

*Social fairness for a community in poverty in the natural area of environmental protection in Brazil: the Chapada dos Veadeiros National Park*

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**Abstract**

This work is a case study that results from doctoral research, developed in the village of São Jorge, in the surroundings of Chapada dos Veadeiros National Park (PNVC) in Goiás. The population, consisting mainly of former miners, lives subjected to difficult survival situations for most. The intervention of the population could contribute to better living conditions, but this initiative is almost nonexistent. We investigated, through the perspective of critical environmental education, aspects of concepts and actions of subjects who favored greater community participation in the social context. Data collection was performed by suggested tools for qualitative research, and the analysis using the method of Content Analysis, through the technique of categorization. We concluded that the aspects in favor of greater participation are reduced, however, they can be extended to a larger number of people through the interaction with one another, which would favor the intervention in life situations surrounding the PNCV.

Keywords: environmental education, protected natural area, social inequalities.

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## **Introduction**

We started from the idea that is already known in many areas of society, the severity of environmental problems to which we are subjected and for which we are primarily responsible. Exacerbated consumption of raw materials and products, the disappearance of species, degradation of the environment and negligence such as those that resulted in the recent case of Mariana, MG, exemplify some of these problems.

The socioeconomic and political insecurity is plaguing a great part of the world. Corruption, threat to life, oppression and various other forms of violence lead thousands of people to migrate in search of other places for survival.

This is a scenario whose crisis is not limited to deterioration of biogeochemical systems of the planet, but that permeates relations with each other in the environment. A crisis of values of the society, in which resources and people have been subjected to an unsustainable model of civilization.

Considering this background, a question arises: what to say about environmental education in times like this? At least, it is worth stating that only information about the natural components of the space and the formation of environmentally friendly attitudes are insufficient and that, with so many current adverse issues, a critical training of people is necessary to face such things.

In this sense, the critical environmental education can be constituted as a process capable of providing subsidies to the challenges of contemporary life. Building the capacity to identify, discuss and act upon the conditions of difficult survival could be a solution. Thus, we consider it as a process of training for life.

The constitution of questioning, analytical and active behavior is one of the main purposes of this process, which aims the setting up of people trained to intervene in situations that concern them, especially those that are essential to the struggle for better living conditions, in which the inequalities are accentuated.

In this context, among the various locations in Brazil that contain socioeconomic disparities among people, and the struggle for better living conditions is scarce, we find the Vila de São Jorge, located near the Chapada dos Veadeiros National Park (PNCV) in the state of Goiás. Initially, the aim of our research was to analyze the proposals of environmental education in state parks. Nevertheless, when we found ourselves confronted with the situation of this town, whose population, in most cases, is subjected to situations that make it difficult to survive on location, we were led to go other ways.

The modification of the original plan led for a sudden moment to the thought of designing a "proposal for environmental education" for the subjects of this village. However, it was soon discarded, given the perception that such purpose was very pretentious, since only a "course" would not be enough to solve the community's problems. Thus we assumed that the very people of the village would be the main responsible for the changes. And these changes would take place by the more effective participation of the villagers in situations which lead to difficult living

conditions in São George. With this position, we proposed to analyze aspects in the views and actions of the subjects that would be favorable to their own greater participation.

Having said that, we outlined the theoretical assumptions with which we dialogued for the analysis.

### **Theoretical assumptions of the study**

In the field of environmental education, it is always worth reminding that there prevails a polysemy of different ways to think of it and practice it, ranging from the transmission of information about the components of space to the transformation of human relations. From this polysemy emerges the heterogeneity of intentions that lie in a non-neutrality sphere, with the materialization, whether conscious or not, of various ideological perspectives (SAUVÉ, 2005a, 2005b; CARVALHO, 2012; LOUREIRO, 2012).

In the discourse of environmental education there is a strong tendency to approaches regarding the natural characteristics of the area or the degradation by pollution. In many the emphasis on biological and physico-chemical characteristics of environmental degradation prevails, privileged at the expense of political, social and economic dimensions which characterize the environment space.

This conservative view expresses the belief that, transmitting information on the environment, we can alter people's "bad behavior". And the sum of individuals with behaviors changed would be the solution to the environmental issue, which is not true (GUIMARÃES 2011; LOUREIRO, 2012).

Leff (2010) considers that the concerns focused on the natural aspects contribute most to "greening" the thinking of society, reducing the interpretation of environmental issues to the description or conservation of natural systems. In this sense, Foladori (2001) points out that prospects facing this dimension promote a viewing shift on environmental issues to understanding inserted into a "natural" order.

The assumptions of critical environmental education guide the perspective of analysis. We adopted this framework because we believe that such a view takes the human being within the space of social and environmental dimensions; life in its complexity and understanding of environmental issues not restricted only to the natural dimensions of space. As its proposal is unveiling and committed to the transformation of social contexts, it would be possible to train people able to identify, challenge, propose solutions and act in the face of environmental issues through it.

We affirmed in this study that it is necessary to have perspectives among people that, when carrying out developments of relations, also favor the identification of the interests and behavior of the subjects in the places where they live (JACOBI, 2003; GUIMARÃES, 2007; LOUREIRO, 2012; PORTO-GONÇALVES, 2004; REIGOTA, 2009).

In this context, information is a key means to build knowledge, due to the fact that it allows people to take better advantage of opportunities, exert their rights, claim the provision of services, among other citizenship exercises (SAITO, 2000;

GUIMARÃES, 2007; LOUREIRO, 2012). Associated with this, the social contexts have elements that can be identified and leveraged to favor the empowerment of individuals (NARAYAN, 2002).

Empowerment here is understood as a dynamic process that aims to increase the autonomy of people in their social contexts. Generally, it refers to groups or individuals subjected to conditions of oppression and social vulnerability. In them, we try to develop a critical view and positions on social issues (FRIEDMANN, 1992; NARAYAN, 2002; GOHN, 2004).

Based on these guidelines, we believe that the participation of men and women in the socioeconomic context of their own lives, linked to critical perspectives, can lead to the empowerment of individuals, such a fundamental aspect in cases of difficulties in survival, as it is the one of the place of our study.

We conceived the empowerment and participation of individuals as integrated processes, and we believe that the very activity of subjects in the socioenvironmental dimensions of their contexts could structure and/or trigger these processes. In this sense, we considered the need for a non-reductionist view of space and interactions and policy stances for the sake of better conditions for the majority.

From these conjectures, we proposed the analysis of increased participation of community people in situations that cause difficult living conditions in São George.

### **The sociohistorical context of the research locus**

In Brazil there are several conflicting situations or of social vulnerability in which people's participation is necessary. In this study, we focused on the social contexts of communities of protected natural areas, in particular the village of São Jorge nearby PNCV, whose sociohistorical context is outlined in this topic.

In this site there are noted survival difficulties for the majority of the population, which are arising mainly from the relationships that have been set in the location and accentuated with the arrival of tourism entrepreneurs; the remarkable political inattention of the municipality's management bodies; and a lower articulation of the subjects to cope with situations unfavorable to life in the village and to changes in this social context.

The research locus, the village of São Jorge, is a town whose population base consists of former quartz miners. Located less than two thousand meters from the entrance to PNVC, and at a distance of 480 km from Goiânia, in the northeast region of the state, the town began with the gathering of people in the place, attracted by the possibility of improvement in living conditions through the mining activities.

By being miners, these people were opening paths, trails and building huts, giving rise to different "villages" that have come and gone in the midst of the cerrado. The village of São Jorge originated from one of these villages (Fig. 1), which dates back, according to Almeida *et al.* (2007), to 1912, from a camp called Garimpão, which was later called Baixa dos Veadeiros and baptized in 1954 as Vila de São Jorge (São Jorge

Village). In 1996, the town became the district of Alto Paraíso de Goiás, located 35 km away from São Jorge.



Fig. 1: Aerial view of the village of São Jorge in the vicinity of the Chapada dos Veadeiros National Park. Source - Casa de Cultura Cavaleiros de Jorge/PNCV.

Historically, the difficulties for survival are the most striking features of the social fabric of the population life. From the invention of the synthetic crystal in the 1960s, mining was in crisis and the extraction of dry cerrado flowers became the main economic activity of these individuals' subsistence.

The harvest and trade of the cerrado flowers helped precariously in the town's livelihood. There are reports stating that entire families went to the fields and remained there for months, and that, at the beginning of the activity, traders in the region made their flower purchases directly; however, soon there appeared middlemen, which depreciated the price of the commodity, therefore increasing the difficulties for survival on site.

Although mining practices were already in decline, many families still survived the regional marketing of crystal chips. With this, the precarious livelihood was maintained for nearly two decades through this chips sale activity, as well as the depreciated flower trade and some subsistence farming practices.

The delimitation of the Park, which began in 1961, led to profound changes in the community's way of life (DOMICIANO & OLIVEIRA, 2012). Survival became even more difficult for the total ban on activities related to mining and the restriction on the subsistence farming with the expropriation of land ownership, completed in the late 1980s during the demarcation of PNCV area.

Many men and women interviewed for this study were children at the time while others were already adults. It was common, in the words of many, the story about facing hunger, conflicts between prospectors, physical violence, death and disappearance of people during this period.

Tourism was proposed in the 1980s as an alternative to the commercial decline of the crystal and the prohibition of mining activities. Immediately, the miners became tour guides and some of the women opened small inns and restaurants. Thus, since the 1980s, the inhabitants of the village have been involved directly or indirectly in tourism.

The surroundings of the park have great touristic potential due to their natural attractions, composed of archaeological sites, thermal water, rock formations, scenic beauty spaces, rapids and falls (Fig. 2). These could be used to structure activities that collaborate to improve the socioeconomic conditions of the majority of those who live around the PNCV.



Fig. 2: Aerial view of falls I and II of the Black River in PNCV. Source - Ion David, photographer in the region.

Nevertheless, there prevails a number of advantages of "newcomers" on the "natives". For example, the former can provide the tourist with services and accommodation options which differ significantly from the establishments of the natives. They also offer tourist better prices and food choices, given their logistics for the purchase of commodities and storage facilities. The "newcomers" can also offer more diverse and improved sightseeing activities.

Currently, in the village, the terms "native" and "newcomer" have been widely used. The "native" word is used to identify people who have their origin related to mining whereas "newcomer" designates those who chose the place to live or open a business related to ecotourism. The natives are usually tour guides, owners of small tourist attractions or of modest establishments; on the other hand, the newcomers are mostly wealthy businessmen, owners of agencies or hotels and upscale restaurants in São Jorge. The change in the base of the village population was due to the implementation of the Project Towards the Sun (Rumo ao Sol) and especially of the voluntary resignation program of president Collor's government in the 1980s. With funds from dismissal, several individuals migrated to São Jorge and have become tourism entrepreneurs.

Moreover, the fact that the "newcomer" entrepreneurs are mostly from Brasilia – the federal capital – collaborates with having political contacts that favor both the promotion of their businesses and the occupation of the hostels in the peak seasons. In the state's own touristic promotions, there is a highlight for establishments whose owners have this origin.

All this context accentuates socioeconomic inequalities among entrepreneurial newcomers and most of the village population. This, together with the poor organization of people to cope with this situation, corroborates the maintenance of

difficult economic conditions for the survival of people in the community in São Jorge.

This situation is compounded by the inattention of the political bodies towards the village. By the year 2016, the village had no paved streets (Fig. 3). Public lighting, which partially came in 1997, still does not exist in various parts of São Jorge. There are no banks, ATMs or gas stations on site.

Basic services are offered to the community with precarious or nonexistent conditions. There are no hospitals or health assistance centers in São Jorge and emergency calls occur at the pharmacy. Education is offered only for children in elementary school and there is a high level of illiteracy in the village. Safety check is performed only sporadically by cars sent from Alto Paraíso de Goiás.



Fig. 3: View of the Village of St. George with its unpaved streets. Source: the author.

It should be noted here that we call community members the group formed by natives and their descendants living in the village. Also inserted in this set are those who came from other places, which, unlike the newcomer entrepreneurs, assume an identity with the natives, establish emotional bonds with them and share the ideals of better living conditions for the majority. Thus we considered, as people from São Jorge, former miners, with their families, who correspond to the tour guides, female cooks, craftsmen, teachers, owners of Bed and Breakfasts and modest restaurants, cafeterias, people who develop projects for the benefit of the community and some owners of tourist attractions, all submitted in a greater or lesser degree to situations that cause unfavorable conditions for survival in the village.

All these facts we mentioned result in losses for the survival of the people of this place and influence on the formation of social, economic and adverse political life of these subjects.

It is true that many situations of life social difficulties in these communities derive from the low participation and little empowerment of individuals on issues that constitute social life. A greater participation would enable individuals to participate in the actions and decisions in their context. The increase of its influence in the resolution of problems, for the benefit of the majority, would contribute to the empowerment in social issues. And, therefore, it is essential to objectify collective and not only individual transformations.

Therefore, we decided to analyze, from the perspective of critical environmental education, aspects present in environmental concepts, in environmental education

concepts/practices and in the interests and participation of the subjects that would favor their greater participation in the village's socioenvironmental context nearby PNCV.

### **Methodological procedures of the research**

The research conducted is a case study that was developed with field visitations in intermittent periods, for three years. The study included 44 respondents and, in the definition of the participants, we considered those who are part of the village's everyday life; we also delimited six groups from their main socioeconomic functions: Tourist Guides Group (GGT), Bed & Breakfast Owners Group (GPP) Group of Travel Agency Owners (GPAG), Tourist Attractions Owners Group (GPAT), Opinion Leaders Group (GFOP) and Political Agent Officers (GAPO).

Data collection was carried out by observation, with notes in field diary, registration by photographs, documents consultation and information from the PNCV collection on socio-historical aspects of the region and through semi-structured interviews (BOGDAN & BIKLEN, 1994).

Interviews are the main source of data. For the data analysis from this source, we chose the method of Bardin's Content Analysis (2011) and we used the technique of categorization. The analysis allowed to raise three categories: environmental concepts (category 1.0), environmental education conceptions/practices (category 2.0) and interest/participation of the subjects (category 3.0).

### **Results and discussion**

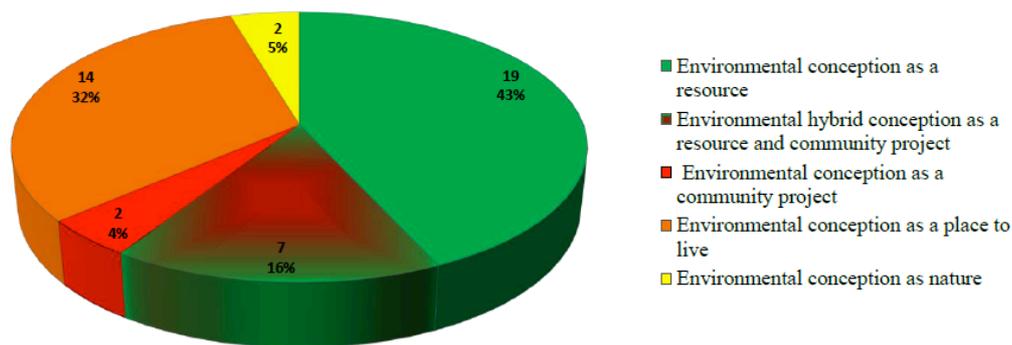
The results and discussion of the study on the conceptions and actions reported by the subjects of the São Jorge Village are grounded in the critical perspectives of environmental education in dialogue with the concept of empowerment. Initially, we dialogued about environmental concepts and environmental education conceptions/practices. Later, we presented what was obtained about the interests and participation reported by the subjects in the Village.

#### **On the environment concepts of subject**

To start off with, it is important to emphasize that, in our study, we considered that the environmental conceptions determine the forms of interaction established by people with/in their space and influence their interests and actions (PORTO-GONÇALVES, 2004; REIGOTA, 2009; SAUVÉ 2005a), leading to a number of implications in the individuals' relationship with each other and in their role in the environment.

When analyzing the communications of 44 respondents, there were several environmental views which were classified into conceptions, based on Sauvé's typological definitions (2005a, 2005b).

In the study, 26 people (59%) presented the environment conception as a resource. We represented the occurrence of this and other views in Graph 1. About this result, we drew attention to the fact that seven participants expressed hybrid visions on the environment, as a resource and community project, as shown:



Graph 1: Environmental conceptions among the subjects of São Jorge. Source: research data, prepared by the author.

The frequency of reporting units and context in the communications confirms the inference that prevails, among those subjects, the environmental view as a resource. It is manifested by environmental ideas as a source of financial and food resources, guarantee space for the quality of life and resources for future generations, as can be seen in the following exchanges:

[1] [...] it's our breadwinner! If I have no *interest in preserving* [...] in a few days I'll sell what? [...]. (PAG<sub>2</sub>)

[2] *We depend on nature to live.* [...] Otherwise *we'll lack even the food to survive.* (GT<sub>2</sub>). [Emphasis added].

[3] All that *the human being has now came from* the environment. The *production of everything we eat.* (PAT<sub>7</sub>).

[4] It's necessary that these woods are preserved *for me to have quality water, so I have quality weather, which can provide food.* (PP<sub>3</sub>).

[5] If we don't *take care of it, if we don't know how to use it, it will end.* (FOP<sub>7</sub>).

These statements referring to the dependence of ideas and "care" about the environment, in fact, explicit subservience views of nature to humans, as exemplified by the speech of PAG<sub>2</sub> in exchange (1). As this speech, others that emerge in interviews, in which the environment is clearly stated as a commodity, reinforces our inference in the study that there is a predominantly utilitarian view of space.

This reductionist view, strongly perceived in the resource conception, is a negative aspect so there is a greater participation of people in situations involving the need to identify the difficulties experienced in their space, as well as the need for analysis and action against them (PORTO-GONÇALVES, 2004). Besides not favoring the identification of factors that cause the survival difficulties in São Jorge, this view also refers to the belief that only "care" with natural spaces are enough for the quality of life and its maintenance of today and in the future.

The views of the environment as a community space, obtained in the statements of nine respondents (20%), refer to understandings of the complex and conflictive nature of relationships on site. We considered these aspects in favor of greater participation

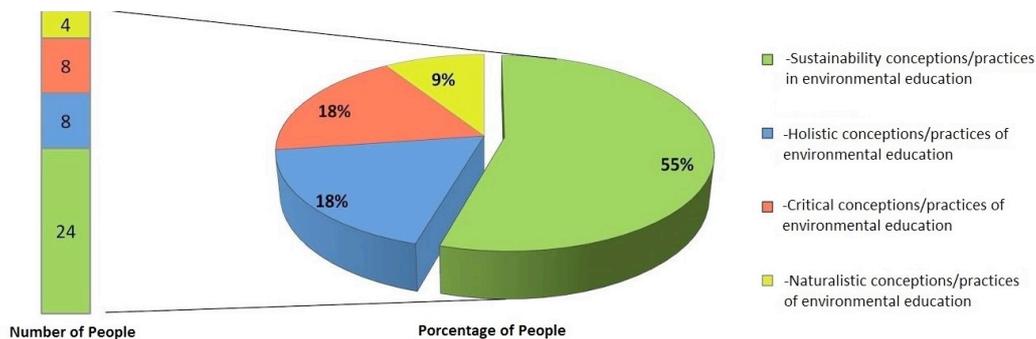
of people in the community, for they are interpretations that do not ignore the social context of São Jorge. As they are focused on the living conditions in the surrounding of the PNCV, they can collaborate to expand the sight field of the adverse conditions in the village.

### On the conceptions/practices of environmental education on site

In the analysis of the conceptions and practices of environmental education existing among the subjects from São Jorge, we started from the assumption that they take place in political and ideological positions and acquire deployments according to the scenarios in which they articulate.

We believe that the conceptions and practices in place can influence for different forms of action and have implications in ways of thinking and acting on the environment (SAUVÉ, 2005a; 2005b). Thus, by appropriating the term used by Leff (2010), we believe that such conceptions and practices can contribute to what is called "greening of thought" of people of the place or the possibility of explanation of the contradictions that constitute the contexts of São Jorge.

The analysis on the concepts and practices among the subjects revealed that sustainability prospects are prevalent, among other conceptions / practices (holistic, critical and naturalist), as we represent:



Graph 2: Conceptions / environmental education practices among the subjects of St. George. Source: research data, prepared by the author.

The view that prevails among the respondents can be exemplified by excerpts from communications of the participants, such as the following:

[6] Environmental education is a job that will *get people to help conserve* what it has [...] (PAG<sub>1</sub>).

[7] *It's to recycle!* It is in this sense that we understand the environmental education here in São Jorge [...]. (PP<sub>5</sub>).

[8] [...] environmental education *would be to encourage* people *not to litter*, polluting. (PAT<sub>2</sub>).

[9] *It's to educate* the human being *for them to be aware of the concepts of sustainability*. (PAT<sub>5</sub>).

We conceived that the prevailing claims in these ways of conceiving the process are in the development of attitudes of "care" towards this place, given the lines mainly

refer to the responsibility to the conservation of resources, decreased degradation of waste and reuse of materials.

All 44 respondents reported performing environmental education practices in São Jorge and nearby. As for these "practices", we focused on the analysis of only those that structure formation processes, such as those carried out by GT and performed in the existing projects in São Jorge.

The practices carried out by the GT aim primarily to train attitudes towards the conservation of spaces, particularly those surrounding the PNCV. We perceived that the GT seek to awaken the attention of people on the trails to the importance of conserving places for visitation. They talk about the importance of medicinal plants, consequences of deforestation and soil characteristics, directing at the conservation needs.

It is important to highlight that such information has value to knowledge related to natural spaces. However, we agree with the observations of Pedrini (2005), that practices such as those carried out by the GT, which emphasize physical and biological order factors, may favor more decontextualized understandings of their social environments.

Having said that, we affirm that practices with these characteristics contribute little to the reflection on the social dilemmas that pervade the lives of people. In São Jorge, they do not favor even the explanation of the interests which evolve the very conservation of tourism sites, and the main contribution of GGT practices for people who visit the place are the sensitization and the acknowledgement of natural space components.

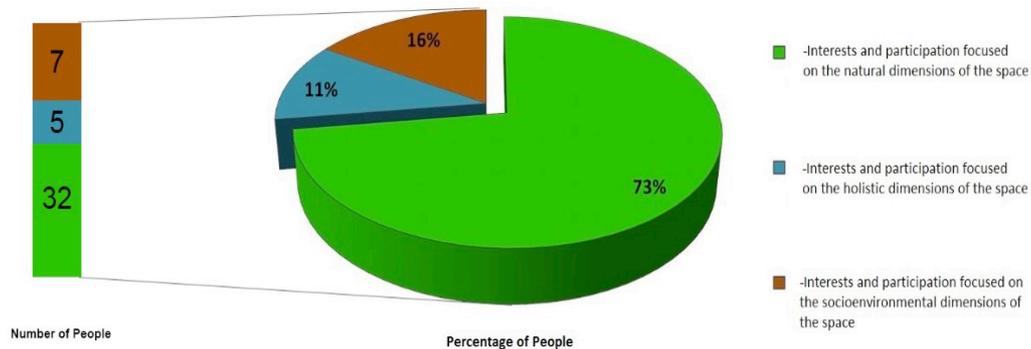
Regarding the critical conceptions/practices of environmental education occurring in 9% of respondents, the analysis of this view showed the existence of aspects that would collaborate to critical understanding and intervention in the social issues of the place, as environmental education is designed, by those people, as a process geared towards the needs of the social context.

Aspects in favor of greater involvement of people emerge in these concepts, as they refer to the development of knowledge and intervention attitudes by the population. Nevertheless, the subjects who expressed them are not much involved in actions to the community currently. Only in one project, developed with children and adolescents around the PNCV, can we find the materialization of ideas close to that approach.

### **On the interests and subjects' participation in the village**

In the analysis about the subjects' interests and participation, it is important to emphasize that the relevance of the investigation of such dimensions is in the fact that they provide clues about the respondents' attention and actions, which corroborates to respond to the study we proposed to. The occurrence of the record and context units in the communications allowed us to outline three categories of analysis, which refer to the interests and participation facing the following dimensions: natural of the space,

holistic and socioenvironmental. Regarding these, expressed by the respondents, we noted the following relationship specified in Graph 3:



Graph 3: Interests and participation among the subjects of St. George. Source: research data, prepared by the author.

Most respondents (73%) reports that people have interests located in the natural dimensions of space, as exemplified some rounds of communications:

[10] There is *an interest in permaculture* and the public who come to Chapada is interested in environment, *in forests*. (FOP<sub>5</sub>).

[11] They are *really interested* in knowing *how garbage from the bed and breakfasts is recycled, how the frying oil from restaurants is recycled* [...]. (PAT<sub>7</sub>).

[12] They *have an interest in environmental issues*. [...] They want to *know about the weather, the climate*, even about another area I've never been in. (GT<sub>4</sub>).

[13] [...] the people who settled down here *have this profile of nature lovers, to respect nature* [...] So this issue of environmental preservation, they *have that kind of worry: do not litter cigarettes, garbage* [...] these things [...]. (PP<sub>6</sub>).

The interests focused on the socioenvironmental dimension of space emerged in a small portion (16% of people). In this regard, we believe that the interests facing the social and environmental dimensions of the village are a favorable aspect, which could lead to increased critical awareness and the ability to make decisions that would lead to empowerment.

Despite being low, the current participation of people in the village dilemmas, the analysis of documents showed that São Jorge was a place where most people got involved in actions organized in the village through associations. However, it is important to highlight that the people's action was predominantly directed at matters relating to the natural dimensions of the place. The analysis of the activities developed by the associations revealed that they were more centered in the development of actions of "care" towards the space, especially the attractions.

Currently, the associations that used to be spaces for people's dynamization are scrapped and were virtually inactive until the year 2014. However, at the end of that

year, a new direction took over ASJOR and resumed the Association's activities aiming to engage people by association in solving common problems. Hence, we believe that the purpose of the subjects' involvement in the identification and discussion on the village problems are favorable aspects to a greater participation and empowerment of people in the community.

## **Conclusion**

In the study we conducted, we apprehended that the views, interests and actions prevalent among individuals determine a synergy of efforts to maintain natural spaces, with few enquiries about the real factors that determine the conditions of difficult survival in the village. We found few aspects in favor of greater participation and involvement of individuals but, even reduced, we believe that they have a potential for clarification of contradictions and can be extended through critical interaction with each other in organized collective processes.

In this sense, the reactivation of ASJOR in order to involve people from the community in finding ways for the social problems of the village is a quite favorable aspect to greater participation. Thus, based on these reflections, in a simplified way we can say that the aspects that would favor a greater community participation have to do with non-reductionist views of spaces and interactions, with processes that enable critical understanding for the identification and analysis of factors that condition the difficult situations of survival, and the organization of the population to intervene in the village's problems.

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