

# Characterization of Tourism Development of the Municipalities of Lejanías, Mesetas and Uribe in the Department of Meta – Colombia

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## Abstract

In recent years the development of the tourism sector is quite important in rural post-conflict areas in Colombia, with the community being a key player that participates in the tourism activities that take place in the territories. Therefore, the need to characterize and plan tourism development is identified, in order to support local development. The method that applies consists of three phases, the first corresponds to the identification and search of secondary information, the second to the selection and implementation of instruments for the collection of information, and the last is the analytic hierarchy process method (AHP).

The criteria with the highest assessment are sociocultural (32%), economic (22%) and ecological (21%), in which the most representative variables are social empowerment, local identity, financial capacity of the demand, offer price level, biophysical conditions and natural resource supply. Likewise, the AHP method indicates the following assessment in each municipality; Mesetas 2,37, Lejanías 2,17 and La Uribe 2.0.

## Keywords

Tourism Development; Characterization; Municipalities of Meta; Post-Conflict.

## 1. Introduction

The tourism sector is defined as a powerful force for change in the economy, in which community participation is an important factor in the planning, management and impact of tourism in the territories (Ortiz et al. 2019), as it improves the employment, infrastructure and increases the income of the population that participates in the development of tourism activities and that generally belong to communities that comprise the territories (Gurría 2020) (Sánchez and Sánchez 2018). According to the above during the last decades, the tourism sector contributes significantly to world GDP due to its rapid growth and development, which is evidenced by the rise in international tourist arrivals worldwide, showing a growth of 5% in the year 2018; therefore, the tourism is recognized as an engine of growth and economic development worldwide (Pololikashvili 2019).

However, this favorable behavior changed worldwide in the tourism sector because of the impact of the pandemic(covid-19). That means, tourism is one of the most affected sectors as international tourist arrivals have

declined due to economic uncertainty and travel restrictions. Therefore, it is identified that the reduction of tourism is mainly related to urban destinations focused on foreign tourism, which is why rural destinations create an interesting alternative for national tourists to enjoy and get to know the natural, gastronomic and local attractions of these areas (Vaishar and Štastná 2022).

Likewise, it is important to indicate the strong relationship that rural areas have with the development of nature tourism (ecotourism - adventure), being essential the conditions and infrastructure of rural territories to carry out and consolidate this type of tourism, which is of great value for the sustainable development of rural populations. That is, the strengthening and conservation of rural areas are only possible through tourism based on the sustainable development of the territories (He et al. 2021), and also this type of tourism has the ability to preserve traditional culture and ethno-cultural heritage from rural territories (Sroda-Murawska et al 2021).

The tourism sector in Colombia is in an incipient phase of development, however, in the last decade the growth has been significant, since the number of foreign travelers has increased in recent years before the pandemic (Zuñiga 2015). Despite this growth, the results remain low compared to other countries that have similar conditions, one of the main reasons is the image that Colombia has abroad (Zuñiga 2015), because of complex situations that have lasted over time, for instance, drug trafficking, and the consequences of the internal armed conflict in which greater poverty was generated, displacement, dispossession of productive assets and violence that makes the situation of those rural territories that have been victims of this conflict more complex (Sánchez 2018). In search of a reconciliation with the conflict, Colombia signed the peace agreement in 2016, which seeks to improve the safety levels, accessibility and international image, being factors of change that favors economic growth derived from the tourism sector (MINCIT 2018), as it generates new doors for the social and productive development of these rural territories that have been seriously affected by the war. In accordance with the above, the signing of the Peace Agreement has had a positive influence on the rise of international arrivals with an increase of 27%, resulting from the improvement of safety components, international promotion and training initiatives of actors that provide tourism services; which is why tourism focuses on a social, cultural and environmental element that overcomes economic constraints, and aims to reduce inequalities and differences (Sánchez 2018).

According to the above, the need to encourage and plan tourism development in Colombian territories is identified, it is for this reason that the Ministry of Commerce, Industry and Tourism (MINCIT) has developed and updated a series of policies aimed at cultural tourism and ecotourism, so that local development is strengthened, along with sustainable productive chains that contribute to the competitiveness and identity of the regions (MINCIT 2018). Another factor that stands out is the limited number of research and/or studies carried out around the development of Tourism, being this the strategic sector for the recovery, and economic, environmental, and social development of the Colombian territory (Zuñiga 2015).

The research interest is focused on the department of Meta, which is located in the central east region of the country and represents 7.5% of the national territory. Likewise, it has a strategic geographical position and it is characterized by having a great water wealth (tributary numbers), and by having one of the most known natural parks in the country, Serranía de la Macarena, and it is one of the departments with stronger presence of natural and animal reserve areas. However, it is one of the departments affected by the internal armed conflict, since the territory experienced serious consequences such as displacement, homicides, forced disappearance, threats, kidnappings and other events (Governorship 2016).

Subsequently, with the signing of the Peace Agreement, the territories of the department of Meta became post-conflict areas which have the purpose of supporting the process of reintegration of demobilized people in which they acquire civil status and achieve sustainable employment and economic income (Cuellar et al 2020) (Governorship 2016). For such reason, economic activities that take place in rural areas are strengthened when projecting livelihoods that must be managed in these regions. In accordance with the above, the public policy of the department of Meta recognizes that tourism is one of the most anticipated economic activities and establishes the importance of applying sustainable development to all types of tourism that are carried out in different territories and that contribute to the consolidation of peace and coexistence in the regions (Departmental Assembly of Meta, 2020). From the 29 municipalities in which the department of Meta is divided, the municipalities of Mesetas, Lejanías, and Uribe are selected.

These municipalities, which are post-conflict scenarios, have a legal framework that defines specific lines of action in those tourist spaces that have been affected by the armed conflict (Boyd et al. 2021). Therefore, there are programs

such as “Tourism, Peace and Coexistence,” which integrates the regions that have been victims of the armed conflict in the national tourism market, another initiative entitled “Pilot Regions of Tourism and Peace” that are defined as tourism producers of nature and that link tourism and peace, through entrepreneurship in sustainable tourism that contributes to improving coexistence among communities. Therefore, 8 pilot regions have been articulated, comprising more than 42 municipalities, in which La Serranía de la Macarena is located in Meta (Sánchez 2018).

According to the foregoing, the need to generate knowledge that allows characterizing the development of tourism in the study municipalities is identified, in such a way that qualities, requirements and possible expectations are identified in order to reinforce or propose relevant action plans in the region.

## 2. Methods

Figure 1 shows the research development stages. In Phase I, the search for information related to tourism development of the study municipalities is carried out. At this stage it is identified that most of the information is found in government reports and laws regulating the tourism sector of the Department of Meta; but there are very few studies and/or research that have been carried out in the territories of interest. Then in Phase II, the techniques and instruments for collecting information are selected, in which direct observation (in situ) is used without stakeholder participation, to fill out the characterization sheets of the main attractions of natural and cultural tourism resources, where the guide for the preparation of the tourist inventory of the Ministry of Commerce, Industry and Tourism ( MINCIT, 2010) was taken into account, surveys were also applied to the actors that were linked to the development of the study and that correspond to farm administrators, hotels, restaurants, and attractions. With the previous information and with the participation of experts, the tourist territorial valuation format for each municipality is developed.

Likewise, it is important to mention that the application of the instruments is due to non-uniform sampling, since it was not possible to have the same level of stakeholder participation in field trips. To finish Phase III corresponds to the processing of the information that was collected in the previous stage, and that consists of the review and digitalization of the information in previously determined tables and matrixes. Next, the analysis method called the Analytical Hierarchy Process (AHP) is applied. Below is the development of the characterization of the main touristic and/or cultural resources and a global analysis for each of the municipalities from AHP.

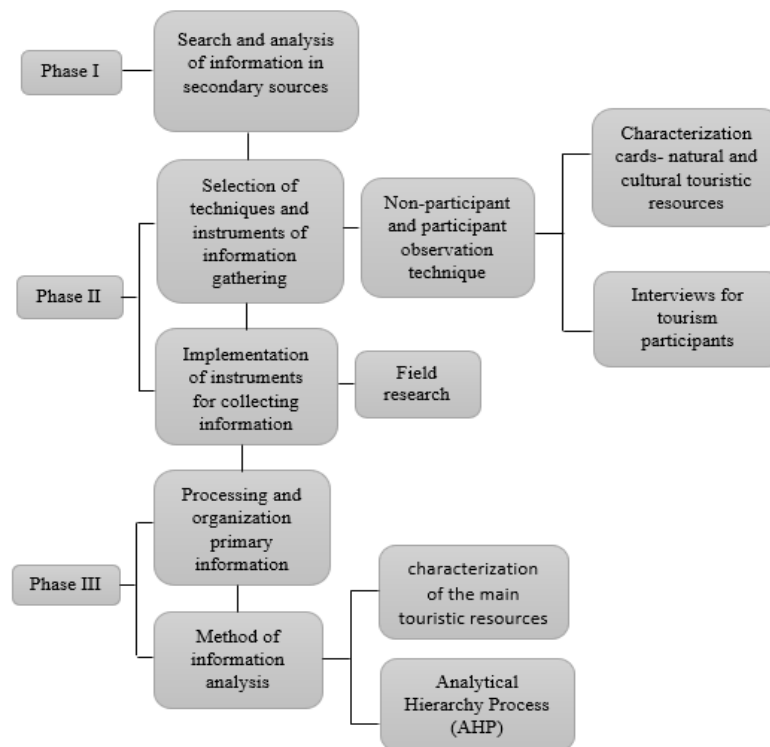


Figure 1. Stages of research development

## 2.1 Characterization of Touristic Resources

The characterization of the resources is carried out through a valuation matrix under weighting according to the type of tourist resource (natural and cultural). In the category of natural heritage, natural sites such as geographical areas, natural resources, and biodiversity are considered. Likewise, in the category of cultural heritage, immovable tangible heritage is considered; rural and archaeological group, festivities and/or events and groups of special interest with the presence of Indigenous communities. In the Table 1 lists the variables and weighting in the valuation of natural tourism resources.

Table 1. Variables and weights in the valuation of tourism natural resources

Code	Variables	Weights
VEC	Conservation Status	20%
VD	Diversity	20%
VS	Singularity	15%
VA	Accesibility	10%
VPV	Promoting Tourist Value	5%
VAS	Appropriation or Social Meaning	30%

Conservation Status: refers to the current state of the structure and ecological functioning of a natural area, natural resources, biodiversity and/or its components, considering the level of impact due to anthropic environmental impacts and tourism activity.

Diversity: is the variety of natural and/or cultural resources in a natural area.

Singularity: is the existence of unique attributes or level of rarity of an environmental component or conjunction in its spatial integration, with environmental interpretation value, which achieves its differentiation. The singularity is associated with components of landscape, flora, and fauna.

Accessibility: refers to the level of ease of mobility and access to an area and/or tourist site, determined by the spatial, temporal scale, type of terrain, state of roads and means of transport required.

Appropriation or social meaning: refers to the level of knowledge and social appropriation of a natural or cultural tourism resource through its tourist and/or recreational use. Its significance increases with its integration into the local, regional, and national tourism product and its tourist use by tourists from international and national destinations.

Tables 2-4 have established rating scales for the variables listed in the previous table.

Table 2. Quantitative assessment scale of the variables VEC, VD, VS, and VPV for natural and cultural tourism resources

Criterion	Very low (VL)	Low (B)	Medium (M)	High (H)	Very high VH
Level	1	2	3	4	5

Table 3. Quantitative assessment scale of the VA variable for natural and cultural tourism resources

Criterion	VL	B	M	H	VH
Level	1	2	3	4	5
VL	More than 30 km, more than 2 hours, road in a very deteriorated condition, passable road, navigable stretch and/or by foot.			H	More than 30 km, less than 2 hours, unblocked road in regular conditions.
B	More than de 30 km, more than 2 hours, road in a very deteriorated condition, passable road and/or by foot.			VH	Less than 10 km, less than 1hour, paved road in good conditions.
M	More than 30 km, less than 2 hours, unblocked road, passable road, and by foot.				

Table 4. Quantitative assessment scale of the VAS variable for natural and cultural tourism resources.

Criterion	VL	L	M	H	VH
Level	1	2	3	4	5
VL	Minimum recognition and tourist and/or social use by tourist and/or local inhabitant, without integration into local tourist product.			H	Recognition and tourist use by national tourist, with integration to regional and/or national tourism product.
B	Recognition and tourist use by tourist and/or local inhabitant, with weak integration into regional and/or local tourism product.			VH	Recognition and tourist use by international tourist, with integration to regional and/or national tourism product.
M	Recognition and tourist use by regional tourist, with integration to regional and/or local tourism product.				

Similarly, Table 5-7 shows the variables and weightings that are applied in the valuations of cultural tourism resources.

Table 5. Variables and weights of tourist cultural resources – immovable property.

Variables	Weights
Conservation status	15%
Establishment of property	15%
Representativeness	25%
Accessibility	10%
Promoting tourist value	5%
Appropriation or social meaning	30%

Table 6. Variables and weights of tourism cultural resources - festivities and events

Variables	Weights
Organization and content	30%
Sociocultural benefits	20%
Economic benefits	20%
Social appropriation or Meaning	30%

Table 7. Variables and weights of tourism cultural resources - Special interest groups

Variables	Weights
Conservation of culture, identity, and ways of living	70%
Social appropriation or Meaning	30%

## 2.2 Analytical Hierarchy Process AHP

The development of tourism in municipalities is determined by several qualitative aspects that are complex to assess, and also the information that is available in secondary and primary sources is not sufficient, which is why the Analytical Hierarchy Process method is applied (Analytical Hierarchy Process - AHP) as it takes these conditions into account. In accordance with the above, it begins with the identification of the subsystems and variables that make up the tourist system of the territories, that is, each subsystem is defined by a group of criteria and/or variables, which are then weighted to quantitatively determine the condition of the subsystems (Saaty 1980). Subsequently, the consistency ratio (CR) of the paired matrixes is calculated, to evaluate the consistency in them. With regard to the foregoing, researchers and experts define the five subsystems that correspond to the ecological, physical, sociocultural,

economic and tourism along with the variables and/or criteria of each of the subsystems (see Figure 2). Here below, the complete application of the AHP method to the ecological subsystem is presented, being the same dynamic for others.

The matrix of paired comparisons of criteria and/or variables of each subsystem is made by assigning the assessment judgment according to the level of relative importance of one criterion over the other. For the development of these matrixes the Saaty scale is applied see Table 8.

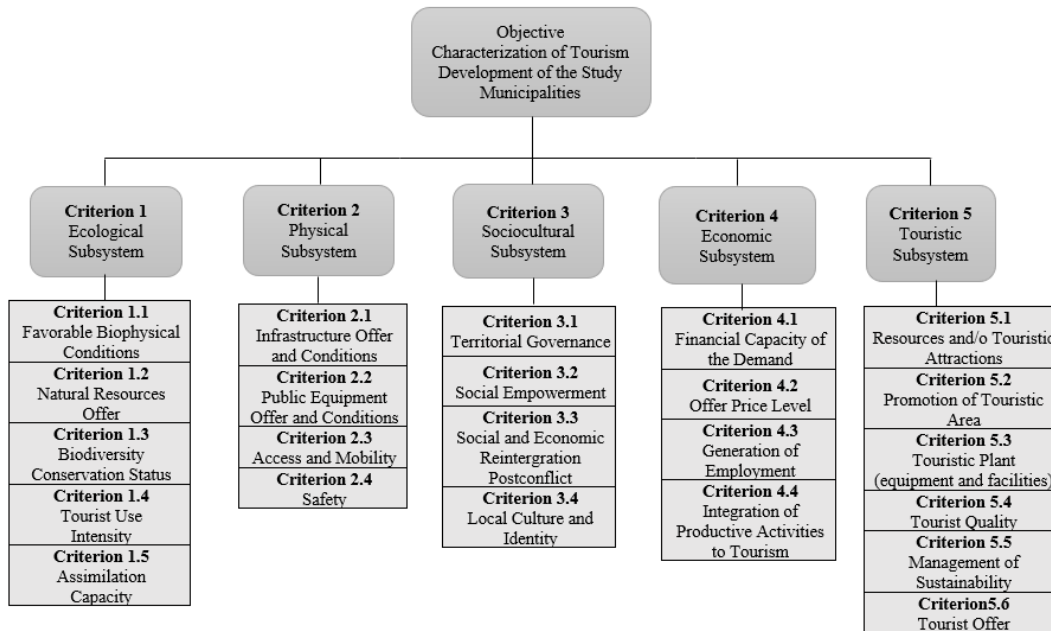


Figure 2. Subsystems - criteria and/or variables for the characterization of tourism development.

Table 8. Saaty Scale

Numerical scale	Verbal scale	Explanation
1	Both criteria or elements are equally important.	The two criteria also contribute to the objective.
3	Weak or moderate importance of one over the other.	Moderately more important one criterion than the other.
5	Essential or strong importance of one criterion over the other.	Strongly more important one criterion than in another.
7	Proven importance of one criterion over another.	The importance of one criterion is much stronger than that of the other.
9	Absolute importance of one criterion over another.	Extreme importance of one criterion over the other.
2,4,6,8	Intermediate importance between two opinions.	
The allocation of an opinion as a whole number represents greater importance to the criteria of the row. The assignment of an opinion as a rational number means greater importance to the criterion of the column.		

Source: Retrieved from (Moreno)

Table 9 shows the matrix of paired comparisons of criteria and/or variables of the ecological subsystem:

Table 9. Matrix paired comparisons of criteria or variables of the ecological subsystem

Criteria	Criterion 1.1	Criterion 1.2	Criterion 1.3	Criterion 1.4	Criterion 1.5
Criterion 1.1	1,00	2,00	3,00	3,00	2,00
Criterion 1.2	0,50	1,00	1,00	0,33	5,00
Criterion 1.3	0,33	1,00	1,00	0,33	3,00
Criterion 1.4	0,33	0,33	3,00	1,00	0,33
Criterion 1.5	0,50	0,20	0,33	3,00	1,00

Criterion 1: Ecological Subsystem				
FBC	NRO	BCS	TUI	EDC
Criterion 1.1	Criterion 1.2	Criterion 1.3	Criterion 1.4	Criterion 1.5

FBC: Favorable biophysical conditions - NRO: Natural resources offer - BCS: Biodiversity conservation status - TUI: Tourist use intensity  
EDC: Environmental Decontamination Capacity

Continuing the normalized matrix is calculated from the vertical sum of the values of each column of the previous matrix and each value of this matrix is divided by the value of the total sum of its respective column (see Table 10).

Table 10. Standardized matrix of criteria or variables of the ecological subsystem

Criterion	Criterion 1.1	Criterion 1.2	Criterion 1.3	Criterion 1.4	Criterion 1.5
Criterion 1.1	0,38	0,44	0,36	0,39	0,18
Criterion 1.2	0,19	0,22	0,12	0,04	0,44
Criterion 1.3	0,13	0,22	0,12	0,04	0,26
Criterion 1.4	0,13	0,07	0,36	0,13	0,03
Criterion 1.5	0,19	0,04	0,04	0,39	0,09

The sum of each of the rows of the normalized matrix is carried out, to estimate the degree of participation which calculates the priority vector, that estimates the level of relative importance of each criterion and/or variables that make up the subsystem (see Table 11).

Table 11. Vector of the standardized matrix of criteria or variables of the ecological subsystem

Criterion	Cr. 1.1	Cr. 1.2	Cr. 1.3	Cr. 1.4	Cr. 1.5	Su m	Priority Vector
Cr. 1.1	0,38	0,44	0,36	0,39	0,18	<b>1,74</b>	<b>0,35</b>
Cr. 1.2	0,19	0,22	0,12	0,04	0,44	<b>1,01</b>	<b>0,20</b>

Cr. 1.3	0,13	0,22	0,12	0,04	0,26	<b>0,7 7</b>	<b>0,15</b>
Cr. 1.4	0,13	0,07	0,36	0,13	0,03	<b>0,7 2</b>	<b>0,14</b>
Cr. 1.5	0,19	0,04	0,04	0,39	0,09	<b>0,7 5</b>	<b>0,15</b>
Cr. Criterion						<b>5,0 0</b>	<b>1,00</b>

Finally, the validation of the priorities of the ecological subsystem criteria is developed, by calculating the consistency ratio (RC) that is related in ec. (1), which measures the dispersion of the assessment judgments of the group of experts in the matrix of initial paired comparisons.

$$RC = \frac{IC}{IA} \quad (1)$$

*RC: consistency ratio - IC: consistency index - IA: random consistency index*

Where *IC* is determined by ec. (2) :

$$IC = \frac{\lambda_{max} - n}{n-1} \quad (2)$$

$\lambda_{max}$ : is the maximum eigenvalue of the initial paired matrix - *n*: is the value of the matrix size

$$IC = \frac{\lambda_{max} - n}{n-1} = \frac{5,22 - 5}{5-1} = 0,054$$

The *IA* is determined by the value of the matrix size (number of elements) that is listed in Table 12.

Table 12 Random Consistency Index (RCI)

n	1	2	3	4	5	6	7	8	9	10
IA	0	0	0,58	0,89	1,11	1,24	1,32	1,4	1,45	1,49

According to the above with a size *n* = 5 the *IA* corresponds to 1,11. Giving an *RC* value of:

$$RC = \frac{IC}{IA} = \frac{0,054}{1,11} = 0,049$$

*RC* values that exceed 0,10 indicate that the opinions are inconsistent, that is why it can be said that the *RC* (0,049) of the ecological subsystem has a reasonable level of consistency in the paired comparisons.

In Figure 3, the Weighting Scheme of the Subsystems and variables of complete analysis of the study system is presented.



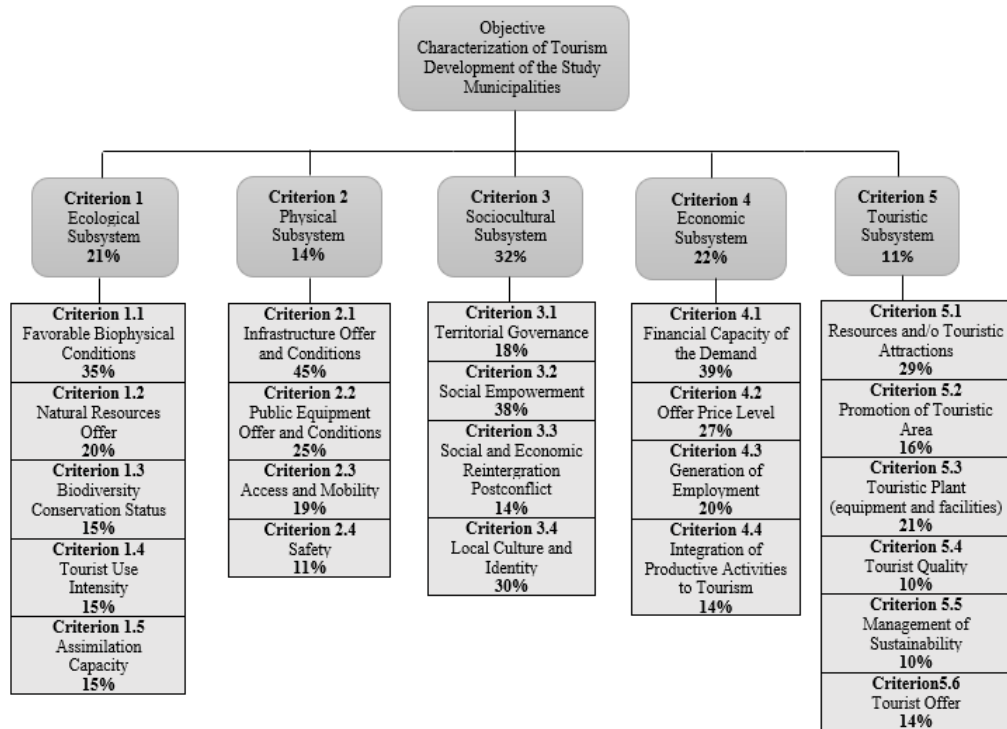
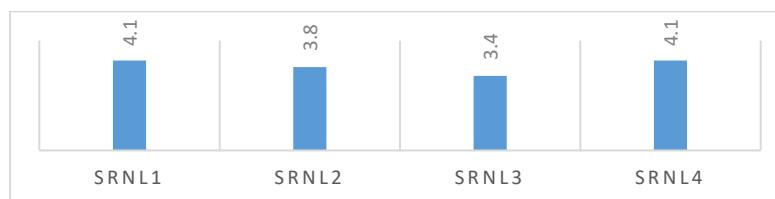


Figure 3. Weights of the subsystems - criteria or variables for the characterization of tourism development

### 3. Results and Discussions

It is identified that the use of natural and cultural tourism resources of the study area has a high level of conservation, diversity and uniqueness in ecosystems, biodiversity and landscapes characteristic of the lowland [llanero] piedmont and Serranía de la Macarena. Likewise, a high value is recognized in the social appropriation of cultural tourism resources associated with the identity and way of living of the llanero peasant. On the other hand, it is recognized that the structuring of the local and regional tourism product of the territories is low mainly due to the absence of planning and organization of the units that provide some type of tourist service, which in turn adds to the lack of integration and cooperation between the actors and the deficient tourist plant of the territories.

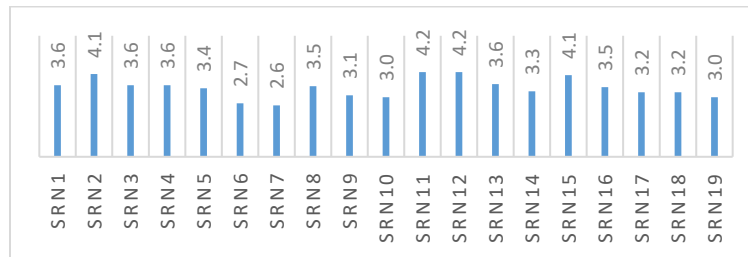
The municipality of Lejanías is characterized by its landscape of rivers and mountains, which make up tourist attractions that are valued in Graph 1, which highlights Cañón del Güejar [canyon] with practices such as rafting and the natural pools of Río Güejar [river]. Likewise, it presents an archaeological zone of eight sites, highlighting La Piedra Gorda [a large stone] with its mysterious petroglyphs in stone, el Puente de la Reconciliación [natural bridge], and El Cable. The Fruit Festival from lowlands [Llano] and the coffee annually attracts a significant flow of tourists to the region.



Graph 1. Main tourist natural resources of the Municipality Lejanías

SRNL1: Cañón Güejar [canyon] SRNL2: Cañón Lajon [canyon] SRNL3: Quebrada Cristalina [gorge] SRNL4: Piscinas Río Güejar [river].

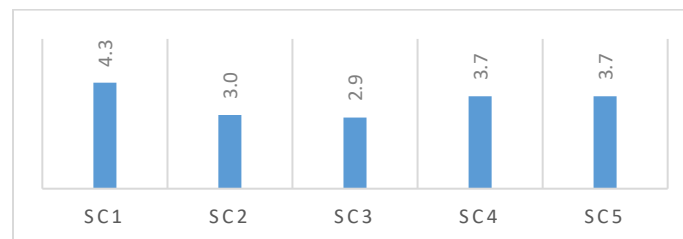
The municipality of Mesetas is positioned as a destination of waterfalls, it has as priority tourist attractions, according to its rating: Cascadas Telares de Cristal and Sanep [waterfall], as representative of the 20 waterfalls that the municipality holds, el Cañón del Güejar [canyon] and Piscinas de La Lucía [stream]; likewise, el Cerro del Indio Acostado [hill] which recreates the landscape of access to the area and its two natural bridges (see Graph 2).



Graph 2. Main tourist natural resources of the Municipality Mesetas

- |  |   |   |
|--|---|---|
| SRN1: El Cerro del Indio Acostado [hill] | SRN8: Cascada el Gobernador [waterfall] | SRN15: Piscinas Lucía [stream]                      |
| SRN2: Cañón del Güejar [canyon]          | SRN9: Chiflón de Peñas [waterfall]      | SRN16: Piscina Limón [stream]                       |
| SRN3: Cascada el Arenal [waterfall]      | SRN10: Salto Santodomingo [waterfall]   | SRN17: Charco el Cafre [pond]                       |
| SRN4: Salto Aventura [waterfall]         | SRN11: Cascadas Telares de Cristal      | SRN18: Puente Natural la Cabaña [natural bridge]    |
| SRN5: Cascadas Caracas [waterfall]       | SRN12: Cascada Sanep [waterfall]        | SRN19: Puente Natural la Esperanza [natural bridge] |
| SRN6: Salto Tres Chorros [waterfall]     | SRN13: Piscinas Moyas [stream]          |   |
| SRN7: Cascada Caño Negro [waterfall]     | SRN14: Piscinas Esperanza [stream]      |   |

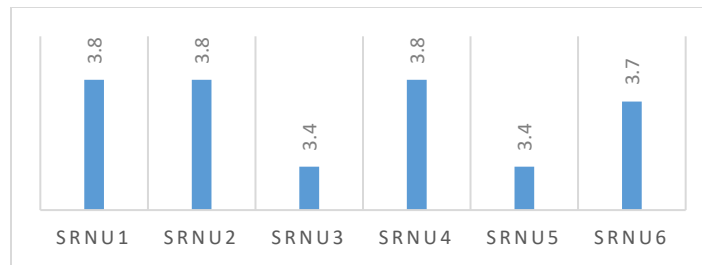
Regarding cultural tourism resources presented in Graph 3, the Serranía de La Macarena National Natural Park, a historical heritage of humanity that has positioned the Department of Meta at an international level, as a nature tourism destination stands out as cultural heritage and as a Nature tourism destination and a valuable conservation site with tourist use for Caño Cristales. This group of tourist resources includes archaeological sites (2), festivals and events (2) and the reception of the Special Groups of Interest known as Resguardo Indígena Ondas del Cafre [indigenous reserve].



Graph 3. Main tourist cultural resources of the Municipality Mesetas

- |  |  |  |
|--|--|--|
| SC1: Parque Nacional Natural Serranía La Macarena [National Natural Park-mountain range] | SC2: Petroglifos Piedra Encantada [petroglyphs]                  | SC3: Petroglifos Las Moyas [petroglyphs] |
| SC4: Festival Folclórico y Turístico [Folklore and Tourist Festival]                     | SC5: Resguardo Indígena Ondas del Cafre [indigenous reservation] |  |

The municipality La Uribe presents as priority tourism resources La Cascada del Amor [waterfall], Quebrada Santa Rita [gorge] and La Laguna del Oso [lake]. Likewise, tourism use potential is identified in the area of influence of Río Duda [river] and Río Guape [river] (see Graph 4). Cultural tourism resources are generated at local cultural and artistic festivals.



Graph 4. Main tourist natural resources of the Municipality of Uribe

SRNU1: Laguna Oso [lake]  
SRNU2: Cascada Amor [waterfall]

SRNU3: Quebrada Riachón [gorge]  
SRNU4: Quebrada Santa Rita [gorge]

SRNU5: Río Duda [river]  
SRNU6: Río Guape [river]

Similarly, the results of the tourism development analysis are presented in Table 14, in which the weights of the subsystems and of the variables (criteria) are related, and the qualifications of the variables are also observed, on a scale of 1 to 3; in which 1 is the low value and 3, the high value. This information is presented by each municipality.

The subsystems that have a higher valuation are the sociocultural (32%), and with a slight difference, the economic (22%) and ecological (21%) ones; being approaches of great importance in a development in which the quality of life of the population prevails over economic interests. Therefore, a brief description of each of the subsystems is presented.

### Ecological subsystem

The municipalities of Mesetas and La Uribe are established in the transition area of the mountain physiographic region of the department of Meta, in the piedmont or transition area among the mountain range, the plain, and the Serranía de la Macarena; while the municipality of Lejanías is located in the southern zone, between the moors and slopes of the eastern mountain range to the warm plains and plains of Ariari and Guaviare rivers. The municipalities of Lejanías, Mesetas and La Uribe are part of the twenty-six (26) municipalities with a tourist vocation in the department of Meta, under the following zoning:

- Ariari subregion: Municipality of Lejanías, along with the municipalities of Granada, Fuente de Oro, El Castillo, Puerto Lleras, San Juan de Arama and San Marín.
- La Macarena subregion: Municipalities of Uribe and Mesetas, along with the municipalities of Vista Hermosa and La Macarena.

The favorable biophysical conditions for the tourism development of the study area are highlighted, identifying the location, geomorphology, the climate and diverse landscapes. Likewise, it is relevant to mention the Special Management Plans of La Macarena-AMEN and the Eastern Slope of the Eastern Cordillera that includes the Ariari-Guayabero basins, being determining factors in the environmental component of the municipalities of the study area, and establishing the guidelines for the conservation and sustainable management of natural resources and biodiversity. On the other hand, the capacity of assimilation or environmental decontamination of the territory, although it is high due to the state and offer of ecosystem services, is limited by the lack of basic sanitation.

### Physical and built subsystem

Access to the study area is facilitated by the good condition of the road, linear route on flat terrain and relatively short distance from Villavicencio to the municipalities of Mesetas, La Uribe and Lejanías, with limited mobility in the rural and natural zone due to the state of deterioration of the secondary and tertiary roads. In recent years there are indicators of improvement in road safety and the social order of the territories. It also identifies the need to increase the capacity of infrastructure in roads, communications and basic sanitation, as well as the provision of equipment corresponding to tourist facilities and the development of the private tourist center for the provision of support services for tourism experiences in the region. Finally, it is recognized that the main tourist attractions have promoting tourist value in the national market.

### Sociocultural subsystem

The territorial integration of the municipalities of Lejanías and San Juan de Arama through Río El Güejar [river] as a structuring element of tourism, as well as the social empowerment through the productive chain of community tourism is highlighted. Another factor that shows growth is the training and certification component in labor competency standards and operation of specialized services in adventure tourism pursuant to the Colombian sector technical standards (NTS AV 010. Rafting Activities), which increase the quality of the experience tourism from safety, sustainability and attention.

In the municipality of Mesetas, one of the three (3) Territorial Training and Reincorporation Spaces (ETCR) of the department of Meta is located, where productive empowerment of the ex-member population of the FARC-EP in the region, besides technical and commercial backing in the management of its productive agricultural and ecotourism units in the small village of Buenavista and area of influence of Mesetas are carried out. In accordance with the above, the tourist productive unit called Sanep Sasan, an ecotourism natural paradise of peace, is identified under the approach of adventure tourism and ecotourism, in which it is configured as a significant tourist experience, that is positioned in a specialized market segment at international level for its differentiated tourist offer, in which it adds valuable components in the historical, cultural and environmental development within the post-conflict framework.

### Tourism subsystem

The tourist offer of the study area is spatially concentrated in the area of influence of the biophysical elements of the main ecological structure, associated with the Natural National Park Sierra de la Macarena, Río Güejar [river] and its main tributaries, Cañón Lajon [canyon] and La Cristalina in Lejanías, Río Ariari, and its tributary, Río Guape [river] in Uribe, Río Duda [river], and mountain range, lowland, mountain ridge, and canyon.

The biophysical elements of the ecological structure of the area have facilitated the development of nature tourism specialized in adventure tourism with the practice of rafting and rope activities (cannons, torrentism and rappelling), bird watching, hiking and environmental education, among others. Likewise, a tourist offer has been consolidated based on the contemplation of the landscape of piedmont and lowland, typical local cuisine and purchase of local fruits within the framework of the road axes of Villavicencio-Mesetas-La Uribe and Villavicencio-San Juan de Arama-Lejanías.

The Administrative and Special Planning Region (RAPE) of the central region and the Governorship of Meta through the Regional Bicycle Tourism Project / BICIREGION has structured the Route of Integration for Peace as a strategy to generate a socio-economic development based on tourism cycling and hiking in post-conflict territories through community tourism. In this regard, the municipalities of Mesetas and Lejanías participate in the tourist route: water paths, torrents of peace, in the area of influence of the piedmont and lowland, and Sierra La Macarena [mountain range]; this route is set as a 60 km bike crossing in a natural area with sightseeing attractions such as Cascada de Azufre [waterfall], Río Güejar [river], and the petroglyphs of Piedra Gorda, Miravalles, and Río Ariari [river].

According to the results of the tourism development analysis (see Table 14), it is identified that the sociocultural and ecological subsystems have the highest scores, in accordance with the variable scores in the municipalities, that is, the weighted average score corresponding to 2.39 and 2.30 respectively. Therefore, changes in the dynamics of the territories can be noticed, since the economic subsystem is located in the third position of the aforementioned score (2.14). Also, the physical subsystem has the lowest score with a value of 1.56, being necessary to improve the tourist infrastructure, which is related to access, mobility, safety, and equipment in public spaces, among others.

Table 14. Analysis of tourism development in the municipalities

System	Weights	Variables and/or Criteria	Weights	Municipality		
				Lejanías	Mesetas	La Uribe
Ecological Subsystem	21%	Favorable Biophysical Conditions	35%	3	3	2
		Natural Resources Offer	20%	3	3	3
		Biodiversity Conservation Status	15%	3	3	3
		Tourist Use Intensity	15%	1	1	1
		Assimilation Capacity	15%	1	1	1

		<b>Subtotal</b>	<b>100%</b>	<b>2.41</b>	<b>2.41</b>	<b>2.06</b>
Physical and built Subsystem	14%	Infrastructure Offer and Conditions	45%	1	1	1
		Public Equipment Offer and Conditions	25%	1	2	1
		Access and Mobility	19%	3	2	2
		Safety	11%	3	3	3
		<b>Subtotal</b>	<b>100%</b>	<b>1.60</b>	<b>1.66</b>	<b>1.42</b>
Sociocultural Subsystem	32%	Territorial Governance	18%	2	2	2
		Social Empowerment	38%	3	3	3
		Social and Economic Reintegration Post-conflict	14%	1	2	1
		Local Culture and Identity	30%	2	3	2
		<b>Subtotal</b>	<b>100%</b>	<b>2.24</b>	<b>2.68</b>	<b>2.24</b>
Economic Subsystem	22%	Financial Capacity of the Demand	39%	2	2	2
		Offer Price Level	27%	3	3	2
		Generation of Employment	20%	2	2	2
		Integration of Productive Activities to Tourism	14%	2	2	1
		<b>Subtotal</b>	<b>100%</b>	<b>2.27</b>	<b>2.27</b>	<b>1.86</b>
Touristy Subsystem	11%	Resources and/o Touristic Attractions	29%	3	3	3
		Promotion of Touristic Area	16%	1	2	1
		Touristic Plant (equipment and facilities)	21%	1	2	1
		Tourist Quality	10%	3	3	3
		Management of Sustainability	10%	2	2	2
		Tourist Offer	14%	2	3	2
		<b>Subtotal</b>	<b>100%</b>	<b>2.01</b>	<b>2.53</b>	<b>2.01</b>
<b>Total</b>				<b>2.17</b>	<b>2.37</b>	<b>2.0</b>

Likewise, five subsystems which allow the characterization of tourism development in the municipalities of interest are determined. Therefore, sociocultural (32%), economic (22%) and ecological (21%) subsystems have the highest valuation or weighting; the latter two criteria being very similar, in which the development of economic activities does not ignore this factor of importance because of the negative effects on the quality of life of the populations living in the territories. Finally, it is identified that the total valuation of tourism development in the municipalities has scores higher than 2 (the valuation scale ranges from 1 to 3; being 2 an average score), with Mesetas being the highest rated with a value of 2.37; followed by Lejanías with 2.17; and La Uribe with 2.0.

#### 4. Conclusions

The municipalities of the study area, with 'first generation' territorial planning schemes in the projection of sustainable development recognize the need to incorporate new instruments that support the planning and management of sustainability approaches (environmental, social, economic, institutional, etc.) in the territories.

One of the weaknesses of tourism development in the study area is the poor connectivity, especially with ground transportation, that affects the arrival of tourists to the natural attractions of the region. For this reason, it is essential to activate the expansion of new roads and improve the conditions of the current ones; and also to continue working on strategies that allow to diminish the concern about safety, which is still a key component for the sustainable development of tourism.

The tourist offer of the study area is properly supported by a set of natural tourist resources that require its enhancement in the components of conditioning tourist support facilities (trails, viewpoints, stop stations, sanitary units), access assurance, tourist and environmental signage, and touristic guidance, which increases the quality of the tourist travel experience.

The emerging tourism development in the study area requires the implementation of management measures, mainly in the control of vehicular and pedestrian loading capacity in tourist areas and paths with greater flow; and awareness of the use of sustainable tourism practices.

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