Success Factors and Lessons Learned from the Management of a Public-Private Partnership (PPP) in a Protected Area in Manizales - Colombia

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Abstract

Public-Private Partnerships (PPPs) are arrangements between public and private sectors that work as an alternative for the growing demand for resources as well as the management of infrastructure and public services. Empirical studies have indicated how the management of PPPs has a direct impact upon the capacity of generating results. This article presents the success factors and the lessons learned from the management of a PPP in a protected area in Colombia, as well as the relationship between its geographical location and the distribution of the territory’s population which will be offered the service.

Keywords: Public-Private Partnership, protected areas, success factors, lessons learned, accessibility, transportation
1 Introduction

Public-private partnerships (PPPs) have been efficient for the provision of public infrastructure as well as of public services [2], [7], [13], [17]. Although PPPs are widely recognized, these are barely a recent phenomenon in Colombia, due to the publishing of Law 1508 in 2012, recognized as the “Régimen Jurídico de las Asociaciones Público Privadas” [25]. Nevertheless, for the past years agreements have existed between both sectors to offer infrastructure as well as services in Colombia’s Ecotourism sector. The research was carried out in the city of Manizales, founded in 1849. It is the capital of the Caldas department and it is located in Colombia’s central-west region (see Figure 1) above The Andes mountain range (2,150 masl). The city is home to 415,124 people [9], registering an urban density of 110 inh./Ha. Its average temperature is 17°, for it is surrounded by moors and snow from the Nevados National Natural Park (PNNN) in its upper region, while it is surrounded by the coffee area in its lower region.

Fig.1: Geographical location of Manizales. Source: Authors.

Manizales includes 9 urban and semi-urban Ecoparks that form the Ecopark Network, which encourages the development of themed parks located in natural areas in order to protect its biodiversity. These should be only used for recreational, environmental, tourist, ecological and educational purposes [30]. Internationally, Ecoparks are known as conservation or protected areas. As a result of a clearly PPP among the Manizales Mayoralty, the Luker Foundation, the United Nations Development Programme (UNDP) and CONFA (Nonprofit private entities that offer subsidies and services in order to redistribute wealth and improve the life quality of the families of Colombian workers), the tropical rainforest Ecopark “Los Yarumos” was built. It was characterized as an area for
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conservation, environmental education, recreation and ecological tourism by the Manizales Territorial Ordering Plan (POT) [1]. PPPs can be generally described as arrangements between public and private sectors to manage infrastructure and public services [4], [18], [24], [26]. They use the capacity, experiences and abilities of the private sector to encourage the expansion of infrastructure [27], [28], [29] by signing long-term contracts of great investment and development in contexts of uncertainty [8]. In PPPs, risks, costs and monetary resources are shared to provide a service or a product [16]. The main objective is to generate capital gains through the synergy between the private and the public sector [31]. According to law 1508 [25], PPPs are long-term arrangements between a state-owned enterprise and a natural person to provide public services. This involves the transfer of risks between the partners and payment mechanisms related to the availability and the infrastructure’s service level. In the reviewed literature, PPP studies deal with different topics, such as: risk analysis and assignment [6], [17], [21], [23]; project financing [2], [5], [7]; and success factors in the relationships between the public and private sector such as in the Ecotouristic sector [11], [14], [22], [32].

The need for an appropriate legal framework to reduce, among others, the contractual risk in PPPs is latent [23]; during the first stages of the project, the establishment of these is of great importance [18], [21] for the project to succeed and, even, for the development of capital projects [6]. According to Agrawal [2], PPP financing problems are closely linked to the policies of the sector as well as the regulatory frameworks, directly related to the private investor’s interest in a PPP, which depends on the risk and the return rate of the project [5]. It can be thus affirmed that the increase in expenses and investment compensates the competences, effectiveness and advantages of said arrangement [7]. Success factors in Australia are the personality of private operators as well as their ability to work in different companies within the bureaucratic structure of the public ally [32]; in Portugal, the power of truth, the selection of the participants and their commitment to the objectives of the PPP, and the communication with stakeholders [14]; in the United Arab Emirates, the politic support and a strong private partnership [11]. The mentioned researches study the relationships between the private and the public sector to encourage sustainable tourist practices in protected areas. In order to do this, McCool [22] indicates that there should be an exchange between two objectives: i) protecting preservation values and ii) allowing access to visitors in order to enjoy these values. These studies have been performed in different Latin-American countries. This study is carried out in the ecotouristic sector, and it is of strategical importance for the economic and social development of Colombia [10]. Merely carrying out a project with a PPP does not guarantee its success, for said manner of urban management directly influences the development and planning of a city. Hence, it is necessary to know the spatial distribution of activities and the policies of transportation [20]. The PPP which carried out the urban and ecotouristic management for the creation of the Ecopark “Los Yarumos” was successful in its construction stage; nevertheless,
these initial achievements have not been consistent throughout the operation stage. The present research strives to identify the success factors as well as the lessons learned in the PPP urban management for the construction and operation of the Ecopark “Los Yarumos” in the city of Manizales, Colombia. After this introduction, the methodology applied is hereby presented. Afterwards, the study is presented and later the results and the discussion. Lastly, the conclusions and references are included.

2 Methodology

For the purposes of this investigation, the methodology proposed is that of a case study in order to avoid theoretical fundamentals and previous hypothesis to, instead, focus on this particular case. Besides, there is no control over the events and the phenomenon is found within a real context. As can be seen in Figure 2, the case study begins with the identification of the observed problem.

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Figure 2. Methodological flow chart. Source: Authors

It is complemented with the literature review, the usage of data collection tools, and the correspondent analysis of the empirical and theoretical evidence. Thus, existent problems and opportunities are determined in order to analyze the situation, generate and evaluate alternative actions, and recommending and implementing a new action plan as a product of the results and the conclusions of this study. This case study has been developed based on the empirical evidence from the PPP subscribed for the construction of the Eco park “Los Yarumos” and from a recollection process based on in-depth interviews applied to experts in the private and public sectors who have been involved in this partnership.
Additionally, a geographical analysis is also performed to identify how the population presents difficulties to access said infrastructure. The necessary historical information is also provided to reveal success factors and the lessons learned from the management of the PPP in the Ecotourism sector, comparing the attained results from the initial moment until the current situation of the case study.

3 Case Study

According to a study performed by the Luker Foundation and the University of Caldas in 1997, based on quality indicators provided by the UNESCO, it was necessary to create recreational and touristic spaces, for the quality of Manizales’ existent infrastructures did not answer to the needs of the population. Due to this necessity and to the universal touristic value which is acquired through nature and ecotourism, the project for the Ecopark “Los Yarumos” was created in order to develop activities related to sports, recreation, cultural, educational, while also considering the conditions of the city’s landscape, environment, and nature. By the year 1999, a group of people named “Friends for Caldas” began to get the community familiarized with the initiative searching for institutional and economical support. As a result, the project was set forth with the support of the local government and the private company. In 2001, the terms for an initial partnership among the Manizales Mayoralty and the Luker Foundation were agreed upon for the studies and designs of the project. Later, the UNDP as well as the Institute for the Financing, Promotion and Development of Projects in Manizales (INFIMANIZALES) joined the project.

Although the main purpose of this PPP was the construction of the Eco park “Los Yarumos”, it was noticed how the most important result would be becoming a pilot process for the partnership between actors from different sectors for the social development of Colombia through environmental education and community involvement. This way, after constructing, involving the community and offering environmental education in a 53 hectare tropical forest, the Ecopark “Los Yarumos” was offered to the people of Manizales on November 17th, 2002. The Ecopark “Los Yarumos” is placed in a region with rich fauna and flora, as well as in one of the best lookouts in the city (see Figure 3). The Ecopark has pathways to observe birds, different rooms for didactic presentations about the environments, vivarium, camping zone, ranger housing, open air practices such as canyoning, Tibetan bridge crossing, canopying, escalade, sports and children’s games. It also offers varied services such as a library, food and craft sales carts, 3D film theatre and parking lot. It also has a station for a cableway to access the Ecopark (see Figure 4).
As can be observed in Figure 5, the geographical location of the Ecopark should be directly related to the transportation infrastructure network of the city of Manizales; nevertheless, the Ecopark appears to be distanced from principal roadways. Public transportation to access the park in a simple and fast manner does not exist. Although a cableway was built in order to do so, it was no longer operational shortly after. This is related to the accessibility that the infrastructure network offers to certain sectors of the city, as is the case of the Ecopark “Los Yarumos”. “The potential of opportunities for interaction” is deeply related to the use land development [19]. Considering the need to offer adequate access routes to infrastructures, as the one hereby studied, it is necessary to learn about transporta-
Success factors and lessons learned from the management infrastructures in order for the population to reach them [15]. The results obtained from the territorial accessibility analysis are presented Figure 6.

Figure 5. Geographical location of the Ecopark “Los Yarumos”. Source: Authors.

Figure 6. Geographic accessibility curve towards the Ecopark “Los Yarumos”. Source: Authors.

The behavior of mean travel time curves is shown in intervals of 5 minutes. It is possible to appreciate that a large part of the city can access the Ecopark in an average time of less than 50 minutes, which is considered reasonable when consi-
dering the topographic and road conditions of certain sectors of the region. The maximum travel time is of 110 minutes from the northwestern neighborhood of La Linda. The distribution of the coverage of the population as well as of the coverage of the urban area are shown in percentages in Figure 7.

![Figure 7. Coverage percentages accumulated for the population and the area towards the Ecopark “Los Yarumos”. Source: Authors.](image)

It is possible to appreciate that 50% of the population is able to reach the Ecopark in a mean travel time close to 30 minutes. It is also observed that 90% of the city’s population is able to reach the Ecopark if they travel for 45 minutes. Analyzing these numbers according to the socioeconomic strata, it has been proven that the higher strata (5 and 6) are those who would be able to reach the infrastructure in less time.

4 Results

4.1 Success Factors

Four success factors were identified, all directly related to the construction stage:

1. **Achievement of the initial objectives and fulfilment of the responsibilities of each if the partners of the PPP**: The political drive as well as the financial support and the institutional compromise of the actors allowed to execute this social initiative. It was also encouraged by the active participation and the due fulfilment of roles and responsibilities, thus strengthening trust and the necessary cooperation bonds to carry out the project.

2. **Appropriate bidding process, execution and monitoring of the Ecopark’s construction**: After acquiring the engineering and architecture studies, the urbanism, environmental and construction licenses were obtained without setbacks. A qualified team was put together for the environmental, structural, hydrosanitary, electric, topographic and earth movement areas. The staff to be
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involved in the construction of the project was hired in the neighboring communities. The public sector worked on the intervention of the project and to support it throughout the formation and training of the staff. The private sector worked on the management of the studies and designs, the coordination of the project and the financing of resources. Both sectors participated in the processes of monitoring, follow-up and evaluation of the project. The UNDP, being an international actor, participated in the management of financial resources, technical assistance and the follow-up of the governmental management.

3. Participation of the community in environmental education processes and community sensitization: Due to these, environmental lessons were imparted for the neighboring communities of the Ecopark as well as for the visiting public. Governmental authorities, as well as from the clergy, and the Academia participated in the process of sensitization meant for the population directly benefitted. As a result, the support and compromise of the community was attained.

4. Consolidation of the Municipal System of Protected Areas: Due to the construction of the Ecopark “Los Yarumos”, the idea for a municipal system of protected areas of the city was consolidated. It would surround this park in a ring-shaped manner and be named “Urban Eco park Network of Manizales”. The experience was also useful to create the program “Guardians of the slopes”, thought of for the citizen and the maintenance of the slopes as a prevention mechanism against disasters due to climate changes which are actually frequent in rainy periods.

4.2 Lessons Learned

The threats and weaknesses considered during the creation of the PPPs have taken place with time. According to the experts consulted, since the opening of the Ecopark, there have been recurrent difficulties. These can be considered the lessons learned:

1. Scarce politic desire from certain public offices: Due to the changes in the politics of public administration, the difference between the working rhythms, disregard to responsibilities and roles of each actor, the trust and structure which had been established during the creation of the PPP and the construction of the Ecopark was weakened. With time, the private sector associate was left alone with the Ecopark’s operation.

2. Insufficient resource appropriation for the Ecopark’s operation: The resources taken from the public sector became continually less. The operation deficit had to many times be covered with charges to the investment. Likewise, a poor resource management for new infrastructure and recreational works led to setbacks in the renewal of attractions and, hence, the objectives of the Ecopark were not fulfilled.

3. Deterioration of the relationship between the private and the public sector: Due to changes unilaterally motivated by the public sector for the operation of the
Ecopark deteriorated the relationship between the public and the private sector, eventually leading to the retirement of the private sector. There have been several efforts to reestablish the situation: for example, the local government has invested in new attractions and has restarted the operations in the Ecopark, mainly focusing on it as a public service for the city.

4. Lack of urban planning and management regarding the development of transportation infrastructure that would allow to connect different sectors from the city to the Eco park: The Eco park is not connected to the public transportation network and, hence, if a person desires to access the park using it, they would have to walk 717 meters, crossing average slopes of 8.5%. Likewise, although there is a cable way (745 meters long) [12] that connects it to one of the most commercially active sectors of the city, although it has not been working for 5 years.

5 Conclusion

PPPs are an effective alternative to develop public infrastructures. Nevertheless, the operation and development of this infrastructure requires the attention of the private and the public sector [3]. Such is the case of the Ecopark “Los Yarumos”, whence the relationship between the public and private sector have worsened due to changes in administrative policies of the public sector, fewer resources for the execution and the loss of trust and structure for the management of it. The success factors during the construction stage of the Ecopark are comparable to the difficulties faced throughout its operation stage. On one hand, the initial objectives of the projects and the responsibilities of the local agents were fulfilled. On the other, the disregard for certain responsibilities and roles, the differences in the working rhythms, a weak management of public resources for new infrastructure works, and the absence of urban planning and management regarding public transportation weaken the PPP and, hence, the operation of the Ecopark. The strength of this alliance relies in the encouragement of politic, institutional interest from the public sector and the management of the private sector, and an adequate financial planning that guarantees sustainability and the growth of the Ecopark’s operations. These are the lessons learned for the management of future PPPs in the Ecotourism field. Likewise, investing in transportation infrastructure for the city of Manizales will allow citizens and visitors to comfortably access the services provided by the Ecopark. This would lead the local government to analyze particularly the Ecopark’s operation and the established policies in the Mobility Master Plan and the Territorial Ordering Plan of the city.

Future Research

It is important and interesting to discuss the success factors and the lessons learned in other protected areas, which form the Ecopark Network from the city of Manizales, to get valuable information to compare and contrast with other
Success factors and lessons learned from the management experiences in the ecotouristic sector in Colombia or Latin America. Likewise, it would be interesting to analyze the geographical location of each protected area in the city, in order to know in which sectors the investment should be prioritized to improve accessibility for residents and tourists.

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