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REVISIÓN

# Stories, Living Experiences, And Generational Meanings In The Use Of Ecosystem Resources: San Juanito, Meta Colombia

Historias, vivencias y significados generacionales en el uso de los recursos ecosistémicos; San Juanito Meta, Colombia

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# Abstract

**Objective:** generational changes through stories, experiences and meanings.

**Methodology:** Through a mixed approach information is collected through semi-structured interviews and focus groups which were processed in the ATLAS ti 7 program, establishing relationships for the interpretation of results.

**Results:** It was determined that the new generations of the roads of San Luis el Plan and San Luis de Toledo have a high level of responsibility for the conservation of ecosystem resources, which leads to repetitive actions in the new offspring, all through schemes carried out by the Hermeneutic Unit and direct relations of the discourses of the inhabitants.

**Conclusions:** Observing and analyzing communities in contexts with endemic characteristics is

relevant, since understanding relationships with ecosystems makes it possible to appreciate the dynamics of exploitation of those; this promotes conceptualization by formulating inclusive conservation plans and projects. It follows that contrasting the evolution of cultural practices made it possible to establish that generational changes have been positive in the face of resource appropriation.

*Keywords:* Generational change, sustainable development, ecosystem resources.

### Resumen

**Objetivo:** los cambios generacionales a través de historias, vivencias y significados.

Metodología: A través de un enfoque mixto se

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recopilo información por medio de entrevistas semiestructuradas y grupos focales los cuales fueron procesados en el programa ATLAS ti 7, estableciendo relaciones para la interpretación de resultados.

**Resultados:** Se determinó que las nuevas generaciones de los caminos de San Luis el Plan y San Luis de Toledo tienen un alto nivel de responsabilidad hacia la conservación de los recursos del ecosistema, lo que lleva a acciones repetitivas en la nueva descendencia, todo ello a través de esquemas realizados por la Unidad Hermenéutica y relaciones directas de los discursos de los habitantes.

Conclusiones: Observar y analizar comunidades en

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### INTRODUCTION

The management of ecosystemic resources seen from the narratives of a flourishing generation at the beginning of the last century until now in two villages of the municipality of San Juanito in the department of Meta, located in the Chingaza páramo area; In this way, people's visions are accessed in relation to the appropriation and usage of the available resources carried out by the first settlers, and what the production and sustainability relations are today. Firstly, a general historical sketch was made, which allowed us to better understand the contextos con características endémicas es relevante, dado que la comprensión de las relaciones con los ecosistemas permite apreciar las dinámicas de explotación de aquellos; esto favorece la conceptualización al formular planes y proyectos de conservación inclusivos. De lo anterior se desprende que contrastar la evolución de las prácticas culturales permitió establecer que los cambios generacionales han sido positivos frente a la apropiación de los recursos.

*Palabras clave:* Cambio generacional, desarrollo sustentable, recursos ecosistémicos.

importance of the meanings of surviving in this area; then a qualitative analysis of the stories was made as a "way to explain and understand the subjective dimensions of social phenomena" (Sancho, 2014), of experiences, "phenomena and processes of a very different order, ranging from learning and didactics to issues related to behavior" (Guzmán & Saucedo, 2015) and meanings: "The meaning that a thing has for a person develops from the ways in which other people act towards the thing in question" (Blumer, 1969) as well as experiences seen from the analysis of Vygotsky (Vygotsky, 1996) "The experience constitutes the unity of the personality and the environment as it appears in development (...) the true dynamic unity of the conscience, a full unit that constitutes the base of the conscience is the experience". Thus, it was possible to capture reality from the individual gaze and rescue the living word of their stories. Additionally, the interviews were processed, work that resulted in a network of iconographic data for their interpretation and conclusion.

#### The intervention, history of the moors

The moors, as a territory of various uses, have been anthropically intervened for centuries; the survival of many peoples and their sacredness have been subjected to these landscapes, but despite this, the attention and study towards their cultural developments are recent (Rincón, 2015). The presence of populations in the "páramos" dates back to pre-Hispanic periods; dates back millennia, but the permanent characteristic has been the transitory nature of these settlements depending on their altitudinal gradients and their needs (Sarmiento, Osejo, Ungar, & Zapata, 2017).

Human settlements and the use of the paramun territories occurred in different ways according to the region and in some cases the exploitations were on a larger scale than in others. The marked difference between the conception of land use in the highlands was observed geographically distributed as follows: towards the north, Colombia and Venezuela; to the center, Ecuador and Peru, a region where economic exploitation and dependency was greater than in the other Andean moors (Hofstede, 2013, p. 154).

The different types of technification of soils and intensive exploitation of crops and roads for transit through the páramos are concentrated in the Inca empire (northern Peru and Ecuador), thus allowing a displacement of the agricultural frontier towards the highlands and generating disturbances due to the great exploitation of these areas (game, firewood, water, minerals) (Gallini, de la Rosa, & Abello, 2017). In other areas, grazing and exploitation of large mammals also occurred.

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Thus, the intervention on a larger scale and with a high recurrence of impacts occurs in the center of the Andes, due to an accelerated settlement of the Inca empire, with a high degree of agricultural and livestock technology (camelids) that allowed them to carry out exploitations in higher elevational gradients. Due to its characteristics as an empire, it displaced cultures and changed forms of relationship of some peoples with the land, generating other impacts when settling in moorland or related territories, increasing population densities resulting in greater use of resources with other exploitation techniques.

Various studies show that in the North Andean regions the use of the moors was less invasive, and more sacred; That is, the prevailing cultures carried out exploitations, but these areas were considered sacred especially for the execution of rites and worship of gods, giving rise later to the myth of El Dorado, especially in the bodies of water that were determined as genesis by their location of life and contact with the divine. The constant presence of man in the Inca imperial developments contributed considerably to the degradation of high mountain ecosystems, because despite their relative duration they supported high consumption.

At the time of the Spanish Conquest, the conquistadores carried out a direct exploitation on the Andes and, when the flat lands were insufficient for the requirements of the Conquest and later Colony in these areas, sheep, horses, cattle and camelids were introduced (which were almost extinct due to the exaggerated Spanish hunting). The intensive use of the forest resource was carried out at altitudes flush within the páramo, the agricultural frontier, in order to meet the demand for said resources in mining operations, constructions, and heat sources, usage that was contrary to that made by the living beings of these lands, thus increasing the impact on this landscape (Rivera Ospina, 2017). For this reason, in the period of the Conquest and Spanish Colony, the Andean moors suffered severe degradation both due to the overexploitation and introduction of new species, and later in the domination of different cultures since, in addition to human exploitation, they were displaced tolocated reservations. some in high areas, accentuating the environmental deterioration in those territories.

It was until the Republic when the intensive use of the Andean highlands decreased, when

world economic conditions shifted and the forms of land exploitation changed significantly in that land tenure was a decisive factor in the new forms of exploitation (Verjel, Navarro, & Barrera, 2015). This occurs because the economy is focused on mining and agricultural exploitation, gold, tobacco and sugar cane, these being produced in lowlands. However, the political instability of the Republic generates an increase in the appropriation of land by the nascent leadership, which displaces the ethnic minorities towards the highlands.

Even presenting a decrease in the impacts generated by the Spanish intervention, the distribution of the territories by reservations and agricultural exploitations persist in these regions, both subsistence and larger scale, with the central region being more intervened; Countries like Ecuador, Bolivia and Peru have the largest human settlements in these areas and their economic performance still depends on the highlands.

Thus, qualifying the moorland areas as pristine is misleading since their intervention is not very old. In the case of the Páramo de Chingaza, the same process occurred and its colonization dates back to the dawn of the 20th century when the founders settled in a small populated center from where the appropriation of the territory began, mostly in smallholdings and some large properties.

Anthropic actions determine relationships with ecosystems and their durability; In moorland systems, which due to their characteristics have an incalculable value for human survival, it is necessary to analyze the role of the populations settled in them and establish what their role has been in the conservation or detriment of those. The case of the Chingaza páramo, in the municipality of San Juanito, presents singularities that allow an approach towards community interaction processes that can become strengths for sustainability and conservation processes. A historical evolution is presented to locate the context where the different types of relationships with the territory have been developing, ranging from the symbolic to the instrumental, to later permeate the stories, meanings and experiences throughout the community that stays in highlands.

The two descriptors are addressed to construct meaning in a clearer way; since those, because they are mental constructs —therefore, emotional, singular and subjective—, are configured in a narration of the lived events expressing the acquired and shared experience, becoming a generator of relationships, and the others act accordingly to the meaning each individual percieves.

Having said that, experiences and meanings will be observed due to the inherent relationship:

The story of a narrator about his existence through time, trying to reconstitute the events he lived through and transmit the experience he acquired. Linear and individual narrative of the events that he considers significant, through which the relationships with the members of his group, his profession, his social class, his global society are delineated. (Veras, 2010, p. 148).

#### Stories, Experiences and Meanings

#### Stories

From the narrative, forms are constituted and woven that show events lived or argued by third parties that pass from one individual to another trying to explain, to understand, the different social phenomena that have occurred, the construction of the past constitutes a valuable tool in the construction of the present, especially when it comes to understanding the way in which the relationship with nature is understood and hence its importance of the proposal of "someone's life story corresponds to an intimate and subjective dimension" (Moriña, 2016).

The oral stories are strengthened not only in the preservation of the memory of family life; as it corresponds to the succession of behaviors, beliefs, dialects, food preparation, celebrations and values,

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but rather to a way of conceiving the world and the relationships that subjects weave with their environment.

In accordance with the above, these stories of recognition of events that have occurred that tell subjective experiences were established, in which direct relationships with the territory are appreciated; The stories are rich and abundant in expressions with constant emphasis on the appreciations of the interviewees.

The historical concept of permanence takes effect from the description of informants who have been present in this territory since its foundation, an element that gives them the character of "social groups that, due to their proximity in age, share the same historical experience" (Paolo, 1999, p. 6) as Mr. Juan García, a man born in the place,who highlights that the permanence of his family in the San Luis El Plan neighborhood is of about eighty years (equivalent to 3 generations), give or take:

I have been living here for 39 years, my father and my mother all my life, my grandmother was brought here to San Juanito for four years and then my mother was born, who is sixty-three years old, living here all her life on the same farm.

Similar is the case of Mr. Adonai Mora, inhabitant of the San Luis de Toledo village, who says "I have been living for 75 years ... my taitas (parents) were born, here I grew up and here will they bury me (his death)". Thus, he strengthens through experience, communicating it orally, the survival of the inhabitants of this area of the páramo.

During this time, the characters of the páramo have been building life stories that show the way in which the inhabitants of the area have adapted to the different situations of the environment, including those that imply the deprivation of basic services such as health units in the institutions of education: "when I was in school there was no toilet at school, the children ran to the mountains, there were no toilets or wells, that's how it was at first"(Adonai Mora).

Similar actions are reflected in the burning of forages and the forest located at these altitudes, since

it was a custom on the part of those who traveled through these areas "even when muleteers arrived with their mules to the moor, it was the same, the first thing when arriving at the Morro (high part of the mountain) was to set fire to the moor" (Juan García), which can be related to the data of the report issued by IDEAM (IDEAM, 1990) where it indicates that forest fires associated with the needs of expansion and deficiency in the environmental education of the population constituted one of the main effects on the moor.

They also refer to careless actions in the land involving plowing techniques "before corn was sown, but a very strong tillage was done, which caused the soil to degrade, erode, because it was done with oxen and hoes"(Juan García ) or livestock "first there was a lot of livestock, but now there is no more, now there is agriculture, the vocation of San Juanito has changed", recalls Mr. Adonay Mora. Currently the density of livestock is ten head of cattle on the farms inserted in protection zone (Castro-Garzón, 2019).

#### Experiences and meanings

Among the meanings shown by the residents of San Juanito one is learning to live with the environment, respect for ecosystem resources and the preservation of wildlife: "from twenty to fifteen years ago we started, we understood what we had to protect" (Bernarda Muñoz), to which Mr. Rodrigo Muñoz García adds "we are already aware that these hills should not be burned, since those fires do not naturally exist", which allows us to observe the change in cultural work that has occurred due to the generational replacement that could be linked to the growth of new forests .at the end of the 20th century 65% of the protected area was deforested, in 2016 this area was 8%, the afforestation processes have been successful" (Quijano Hoyos, 2018), the return of animals that were considered extinct and in fact the data from Natural National Parks: "the reconstitution of the páramo has been completely evident, in more than 40%, the increase the number of birds, mammals and reptiles has been 20% in the

last 30 years " (PNN, 2005).

This has allowed the inhabitants of the páramo to enjoy biodiversity and teach their children (the new generation) the importance of treasuring and preserving the soil, as Amanda Muñoz says "we have already acquired awareness ourselves, as it is a tradition where we teach our children that we must take care of the springs, the trees, because they are the balance of the town's ecosystem".

The approach to the subjects and their impressions indicate a position and meaning deeply rooted in the area; they are the feelings of the people present in the territory since they are represented through the expression of things in a way that does not imply actions, but rather makes sense in the preservation and transmission of care.

### METHODOLOGY

The study area is located in the northernmost municipality of the Meta department, in the Colombian Orinoquia; Due to its unique and high mountain characteristics, it becomes a strategic area for the nation (Law 2, 1959); Of the nine villages present in the municipality (SIG, 2017), those of San Luis de Toledo and San Luis El Plan were chosen since they represent the villages that contain the largest number of properties located in the páramo area and the largest extension immersed in said zone (SIG, 2017).

After the verification and field observation, open and personal interviews were carried out since they are a qualitative context instrument that allows contact with the members of the community in order to know the particular situation, or the problem from the perspective of the actors. as stated by Patton (Patton, 1980, p. 100) "the objective of the qualitative interview is to know the perspective and the frame of reference from which people organize their environment and guide their behavior", so that through these tools they established the perceptions with the different actors.

The tool was framed, as determined by Fals-Borda (Borda, 1985), in the Participatory Action

Research (PAR) method that implies the inclusion of the researcher in the study area, so that he can observe and compare the physical, social, cultural, moral, historical and political aspects of the object of study, its greatest feature being the commitment to the community in order to obtain solutions to the problem, raised by the actors - "agents of change (Balcazar, 2003, p. 61).

Adding to the above, the stages proposed by Fawcett, Seekins, Whang, Muiu, & Suárez-Balcázar (1982); Quiros, Suarez-Balcazar, Balcazar, Quiros & Chavez (1995); Fawcett, Seekins & Balcázar (1985) determine a process:

First, research: this refers to the active role that participants play in documenting the history of their experience or their community...

Second, education: participants learn to develop a critical awareness that allows them to identify the causes of their problems...

Third, action: participants implement practical solutions to their problems; each of them. For the purposes of this research and taking into account that the information gathering tool was the interview and the focus group, the stages of research and education were developed with the informants, since these show the descriptors of the research stories, experiences and meanings — also throwing perspectives on those.

To analyze and interpret the information collected, it was processed in the Atlas.ti software; Appropriate tool for the qualitative analysis of large bodies of textual, graphic and video data. It allows organizing the information obtained from the interviews and focus groups as it helps to regroup and manage the material by systematizing it (Varguillas, 2006). It also allows structuring the research responses from the correlation networks thrown by the system.

### RESULTS

The results are presented from the compilation, in the Hermeneutic Unit, of the interviews carried out; the Atlas.ti software produces a network of

relationships and a semantic cloud of the San Luis de Toledo and San Luis El Plan districts that are listed below. Schematization of the use of resources from the stories, experiences and meanings.

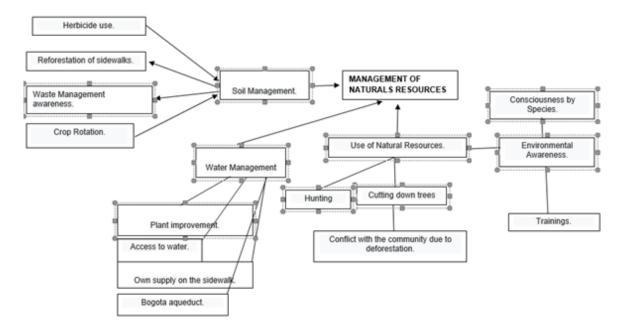


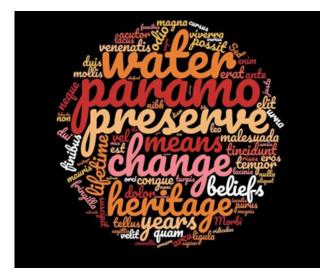
Figure 1. Schematization of the use of resources from the stories, experiences and meanings

Source: Prepared by the authors, taken from the focus group in San Juanito Meta, 2018.

The previous scheme allows observing the management of resources in the villages under study in order to carry out an analysis from three different areas: the first under the use of natural resources in which actions such as cutting down trees, hunting and deforestation directly related to issues of training, environmental awareness and awareness for the species that cohabit with the informants; This allows us to appreciate the way in which cultural activities generated or did not affect the resource; The passage of time was included since it is subject to the objectives of each moment and allowed to determine that, at present, the appropriations of natural resources in these villages have a focus on conservation allowing a collective vision of imaginary prosperity and improvement in their socio-ecosystems through a perspective of what is right or what should be. Secondly, there is the management of water with factors such as the improvement of the water treatment plant, access to it, own supply in the village directly related to the privileged geographical location of these villages; This is confirmed by Mrs. Teresa Gutiérrez: "we are in a place where there is a lot of water, also a lot of water comes down the slope or also by gravity". It ends with a conflict with the company Acueducto de Bogotá. Similarly, when dealing with soil management, factors such as the use of herbicides, reforestation of the sidewalk, awareness of waste management are specified: "then one has at least in the house, the waste of the kitchen goes to the animals, and human waste goes to the septic tank" as related by Mrs. Gutiérrez; It is also established that they practice crop rotation to rest the soil and replace it.

In accordance with the above, the determination of what is or is not appropriate to manage ecosystem services consists of the expression of certain practices, which refer to actions determined by the context of the exploitation of the territory; those are generated according to the individual-ecosystem relationship, thus determining its function; It is intended that the act of appropriation and use of resources is positive, in the present actions, although it has been negative in those carried out by the founders of the region.

As a result of the process of coding the focus group, a total of three subcategories were obtained, which were concentrated in 115 citations (brief narratives made by the interviewees) which constituted the universe of the research; the balance of repetitionsallowed observing the greater and lesser relevance of the interviewees as it is observed in the semantic cloud, where words such as conscience, preserve, protect, inheritance and change are presented as the highest metric for the informants; As a result, a change is shown in the form of appropriation and exploitation of ecosystem services in an intergenerational way in the villages of San Luis de Toledo and San Luis El Plan.



**Figure 2.** Nube semántica **Source:** Elaboración propia

# CONCLUSIONS

Observing and analyzing communities in contexts with endemic characteristics is relevant, since understanding the relationships with ecosystems allows us to appreciate the dynamics of exploitation; This favors conceptualization when formulating inclusive conservation plans and projects. From the foregoing, it follows that contrasting the evolution of cultural practices allowed to establish that generational changes have been positive in the face of the appropriation of resources.

However, these perceptions cannot be extended throughout the municipality since, in areas where agriculture is exploited intensively, the position towards the ecosystem is extractivist.

Although the relationship with the ecosystem has improved, the community is in conflict with the environmental authority as deforestation continues in some areas in order to obtain tutors for the planting of beans.

The vocation of exploitation of the territories has always been changing and has developed in favor of the best profitability with the purpose of becoming a large bean producer.

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