RELEVANCE OF STAKEHOLDERS FOR TOURISM MANAGEMENT: THE CASE OF THE EL CHICO NATIONAL PARK, HIDALGO, MEXICO

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ABSTRACT

El Chico National Park (ECNP) is one of the most important protected areas in the state of Hidalgo. Tourism management of this protected area involves numerous stakeholders with different needs, resources and perceptions of nature. There are four forest communities that are involved in the tourist use of this park, but other stakeholders are also behind tourism activity in this PA: federal government agencies, state government agencies, municipalities, unorganized smallholder entrepreneurs. Tourism management of this protected area is a complex issue, particularly, when decision-making process is centralised by government bodies. This study explores the relationships' structure among government agencies and community tourist associations (CTA) based on the tourism management of El Chico National Park. This study presents a descriptive analysis of collaborative networks among ECNP's stakeholders, using a qualitative research.

Keywords: tourism management, government bodies, collaborative networks, stakeholders, protected areas.

INTRODUCTION

Protected areas are "multi-use" public spaces, thus, stakeholders have to deal with different problematic situations in regards to tourism development. Perhaps, some significant challenges are the social and structural legitimacy; government accountability, environmental degradation, social inequality and socio-economic impacts of tourism on host communities (Leewis & Van Ban, 2004). However, the low level of participation in the knowledge exchange and decision-making process is one of the most important critical situation in these types of ecosystems.

Collaborative networks are systems that support the tourism organization in protected areas. It has been shown that collaborative actions have become the basis for the development of environmentally sustainable tourism (Erkus- Öztük & Eraydın, 2010; Madhumita, & Chatterjee, 2015). Since not all protected areas can be manage properly through government regulation alone, it is required the active involvement of a wide range of stakeholders from the public, private and non-profit sectors.

El Chico National Park (ECNP) is one of the most important protected areas in the state of Hidalgo. This park holds one of the most relevant oyamel forest and cedar forest ecosystem in the central Basin of Mexico. Tourism management of this PA involves numerous stakeholders with different needs, resources and perceptions of nature.

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In ECNP, there are four forest communities that are involved in the tourist use of this park: La Estanzuela, Carboneras, San Miguel El Cerezo and Pueblo Nuevo. Each one of them, are responsible for the valley management, wich are located around this national park. To manage them, local communities have formed four community tourist associations (CTAs). Other stakeholders are also behind tourism activity in this PA: federal government agencies, state government agencies, municipalities, unorganized smallholder entrepreneurs.

Tourism management of this protected area is a complex issue, particularly, when there is not trend of devolving control over natural resources from government to user groups. And also when there is a variety of public stakeholders involved in tourism providing infrastructure, services, information and primary and secondary tourist products. It asks the question, what extent can tourism be managed in a sustainable and integrated way in PA where decision-making process is centralised by government bodies?.

This study explores the relationships' structure among government agencies and community tourist associations (CTA) based on the tourism management of El Chico National Park. Through the analysis of relationships and the empirical evidence, the social networks in tourism process are described. This paper focuses on: a) identifying stakeholders categories and their key activities in ECNP's tourism management, b) perceived stakeholders' influence and involvement on making decisions processes and c) describe general patterns of cooperation among stakeholders.

This study consists of the following sections: Section I. shows a literature review of tourism development in protected areas; Part II. presents an approach to social networks and systems thinking; Part III. refers to the El Chico National Park in context of tourism activity; Part IV. presents the methodology; Part V. shows the stakeholders' analysis and their roles; Part VI. presents the conclusion and, Part. VII. the references are presented.

I. TOURISM DEVELOPMENT IN PROTECTED AREAS

Tourist activities linked to the recreational use of the protected areas (PA) are increasing. In fact, there is a growing interest in alternative experiences and adventure tourism (Minciu, Pădurean, Popescu, & Hornoiu, 2010).

Nature-based tourism has been a relevant subject for many researchers. The main reason is because nature-based tourism is also linked to economic, sociocultural and ecological impacts of tourism development such as enviromental degradation, inequality, conflicts of interest and other issues (Bringas & Ojeda, 2000; Sekhar, 2003; Madhumita & Chatterjee, 2015).

Tourism in national parks and protected areas is a growing trend worldwide. The power of natural settings in attracting tourists is widely recognized. However, the negative effects of tourism on protected areas include: the loss of native species, deforestation, enviromental degradation. Ecological degradation in PA is caused by the massive influx and outflow of visitors to this destination; but it is also caused by a lack of stakeholders involvement in sustainable management of tourist destinations (Törn, Siikamäki,

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Tolvanen, Kauppila, & Ramet, 2008; (Waligoa, Clarkeb, & Hawkinsa, 2013, Tittensor, et al, 2014;. Juffe-Bignoli, et al, 2014).

In Mexico, federal government plays an important role in decision-making processes related to tourism management in protected areas. Its rol as a decision maker has limited stakeholder involvement in sustainable management of this ecosystems. In many cases, societies (stakeholders) are unable to recognize their collective capacities to manage these ecosystems. (Peterson, 2011; Durand, Figueroa & Trench, 2012). But as not all problems in protected areas can be solved through government agencies, these problems require the active involvement of a wide range of stakeholders from the public, private and non-profit sectors.

Tourism management of protected areas demands a social structure and institutional arrangements to promote flow information, knowledge transfer, innovation exchange and learning opportunities (Natera, 2001 2004; Cooper, Scott, & Baggio, 2009). Ecoturism as a tool for economic development and conservation that depends on collaborative actions and social networking. Social networks in tourism development can bring benefits, for example, social networks help to decrease transaction costs, lead to more innovative activities and allow to a large number of small actors with limited resources to take part in the decision-making process (Erkus- Öztük & Eraydın, 2010).

Some studies report that ecoturism is not being a mechanism for economic development in many protected areas declared. In fact, these studies suggest that the relationship between tourism and protected areas is limited in regards to the socieconomic benefits. This is because tourism development in protected areas usually lacks of a social structure based on collective norms, egalitarian relationships and knowledge exchanges among stakeholders, who are interested in sustainable tourism development and democratic governance (Barkin, 2000; Zizumbo, Cruz, & Vilchis, 2012).

Protected areas are "multi-use" public spaces (Leewis & Van Ban, 2004), thus, stakeholders have to face up to the different problematic situations in regards to tourism development. Perhaps some significant challenges are: social and structural legitimacy; government accountability, environmental degradation, social inequality and other socio-economic impacts on host communities. However, the low level of participation in the knowledge exchange, environmental management and decision-making process, is one of the most important critical situations in these ecosystems (Bringas & Ojeda, 2000; Sekhar, 2003; Madhumita & Chatterjee, 2015).

Tourism management of protected areas is a complex issue, due to the wide variety of economic activities derived from tourism development and for the public and private stakeholders involved in tourism providing infrastructure, services, information and primary and secondary tourist products (van der Zee & Vanneste, 2015).

Inter-organizacional relationships are a key factor in planning strategies which guarantee a level of enviromental conservation and economic development for host communities and stakeholders directly or indirectly linked with the tourist use of the protected areas.

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Interorganizational relationships in the tourism field, take place in the different stages of tourist process, for example, on the creation of services, in the promotion and marketing and all key activities refers to tourist destination management. In a protected area, relationships among stakeholders are key factors in activities such as: sustainable management of natural resources, regulation of tourist activity, sustainable tourism infrastructure planning and even in tourist safety issues (Nicolau & More 2005; Merinero, 2011; Muñoz, 2012).

Collaborative networks are created in each stage of tourism process. Some stakeholders are linked with other groups, some of them rely on certain groups and other groups depend on these groups to achieve their goals in social networks. Each stage seems to be as a market where people or groups exchange a wide variety of goods, ideas, resources, knowledge and information (Burt, 2000). Relational approach in social networks, allow to analyze who is playing the main role in decision-maker process, explore the interdependent among stakeholders and identify the type of ties among them (Natera, 2001, 2004, 2005).

II. COLLABORATIVE NETWORKS AND SYSTEMIC THINKING

The emergence of collaborative networks is a difficult task. The development of a social network is a particular process in which a set of stakeholders attempt to achieve their individual and collective goals. These interdependence relationships are considered as a whole, which are useful to understand the collective behavior (Kossinets & Watts, 2006; Rutten & Boekema, 2007).

Analysis social networks has promoted the analysis of the social relationships keeping a static perspective, which has not been able to explain the complex dynamics of reality (Najmanovich, 2007, 2008). A paradigm that overcome this perspective is the general systems theory. This approach can also contribute to understand social networks as a complex dynamic systems, which combine elements such as: stability and change, unity and diversity, autonomy and dependence, individuality and system (Serra, 2008; Najmanovich, 2005, 2008). A shift toward complex thinking in social networks analysis, allows to observe relationships among stakeholders as a dynamic processes in which individuals are heterogeneous units open to the change (Najmanovich, , 2001, p. 110).

Analysis of social networks is supported by a set of assumptions and hypothesis, which are listed below (Dabas, 1993):

a) In a social network, the universe is a set of relationships and, individuals are nodes; individuals are "heterogeneous units" that are linked in and by the dynamics of exchanges.
b) In analysis of social networks, patterns of relationships among stakeholders are the object of study.

c) Properties of a system do not emerge only by the presence of individuals itself. Properties of a system emerge by the "exchanges" among the "parties".
d) Networks are open systems, which are in a constant reconfiguration by their information exchange and knowledge transfer with their environment.
e) Social networks emerge as a complex systems for the dynamic exchange among all the "parties", which have an internal structure with a specific purpose.

The difference among the simplicity perspective and the complex thought is that the first promotes an essentialist-deterministic approach and, the second suggests a non-linear dynamic approach *(*Najmanovich, 2008*)*. Thus, complex networks analysis could be divided into two different but complementary fields: structure and dynamics (Aldana , 2006; Takaffoli , Sangi , Fagnan , & Zaiane , 2011).

Structural perspective for social networks analysis is focused in the links among stakeholders and in the different types of connectivity patterns behind the formation of networks. Unlike structural approach, non-linear dynamic perspective emphasises on the social networks' capacity for change over time (Hummon, 2000; Snijders, 2005; Snijders, Van de Bunt, & Steglich, 2010).

This study focuses on the relational characteristics of a network for tourism development as well as the subsequent behavioral patterns. The studies that result of the relational perspective, usually describe the connectivity patterns in a social system. Through the graph theory and the use of matrices, the main objective of this perspective is to identify functional and dysfunctional connectivity patterns in a social network (Wellman , 2000; Marin & Wellman, 2011).

III. TOURISM DEVELOPMENT IN THE EL CHICO NATIONAL PARK

In the state of Hidalgo there are 46 protected areas (PA); these are managed by federal and state governments. Protected areas cover 143,603.68 hectares of all terrestrial state area (6.87% of the total state area). El Chico National Park (ECNP) is one of the most important protected areas in the state of Hidalgo. This park holds one of the most relevant oyamel forest and cedar forest ecosystem in the central Basin of Mexico.

There are four forest communities that are involved in the tourist use of this park: La Estanzuela, Carboneras, San Miguel El Cerezo and Pueblo Nuevo. Tourism is the primary business sector to these local communities. Each one of them manage a tourist valley, these are located around the park. To manage these valleys, local communities have formed four community tourist associations (CTAs)[1] .

When this protected area was declared (1982), the enviromental policy was tightened; for example, wood forest products for commercial purposes were restricted and traditional agricultural uses were controlled. Since 1990, federal government have stimulated tourism

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activity as a new economic alternative to combat poverty and environmental degradation in the region. CTAs have continued to use the valleys as a tourist places. These associations provide a range of activities such as the sale of food, horseback riding, cabin rentals and camping services. This community-based tourism model appear to be successful, however, the tourist services are quite repetitive and, overall, are considered similar in all valleys. On the other hand, the quantity of infraestruture is insufficient to support tourism activity and, there are a variety of tourist activities that cause an intensive use of natural resources.

An increasing complexity of enviromental problems requires a understanding about the functioning of societal systems. Stakeholders and their relationships' analysis, allows to gain an overview of networks that support tourism activity in this region, thus, this paper intends to explore the relevance of stakeholders in the tourism management of ECNP.

IV. METHODOLOGY

Analysis collaborative networks refers a set of tools allowing to gain an stakeholders' overview and their respective interests. Participation in collaborative networks is considered a crucial precondition for sustainable management based on tourism. Departing from this, we are interested in: a) identifying stakeholders categories and their key activities in ECNP's tourism management, b) perceived stakeholders' influence and involvement on making decisions processes and c) describe general patterns of cooperation among stakeholders. This study presents a descriptive analysis of collaborative networks among ECNP's stakeholders, using a qualitative research.

To identify stakeholders and their key activities, we conducted an iterative stakeholder analysis involving semi- structured interviews and informal meetings with public managers and CTA´s members. Stakeholder categories were derived to the research questions as well as issues emerging from the data. According to similarities and differences in roles, we distinguished a typology of stakeholders by introducing three attributes, such as: a) the influence on the network, b) the logic of action and, c) the action on the territory (see Table 1).

In many interviews, we also identified stakeholders' roles and their activities related to tourism management in this park. These "key activities" were eventually place into five categories. The five categories that emerges from this analytical process were: 1) Natural resources management (NRM), 2) Creation of tourist services (CTP), 3) Tourist destination management (TDM), 4) Promotion (PRO) and 5) Marketing (MKT).

Table 1. Typology of social actors

Its influence on the network	Its logic of action	Its action on the territory
- Social actors with institutionalized power (SAPI) - Central actors with / without institutionalized power (CA)	- Single Logic - Collective action/ public	- Local - Regional - National/International

Source: Modified from Bustard, He, & Wilkie (2000), Bergvall- Kareborn et al. (2003), Checkland et al. (2010).

To describe general patterns of cooperation among stakeholders, we used social network analysis (SNA). It was a good tool to describe the structure of relations (displayed by links) between people, groups and other type of associations (displayed by nodes) involved in the tourism mangement of this park. Also, interviewees discussed about their relationships with other relevant stakeholders, and their experiences with participatory approaches. A serie of 15 face-to-face interviews with key informants were conducted between January to March 2015.

The interviews also were conducted to collect "relational data"; this type of data concern the contacts, ties and connections that relate one agent to another (Scott, 2013). We used asymetric matrices to organized the data, one for each "key activity". In the matrices, stakeholders were represented twice: once in the row and once in the column. In asymetric matrices, the ties may o may no be reciprocal and they also represent the intensity of a tie by the values found within the cell. Thus, for example, if a stakeholder attended different marketing activities, the matrix's cell containing the value of 1, 2, 3, 4, etc. For this exploratory analysis of relationships, we also used Netdraw as a part of the Ucinet software for producing network diagrams.

V. IDENTIFYING STAKEHOLDERS AND ANALYSING THEIR ROLES

This study aimed at exploring the roles that stakeholders play in tourism management, and at identifying some of relevant stakeholders activities. The selection of stakeholders allows us to understand the social and institutional structured which supports tourism management of this ecosystem. Above all, the selection of stakeholders is important to identify main stakeholders or groups of them who are capable of: a) controlling and mobilizing all types of resources (natural, economic, social, cultural, etc.)   b) making decisions about these resources, and c) involving stakeholders groups in strategic decisions about the course of tourism development (Leeuwis & Van Ban, 2004)

A set of public and private stakeholders are involved in the tourism management of this park. Their involvement in tourism covers activities ranging from management of natural resources until tourism services marketing. These activities play a central role in knowledge transfer and innovation diffusion (Tsai, 2001, Bercovitza & Feldman, 2011; Hjalager, 2002). These are channels that contain push and pull mechanism as well as a variety of flows (knowledge and information) among goverment agencies and private stakeholders, and between private stakeholders and tourists.

Recent studies have focused on the benefits of the higher level of knowledge and information on innovation process (Bercovitz & Feldman, 2011; Rost, 2011). Relationships among stakeholders bring collaborative trust and some fresh and heterogeneos knowledge, which is crucial for the innovative process in tourism activity. Furthermore, sustainable ecosystem management depends on the acquisition and use systems of knowledge and information; one key part of natural parks conservation involves to form a broad knowledge community, thus, the analysis nertworks is a useful tool to incorporate changes in collective behaviour.

However, tourism management is a complicated task. It involves numerous stakeholders

with different needs, resources and perceptions of nature. In the ECNP, there are a lot of people behind tourism activity conducted: federal government (government agencies), state government, the municipalities, local communities (community tourism associations), unorganized smallholder entrepreneurs, tourists and visitors.

The list could be longer. In Table 1, we conclude that these stakeholders' categories are the most influential and the ones that are most likely to potentially be affected by the tourism management of ECNP is organized. For example, many of communities' residents surrounding the park are organized in tourism associations, but some smallholder entrepreneurs have chosen not to be involved in those groups. Some state government agencies support community tourism associations' activities but the municipality has a different view of the community-based tourism planning (CBT).

Table 2. Relevance of stakeholders on key activities

Social Actors Involved	Key activities	Central Actors (CA) in key activities
Social actors institutionalized power (SAPI) **Municipalities** H. Ayuntamiento de Mineral del Chico (HAMC) H. Ayuntamiento de Pachuca de Soto (HAPS) H. Ayuntamiento de Mineral del Monte (HAMM) **State government agencies (EGA)** Secretaría de Turismo y Cultura de Hidalgo (STYC) Secretaría de Desarrollo Social (SEDESOL)	**1. Natural resources management (NRM)** 1.1 Implement environmental practices. 1.2 Adequacy of Management Plan of the PA. 1.3 Create rules and regulations for use of natural spaces. 1.4 Controlling impacts from tourism development 1.5 Implement environmental certifications. 1.6 Programmes and development strategies/ environmental education. 1.7 Implement environmental practices.	CONAFOR : 1.1, 1.2, 1.3, 1.4,1.6, CONANP: 1.1, 1.2, 1.3, 1.6, SEMARNAT: 1.1, 1.3, 1.5, PROFEPA :1.3, SAGARPA, SEDESOL : 1.1, 1.2, 1.4, ATESMC :1.1, 1.7, ATEC:1.1, 1.7, ATEPN :1.1, 1.7, ATELE :1.1, 1.7
Comisión Nacional de Áreas Naturales Protegidas (CONANP) Secretaría de Economía (SE) **Federal government agencies (FGA)** Secretaria del Medio Ambiente y Recursos Naturales (SEMARNAT) Procuraduría Federal de Protección al Ambiente (PROFEPA) Comisión Nacional Forestal (CONAFOR)	**2. Creation of tourist services (CTS)** 2.1 Create rules and regulations for tourism services. 2.2 Advisory services on the creation of tourism products and services. 2.3 Advisory services for the building of infrastructure and tourist equipment. 2.4 Advisory services for the creation of small and medium-sized tourism enterprises. 2.5 Finance and subside	STYC: 2.2, 2.5, SE:2.2, 2.4, 2.5 SEDESOL :2.2, 2.5, ATESMC : 2.5, ATEC: 2.5, ATELE: 2.5, CONAFOR: 2.1, 2.2, 2.3, 2.5, CONANP: 2.1, 2.3, SEMARNAT: 2.1, 2.3, 2.5, SE: 2.2, 2.5
Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación (SAGARPA)	**3. Tourist destination management (TDM)** 3.1 Creation and implement of regulatory systems to services and products 3.2 Training human capital 3.3 Financing for the improvement of the infrastructure and tourist equipment 3.4 Creation and implementation of tourism certifications 3.5 Operation of tourist services	SE: 3.3,3.4, STYC: 3.2, 3.4, CONAFOR: 3.1, 3.2, 3.3, SEDESOL: 3.3, SEMARNAT: 3.1, 3.3, ATESMC: 3.3., 3.5, ATEC: 3.3, 3.5, ATEPN :3.3 3.5, ATELE: 3.3, 3.5

Table 2. Relevance of stakeholders on key activities (Continuance).

Social Actors Involved	Key activities	Central Actors (CA) in key activities
Community Tourist Associations Asociación Turística del Ejido de San Miguel El Cerezo (ATESMC), Asociación Turística del Ejido de Carboneras (ATEC) Asociación Turística del Ejido de Pueblo Nuevo (ATEPN) Asociación Turística del Ejido de La Estanzuela (ATELE) Comisión Nacional Forestal (CONAFOR) Secretaria del Medio Ambiente y Recursos Naturales (SEMARNAT)	**4. Promotion (PRO)** 4.1 Advisory services for promotion of tourism services 4.2 Incentives for attending tourism fairs 4.3 Financing of promotional campaigns	STYC: 4.1, 4.2; ATESMC: 4.3 , ATEC: 4.3, ATEPN: 4.3, ATELE: 4.3
	5. Marketing (CO) 5.1 Signing marketing agreements 5.2 Request advisory services for sales strategies 5.3 Creating marketing channels	ATESMC: 5.1, 5.2, 5.3, ATEC: 5.1, 5.2, 5.3, ATEPN: ninguna, ATELE: 5.1, 5.2, 5.3

Source: Prepared by author

Collaborative networks based on natural resources management (NRM)

The past decades have witnessed a major policy trend of devolving control over natural resources from government agencies to user groups. Hence, the natural resources management (natural attractions and non-tourism resources) should be permeated by the logic of colletive action (Ratner, Meinzen-Dick, May, & Haglund, 2013). This process involves a control transfer from the state to non-governmental stakeholders.

In Mexico, the state retains a main role in tourism management. In fact, government play a central role in the decision-making on the natural resources management: in the vast majority of PA, the decision-making involves only some forms of interaction between the state and other stakeholders.

Our analysis suggests two aspects to be considered about relationships among skateholders in the natural resources management: influence and involvement on making decisions processes. In the ECNP, there are a number of institutional actors involved in natural resource management. Public agencies linked to NRM have an important influence on community tourism associations (CTAs), they play a central role in the implementation of environmental practices which benefit tourism activity. Federal government bodies such as CONAFOR, CONANP, SEMARNAT and PROFEPA are linked with CTAs through some mechanisms that are compatible with conservation and tourism development, such as: reforestation, environmental education courses, preparation in environmental issues and other forests management practices.

These stakeholders are also responsible for defining forest use conditions to guarantee sustainable tourism development in this PA. The influence and mutual collaboration among these government agencies, derive from its institutional capacity to develop rules

for natural resources use, monitor compliance with the rules and implement enviromental standards.

Governmet conservation agencies can also provide a catalythic role in getting others to cooperate (Knox & Meinzen-Dick, 2001), they are perceived by CTAs as key players on natural resources management (NRM) and several bodies and private skateholders would like to cooperate closely with them. They are seen as key knowledge providers. Subsidies and contributions from these government agencies may be helpful in settind up CTAs, however, CTA's members have also developed relationships of subordination and dependency on such these sources.

Figure 1. Network based on management of natural resources

Source: Prepared by author

In Mexico, protected areas is a legal instrument to protect the enviroment, however, this instrument have lacked legitimacy and support of the local communities and other stakeholders (Brenner, 2009; Brenner & Job, 2012; Brenner & De la Vega, 2014). The tendency to decree as many PA as posible, have drastically restricted the tradicional uses of natural resources, this is why local communities (and other stakeholders) usually do not participate on natural resources management (NRM); nor do they support activities that are carried out by environmental protection agencies.

Although, environmental authorities are seen as key knowledge providers in this PA, they also are responsible for enforcing penalties in environmental issues and restrict access to certain natural areas. However, they have maintained strong and reciprocal relations with CTAs' members (ATESMC, ATEC, ATEPN, ATELE).

In the network based on natural resources management (NRM), there are unidirectional and bidirectional relationships in particular situations. Environmental protection agencies influence CTAs' members on decision-making and in their collective actions, particularly, when they try to maintain lower levels of negative tourism impacts, through good environmental management practices.

Also, a pattern of reciprocal relationships is observed. In this network, knowledge exchange creates and maintains reciprocal relationships among CTAs and environmental government agencies. CTA`s members have a traditional ecological knowledge that maintains strong links with their local cultural identity; most living resources in this PA have been utilized for a great many generations. For environmental protection agencies in the ECNP, traditional ecological knowledge has contributed to planning sustainable tourism activities.

Public agencies such as SEDESOL and SAGARPA also participate in this network . These public agencies have supported (economical support) projects for tourism development and they have also provided advisory services to CTA`s members. Advisory services on providing technical knowledge are focused on developing compatible projects with natural environment conservation. The factors motivating relationships among these public agencies and CTAs are resposability and obligation, as well as the relationship between the seller and the buyer; we could not recognize these relationships as cooperative relationships.

Tourism Development Office (STYC) and municipalities (HAMC, HAPS, HAMM) should play a catalythic role in providing information, knowledge and economic support to local stakeholders. The interest of these public agencies on natural resources management (NRM) has not been so high, their links with federal government and local communities revealed certain indifference because they have focused in encouraging cultural tourism throughout state's tourism programm "Pueblos Mágicos".

Collaborative networks based on the creation of tourist services (CTS)

CTAs' members are responsible for providing tourist services in the valleys near to the ECNP. They offer repetitive tourist products and poor-quality of services, these are limited to horseback riding and sale of food and beverages. Also, they offer cabin rentals and camping services in other valleys. However, it seems that they have ignored that consumer behaviour in tourism consumption has been changing extensively; they do not take into consideration the present tourist behaviour and future trends to create new services.

Tourism based on natural resources is seen as a viable option for self-sustaining tourism development in this park. One of the challenges of tourism development is maintaining strong relationships among public and private stakeholders to create innovative tourism services that provide new potential consumption. Knowledge exchange processes has been identified as a key source of innovation advantage, however, this exchange remains a significant challenge.

In this case, STYC as a government tourism agency is responsible for promoting innovation and providing technical tools to develop innovative tourism services. In this network (based on the creation of tourism services), the STYC is an active participant in the process of innovation.
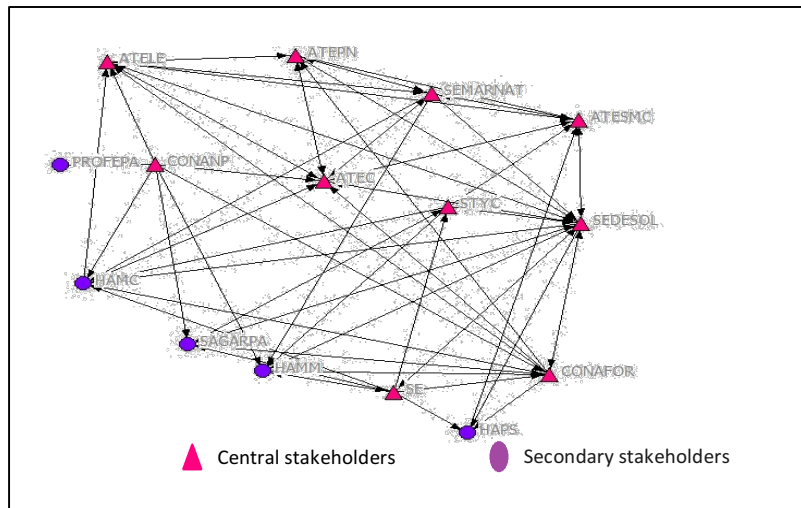
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This tourism development office provides tourism advisory services to CTAs, the aim is ensuring the growth of the tourist sector and its contribution to the region economy and job creation. This public agency must meet demands (rules and regulations) established by CONANP, SEMARNAT and CONAFOR for creating tourist services.

The STYC has developed multiple governmental programmes to support tourism development in this area, however, there is a lack of continuity in its governmental actions and economic support is also rather limited. These factors have caused lack of credibility in this tourism office's actions, hence, relationships with local communities have been weakened in recent months. Once again, public agencies such as CONANP, SEMARNAT and CONAFOR tend to dominate decision-making in this network, in fact, they play a key role in the network based on the creation of tourist services. For example, building of infrastructure and tourist equipment involves different criteria which are determined by these government bodies.

The principal purposes of environmental protection agencies are protecting and conserving the environment, however, SEMARNAT and CONAFOR carry out activities do not correspond to their main activities. For example, their members are providing advisory services to CTAs'members based on: service quality management, tourism enterprises mangement and other issues. In the field of creation of tourism services (CTS), environmental protection agencies have built and maintained unidirectional relationships with CTAs' members, and bidirectional relationships between themselves, particularly to exchange knowledge and information.

Figure 2. Network based on the creation of tourist products (CPT)

Source: Prepared by author

SEDESOL is also an important player on the creation of tourist services, but one of its main responsabilities is to provide economic support to primary activities. Protected areas declared have imposed boundaries and limitations on the traditional economic activities, however, economic support provided by SEDESOL has been extended to support micro

and small tourism enterprises. Stakeholders who are benefited with these economic supports, have to develop tourism projects based on principles and criteria of sustainable tourism development. For example, they have to use ecological construction materials for building tourism facilities.

This public agencie has been directly involved (and constantly) in tourism development, thus, it has a strong influence in strategic decision making on tourism projects. Although, it has a high level of acceptance among CTAs´ members, it maintains unidirecctional relationships which basically depends on subsidies. Unfortunately, the development of new tourism services and innovation are determined by the economic support and government programs which are limited in this region.

Collaborative networks based on tourist destination management (TDM)

Relationships among stakeholders is a key factor for the active management of this tourism destination. Relationships play a significant role in decision-making strategies for adapting tourist destinations to national/ international changes.

The main activities involved in ECNP´s tourism management are: education/training human capital, improvement of infrastructure and implementing tourism certification schemes. Tourism Development Offices (STYC) plays a significant role in service providers training and it also provides training courses to CTAs´ members to get certifications for their ecotourism projects. The STYC has attempted to maintain closer relations with the CTA´s members, however, they consider that certifications do not give a value added to their small tourism business. Neither of the CTAs have been able to obtain one of the certifications granted by STYC.
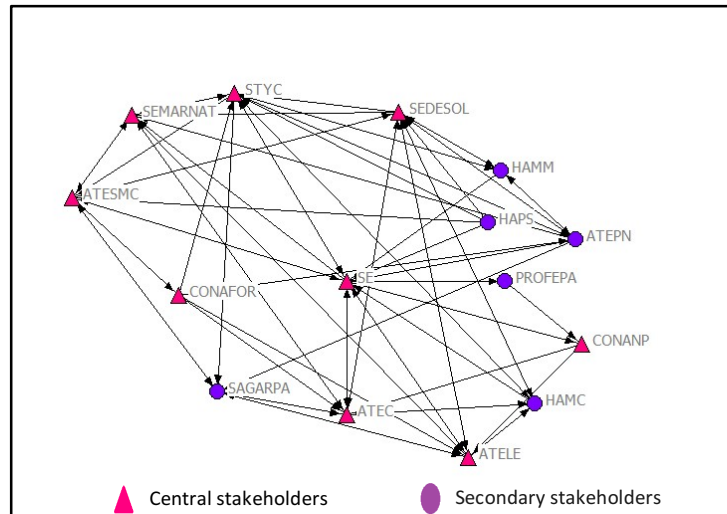
In ECNP, tourist industry has become a main activitiy recently. Economic activities carried out by local population in the past, had nothing to do with tourism industry , this is one of the reasons why people are lacking of appropriate service orientation. STYC maintain closer relationships with CTA´s members through training courses based on technical quality of service, for example: operator's attitude towards tourist and the cleanliness of food services. However, these training courses are not focused on management skills. CTAs´ members need an appropiate managerial training, for example, market knowledge (many operators have weak links to the market), proper cost controls and proper accounting management practices seems to be a serious problem in tourism associations.

Government agencies such as SE have a stronger influence in the region than any other economic actor. Its presence means a greater access to economic support. SE has benefited CTAs in terms of infrastructure and equipment; however, this public agency has promoted economic development programs aimed at creating new small tourism business through business incubators centers. SE has tried to improve business skills and innovative ideas; however, results have not been encouraging. CTAs´ members have preferred remain as a collective entrepreneurships.

Positive relationships have been reported among these federal government agencies and tourism associations. In general, both public agencies have been recognized as being the most important authorities in promoting an appropiate tourism management in this PA. Even though, they have maintained reciprocal relationships and strong links among CTAs, their actions have not influenced CTAs´ members to adopt other mechanisms of tourism management.

Figure 3. Network based on tourist destination management (TDM)

Source: Prepared by author

It is important to emphasize that environmental protection agencies (SEMARNAT, CONANP, CONAFOR) have been involved in tourism management. They are responsible for implement environmental policies to control and regulate: tourism activities, visitors' group's size, carrying capacities and environmental behaviors (CTAs' members and tourist). They also provide opportunities for education and local capacity building through the training of local people, but its role is not as important as STYC and SE on tourism management.

Collaborative networks: Promotion (PRO) and Marketing (MKT)

It is suggested that the economic organization of tourism in PA involves main components such as promotion and marketing destinations. The role of the tourism government agencies should be important in the promotion of all aspects (natural and cultural resources) of PA. In Mexico, many states are designing government-sponsored tourism websites, in the hope that tourists can access information about their potential destinations by browsing them. Official tourism websites of some states has also become a significant means of advertising the local cultures and natural resources of tourist destinations (Boyne & Hall, 2004; Horn & Chen-Tsang, 2010).

Although, the official tourism websites of some states need to be improved in terms of information provision, updating, web interfaces, and hyperlinks (Boyne & Hall, 2004). In
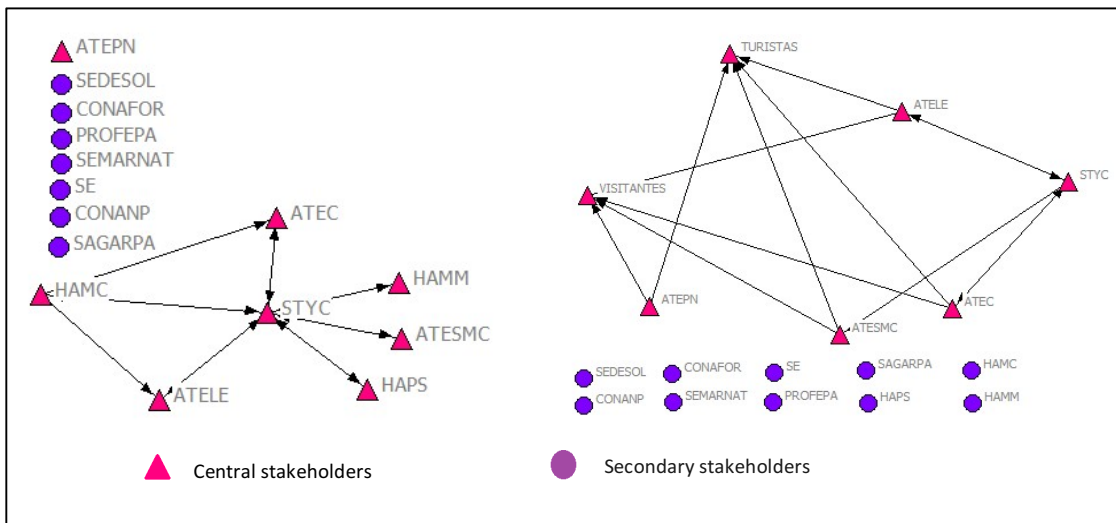
the case of the state of Hidalgo, constructing effective government tourism websites has not received attention.

Currently, government actions (federal and state government) are focused on promoting cultural tourist destinations such as Huasca de Ocampo, Real del Monte, Mineral del Chico and Huichapan (Gobierno del Estado de Hidalgo, 2014). Ecotourism development is at a very early stage of development in the state. Government supports in this field are focused in developing ecotourism enterprises and providing funding support to infrastructure building and tourist facilities. However, governmental programmes in ecotourism have not involved any sort of promotion and marketing, particularly, this national park is not subject to a marketing program (Gobierno del Estado de Hidalgo, 2013).

In the case of ECNP, local government has an important role in tourism marketing but has been criticized for not being more proactive. Government tourism agencies (STYC) and municipalities have held certain promotional campaigns at a local and regional scale. In these promotional campaigns, two strategies are being used: distribution of brochures and it has advertised relevant tourist information on the STYC's website. Both of them are isolated efforts, thus, this destination (ECNP) have not acquired a dominant position in the tourism market at a regional level; even though it is one of the most important destinations in the state of Hidalgo.

STYC also encourages the engagement of CTA´s members in tourism trade fairs; however, they lack knowledge on methods of communication, different packages and different developmental strategies for products in order to satisfy different tourists' needs. These activities have helped CTA´s members to meet tourists' expectations but it is difficult to develop an image destination when they ignore the market dynamics and other components such as the characteristics of the visitors, and the particularities and attributes of this tourism park.

Figure 4. Networks based on Promotion (PRO) and Marketing (MKT)

Source: Prepared by author

Based on these activities, government tourism agency (STYC) has encouraged initial approaches to the regional market tourist. Nevertheless, it is difficult to mainstream the findings in collective strategies of effective communication to develop local brands and other marketing strategies.

CTA's members have created for themselves the tourism destination marketing; they have developed some instruments for promoting tourism but these are limited at a local scale. Hence, tourism segments at a regional scale are not considerate to developing a successful marketing strategy. They trust in the effect of word-of-mouth marketing as an informal marketing tactic, although they recognize the need to invest in an effective marketing campaign.

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Government programmes aimed at marketing strategies are limited. In addition to this, local operators (CTAs) have been inactive in the field of promotion and marketing strategies. Relationships based on promotion and marketing are the weakest in the whole network. Collaborative networks among government agencies and CTAs are not enough; particularly, CTAs have to create direct links with travel agencies, tour operators and hotels for approaching to specific market segments. Private stakeholders are not involved in marketing and promotion activities.

VII. CONCLUSION

An increasing social complexity of tourism development protected areas requires a comprehensive understanding about the functioning of societal systems. Stakeholder participation is considered a crucial factor for a sustainable tourism management, particularly, in protected areas.

By taking El Chico National Park as an example, this study explored the relevance of stakeholder participation in tourism management of protected areas. We identified the key stakeholders, assessing their support and influence in the tourism management of this protected area. Networks are not being flexible tools for tourism management in this park; these are not facilitating communication and factors such as information, innovation or collaborative actions among stakeholder. Government bodies still have a relevant and dominant influence in decision-making on tourism activities. The state has not transferred the control over decision-making to user groups (stakeholders). Government agencies still are playing an important role as owners and managers of resources at local level.

Environmental protection agencies have supported, particularly, some tourism activities such as natural resources management, the creation of tourist services, and tourism management in this protected area. Although, these are not their main activities, these government agencies were foremost involved as knowledge-providers in decision-making processes. The quality of relationships among these agencies and CTAs are determined by knowledge exchange but also by economic support.

Relevance of stakeholders analysis provide a broad overview of stakeholder´s involved in tourism management of El Chico National Park. This study pointed at certain potencial collaborative networks as well as conflict situations among stakeholders who are involved in tourism management of this protected area.

We propose that this study could be complement with quantitative methods for investigating the networks characteristics, which offers numerous techniques and indicators through measuring the links among nodes to demonstrate the structural patterns of connected systems; for example, the major structural networks components such as size, centrality, structural holes, and tie strength.

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