POST-EARTHQUAKE STRATEGIC TOURISM PLAN FOR THE MUNICIPALITY OF BOLÍVAR, MANABÍ, ECUADOR

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Abstract: The objective of this research is to improve tourist management after the earthquake on April 16, 2016 in the Bolívar canton, by proposing a strategic plan that responds to existing problems. The methodology employed consists of four phases: (1) post-earthquake diagnosis; (2) determine the main strengths, weaknesses, threats, opportunities and strategic positioning of the territory; (3) identify strategies based on long-term sustainable tourism planning; and the (4) proposal of the strategic plan, which as a result allowed the identification of 9 programs supported by 19 projects aimed at the improvement and reactivation of tourist attractions, basic services and commercialization.

Key words: Strategic planning, sustainable tourism, natural disasters, intervention strategies

INTRODUCTION

Tourism has become one of the most important industries in Ecuador in recent times, because it is an important source of foreign currency and contributes to the diversification of income among recipients. Tourism (Kuqi, 2018), has a great potential and plays an important role in meeting the main objectives related to, employment, sustainable economic and social development. Acording to Reyes et al., tourism is a strategic factor for economic development of the country. Tourism has an important

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interface role due to its complex connections to the other socio-economic sectors, to its superior use of the available resources, therefore it stimulates the local economic development, stimulating the socioeconomic system (Morar, 2012).

Domereski (2003) states that planning is a vital element in promoting tourism activities in local communities without significant damage to the environment. The nature conservation has historically been debated within the context of the biodiversity (Pletsch, et al., 2014). Learning natural values of biodiversity and geodiversity is a necessity (Bâca, 2018), because education is the basis for all planning activities, recovery and conservation of natural heritage. Morinero et al., (2013) maintain that planning is an essential process in public administration, connecting economic growth with sociocultural and environmental impacts brought by tourism.

Moreover, Moreno (2013) maintains that tourist site management must be closely related to its conservation, visitor capacity, and general commitment with all stakeholders in the development of a tourist site. For this to happen, it is necessary to assure management processes based on tools such as strategic plans that are in line with sustainability principles. At present, the small number of scientific studies addressing innovation in tourism management models represents a serious problem (Elia & Suarez. 2015). This reality makes it necessary that institutions create strategic plans as an for improving tourism management and for developing new tourism activities or enhancing the ones already in existence. Planning must be established on the basis of sustainability and equity, and its main objective should be to use natural and cultural resources appropriately, which in turn will improve the quality of life for local people. Tourism types and forms typologies are aiming at more effective tourism policies (Morar, 2012), also at targeting alternative local and regional development plans and marketing strategies. Planning, as stated by Doumet & Yánez (2014) in reference to managements strategic lines, enables the creation of models for monitoring tourism activities, resulting in the development of adequate procedures especially in conservation areas. It must be taken into account that the tourism industry, as argued by Monterrubio et al. (2014), "can generate changes by itself, or in symbiosis with other change agents" such as organizations and institutions in charge of fomenting strategic plans.

Ángeles (2012) and Barra & Gómez (2014) define strategic plans as the most common tool for optimizing resources and obtain most consistent results by setting short-term goals with achievable tasks. For this reason, Tur-Viñes and Monserrat (2014) suggest that "tourism plans must be adaptable to every business, institution and organization for which it was created. Their flexibility must be present in every management aspect from logistics to the implementation of procedures, improving the general management and tourism reactivation. Tourism typology of the forms and types constitutes a very important tool for tourism management and planning (Morar, 2012), being essential elements in local development policies through tourism.

According to Orgaz (2013), over the years, there has been an interest in working towards developing new forms of tourism; that is the origin of sustainability and the importance of taking sustainable development activities into practice. At a time when the global economy is in a very varied period of time, the efforts for orientation for sustainable economic development have the advantage (Kuqi, 2018) of providing new solutions for decision-makers who, encourage debate on sustainable economic development. Bermejo (2014), citing the definition established by the Brundtland Report (1987), "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." points out that this principle can be implemented in different productive sectors, namely tourism. Madrid (2015) points out that tourism sustainability promotes and balances the

benefits for the environment, society, and private and public tourism investments, aiming at ensuring an optimal development looking into the future.

After the devastating earthquake that took place in Chile in 2010, there is evidence of adequate planning, emphasized by PNUD Chile (2010) "Support for early post-earthquake/tsunami recovery occurred in February 2010". The objective was to empower local communities to manage a sustainable recovery process after the earthquake.

The reactivation of Chile started with a baseline study on the impacts caused by the earthquake and tsunami in communities. They identified vulnerabilities, needs and risks according to threat type, which were linked to vulnerable territories and zones. The main needs and risks established in the initial study were revised for a classification of problems and needs. A general objective for an early recovery plan was formulated as follows: "reinforce the institutional and community development for physical, productive and emotional recovery". Japan was struck by an 8.9 earthquake in 2011. Gandia (2012) reports the execution of a tourism activity analysis after the disaster. He continues to state that this type of disasters is caused by tectonic activity and climate change, and it is impossible to avoid their occurrence. It is up to people to create tools for diminishing their negative effects by creating cooperation and planning culture.

In order to reactivate the tourism sector, Japan invested in strategic planning, which was well accepted by the people because of their awareness of the importance of tourism for the economy. The plan was executed by means of a baseline study that enabled the decision making on the necessary actions to reactivate tourism.

Both Chile and Japan showed high levels of tourism planning after a severe earthquake, and showed that with planning, it is possible to fully recover from this type of disasters through sustainable use of natural and cultural resources by cooperatively working with all stakeholders. According to Rodriguez-Rodriguez (2012), after experimenting the earthquake in Colombia in 1999, they proposed seven basic principles for spatial planning after a disaster. This guideline should be used in all types of planning. The principles go as follows: integral development, community participation, transparency, celerity, efficiency, sustainability, and decentralization. Therefore, it is necessary the integration and publication of planning actions involving all stakeholders.

The spatial characterization of a territory is obtained from a large number of factors, as argued by Silva et al., (2012), which consequently result in the definition of forms of occupations and territory use. Spatial planning is regarded as highly important because of the need for a correct use of territories for contributing to sustainable development. On April 16, 2016, an earthquake of magnitude 7.8 on the Richter scale shakes the northwest coast of Ecuador; the event caused great losses to the tourism sector. The National Secretary of Planning and Development of Ecuador (SENPLADES, 2016) recorded losses of USD 3344 million in total, money that would be required to rebuild the affected areas that harm more than 21,000 people directly and indirectly. In the province of Manabí the hotel, food and entertainment sector was destroyed by 80%. In the tourism subsector, a total reconstruction cost of 97 MM USD (9.4% of the productive sector) was estimated, which includes the cost of the immediate response to the event, the reconstruction of assets and the lost flows. The subsector had significant effects on assets: 22.2% of total assets recorded in 2014 were lost in the affected area. 98.6% of these damages are concentrated in small companies. The assets that were most affected correspond to buildings and facilities belonging mainly to small businesses, micro-enterprises and individuals. The reconstruction of assets in the tourism sub-sector amounts to USD 76.8 million. The losses for the tourism subsector are estimated at USD 19.5 million, which represent close to 13.3% of the annual sales prior to the earthquake (General Secretariat of Risks of Ecuador, 2016).

The cost of rebuilding this infrastructure sector amounts to USD 862 million, a figure that represents 25.8% of the total amount of the reconstruction of the country. Of this amount, 89.6% corresponds to the reconstruction of assets, 7.3% to additional costs and 3.1% to lost flows. Likewise, 31.2% of cost corresponds to water and sanitation, 28.3% to transportation, 22.7% to electricity and the remaining 17.7% telecommunications (General Secretariat of Risks of Ecuador, 2016). García et al., (2016) maintain that the post-earthquake tourism industry in Manabí must be restated and adjusted to the existing reality. It is necessary to diagnose current tourism resources, evaluate damages, identify problems and causes of stagnation in the tourism industry, recognize the needs of service providers who were affected by the earthquake, redesign new products oriented to increasing local demand, and implement strategies to foster the industry through communication and destination marketing. The scholar also claims that the Municipality of Bolívar has sufficient natural and cultural resources, which have not been suitably developed. In addition, there are no adequate procedures that interlace public and private institutions for strengthening and managing the tourism industry in a more efficient manner.

It is possible to affirm that an inadequate management results in insufficient basic services. This is also reflected in the lack of tourist facilities and businesses. In the absence of clear methodological procedures, the tourism industry is affected by poor implementation of sustainable development plans, inaccessibility to tourist resources, no tourist signs and unawareness of environmental management actions by the communities. There is currently deficient planning in the canton of Bolívar. Tourism management is visibly stagnant; this reality has even worsened after the earthquake on April 16th 2016. The municipality does not have a mechanism for responding to natural disasters. It is thus of utmost importance that the municipality have a strategic plan, which restructures and improves tourism management based on current needs.

The above-mentioned problems justify this research by validating the need for identifying and implementing strategies that are addressed towards activating tourism in Bolívar after the last earthquake. This can be possible through the creation of new products and services based on strategic planning that must be adapted to the local context. This research comes as the result of executing a Research and Development project (I+D+i, in Spanish) designed to improve local tourism management and wellbeing. Through a strategic tourism plan, it will be possible for Bolívar to see a recovery after the earthquake, and promote its tourist attractions more sustainably. We propose that only through planning, development and rigorous management, the benefits of tourism can be optimized. Furthermore, through the mitigation of risks, resources will be protected, creating jobs and positioning Bolívar towards an efficient post-earthquake management.

MATERIALS AND METHODS

The methodology of this study enabled the creation of a strategic plan directed towards improving the tourism management in Bolívar after the April 16th earthquake. Our initial point was a diagnosis of the current situation of the local tourism management after the earthquake. We evaluated the conditions of the resources and facilities, and identified problems in connection with tourism management. Planning is thus conducted in order to identify sustainable strategies through the implementation of programs and projects directed toward improving the tourism management in Bolívar. For the purpose of this paper, we followed the methodologies published from The Ecuadorian Ministry of Tourism (2007); Ecuadorian Strategic Plan for Tourism Development (PLANDETUR, 2020); Methodology for Formulating Local Development Strategies (Silva & Sandoval, 2012); Japan: Encouraging Tourism and Improving the Image of the Destination.

Analysis of the Before and After a Natural Disaster (Gandía, 2012); Chilean National Tourism Strategy (Chilean Government, 2012); Preliminary Design of the Tourism Development Plan for Selected Municipalities in the Province of Mayabeque, Cuba (Echarri & Bulnes, 2015). We present a summary of our methodology in table 1.

Table 1. The proposed methodology for a strategic plan design for the Municipality of Bolívar

PHASES	ACTIVITIES	TOOLS AND TECHNIQUES
1. Situational baseline study of current tourism management in Bolívar after the April 16th earthquake.	 IN-SITU information survey activities on: socioeconomics, environment and culture. Inventory and categorization of natural and cultural tourism assets. Problems and causes affecting management after the April 16th earthquake. 	 Maps, global positioning system (GPS) and geographical information system (GIS). Photographic record. Tourist destination inventory forms from the Ministry of Tourism. Interviews. Surveys.
2. Determine the strategic positioning of the tourism management in Bolívar.	4. Identify the problem and solution to strategic positioning.	Technical visits.Brainstorming.SWOT analysis.
3. Identify strategies.	5. Determine the strategies directed toward strengthening tourism management and recovery after the earthquake.	Revision and analysis of collected data.
4. Establish the strategic plan proposal.	6. Establish the programs and projects that enable the fulfilment of strategies.7. Evaluation and monitoring of the strategic plan proposal based on the identified problems.	 Spatial and Territorial Development Plan of Bolívar. Technical document of plan design for improving tourism management. Strategic plan matrix.

The proposed methodology is composed of the following phases:

Phase 1: Situational baseline study of current tourism management in Bolívar after the April 16th earthquake: in-situ information compilation of various aspects such as socioeconomics, environment and culture for carrying out a situational baseline study of tourism management in Bolívar. An inventory of Bolivar's tourism resources is performed with the aim of verifying their current conditions and existence. In this phase, we used maps, GPS, GIS, photographic and written records collected by means of a technical inventory forms from the Ministry of Tourism. The final part consisted of a categorization of resources and identification of their potential for tourism after the earthquake. We identified the problems and causes affecting tourism management after the April 16th earthquake through surveys, interviews to public employees of the Bolívar Department of Tourism, tourist managers (private and customers/visitors) to identify problems, causes and consequences, all of which will enable the improvement of the tourism management.

Phase 2: Determine the strategic positioning of the tourism management in Bolívar through a SWOT analysis, which identified the strengths, opportunities, weaknesses and threats of current tourism management. The most relevant findings enabled us to pinpoint the problem and suggest strategic solutions.

Phase 3: Identify strategies that are oriented to enhancing tourism management in Bolívar and recovery after the earthquake on the basis of a revision and analysis of previously-collected data. Thus, strategy selection sought to improve the current positioning to achieve expected results.

Phase 4: Establish the strategic plan proposal for improving tourism management in Bolívar by considering the actions and indicators that enable the fulfilment of programs and projects based on the strategies to mitigate and eliminate the identified problems. The plan must be linked to the Spatial and Territorial Development Plan of Bolívar for evaluating and monitoring the execution of the strategic plan proposal.

RESULTS DISCUSSIONS

Phase 1: Situational baseline study of current tourism management in Bolívar after the April 16th earthquake

We present the details of the evaluation and characterization of the study area through the gathered information on geographical aspects, as shown in Table 2.

Table 2. Bolívar General Information			
(Source: Spatial and Territorial Development Plan, Municipality of Bolívar, 2015)			

Location Astronómica	g, g,	
	North: Chone	
Limits	South: Portoviejo and Junín	
Limits	East: Pichincha	
	West: Tosagua	
Main Territories	Calceta (urban), Quiroga y Membrillo (rural)	
Area	537.8 Km ²	
Population	40.735	
Hidrography	Carrizal River (main)	
Temperature	25,5° C (mean annual temperature)	
Annual precipitation	1.300 mm.	
Height	21 - 400 m.a.s.l.	

In-situ information collection of socioeconomic, environmental and cultural aspects

Bolívar has, to a large extent, an agricultural economy. Its main products are cocoa, coffee, and citrus. The topography is flat in the low lands and irregularly broken in the uplands. The mountains are known for having been a natural reservoir for forest with diverse vegetation and pleasant weather conditions. However, over the last years, some areas have been degraded due to timber exploitation and enlargement of the agricultural frontier for cattle and swine breeding.

In terms of the culture, Bolívar still has vibrant expressions of popular Manabí cultures, being a mixture of autochthonous ancestral roots and the acculturation effects of the Spanish conquest. The traditional gastronomy still prevails with exquisite dishes such as the famous tonga (chicken stew and rice wrapped in plantain leaves), free-range chicken soup and stew, cuajada (soft cheese), among others. Unfortunately, the public clock, one of the main tourist attractions, collapsed during the April 16th earthquake.

Inventory and categorization of natural and cultural assets

We here present the tourist resources and attractions of Bolívar registered and categorized after the earthquake using inventory forms from the Ecuadorian Ministry of Tourism. The results are shown in table 3. We confirmed that the earthquake in fact affected a large number of tourist assets in Bolívar. An example of this are the San Agustin Temple, the Los Platanales bathing establishment and Abdón Calderón Park.

Other attractions collapsed (e.g. Public Clock and Luis Félix López Archaeological Museum), overall constituting a significant loss for the local tourism sector and culture. Despite the adverse consequences of the last disaster, there are still several natural

resources such Mil Pesos Mount and the large number of waterfalls. With an adequate tourism management, they could become an important piece for the recovery of tourism in the area in a sustainable manner.

No.	Attraction or resource name	Category	Current condition	Rank
1	Balneario de agua dulce Los Platanales (Bathing establishment)	Natural site	Damages to facilities	II
2	Balneario de agua dulce Los Almendros (Bathing establishment)	Natural site	Preserved	II
3	Cascada Chapulí (Waterfall)	Natural site	In deterioration	II
4	Cascada Julean(Waterfall)	Natural site	In deterioration	II
5	Cascada La Mina (Waterfall)	Natural site	In deterioration	I
6	Cascada Primera Piedra (Waterfall)	Natural site	In deterioration	II
7	Cerro Mil Pesos (Mount)	Natural site	In deterioration	I
8	Clay handicraft processing	Cultural manifestation	Preserved	I
9	Finca Agroecológica Sarita (Agricultural farm)	Cultural manifestation /Natural site	Preserved	II
10	Iglesia Santa Marianita de Jesús (Catholic church)	Cultural manifestation	Structural damages	I
11	Monumento a Simón Bolívar (Monument)	Cultural manifestation	Preserved	II
12	Monumento al Balsero (Monument)	Cultural manifestation	Preserved	II
13	Museo Arqueológico Histórico Luis Félix López (Archaeological museum)	Cultural manifestation	Collapsed during the earthquake	-
14	Paraje Natural y Cultural Quinta Colina del Sol (Natural site)	Cultural manifestation /Natural site	Preserved	II
15	Parque Central Abdón Calderón (Central park)	Cultural manifestation	Structural damages	II
16	Parque Ferroviario (Railway park)	Cultural manifestation	Preserved	II
17	Parque de Membrillo (Park)	Cultural manifestation	Preserved	I
18	Parque de Quiroga (Park)	Cultural manifestation	Preserved	I
19	Plaza Cívica (Public square)	Cultural manifestation	Structural damages	II
20	Puente Rojo (Bridge)	Cultural manifestation	Preserved	II
21	Reloj Público (Public clock)	Cultural manifestation	Collapsed during the earthquake	-
22	Represa Sixto Duran Ballén (Dam)	Cultural manifestation	Preserved	II
23	Templo San Agustín (Catholic church)	Cultural manifestation	Structural damages	II

Table 3. Tourist attraction inventory of Bolívar

Problems and causes affecting management after the April $16^{\rm th}$ earthquake

We carried out interviews and surveys for identifying the problems and causes affecting the tourism management in Bolívar. Participants were the people involved in local tourism activities and some representatives from the Tourism and Planning Departments of the Bolívar District. We gathered the following information:

- The Spatial and Territorial Development Plan is currently being publicized, despite the fact that it should have been applied since 2015.
- There is no record of a technical document comprising a strategic tourism plan for adequate management.
- One of the main causes for inefficiency in local planning is the limited budget, especially in the sectors that generate income such as agriculture and tourism.
- The tourism sector does not have long-term planning. The actions only address current needs.

We conducted surveys to the private tourism sector (21 establishments), using the

required sample size for inferential statistics. Results are as follows:

- 88% of tourism establishments have been affected by the April 16th earthquake.
- 82% have basic services, but not in optimal conditions. 53% of establishments lacked drinking water, followed by 29% internet service, 12% telephone service and 6% electricity.
- 41% have expressed that they have never been visited by the Bolívar Department of Tourism for evaluation purposes.
- 76% of business owners think that the Department of Tourism could significantly contribute to solving their problems, while 24% agree that the department could not give them the appropriate support.
- Currently, 82% of the establishments have problems such as lack of training (22%), and marketing, and basic services (18%), respectively, whilst 6% reported financing problems.
 - 71% stated that the Department of Tourism is not adequately using their resources.

All of our results are evidence of the need for implementing a strategic plan that improves the tourism management in Bolívar joining forces with public and private businesses. An adequate tourism management will benefit local communities and will enable the execution of sustainable projects that use resources (especially nature) in a suitable manner. Surveys were conducted aiming at identifying the profiles of different visitors. Because of the relevance of identifying the type of visitors and gathering the related information, it will be possible to suggest feasible tourism projects. In determining the sample size, we used the following equation for unknown population (González & Conde, 2011):

$$n = \frac{Z_{a/2}^2 * p * q}{d^2}$$

We established a 95% confidence level, a probability of occurrence (p) 0.5, a probability of failure (q) 0.5 and a margin of error (d) 0.09. The calculated sample size was 120 participants. Their answers shaped the visitor's profile shown in table 4.

Table 4. Visitors prome			
Sex	Men 53%, Women 47%		
Age	26 – 35 years old 32%		
Job	General employees 22%		
Education	High school degree 55%		
Number of visits	3 -5 times 44%		
Length of stay	2 days 37%, 1 day 32%		
How they heard about Bolivar's attractions	Word of mouth 32%, Internet 30%		
Travelling conditions	Accompanied by other people 72% (Family 37%), Alone 28%		
Transportation	Car 56%, Public transportation 41%		
Visitor's motivation	Nature and landscape 25%, meet family and friends		
	19%, traditional food 18%		
Suggestions for a more pleasant stay	New tourist attractions 23%, Improve facilities at		
	existing attractions 20%, Improve service 14%		
Nivel de satisfacción en su visita	Neither unsatisfied nor satisfied 34%, Satisfied 27%		

Table 4. Visitors' profile

Results show that the people who visit Bolívar are aged between 26-35, and are general employees. When visiting a tourist attractions, they are usually accompanied by family members. They mainly come to see natural resources and landscapes. Most of them suggest that there should be new attractions and improvements in the quality of service in existing destinations. Visitors believe that by improving services, the level of satisfaction will increase, which is now at an intermediate level. Now it is important to show picture abaut the earthquake in the center of Calceta: Figure 2 shows the total

destruction caused by the earthquake to two important tourist resources of the Bolívar canton: the Public Clock and the Archaeological / Historical Museum, Luis Félix López and Figure 3 illustrates house destruction and rescue and reactivation activities.





Figure 2. Public monument

Figure 3. House destruction

Table 5. SWOT analysis

Strengths		Weaknesses
1. Available Spatial and Territorial Development Plan.	1.	Few attractions with good infrastructure.
Agricultural and livestock activities.	2.	Unawareness of agrotourism potential.
3. Large number of standing resources and	3.	No tourist signs.
attractions after the earthquake.	4.	Unsatisfactory basic services.
4. Urban areas with basic services for the tourism sector	5.	Polluted rivers.
5. Transportation for traveling in and out of Bolívar.	6.	No tourism organization and planning.
6. Water availability.	7.	Department of Tourism Limited budget
7. Good highways for connection with other districts.	8.	Little information, and marketing of
8. Potential agrotourism farms.		rist attractions.
9. High level of hospitality.	9.	No strategic plan for tourism
10. Rich biodiversity and beautiful landscapes.		nagement.
11. Varied traditional gastronomy.	10.	No integrated management between
12. Considerable number of recreational sites for	tou	rism companies and local government.
sports.		Very few tourism projects.
13. Tourism companies willing to improve their		Untrained personnel in tourism companies.
service quality.	13.	Water not suitable for human
14. ESPAM- MFL University.	cor	isumption.
14. ESPAM- MFL University. Opportunities	cor	nsumption. Threats
Opportunities	1.	Threats
Opportunities		*
Opportunities 1. Ministry of Tourism as the regulatory body of	1. 2.	Threats Weather conditions during the rainy season. Earthquakes.
Opportunities 1. Ministry of Tourism as the regulatory body of tourism in Ecuador.	1. 2.	Threats Weather conditions during the rainy season.
Opportunities 1. Ministry of Tourism as the regulatory body of tourism in Ecuador. 2. Ecuadorian laws dealing with tourism development.	1. 2. 3.	Threats Weather conditions during the rainy season. Earthquakes. Risk of infectious and contagious diseases
Opportunities 1. Ministry of Tourism as the regulatory body of tourism in Ecuador. 2. Ecuadorian laws dealing with tourism development. 3. Growing trend in nature-related tourism,	1. 2. 3. 4. 5.	Threats Weather conditions during the rainy season. Earthquakes. Risk of infectious and contagious diseases Financial instability in the local government
Opportunities 1. Ministry of Tourism as the regulatory body of tourism in Ecuador. 2. Ecuadorian laws dealing with tourism development. 3. Growing trend in nature-related tourism, adventure and ecotourism.	1. 2. 3. 4. 5. 6.	Threats Weather conditions during the rainy season. Earthquakes. Risk of infectious and contagious diseases Financial instability in the local government Global economic crisis. Political instability. Similar attractions and services in
Opportunities 1. Ministry of Tourism as the regulatory body of tourism in Ecuador. 2. Ecuadorian laws dealing with tourism development. 3. Growing trend in nature-related tourism, adventure and ecotourism. 4. Increasing demand for agricultural and	1. 2. 3. 4. 5. 6.	Threats Weather conditions during the rainy season. Earthquakes. Risk of infectious and contagious diseases Financial instability in the local government Global economic crisis. Political instability. Similar attractions and services in
Opportunities 1. Ministry of Tourism as the regulatory body of tourism in Ecuador. 2. Ecuadorian laws dealing with tourism development. 3. Growing trend in nature-related tourism, adventure and ecotourism. 4. Increasing demand for agricultural and livestock products. 5. Public funding sources (local government, BE, CFN, IESS)	1. 2. 3. 4. 5. 6.	Threats Weather conditions during the rainy season. Earthquakes. Risk of infectious and contagious diseases Financial instability in the local government Global economic crisis. Political instability. Similar attractions and services in ghboring districts. Growing social insecurity.
Opportunities 1. Ministry of Tourism as the regulatory body of tourism in Ecuador. 2. Ecuadorian laws dealing with tourism development. 3. Growing trend in nature-related tourism, adventure and ecotourism. 4. Increasing demand for agricultural and livestock products. 5. Public funding sources (local government, BE, CFN, IESS) 6. Support for foreign investment.	1. 2. 3. 4. 5. 6. 7. nei	Threats Weather conditions during the rainy season. Earthquakes. Risk of infectious and contagious diseases Financial instability in the local government Global economic crisis. Political instability. Similar attractions and services in ghboring districts.
Opportunities 1. Ministry of Tourism as the regulatory body of tourism in Ecuador. 2. Ecuadorian laws dealing with tourism development. 3. Growing trend in nature-related tourism, adventure and ecotourism. 4. Increasing demand for agricultural and livestock products. 5. Public funding sources (local government, BE, CFN, IESS) 6. Support for foreign investment. 7. Connections with domestic tourism projects	1. 2. 3. 4. 5. 6. 7. nei 8. 9. tap	Threats Weather conditions during the rainy season. Earthquakes. Risk of infectious and contagious diseases Financial instability in the local government Global economic crisis. Political instability. Similar attractions and services in ghboring districts. Growing social insecurity. Setting up a business involves a lot of red
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Phase 2: Determine the strategic positioning of the tourism management in Bolívar

After obtaining the results from the baseline study, we were able to determine the positioning of Bolívar in terms of its current tourism management. The SWOT analysis show the main strengths, weaknesses, opportunities and threats of the tourism management in Bolívar as shown in table 5.

Identify the problem and solution to strategic positioning

The identification of the problem and strategic solution are based on the strategic positioning that is obtained as a result of the main factors established in the SWOT analysis (Tables 6 and 7).

Table 6. Main Strengths, Opportunities, Weaknesses and Threats

Strength	#3 Large number of standing resources and attractions after the earthquake
Opportunity	#3 Growing trend in nature-related tourism, adventure and ecotourism
Weakness #9 No strategic plan for tourism management	
Threat	#7 Similar attractions and services in neighboring districts

Table 7. Strategic Positioning

	Opportunity	Threat
Strengths	Offensive strategy	Defensive strategy
Weaknesses	Reorientation strategy	survival strategy

From the SWOT analysis, we found that the greatest weakness and threat must be countered through strategies that are based on the most important strengths and opportunities for an appropriate tourism management in Bolívar.

Strategic Problem

If similar services and products continue to be available in neighboring districts, considering the lack of a strategic plan in Bolívar and despite the fact that a large number of attractions are still standing after the earthquake, the territory will not be able to take advantage of the growing trend in ecotourism.

Strategic Solution

New proposals for minimizing the effect of the availability of similar attractions in neighboring districts should emerge, using the majority of resources and existing tourist attractions. This will overcome the lack of a strategic plan for tourism management in Bolívar.

Phase 3: Identify strategies

Determine the strategies directed toward strengthening tourism management and recovery after the earthquake

The strategic positioning establishes the need for implementing reorientation strategies because they allow the reduction of weaknesses. We present a list of strategies as follows:

- Reinforce the Department of Tourism in the local government.
- Establish institutional relationships among communities and the public and private sectors aiming at a sustainable tourism management.
- Execute projects promoting and providing information on the existing attraction in Bolívar.
 - Establish a plan of action for natural disasters affecting the tourism sector.
- Improve and provide basic services in the area (with an emphasis on drinking water and sewage system).
 - Cleaning programs at tourist sites and solid and liquid waste management.

- Implement a tourist signage program in the district.
- Execute tourism projects based on sustainability principles.
- Develop new tourist attractions based on novel modalities such as gastronomy, nature, adventure and ecotourism.
- Continually train service providers and potential entrepreneurs on technical aspects related to tourism.
- Establish a program aimed at renovating resources and tourist attractions that were affected by the April 16th earthquake.
- Add value to tourist resources and attractions that highlight the differences between Bolivar attractions and those in neighboring districts.
- Implement awareness-raising and sensitizing activities on environmental protection with the local communities.
- Manage non-refundable resources from domestic and foreign organizations for tourism projects in the area.

Phase 4. Establish the strategic plan proposal

The strategic plan is aimed at improving the tourism management in Bolívar through a partnership work between the public and private sectors, and the local community. The goal is to promote the conservation of natural and cultural tourism resources.

The mission: improve the tourism management in Bolívar through the application of a strategic plan that addresses current needs in developing tourist attractions and resources for integrating the public and private sectors involved in tourism activities.

The vision: promote Bolívar as a reference for tourism management with a successful model based on strategies in favor of sustainable development and the wellbeing of local communities.

The values: service capacity, work quality, commitment to society, discipline, efficiency, continuous improvement and responsibility.

The strategic goals in the plan are divided into three main axis:

Social Axis: implement tourism projects that generate jobs for improving the quality of life of local people.

Environmental Axis: implement environmental principles of sustainability in all tourist attractions for ensuring their conservation and availability for future generations.

Economic Axis: consolidate the tourist sector as one of the main direct and indirect sources of income for local people, utilizing the multiplying effect for positive outcome demonstrated by the industry.

Establish the programs and projects that enable the fulfilment of strategies

We established 9 programs and 19 projects based on the problems in the current tourism management in Bolívar. The details are shown in table 8.

Territorial planning: strategies for tourism development

As a strategy to strengthen the tourism sector of the Bolívar canton, a tourist zoning is established trying to plan the territory affected by the earthquake of April 16, 2016, was designed according to the three tourism environmental units, considering the type of agricultural activities that in it develops, as well as urban-rural areas where socio-productive activities are encouraged (Figure 1). The established zones are the following:

- a) Tourist core zone.
- b) Agritourist use zone.
- c) Sustainable use zone

d) Wildlife and conservation zone For more facility, we show the map whit the different zone:

Table 8. Programs and Projects

Programs	Projects	
1. Organizational and	Improvement of internal processes.	
institutional empowerment	2. Reinforcement of technical capacities in human resources.	
of the Bolívar Department	3. Elaboration and application of a data collection system for	
of Tourism	tourism variables.	
2. Interinstitutional	4. Effect of sustainable tourism on the local economy.	
coordination for	5. Interinstitutional coordination for local tourism	
sustainable development	management.	
3. Tourism information	6. Periodic restructure of tourism inventory.	
system	7. Elaboration of a web page.	
4. Reinforcement of	8. Action plan for disasters affecting tourism.	
integral security in tourism	9. Elaboration of preventive measures for improving safety	
integral security in tourism	during natural disasters.	
	10. Provision and improvement plan for basic services at main	
5. Infraestructure and	tourist attractions.	
tourism facilities	11. Highway improvement plan for local tourism routes.	
	12. Signage plans for urban and rural roads.	
6. Development and	13. Sustainable tourism project proposals in rural areas of Bolívar.	
reinforcement of	14. Implementation of sustainability principles at main tourist	
sustainable tourism	attractions existing after the April 16th earthquake.	
	15. Promotion of cultural identity.	
7. Innovation in tourism attractions	16. Added value and innovation plan in local tourism activities.	
8. Capacity development in	17. Technical training plans for tourism service providers.	
human resources for	18. Training of the importance of preserving the local	
sustainable tourism	environment.	
9. Sustainable tourism	19. Management of funds for public and private initiatives and	
development fund	sustainable tourism in communities.	

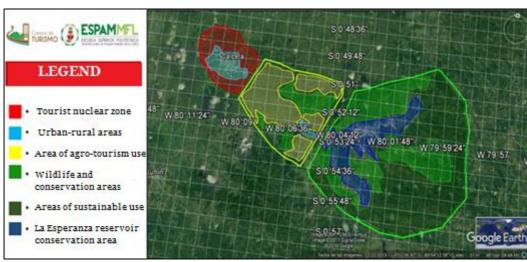


Figure 1. Tourist zoning of canton Bolívar (Source: processing on topographic map 1: 100000 and orthophotomap)

The strategic plan proposal for improving tourism management in Bolívar after the earthquake contains a chronogram, activities, indicators, budget and actors responsible for executing programs and projects. This enables the evaluation and monitoring of aspects such as the fulfillment of indicators established for each project, elaboration of programs and projects within the appropriate timeline, and according to the chronogram. In addition, based on the budget, the plan will serve to guarantee that expenses by programs and projects are not higher than what it was established. It is worth noting that the Bolívar Department of Tourism is the actor responsible for evaluating and monitoring all of the aforementioned aspects.

CONCLUSION

Based on the diagnosis, we verified that the April 16th earthquake affected a great number of tourism establishments, tourist attractions and basic services that make reactivation of tourism harder. Tourism planning is one of the most inefficient areas of local tourism management. An evidence of such a reality is the lack of planning tools for addressing current problems and needs. There is little interinstitutional work between communities and the public and private sectors for developing tourism activities, with no execution of sustainable tourism projects. With regards to the established strategies, we proposed 9 programs and 19 projects that are based on the SWOT analysis, the Spatial and Territorial Development Plan, Municipality of Bolívar (2015) and the Ecuadorian Strategic Plan for Tourism Development (2020).

Aknowlegments

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