hosts with respect to local tourism development. The community of Creel – named Magical Town (Pueblo Mágico) – was integral to this research, since it is the population group experiencing the greatest tourism development and flow in the region, which determined the significance of the obtained results, its representativeness and overall contribution.

The analysis showed in general terms that the inhabitants did not have enough information regarding tourism development and they were not aware of the proposed projects to turn their permanent residence space into a Mountain Resort with high international attractiveness. It is evident that if the local population is not up to date with current and future development plans, both implied and committed, it will be less probable for the destination to reach this goal; particularly, if hosts have not been trained in the tourism and sustainability dimensions, they will not be able to be consistent and act responsively to the complexity of the proposed development.

Among the most important findings in this study of perceptions regarding tourism development in Copper Canyon Park are the following judgements and reasoning, which have been synthetized and generalized for each indicator utilized in the research:

- 1. Type of project. The community warns that the region is facing total deforestation, and there is poor management of waste that eventually ends up in the water streams (mainly in the Divisadero zone). In the opinion of a participant "It is important to preserve the environment, considering that deforestation is not moderated, there's no respect for the environment... it is necessary to have strict regulations of entrance fees to the parks and rural communities." There is a need for new infrastructure and medical services both for tourists and residents as well as cultural activities for both parties. A participant mentioned "...more cultural events for the population are needed, we do not have much to do or to offer to the visitors, we need more efficient transportation for tourists, parking areas, maintenance and improvement of all touristic areas and public spaces; and of course, it is necessary to have bilingual training for service providers and improve the availability of emergency services at tourism sites."
- 2. Needs and desires of the community. It is recognized that the services of fresh water are scarce during high seasons; the populations also suggest the need for a better tourism infrastructure as well as local, new restaurants, certified personnel, etc. One participant recognized "we hardly have potable water during the tourism season when it is only provided to hotels and tourism businesses. I consider it is necessary to pay attention to waste water disposed by local communities since these end up in nearby creeks and contaminates them... the Environment and Ecology Department must pay more attention to the environmental problems to avoid more negative environmental impacts associated with our local development." Residents also point out the lack of water supply and the high prices for some basic foods making them expensive to purchase and inaccessible for some segments of the local population; the increasing tourism flows to this region have forced the community to import foreign merchandise to address the growing demand for goods.

The community mentioned that prices of goods and services in the Divisadero-Barrancas stations are high, therefore, only tourists can afford to purchase them. The residents also expressed the need to have better environmental cleaning services because they felt ashamed that tourists could see trash at the destination. A participant narrated "...there is effective and constant regulation of the price of goods and services, especially basic items that sometimes increase 40% more than at other surrounding communities such as San Juanito... we demand an improvement of the population's salaries considering the average wage is 300 pesos and in rare cases 400 pesos per week... and an improvement of the quality and price relationship of food, since some tourists complain about paying 25 pesos for a bad quality "burrito" or the famous "gorditas" also of bad quality for 40 pesos." Another participant mentioned "...fast food restaurants should be supervised by the health department, since some tourists get sick sometimes after eating at local restaurants that do not comply with required quality standards...healthy and hygienic foods are required... and publicize the traditional medicine and remedies of the indigenous population of Tarahumara. It could be a touristic attraction for our community... in my opinion we do not have guidance and training to participate in a tourism life, and we need it because more and more tourists are arriving."

- 3. Community involvement. It became evident that the community does not receive a favorable economic benefit from tourism; residents recognized that the ethnic groups did not get any kind of benefit. Residents also commented that the general feeling towards tourism is gradually shifting towards rejection. Local populations did not know some of the attractions of the area and alluded only to knowing that they were high priced. A participant said "the community does not receive direct benefits from tourism, since very few locals are service providers, the majority of the indigenous community does not benefit directly from tourism, so the general consensus of the poor class is that they reject tourism because the tourist is only intrigued by them perhaps due to their deplorable living conditions. A high percentage of the local population has never been to the touristic attractions. For example, 'El Divisadero de Barrancas' which is relatively expensive for them to visit, let alone enjoy attractions such as the cableway." Another participant mentioned "However the local Tarahumaras are allowed to use the cableway as means of transportation for free, some locals get involved in tourism but there are others that show little or no interest at all, there are salary limitations that prevent the integration and participation of the local communities in tourism."
- 4. Community aspirations. The community exhibited great interest in increasing their levels of participation in tourism activities since they recognized its importance; they also wanted to be trained to be able to obtain different job positions (tourist guide, cook, craftsman, among others) in the tourism sector. A participant mentioned "We need to be trained, for example indigenous people as local guides since they know the region better than anyone else, it could improve working conditions and salaries as well as access to all benefits... reinforce working skills in different activities, such as gastronomy, would favor employment opportunities, for example, it is possible to establish a program in food preparation with the locals promoted by the Health Department or promote local indigenous musical, and native folklore performances, games, dances and so forth."
- 5. Value and importance of local tourism development. The community indicated that income generation and fair wages are the most important aspects for them; residents also explained that with the construction of the airport, various problems, mostly environmental, have been generated and foreign workers were being hired instead of employing local people to perform the jobs. A participant recognized "As tourism is an important factor for our economic income, it is necessary to focus on the deforestation problem and reforest because the construction of the local airport lead to the destruction of several hectares of forests and various flora and fauna components, and remember that the contractors were foreigners...The construction of a gas pipeline that goes through the town of Creel generated a lot of environmental and social damages and the exploitation of the nearby mines has provoked the extinction of entire flora and fauna species." Another participant pointed "up to now, I have experienced limited generation of valuable employment sources...little or no economic benefit reflected in any tangible way to the wellbeing of my family, my community, I know tourism is an important source of growing, but when we are going to see the benefits ...?"

Based on the analyses of the indicators, a high level of dissatisfaction in the community with respect to the implanted territorial tourism development model is verified. When considering the criteria established by the GSTC, there is a lack of effective sustainability planning with an emphasis on the sociocultural component; there has been no

#### Table 1

Competitiveness gaps in meeting sustainability criteria.

Maximize social and economic benefits to the community and mini	mize negati	ve impacts								
Stimulation of social community development	01	02	03	04	05	06	07	08	<u>09</u>	10
Employment opportunities for local residents	01	02	03	04	05	06	07	08	09	10
Fair trade	01	02	03	04	05	06	07	08	09	10
Sustainable products	01	02	03	04	05	06	07	08	09	10
Policies against exploitation and harassment	01	02	03	04	05	06	07	08	09	10
Equal opportunity employment	01	02	03	04	05	06	07	08	09	10
Local access to ways to make a living	01	02	03	04	05	06	07	08	<u>09</u>	10
Maximize benefits for cultural heritage and minimize negative imp	acts									
Codes of behavior for visits to sensitive cultural sites	01	02	03	04	05	06	07	<u>08</u>	09	10
Use of local elements of art, architecture or cultural heritage	01	02	03	04	05	06	07	08	09	10
Respect for the intellectual property rights of local communities	01	02	03	04	05	06	07	08	<u>09</u>	10

real maximization of social and economic benefits for the local community; and tourism has not contributed to the reduction of negative impacts on the environment. According to the participants' perceptions, it is possible to affirm that it is a development lacking in sustainable community ties and bases, isolated from the opinions of the host communities who are knowledgeable about the destination and with an insufficient regard for local empowerment required for community practice and engagement.

The diagnosis of the needs felt by the community, their motivations, tastes and preferences projects future scenarios in which the perception status of such communities could negatively affect the perception of the visitors regarding regional tourism development, its image, brand architecture and strategic positioning. These scenarios are predictable especially as the park attempts to attract market segments with higher expectations and previous experiences relative to this kind of tourism product, particularly those interested in the authentic culture and preserved traditions, imposing high demands to achieve a favorable satisfaction and memorable experience.

In this study, several questions for the participants were focused on understanding if the community was interested in being part of the tourism development initiatives underway at Copper Canyon. Most of them were very interested in this opportunity, recognized the importance of tourism for their wellbeing, wanted to be part of the tourism industry, to be prepared for the tourism workforce, and wanted to be taken into consideration in the tourism planning process. In the opinion of one local resident "the development of tourism here could benefit us, we want to be part of this project, we want to be taken into account, but this purpose has been limited up to now... I do not have any idea how to participate, but I want... I know it is necessary to do something to receive something, so I am in disposition to begin to do... something."

Next, the analysis of tourism competitiveness was carried out taking into consideration sustainability criteria that represent competitive advantages for the destination. In workshop sessions with local tourism entrepreneurs, the evaluation of the Global Criteria for Sustainable Tourism for Hotels and Tour Operators was carried out, in order to determine the competitiveness gaps that allow the future to guarantee the sustainability of tourism development. In the participatory evaluation through group work sessions, the smallest gap in competitiveness is represented by 01 and 10 for the biggest gap (Table 1).

As exhibited in Table 1, the challenges to sustainability are considerably high, since the development of each of the indicators represents large gaps of competitiveness for the success of the destination which will require strategies in the medium and long term to turn them into positioning attributes. The criteria with the most unfavorable levels of evaluation correspond to the stimulation of community social development, local access to ways of earning a living, and respect for the intellectual property rights of local communities; all factors that reflect the unsustainability of perceived tourism development.

In order to maximize the benefits derived from the use of the cultural-natural heritage and to minimize the negative impacts, it will be necessary to position project development strategies in favor of intercultural communication competence, conditions for comfortable interaction, inter-role congruence, management of perception on cultural distance, as well as the study and systematization of previous experiences and visitors' satisfaction. It should be noted that the satisfaction of the hosts could be improved through transparent access to information in addition to improvements to the criteria/indicators perceived as unfavorable by locals for the management of the destination, especially since the significant value of the local community's opinions in the tourism development process has been justified and corroborated by all typologies and models described in prior sections.

# 4.3. Visitors' perceptions regarding tourism development

During the initial stages of the investigation, it was verified that the websites available for the collection of online opinions of visitors regarding trip satisfaction only offered specific (limited) possibilities to rate the quality of the tourism product/service. The guest feedback options provided by the websites were general indicators of trip satisfaction such as cleanliness and comfort of rooms, hotel status, service, and contact staff, among others, as well as natural attractions and parks, attractions and places of interest, and tourist activities available for guests. These websites did not assess the perceived sustainability of the destination in relation to the local heritage and host community characteristics (refer to Fig. 1). It would be advisable for the websites/ destination to provide options that allow visitor comments relating to experiences with the local population, the significance and conservation status of the heritage, visitor behavior codes, environmental practices, use of local products, and economic well-being of the communities. This would imply greater sensitivity to the sustainability aspects of the destination, and, consequently, would favor the destination's positioning within the specialized market of sustainable travel.

Responses from visitors to Urique Canyon were quite significant to this research study since this area has the largest concentration of tourism infrastructure in Copper Canyon Park (Table 2). As shown in Table 2, perception-based evaluations given by visitors were very favorable, but their feedback options only included aspects related to the accommodation facilities available at the destination. A visitor said "A place not to be missed, a lot of adrenaline!!! The park is very good!!! The attractions are the best ..., super recommend everything. It's not cheap, but it's worth it. The restaurant has good food and the price is fair. The views of the Barrancas are the best!" (TripAdvisor México Opinions, 2016).

According to the online opinions provided by the visitors, it may be inferred that the destination was an excellent option to rest and

#### Table 2

Opinions of tourists regarding accommodation establishments in Copper Canyon.

Hotel	Website	Customers' opinions		
		Aspect evaluated	Evaluation	
Misión Hotel (4 stars)	Expedia.com (7 reviews)	Service and staff	4.3	
	· · · ·	Room cleanliness	4.1	
		Hotel condition (general)	4.1	
		Room comfort	3.4	
		General Evaluation	4.0	
	Hotels.com (7 reviews)	Service	4.3	
		Cleanliness	4.1	
		Hotel condition (general)	4.1	
		Comfort	3.4	
		Zone	3.5	
		General evaluation	4.5	
	Tripadvisor.com (73 reviews) Decorated with	Resting quality	4.5	
	certificate of excellence.	Service	4.5	
		Cleanliness	4.5	
		Rooms	4.0	
		Price-quality	4.0	
		Location	4.0	
		General Evaluation	4.0	
Paraíso del Oso (3 stars) Tripadvisor.com	Tripadvisor.com (73 reviews)	Resting quality	4.5	
	* · · · · ·	Location	4.5	
		Cleanliness	4.5	
		Service	4.5	
		Price-quality	4.0	
		Rooms	4.0	
		General evaluation	4.5	
Jade Hotel (2 stars)	Tripadvisor.com (43 reviews)	Resting quality	4.5	
		Location	4.5	
		Cleanliness	4.5	
		Service	4.5	
		Price-quality	4.5	
		Rooms	4.0	
		General evaluation	4.5	

From TripAdvisor Copper Canyon Accommodations (2016).

appreciate nature; the comments indicated favorable levels of satisfaction with the destination's hotels, highlighting the importance of resting quality and service. Based on these evaluations, it became apparent that the Misión Hotel received the lowest satisfaction scores, which is contradictory since it was the highest 'star' category, while the Jade Hotel that holds the lowest 'star' category received the best scores. No recorded guest opinions relate satisfaction with the destination to interactions with the native communities which gives the impression that a bubble is generated in which the visitors are isolated from the local population, especially from the indigenous, while the websites of the destination and hotel companies themselves do not provide a direct option to receive comments on this matter, thus devaluing an attractive potential of very high hierarchy within the sustainable travel market segment.

This study also considered visitors' online evaluations of the experience during their stay in Copper Canyon posted on TripAdvisor, which categorized the tourist typology into three fractions (term used by the source): nature and parks (Table 3); tours & activities (Table 4); and attractions & places of interest (Table 5). Based on the ratings posted on the TripAdvisor website, the experience, in most cases, proved to be very positive and exceeded the expectations of the visitor. A visitor mentioned "The road to get to the site is always in good condition and well-guarded. The site is not expensive for the experience lived when doing any of your activities, which are totally safe and welladvised. The guide team is wonderful, they are friendly and dynamic, they certainly improve your experience" (TripAdvisor México Opinions, 2016). Another visitor added "... the most outstanding and enjoyable are undoubtedly the views of the canyons; the activities are extreme and I even dare to say that they are for young people and those with adventurous spirit ..." (TripAdvisor México Opinions, 2016).

Mostly positive reviews regarding nature and parks in Copper

Canyon were reported in this section of the TripAdvisor website. In this respect, tourists rated the experience as "unique, incredible and unforgettable," with the majority of them rating the tourist attractions of the region as excellent. Three of the eight attractions evaluated had a certificate of excellence awarded by TripAdvisor, indicating that they had consistently been rated as high-quality attractions. It should be noted that these certifications have become very 'fashionable' and

#### Table 3

Opinions of tourists regarding nature and parks in Copper Canyon.

Nature and parks	Scoring	Responses
Sierra Tarahumara (36 opinions)	Excellent	31
Decorated with certificate of excellence	Very Good	5
Los Monjes (Monks) Valley (43 opinions)	Excellent	30
Decorated with certificate of excellence	Very Good	11
	Regular	2
Cusárare Falls (44 opinions)	Excellent	28
Decorated with certificate of excellence	Very Good	15
	Regular	1
Batopilas Canyon (27 opinions)	Excellent	25
	Very Good	2
Arareco Lake (44 opinions)	Excellent	19
	Very Good	15
	Regular	10
Las Ranas (Frogs) Valley (21 opinions)	Excellent	8
	Very Good	7
	Regular	6
Recohuata Thermal Waters (16 opinions)	Excellent	7
	Very Good	6
	Regular	3
Huápoca Canyon (2 opinions)	Very Good	2

From TripAdvisor Copper Canyon Attractions and Activities (2016).

#### Table 4

Opinions of tourists regarding tours and activities in Copper Canyon.

Tours and activities	Scoring	Responses
The 3 Amigos - Private Day Tours (124 opinions)	Excellent	104
Decorated with certificate of excellence	Very Good	16
	Regular	1
	Bad	2
	Very Bad	1
Chepe-Railway Copper Canyon (127 opinions)	Excellent	80
Decorated with certificate of excellence	Very Good	32
	Regular	11
	Bad	3
	Very Bad	1
Canyon Travel Tour (16 opinions)	Excellent	9
	Very Good	4
	Very Bad	3
Ecoalternative Tours Sierra Tarahumara (2 opinions)	Excellent	1
	Very Good	1
Sierra Madre Express (3 opinions)	Excellent	2
	Very Good	1

From TripAdvisor Copper Canyon Attractions and Activities (2016).

#### Table 5

Opinions of tourists regarding attractions and places of interest in Copper Canyon.

Attractions and places of interest	Scoring	Responses
Mission of San Ignacio (12 opinions)	Excellent	9
	Very Good	3
Mission of Satevó (9 opinions)	Excellent	3
	Very Good	5
	Regular	1
Cristo Rey (3 opinions)	Excellent	1
	Very Good	1
	Regular	1
Mission of Cusárare (4 opinions)	Excellent	2
-	Very Good	2

From TripAdvisor Copper Canyon Attractions and Activities (2016).

appealing among potential tourists as a criterion for decision-making regarding travel choices; therefore, companies proudly display these along with other awards and certifications of quality and sustainability, in order to reinforce market influence through internet sites.

Most of the tourists rated the tours and activities offered in Copper Canyon Park as excellent, expressed that the services were of the highest quality and described the experience as "wonderful and unforgettable." However, some of the guests also indicated that the cost of the Chepe tourist train was "pricey" (TripAdvisor México Opinions, 2016).

Many of the cultural attractions visited at the destination were missions and religious sites, which provides a context as to why tourists rated the place as "magical, different and silent." Most visitors described and characterized the experience as "unusual and unique," and the trek to reach the attractions was generally touted as "memorable." It may be noted that the opinions expressed by the respondents represented a trip satisfaction/quality equation where predisposed expectations are lower than the actual experience, with the quality being perceived as either good or very good and satisfaction levels being high to very high, which corresponds to potential intentions of guests to Copper Canyon to recommend the destination favorably to others and revisit the place themselves.

In particular, Copper Canyon Adventure Park has the mission of providing unforgettable and extreme experiences to tourists. Visitors 
 Table 6

 Opinions of tourists regarding Copper Canyon Adventure Park.

	g Responses
Located in the Copper Canyon, this extreme park offers Excelle in addition to a spectacular view a diverse amount Very C	
in addition to a spectacular view a diverse amount Very C of activities to perform outdoors, among which Regula	
stand out zip line rides, hanging bridges, hiking and Bad beeiling. Very E	1 ad 0

From TripAdvisor Copper Canyon Attractions and Activities (2016).

mostly rate the park as excellent (Table 6), which accounts for 84% of total assessments, substantiating the reason for the Park having received a Certificate of Excellence from TripAdvisor. Since the park has received very high satisfaction scores; TripAdvisor recommends it as the 'number 1' activity to perform outdoors in the state of Chihuahua, Mexico, which indicates that the destination likely meets the expectations of the visitors, in addition to generating lasting experiences.

The results of this study on perceptions regarding tourism development in Copper Canyon Park, illustrate that visitors identified the attractions of the park as its greatest strength, although they also recognized the beauty of the landscape, and the excellent preparation and attention of the employees of the park. Outstanding among the most positive comments were about the route through the world's longest zip line and cableway ride, with visitors describing the experience as "unforgettable," "extreme" and "incredible." Visitors also indicated that the price to enter the park was high, that the amenities publicized in the packages were scarce, and that tourist information is insufficient. In some cases, the lack of security for valuable possessions, such as availability of lockers to protect belongings during the excursion, were also mentioned.

# 4.4. Compatibilities versus incompatibilities for the sustainability of Copper Canyon Park

Within the context of FONATUR's plans to position Copper Canyon Park as a sustainable Mountain Resort with high international attractiveness, this study investigated the compatibility between opinions of hosts and visitors regarding current and future tourism development at the destination. Qualitative analyses of both primary and secondary data sources were conducted to examine the two parties' perceptions regarding quality and sustainability of Copper Canyon Park. The results of this research lead to the assertion that a meaningful nexus between tourism development, host and visitor satisfaction, and destination sustainability as per GSTC's Global Criteria for Sustainable Tourism for Hotels and Tour Operators would be difficult to achieve considering the high degree of incompatibilities identified from the study's data sources, meaning there is a dire need to implement innovative and immediate management strategies to achieve the goals outlined by GSTC for sustainable tourism development.

Results from the study suggest that the federally-shaped model of tourism development in Copper Canyon, generates more incompatibilities than compatibilities, mainly because the perceptions of visitors and hosts regarding typologies and models of development have been insufficiently integrated into the decision-making processes involved in tourism planning. A comprehensive synthesis of the opinions of hosts and visitors (based on a weighted and validated list of participation by different local actors) revealed the most relevant compatibilities and incompatibilities, pertaining to the management and sustainable tourism development in Copper Canyon Park:

Compatibilities	Incompatibilities
<ol> <li>Recognition of the territory's high potential for tourism, especially in relation to natural and built attractions.</li> <li>Development and positioning</li> </ol>	<ol> <li>Limited intercultural interaction between hosts and visitor in the tourist areas.</li> <li>Insufficient social and economic benefits to the local</li> </ol>
of the tourist corridor of Creel-Divisadero. 3. High utility value of direct	community from tourism development. 3. Poor integration of local
information provided by local community and visitors.	community input into the tourism development decision-
<ol> <li>Added value through information provided by different social actors towards.</li> </ol>	<ul><li>making process and a low level of community engagement.</li><li>4. Undervaluation of cultural</li></ul>
tourism knowledge which serves as the basis for	heritage and indigenous cultures and negative impacts
qualitative data based sustainable destination	on the environment. 5. Lack of convergence between

- management.5. Recognition of the marked cultural distance perceived between hosts and visitors.
- Projects subsidized by the State Government to indigenous communities for employment opportunities in the park.
- 7. Training for a better understanding and operationalization of the sustainable tourism development concept at a local scale.
- Guided walks into the local communities as part of the Copper Canyon Adventure Park product.

- Lack of convergence between perceptions of the local community and visitors regarding the tourism model in terms of satisfaction and sustainability.
- 6. Non-correspondence between the criteria used for assessing the quality, expressed online, of tourism experiences for commercial purposes and the criteria of sustainability.
- 7. Project for the consolidation of the destination as a Mountain Resort with high international attractiveness is far from the fundamentals of effective sustainable tourism development planning.
- 8. Growing feeling of rejection towards tourism by the resident community in the current scenario.

The above findings pertaining to destination compatibilities and incompatibilities could be utilized by the region's policy makers in order to ensure the quality and sustainability of current and future tourism development in Copper Canyon. For this purpose, first of all, it is necessary for policy makers to incorporate these recommendations during the planning and implementation of tourism development in this region. Accordingly, the results of this study and associated recommendations, along with the methodological background and research instruments used, are currently being disseminated by the authors through workshops with local level representatives, in collaboration with regional policy makers. In addition, the authors have also begun to share the study's results and transfer this knowledge through formal training in workshops aimed at key stakeholders at the destination level.

In addition to the incompatibilities investigated in this study, other future challenges, no less important, have been identified. One of them is related to the ethics of participation and the ability of the community to respond to the development of tourism, due to issues including social exclusion, pronounced differences between different social agents, and logistical constraints to public participation, among others. In order to address these significant challenges, it will be necessary to conduct an evaluation of the impacts of tourism on local communities and prepare a plan for the management and mitigation of the impacts through a participatory approach. Although it is a very complex task to perform such an investigation, particularly in this region with highly vulnerable autochthonous communities, it is important for future research projects to find solutions to the aforementioned challenges facing the local community.

# 5. Conclusions

The conceptual model developed for this study (see Fig. 1) has been validated in practice as a valuable tool for the management of the studied tourism destination and it offers opportunities for managers to obtain a better understanding of the perceptions of visitors and hosts in relation to the development of territorial tourism in Copper Canvon. The new base of tourism knowledge provided by this study reflects relevant information related to the perceptions of visitors and hosts regarding tourism development models (Byrd, 2007; Clausen & Gyimóthy, 2016) in terms of quality (Silva, Agapito, & Pinto, 2017) and sustainability (Cárdenas, Byrd, & Duffy, 2015) of the destination, contrasted commonalities and divergences among stakeholders (Crosby, 2015), and community's/visitors' concerns regarding tourism's impacts (Cárdenas, Byrd, & Duffy, 2015). This corroborated instrument integrates variables that could be applied in future scenarios to facilitate a better process of decision-making oriented towards the co-creation (Lin, Chen, & Filieri, 2017) of a sustainable tourism development model (GSTC, 2012; Peric & Djurkin, 2014) in this mountain destination.

Copper Canyon (Or Copper Canyon Park or Copper Canyon Adventure Park) is still in its formative stage towards becoming an internationally renowned tourist destination. At present, the perceptions of the local community and the visitors towards tourism development plus the characteristics of the natural/cultural environment are not convergent in terms of quality and sustainability as different authors have previous recognized (Palafox-Muñoz, Sánchez, & Ortiz, 2013; Peric & Djurkin, 2014; Postma, Cavagnaro, & Spruyt, 2017; Villavicencio, Zamora, & Pardo, 2016); furthermore, indigenous communities are not perceived by visitors as a high hierarchy attraction in the destination. It is necessary to develop local-level strategies as other destinations have adopted (Ali & Frew, 2014; Bhat & Gaur, 2012; Bimonte & Punzo, 2016; Pulido-Fernández & Pulido-Fernández, 2017) to ensure a satisfactory nexus of interests and expectations among hosts and visitors (Byrd, 2007; Crosby, 2015; Grybovych, 2012) and to facilitate the creation of memorable travel experiences within the destination. Through this approach, progress can be made towards the development of an efficient and integrated tourism management system which consolidates market intelligence, sustainability, stakeholder participation, business competitiveness and profitability for the tourism destination, whereby the compatibilities that characterize the current scenario are strengthened over the existing incompatibilities.

Currently, the appeal of Copper Canyon Adventure Park has been concentrated only on its wilderness topography and natural landscape. From a social sustainability perspective, it is essential to integrate the opinions of residents and visitors within tourism planning in a more compatible way (Clausen & Gyimóthy, 2016; Guccio, Lisi, Martorana, & Mignosa, 2017; Oz, Ihtiyar, Ahmad, & Ali, 2015), avoiding the propagation of a mass tourism model that omits the interests of the community. Doing so could avoid over-commercialization of the Copper Canyon territory and prevent a transformation of the natural environment and culture to the style of the more conventional adventure parks. From a marketing perspective, such measures could create a unique identity for the destination, and allow for adjustments to be made to meet the demands of the growing sustainable travel market segment for high value tourism products in terms of quality and sustainability.

The information provided by the local community and the visitors was of high utilitarian value for understanding the problems associated with evaluating the social dimensions of sustainable tourism development at the destination level, which has also been demonstrated by similar past studies (Joo et al., 2018; Lekaota, 2015; Montaño, Núñez, &

Pérez, 2016; Wang, Zhou, Lee, & King, 2014; Woosnam, 2012). The study of the local communities offered an opportunity to listen, observe and understand the perceptions of the population, demonstrating the high contribution value of social actors towards the implementation of tourism development models at the local level. Simultaneously, the evaluations of online visitor feedback added valuable information as have been presented in other studies as new tools for evaluating visitor experiences (Udayapuram & Gavirneni, 2015), albeit limited to the analysis of sustainability, which allowed the researchers to conclude that these information sources have a great potential of use if utilized as advanced instruments for the smart management of a destination, focusing on quality and sustainability performance.

By carrying out this study, it was revealed that the local residents' attachment to their community and their involvement in destinationlevel management processes are key factors that affect the levels of support necessary for sustainable tourism development in Copper Canyon, as have been proposed as important criteria for sustainable tourism development (GSTC, 2012) and demonstrated in destinations where local stakeholders' views are taken into consideration throughout the destination planning and management process (Tuohino & Konu, 2014). When the local tourism model is not endogenous, participatory and self-managed, the inhabitants do not perceive the benefits; therefore, incompatibilities are generated that negatively affect sustainability. This problem has been evidenced through the current adverse environmental and sociocultural impacts of tourism development in Copper Canyon and must be corrected to promote a locally-based alternative tourism model in this destination.

Access to communities in Copper Canyon was restricted due to the geographical location and terrain of this region; therefore, this study included only the 'accessible,' most vulnerable, and important territories impacted by tourism development in the region. Thus, the number of study participants as well as the specific characteristics of the subjects may limit confidence in the findings and their applicability to other populations of similar context. Another limitation of this study is that the analysis of the integrated perception of the destination did not incorporate the totality of all local communities and canyons with tourist attractions in the region. Therefore, it is recommended that a larger scale study be conducted as the next stage. Such a study would be of great value because even though the canyon localities have similar characteristics and share the same geographic space, the contexts for tourism development differ in each locality. Furthermore, obtaining opinions regarding tourism development from hosts and as well as visitors is essential for an integrated approach to destination management at Copper Canyon.

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