

Received: 06/14/2019

Accepted: 08/10/2019

## **PUBLIC POLICY AND CONFLICTS: OUTLINING PERSPECTIVES IN THE SOCIO-ENVIRONMENTAL RELATIONSHIPS IN THE ENVIRONMENTAL PROTECTION AREAS<sup>1</sup>**

## **POLÍTICA PÚBLICA E CONFLITOS: DELINEANDO PERSPECTIVAS NAS RELAÇÕES SOCIOAMBIENTAIS EM ÁREAS DE PROTEÇÃO AMBIENTAL**

**Tamirez Dornelles Grammatikopoulos<sup>2</sup>**  
**Maria Gracinda Carvalho Teixeira<sup>3</sup>**

### **Abstract**

The article analyzes how social agents position themselves regarding the confrontation of conflicts generated in the implementation of a public policy, the Environmental Protection Areas (APAs) in the municipality of Nova Iguaçu, in the region of Baixada Fluminense, the empirical basis of this research. The study, of qualitative nature, assumes that the ways of tackling the conflicts are divergent between the social actors that interact with such areas, depending on the socially constructed relationships with the territory, causing a shock of rationalities about the meaning and the use of such territories. The analysis allowed outlining different perspectives in the socio-environmental relationships in such territories from the specialized literature and the perception of social agents interviewed in the research, and hence, pointing out that there are ways to strengthen the social bases of such territories, overcoming the old principles that conceived the creation of such areas in the world and that have been incorporated into the Brazilian experience. The research concludes that there is a wide arena of conflicts in the APAs studied and that the formulation of public policies on different fronts in the management of such territories is an imperative condition for their sustainability and durability, suggesting the construction of the idea of co-management of this public asset as APAs are, where their inhabitants play a crucial role.

**Keywords:** Environmental Protection Area. Public policy. Conflict. Socio-environmental relationship.

<sup>1</sup> This article presents an enhanced version of the work introduced at the EnANPAD conference edition of 2018.

<sup>2</sup> Master in Business Administration from the Federal Rural University of Rio de Janeiro (UFRRJ). Email: [tami\\_dornelles@hotmail.com](mailto:tami_dornelles@hotmail.com)

<sup>3</sup> PhD in Environmental Sociology from the University of East Anglia, Great Britain. Professor at the Federal Rural University of Rio de Janeiro, Seropédica - RJ, Brazil. Email: [gracinda@uol.com.br](mailto:gracinda@uol.com.br)

## Resumo

O artigo analisa como os agentes sociais se posicionam quanto ao enfrentamento de conflitos gerados na implementação de uma política pública, as Áreas de Proteção Ambiental (APAs) do Município de Nova Iguaçu, na região da Baixada Fluminense, a base empírica da presente pesquisa. O estudo, de natureza qualitativa, parte do pressuposto de que as formas de enfrentamento dos conflitos são divergentes entre os agentes sociais que interagem com essas áreas, dependendo das relações socialmente construídas com o território, provocando um choque de racionalidades sobre o seu significado e uso. A análise permitiu que se delineassem distintas perspectivas nas relações socioambientais nesses territórios a partir da literatura especializada e da percepção dos agentes sociais entrevistados na pesquisa, e assim, apontando que há meios de fortalecer as bases sociais desses territórios, ultrapassando os antigos princípios que conceberam a criação dessas áreas no mundo e que têm sido incorporados na experiência brasileira. A pesquisa conclui que há uma arena ampla de conflitos nas APAs estudadas e que a formulação de políticas públicas em diferentes frentes na gestão desses territórios é condição imperativa para a sua sustentabilidade e durabilidade, sugerindo a construção da ideia de cogestão desse bem público que são as APAs, em que seus habitantes exerçam papel crucial.

**Palavras-chave:** Áreas de Proteção Ambiental. Políticas públicas. Conflito. Relações socioambientais.

## Introduction

The idea of instituting environmentally protected areas is very old, and, even though, it continues to be subject matter of study of the most different disciplinary fields of sciences. In Brazil, the interest in such subject arose from the decade of the 1990's, in Social Sciences, suggesting a promising dialog between the Social Sciences and the Natural Sciences, where the construction of a theoretical-conceptual framework started to be incorporated which would comprehend such interdisciplinary interactivity.

It is possible to find works under the most different approaches that have marked the specialized literature. One of the most remarkable and controversial is the preservationist perspective, which basic ideas are grounded on the perception of wilderness (natural/wild life) that shall be preserved as "virgin area" that shall not, in any manner, be inhabited by the human being. On the very opposite side to this current, the critical social sciences defend that, upon thinking of a socialized material world full of meanings, the society and its environment co-exist in an inseparable manner, since the elements that constitute the "environment" are not merely matter and energy, since they also are cultural and historical (ASCELRAD, 2004a). Thus, in such perspective, the environment is complete, it is not a half, and humanity is part of it.

In the last decades, there was a stressed growth of protected areas in Brazil, especially of conservation units, which may be interpreted as an advance in the concern with the conservation of the natural resources. Nevertheless, although the increment in the quantity of conservation units, it is observed that other questions connected to the subject deserve attention, such as social questions and problems of management of such areas (LIMA; ALMEIDA; RIBEIRO, 2014). A controversy about such subject is just that, although a significant increase of the number of conservation units created in the Brazilian territory has occurred, not all such amount is effectively being "protected", since many of them do not have a management plan, nor managing board to regulate such management guidelines. It is also needed to understand what meaning of protection has been incorporated in the Brazilian experience of environmental protection areas.

The question of the conflicts existing in the environmental protection areas (APAs) is a subject that is gaining visibility in Brazilian society and in the specialized literature, however, it is not with the due importance it requires. There is a trend to the naturalization of the environmental problems and, in general, a disconnection of the environmental to the social. More recent works referred to about socio-environmental conflicts in APAs have pointed out that there is an inequality situation that passes over the conflicts affecting populations resident in such areas, situation marked by the relationship they keep with the territory.

When talking about the management of a Conservation Unit, among which the APAs are located, great challenges have been faced, either to the federal, state, and municipal executive

authorities, or to the society as a whole. One of such challenges is that, as the territory of an APA is generally formed by public lands and private properties, the public management of such areas passes to occur in third parties' lands, which is added to the unprecedented scenario of conflicts in the management of conservation units of such category (HOEFFEL; FADINI; SEIXAS, 2010).

Having such discussion as start point, it is possible to argue that the environmental problems are strongly connected to the social problems, and, even more, that the environmental problems may arise out of social problems. Therefore, it is believed that the environmental conflicts that arise have a potential to contribute to expose the social problems, previously ignored in the original approaches of environmental protection of territories. Summarizing, it may be said that the management of an APA is intrinsically closely interwoven in the management of conflicts established by the use of land, by the possibility of economic development of a region and, especially, by social questions promoted by the expectancies of the population residing in the territory (HOEFFEL *et al.* 2010).

Thus, the following research problem was designed: how do the social agents involved in the Environmental Protection Areas of the city of Nova Iguaçu position themselves regarding the confrontation of the socio-environmental conflicts existing in such areas?

It leads us to think that the confrontation forms of the socio-environmental conflicts existing in the Environmental Protection Areas (APA) of the city of Nova Iguaçu diverge between the social agents engaged in such areas, since they are not equally shared thereby, because each segment sets forth a different relationship with the territory. In addition to the shock of rationalities among the social agents about the meanings and the uses of such areas, the situation of the APAs is even more complex when it is detected that not all residents in such areas are aware that they inhabit an APA.

To expose the study, the article in question presents the following sequential structure: the first section consists of the introduction to the work; the second, third, and fourth sections comprise of the construction of the theoretical framework of the study; the fifth contains the research methodology; the sixth registers the analysis of the data and its results and, finally, the seventh part presents the final considerations, followed by the bibliographic references.

## **Environment and the question of the environmental protection**

There are records that movements concern with the environmental started to appear after the World War II, intensified with the creation of non-governmental organizations, and international environmental agreements, which aimed at coordinating a proposal of global environmental policy. It may be mentioned as an example of such initiative, the International Union for Conservation of Nature (IUCN) (1948). Additionally, events such as the Club of Rome (1968), which assessed the environmental situation in the world offering solutions to the future of the humanity, publishing several reports that forecast the extinction of the natural resources (THE CLUB OF ROME, 2017). Such event was developed in the 1<sup>st</sup> United Nations Conference on Human Environment, seen as the crucial benchmark to the discussion about the environmental questions in the world, held in 1972, in Stockholm. At first, the focus of the concerns were the environmental questions; solutions were searched for the crisis of shortage or waste of resources and its consequences in the global market. Economic development, the environmental question, and their effects to the development of the nations were discussed.

However, the United Nations Conference on the Human Environment and its developments, as well as many other international forums that have been discussing the environmental questions, have received several criticisms for not advancing in crucial questions, and for presenting a reaffirmation of the commitments already defined in other occasions, but only a few were complied with, including generating disagreements between countries. There are authors that interpret such situation as critical and far from achieving its purposes, due to protectionist postures of certain countries, in the manifested disbelief in the environmental problems, pressures of different interest groups on the territories and their wealth, and which exercise strong influence in the countries' economies, among many other questions.

Chiaravalloti (2016), who has studied for years the preservation areas in Brazilian region, in the international scope defends that the use of the term Community-Based Conservation (CBC) or the New Conservation has been recently disseminated by international conservationist entities, but that it is required to carefully exam such recent experiences, since, according to the author, they are presented with such justification, but that are little different from the traditional view of preservation. To the author, in the international scope, there is a lot of rhetoric around engaging and including communities in the preservation projects, and even in the management, but that many

things that were promised remain at the speech level, which consequently affects the advances on policies of sustainable socio-environmental use of APAs.

Thus, the subject matter of the research is connected to a scenario of more complex problems in the set of contemporary rearrangement of the regulation instruments of the environmental resources, globally speaking, and it has become a challenge to researchers, as well as to policy makers to appropriate of the proper tools to the understanding of socio-ecological and political processes that put “the nature inside the field of the social conflicts” (ACSELRAD, 2004a, p. 9).

### **Environmental public policy and the institutionalization of APAs (Environmental Protection Areas) in Brazil**

From Stockholm Conference, in 1972, in effective period of Brazilian military dictatorship, the process of construction of an environmental area in Brazil was deeply bound to an intersection of such arena with legal questions grounded on one side, in the political-institutional scope, on the creation of the Special Environment Office (decree no. 73.030/1973) in 1973, a body integrating the Ministry of Internal Affairs which purpose was to allow a greater preservation of the environment, and the rational use of the natural resources, in a conservationist perspective. On the other side, in the legal-regulatory scope guided by the “legal view on the material world ethically ruled by the utilitarianism: there would be environmental protection only if the property had economical value” (MACHADO, 2014, p. 133). That is, territories that had natural properties with economical value would be under the State’s protection. Such view carries a legacy that still remains, according to the territory, in the posture of the existing environmental bodies in the country that present themselves as environmental protectors.

In the process of elaboration of the legislation of protected areas in Brazil, two divergent concepts defended by different currents of the environmentalist movement shall be mentioned: preservation and conservation. The first, according to Art. 2, V, Law no. 9.985/2000, comprehends the “set of methods, procedures, and policies that aim at the protection of the species, habitats, and ecosystems in the long run, in addition to the maintenance of the ecological processes, preventing the simplification of the natural systems”. While the conservation of the nature is:

the management of the human use of the nature, understanding the preservation, the maintenance, the sustainable use, the restoration, and the recovery of the natural environment, so that the greatest benefit may be produced, on sustainable bases, to the current generations, keeping their potential to meet the needs and aspirations of the future generations, and guaranteeing the survival of the alive beings in general (BRAZIL, 2000, Art. 2, II).

Such differences of views are internalized by the Brazilian environmentalist movement, which, on its turn, follows its different lines of thought in relation to people and nature existing in the territories of APAs – there is no consensus in the environmentalist movement regarding those views.

The expansion of the Brazilian governmental action in the environmental area occurred as one of the practical results of the multiple international conferences, already previously mentioned, as well as political pressures and social mobilizations in favor of the environmental question (LITTLE, 2003). According to the said author, after the enactment of the Constitution, “several governmental programs and institutions were established to meet the increasing demand for solutions to the environmental problems of the country” (LITTLE, 2013, p. 16), as it will be seen as follows.

In Brazil, through the preparation of Law no. 6.938, of 1981, the National Policy of the Environment (PNMA) was instituted, and the National System of the Environment was created (SISNAMA) (BRAZIL, 1981). Another important body is the National Environment Council (CONAMA), instituted by the aforementioned law, being it the advisory and deliberative body of SISNAMA. CONAMA is a collegiate represented by five segments: federal, state, and municipal public bodies, business sector, and civil society (BRAZIL/MMA, 1981). Only from the Constitution of 1988, the environmental policies in Brazil started to get a more real dimension, especially through the establishment of Art. 225 of the Federal Constitution of 1988 that was considered, at that time, part of one of the most advanced environmental decrees of the world, since it considered that it would be responsibility of the public authority the preservation of the environment, and that it would be treated as a common asset, of which everyone should take care.

According to Cader and Vieira (2015), with the institutionalization of the Constitution of 1988, the environmental bodies went through significant transformations, initially, in 1989, with the creation of IBAMA, with the mission of reformulating, coordinating, and performing the PNMA. However, the Ministry of Environment was only created years later, and for being considered a body of superior hierarchy, it passed to exercise the functions that previously were of IBAMA, while the latter passed to act in the inspection.

Regarding the creation and management of conservation units in Brazil, the main institutional benchmarks were: the creation of the National System of Nature Conservation Units (SNUC); of the National Strategic Plan of Protected Areas (PNAP), and the creation of ICMBio - *Instituto Chico Mendes de Conservação da Biodiversidade* (IBAMA, 2007).

SNUC is considered the initial reference to the planning of protected areas, since it registers the promise of a new posture by the State in its relationship with the society, considering to protect the natural resources required to the subsistence of traditional populations, and also pointing out mechanisms that enable “a greater public participation in the process of creation and management of the protected areas” (IBAMA, 2007, p.13). Following, in chart 1, the Brazilian conservation units are introduced, which are classified in full protection and sustainable use units, defined according to their possibilities of management, where it is visualized the APA category:

**Chart 1:** Classification of the conservation units

Full Protection Conservation Units (UCPI)	Sustainable Use Conservation Units (UCUS)
I- Ecological Station (Esec)	I- Environmental Protection Area (APA)
II- Biological Reserve (Rebio)	II- Area of Relevant Ecological Interest (ARIE)
III- National Park (Parna)	III- National Forest (Flona)
IV- Natural Monument (MN)	IV- Extractive Reserve (Resex)
V- Wildlife Refuge (RVS)	V- Fauna Reserve
	VI- Sustainable Development Reserve (RDS)
	VII- Private Reserve of the Natural Heritage (RPPN)

Source: Ministry of Environment (2000).

IBAMA (2007) recorded as the main difficulties in the management of the Conservation Units: to assure the financial sustainability of SNUC; to provide the system of conservation units with personnel in proper number and qualification; to provide for the land property regularization of the conservation units; to regulate the management categories contained in SNUC; to institute state and municipal systems compatible with the SNUC; to increment the preparation and implementation of management plans of the conservation units. Therefore, what we see is that the Brazilian environmental legislation is presented with several institutions that shall interact with the APAs in the sense of benefiting them, but that on the other side, there may be overlap of responsibilities that may cause difficulties of understanding and to decision making, to those involved directly to the use of such areas.

### **Socio-environmental conflicts and territoriality: the problem of the conservation in APAs**

The conflict has a sociological meaning as much as it produces or changes interest groups, unions, and organizations. It is a principle defended by one of the most notorious specialists in conflicts, George Simmel (1903;1983), to whom there is, including, a paradoxical aspect that places the conflict as a way of interactivity and even of socialization. In such sense, Simmel calls attention to both sides of the conflicts: a positive one, which has a socializing character, being the conflict able to take to solutions of divergences, and a negative one, which may take to the annulment of one of the involved parties. To him, it is not possible to separate such both sides, being only possible to separate them in a conceptually manner, but never empirically.

Such understanding of conflict, as a start point, is important when it is intended to understand and interpret a complex scenario that involves an array of social groups around the creation and use of expressive territories, the protected areas of a municipality of the metropolitan region of Rio de Janeiro – the municipal APAs of Nova Iguaçu, in Baixada Fluminense.

When the discussion is the environmental conflicts, according to Brito, Bastos, Farias, Brito, and Dias (2011, p. 58) they refer “to the pressures that involve decisions about when, how, and where

to use the natural resources". The environmental conflict would arise out of eventual breaches of the "symbolic agreement" between the different social practices allocated in the space, since that, depending on the combination of certain activities, the "environment" could become means of transmission of undesirable impacts, which could be spread through water, air, soil and/or living systems. Thus, the development of a certain activity could compromise the possibility of other practices being kept (ACSELRAD, 2004b). The environmental conflicts shall be understood, therefore, jointly in the spaces of material and symbolic appropriation of the resources of the territory, since both are spaces where general social disputes occur. Then, according to the said author, the conflicts occur due to economic and political disputes of territories, involving private and/or public sectors, and several social groups including vulnerable populations, such as indigenous people, extractive populations, *quilombolas*, riparian populations, low-income social groups, among others.

The literature points out to a differentiation between environmental problem and environmental conflict. The first is conditioned to a situation where there is risk, social or environmental damage, but there is no an active reaction of the affected people and of other social groups, while in the second, there is a confrontation situation in relation to the use or management of the natural resources (BRITTO et al. 2011) and of their respective territory. To Oliveira (2004, p. 96), the conception of "environmental problem seems to have a more restrictive and punctual character. After all, changes in the environment only become environmental problems in social processes where collective subjects define them as such".

In the academic scope, the discussion that the environmental conflicts are fed by the social inequality, originating the meaning of the term "environmental inequality" has matured. Thus, in the point of view of Acselrad, Almeida, Bermann, Brandão, Carneiro, Leroy (2012) the production processes of the environmental inequalities, associated to the dynamics of accumulation by spoliation, tend to favor the onset of territorial and environmental conflicts, since they impair the existence of several groups, revealing the overlapping of large projects - of infrastructure, steelmaking, mining, agroexport, monocultures, among others - to territories marked with the presence of traditional and/or socially vulnerable groups, faced by public and private sectors of the hegemonic developmental project, according to the said authors, as obstacles to the capital accumulation process.

To Brito *et al.* (2011), the socio-environmental conflicts are more common in the developing countries. In the human areas of such countries, the conflicts normally related to social iniquity, while in their rural zones the socio-environmental conflicts occur more due to the appropriation of the natural resources, here involving the territoriality (SANTOS, 1997), or for question related to the preservation of the culture of the people that live in the locations.

With effect, Acselrat *et al.* (2012) argue that the environmental problematic still is far from aggregating all social groups in favor of a common well, since certain territories of deprived social groups are treated as receivers of the waste produced by the practices of the economically dominant groups, making effective a development model based on the unfair distribution of social assets, as well as on the unequal environmental effects added to what Machado (2014) calls our attention about the utilitarian legal-normative legacy of the environment that is still observed in the actuation of the nature protection bodies.

It was already evidenced the low social-economic conditions take to a greater exposure of people to environmental risks, configuring the situation of environmental inequality. Therefore, the social inequality is the origin of the environmental inequality, since there is a differentiated degree of exposure of groups socially vulnerable to the environmental risks, such as floods, landslides, high level of air pollution, lack of basic sanitation, inadequate housing conditions, among others, so generating conflicts (ALVES, 2007).

Upon studying experiences involving socio-environmental conflicts, Brito *et al.* (2011) reveal that the resolution of such conflicts virtually does not occur from the attempt of mediation, conciliation, or negotiation, which may hinder not only the society, but also the environment itself, since there is no equality in the interests of the agents involving in the conflict. They also argue that groups with predominant economic and political powers tend to overlap for being clearer and more defined purposes, which are shared among such powers, strengthening them and generating a disproportionate situation when confronted with the interests of community groups, NGOs, social movements. Although they may articulate a support of combative entities of the civil society and even of the public sector, they have more heterogeneous interests, in addition to, in general, they are

not able to get access to all required information and the institutional support of the State to provide grounding and support their claims.

However, we may not consider that it is a finished fact, so that there are no perspectives of social or environmental gains to non-hegemonic groups, since they may, from their own empowerment, revert situations into their benefit. Whatever it is the perspective possible to the non-hegemonic groups, it is important to remember what Santos always emphasized that the great social changes will occur from the perspective of those “marginalized” from “outskirts” (SANTOS, 1997).

## Methodology

This research is of qualitative nature. It is classified by its analytical and also descriptive approaches, which, according to Gil (2002) assist in the description of the characteristics of a certain population or phenomenon, enabling the improvement of ideas or discovery of intuitions.

The literature existing in several disciplinary fields of the Social and Human Sciences served as base for the construction of a comprehensive theoretical framework to the intended theoretical approach, and for the definition, *a priori*, of the research analysis categories.

The documentary research provided elements for the preparation of the guiding questions, aligned with the analytical categories. The referred documents were: (i) Management Plan of Tinguá Rebio (2006); (ii) Participation Master Plan of the City of Nova Iguaçu (2008); (iii) Management Plan of APA Tinguá (2016a); (iv) Management Plan of APA Rio D'Ouro (2016b); (v) Management Plan of APA Jaceruba (2016c); (vi) Laws and decrees related to the creation and operation of the studied APAs.

In field, interviews were carried out guided by a semi-structure procedure of open grid, providing a wide variety of answers upon allowing that the respondent freely expressed him/herself (GIL, 1989). The procedure was prepared based on the guiding questions of the research, which are further presented, ad on the specific purposes to answer to the research question: how do the social agents involved in the Environmental Protection Areas of the city of Nova Iguaçu position themselves regarding the confrontation to the socio-environmental conflicts existing in such areas?

Gaskell (2002) argues that there is no single method to select the interviewed people in the qualitative investigations, being the researcher in charge of using his/her sensitivity and social scientific imagination to make the selection of the respondents. In such sense, the selection of the subjects was defined according to criteria set forth by the researchers, which took into consideration especially the involvement of the subjects with the investigation subject matter, combining with the snowball technique (BIERNACKI; WALDORF, 1981), which assesses in the identification of the subjects by reference chains. In chart 2, the research subjects are presented.

**Chart 2: Configuration of the research subjects**

INTERVIEWED	ORIGIN BODY
Interviewed 1	SEMADETUR
Interviewed 2	Local Agricultural Technician
Interviewed 3	Environmental Guard
Interviewed 4	Association of Tinguá's Residents
Interviewed 5	SEMADETUR
Interviewed 6	Union of the Rural Workers of Jaceruba
Interviewed 7	Instituto Ecopreservar
Interviewed 8	NGO Planeta Verde

Source: Own preparation.

The interviews, held between 2017 and 2018 were recorded in audio, with duration from 30 to 90 minutes each interview, upon authorization of the questioned ones through the Free and Clarified Consent Document and, subsequently, fully transcribed (with no cuts, corrections, or initial interpretations). Thus, it was tried to avoid the loss of relevant data, and guarantee the reliability of the reports. According to Vergara (2005), interviews shall be held this way so that the participants' speech is preserved. The parties agreed that the confidentiality of the names of the research subjects would be respected, except of those that represented the APAs, since they so desired.

To work the empirical data, the analysis of the contents under Bardin's molds was used. According to the author, “the analysis of the content is a set of analysis techniques of the communications that have as purpose to obtain through procedures the description of the contents

of the messages that enable the inference of knowledge regarding such messages” (BARDIN, 1977, p. 31). Therefore, the stages of such technique were followed, according to Bardin (1977), which consisted of three phases: 1) pre-analysis, 2) material exploration, and 3) treatment of the results, inference, and interpretation.

**Chart 3: Analytical categories of the research**

Categories	Theoretical definition
<b>Public Policy</b>	“(…) field of the knowledge that aims at, at the same time, “putting the government into action” and/or analyzing such action (independent variable) and, when required, proposing changes in the direction or course of such actions (dependent variable) (SOUZA, 2006, p. 26).
<b>Environmental Protection Area</b>	“(…) in general, an extensive area, with a certain level of human occupation, provided with abiotic, biotic, aesthetic, and cultural attributes especially important to the life quality and well-being of the human populations, and has as basic purposes to protect the biological diversity, rule the occupation process, and assure the sustainability of the use of the human resources” (BRAZIL/MMA, 2000).
<b>Environmental Inequality</b>	“The concept of environmental inequality allows to point out the fact that, with its specific reasonableness, the liberalized capitalism makes that the damages resulting of pollutant practices predominantly fall upon the vulnerable social groups, configuring an unequal distribution of the benefits and harms of the economic development. Basically, the benefits intend to the large economic interests, and the damages to deprived social groups” (ACSELRAD; ALMEIDA; BERMAN; BRANDÃO; CARNEIRO; LEROY, 2012, p. 165).
<b>Socio-environmental Conflict</b>	“(…) conflicts between social groups due to their different modes of ecological inter-relationship, that is, with their respective social and natural means” (LITTLE, 2004, p. 1). They arise as confrontation forms between certain life modes consolidated by their means of relating to the nature, where values and rules are at stake. (...) when a socio-environmental conflict is establish, the fight for the territory is converted into dispute for the power of acting and arranging on the territory (BESSA, 1993).

Source: Own preparation from Souza (2006, p. 26); Brazil/MMA (2000); Acselrad; Almeida; Bermann.; Brandão; Carneiro; Leroy (2012); Little (2004); Bessa (1993).

Although the categories of analysis have been defined, *a priori*, based on the constructed theoretical framework and documentary sources, according to chart 3, it was accepted the emerging analytical categories or subcategories, arising out of the field work, as it is observed in chart 4.

**Chart 4: Analytical categories and subcategories**

Analytical Categories	Emerging Categories/Subcategories
<b>Public Policy</b>	Shortfall of public resources Difficulties to perform the environmental policies
<b>Environmental Protection Area</b>	Understanding on environmental legislation Actuation of the agents
<b>Environmental Inequality</b>	Socio-economical aspects Lack of infrastructure
<b>Socio-environmental Conflict</b>	Main conflicts Forms of facing the conflicts/possibilities of use of APAs

Source: Own preparation from the data of the interviews.



Thus, through the proposed analytical approach, the theoretical definitions of the categories guided the analysis of the content of the data gathered through interviews with the research's subjects.

### **Analysis of the research data and results**

In this section, it is presented the analysis of the research data and results based on the documentary and empirical sources, making counterpoints with the theoretical framework of the study.

#### **The territory of the studied APAs**

The city of Nova Iguaçu has approximately 70% of its territory formed by green areas. Thus, at first sight, the creation of federal, state, and municipal conservation units in Nova Iguaçu may signalize a concern of the public authority with implementing public policies towards the environmental protection of the region. The Conservation Units of the city are: a biological reserve, a state park, two municipal parks, eleven environmental protection areas (three state and eight municipal), some within the protective boundary zone of the Biological Reserve of Tinguá, and two Private Reserves of the Natural Heritage. All are part of Atlantic Forest biome.

The Environmental Protection Areas of Nova Iguaçu were increasingly being defined through municipal legislations between 2000 and 2012. They are: APA Tinguazinho, APA Tinguá, APA Rio D'Ouro, APA Guandu-Açu, APA Jaceruba, APA Retiro, APA Morro Agudo, and APA Posse/Guarita. Although the legal importance of the management plan as regulation instrument, some conservation units were created, even if with no preparation of such plan, as it is the case of APAs Tinguazinho, Guandu-Açu, Retiro, Morro Agudo, and Posse/Guarita. Although the management plan should be instituted within five years after the creation of the UC, in the case of such APAs, the situations already exceed such term. It is applicable to highlight that after such period if the management plan has not achieved its applicability in a full manner, a revision in the document shall be carried out to update its proposals according to the local reality (VERDE ENGENHARIA, 2016a; VERDE ENGENHARIA, 2016b; VERDE ENGENHARIA, 2016c).

It was checked that the sole APAs of the city having management plans are Tinguá, Jaceruba, and Rio D'Ouro, they belong to Tinguá Government Regional Unit (URG) that shelters the smallest population percentage of the city of Nova Iguaçu. The largest portion of the territory of this URG corresponds to Tinguá Biological Reserve, then, it is the less dense URG (NOVA IGUAÇU, 2008).

Successive environmental decrees, the enhancement of the protection rights of the natural equity with international recognition, the creation of management plans, the regulation of APAs created surrounding Tinguá Biological Reserve and the recent definition on the possible re-categorization of the reserve are a set of measures that represent the relationships between social groups, political and economic interests (MARTINS, 2011) in such territories. In the core of such relationships it is that the conflicts arise, and the intention of this work was to identify and understand the confrontation forms sought by the agents.

#### **“Public Policies” analytical category**

This category confirms the definition of public policies of Souza (2006), since it aims at identifying and analyzing the actions carried out by the government in favor of APAs as public policy. Aspects related to the obstacles found so that the Management Plans of the APAs are complied with were identified, as well as, how such obstacles affect the cycle of such policy, especially if considering the questions defined in its formulation that will affect its implementation. In such sense, it was identified, in the reports, as its subcategories the “shortfall of the resources” and the “difficulties in performing environmental policies”.

In the first subcategory, “shortfall of resources”, it is observed that the lack of resources – not only financial, but also human, to carry out the monitoring of the UCs – reflects one of the main difficulties exposed by the social agents to comply with the environmental policies within such territories. However, in the second subcategory called “difficulties in performing environmental policies”, the records find support in the studies of NEPP (1999), as well as of Marques (2013), and Little (2004), according to which it is not sufficient the formulation of a public policy if there is no concern with the variables and the involvement and participation of the main agents in the

formulation phase, as well as in the implementation phase, since it is an autonomous process where essential decisions are made and not only implemented. Then, according to NEPP (1999), it is possible to argue that it is very complex to undertake a public policy when it is intended to consider the shared interests.

### **“Environmental Protection Area” analytical category**

In the analytical category “environmental protection area”, the reports point out what is the understanding the interviewees have of such areas. The “understanding about the environmental legislation” arises as subcategory, since some interviewees consider that the concept of APA shall be that contained in the environmental legislation. Nevertheless, several reports point out that the largest part of the population that inhabits the APAs or their surroundings are not aware of such legislation. The greatest concern of the interviewees with the environmental protection is with Tinguá Biological Reserve (Rebio Tinguá) due to the prohibition to enter it, as well as for being the oldest in the territory. Some interviewees signalize that social groups may not know if they inhabit APAs and, even if some residents know they reside in APAs, they are not deeply aware of the legislation that applies to such areas, then, they do not know what activities are allowed or not inside them.

In such category, the subcategory “actuation of the agents” is identified. The reports reveal that there is the involvement of several segments of the society with APAs, especially from the public bodies, organized civil society, private sector, and local populations, and that the actuation of them varies according to their interests about the use of such territories that not always are harmonious and may generate conflicting relationships.

### **“Environmental Inequality” analytical category**

Regarding the analytical category “environmental inequality”, it was observed that documentary data confirm the field data, regarding the socio-economical and infrastructural aspects that perpetuate a situation of environmental degradation where the residents of APAs and their surroundings inhabit. There are reports that show that the difficulty of employment offer to the residents of such APAs and surroundings causes the low income of the population residents in such areas, which in general find the option of working with agriculture or perform practices considered illegal in the APAs, such as, for example: the predatory hunting. Many people also move to the urban centers, intending to land any way of subsistence.

The environmental inequality is revealed in the subcategory “lack of infrastructure”, with the existence of an inadequate sanitation and precarious paving: the first causes not only the pollution of the rivers, but also the disease proliferation, while the second impacts on the displacement, especially, of the residents. Such situation, aforementioned, ratifies the interpretation of Ascelrad *et al.* (2012,), that the territories of deprived social groups are treated as receivers of waste. Thus, an unequal distribution of social assets rules and, consequently, disproportional environment effects, noticing how much the environmental problem is far from joining all social groups in favor of a common well.

### **“Socio-environmental Conflicts” analytical category**

The analytical category “socio-economical conflicts”, previously called “environmental conflicts” was renamed based on the analysis of the interviews, since the environmental conflicts noticed by the social agents involved in such areas are deeply connected to social questions that affect them and to the ways they attempt to face them. Then, the “main conflicts” and the “confrontation forms” arise as subcategories. Thus, the conservation of the protected areas was pointed out as fundamental aspect to reduce the conflicts, focusing on the need of balancing a healthy environment, and the life quality of people that inhabit such areas.

In the subcategory “main conflicts”, through the reports, it was possible to observe that the predatory hunting generates conflicts in the three APAs; in addition to it, land property problems were mentioned, whether for land-grabbing, or for the occupation of lands of Rebio Tinguá, considered illegal, although the residents there were already found in such territory even before it became a conservation unit of full protection. There is also the case of properties that are in the boundary of Rebio Tinguá with the APAs, and with that, the owners, with their lands in such

situation, do not know if they are classified as belonging to the territory of Rebio or not, although they are part of its protective boundary zone. In general, the reports presented ratified information contained in the Management Plans of APAs Tinguá, Rio D'Ouro, and Jarecuba, and in the Management Plan of Rebio of Tinguá, which record that there are several environmental conflicts in the city of Nova Iguaçu, many of them related to the Conservation Units existing in its territory. However, the documents tend to make the residing populations responsible for the environmental degradation of such areas, as well as conflicting situations between different social groups that make use of such territory, resident or not. The focus of the management is on inspection and punitive measures in the actuation of the public authority.

Regarding the subcategory "confrontation forms", the subjects that suggested as main manners to face such conflicts: the access to the information on the APAs, the environmental education, strategic planning workshops, qualification of the residents to work in projects, such as, for example, tourism projects, which may help in the support of the families. The representatives of the civil society interviewed charged of the public authority, the offer of public services in APAs, and a participative environmental management that involves the residents in the management of such areas.

Upon analyzing the forms of confrontation of the conflicts, expressed by the interviewees, it was noticed that the situation meets the thinking of Simmel (1903; 1983) about the conflict upon emphasizing the paradoxical aspect of the conflict upon considering both sides of the phenomenon, which makes the search for solutions to the divergence complex, when there is inequity of power between groups. On the other side, as Simmel forecasts, the divergences end up socializing and are a way of political motivation for mobilization.

## Final considerations

The purpose of this study was to analyze how the social agents involved in the Environmental Protection Areas of the city of Nova Iguaçu position themselves regarding the confrontation of the socio-environmental conflicts existing in such areas. The idea of creation of the National System of Conservation Units, conceived with the purpose of enhancing the role of the Conservation Units, which has the APAs as one of their categories, have not fully yet achieved their purposes of promoting the establishment of the criteria and standards to the creation, implementation, and management, of the Brazilian conservation units, and performing the articulation between the conservation units and the local populations that inhabit such territories.

The initial assumption of the study was that the confrontation forms to the socio-environmental conflicts existing in the Environmental Protection Areas of the city of Nova Iguaçu diverge between the social groups that interact with such areas, since they are not equally shared by such groups, since they establish a different relationship with the territory. The research results, in addition to confirm such assumption, called the attention to the fact that there are deep management problems in such areas that do not help to put into practice their management plans, since the management is more focused on the inspection leading to prohibitions and penalties instead of an educational and guiding approach, in order to stimulate good socio-environmental practices.

The research detected that the public bodies of local actuation are still disconnected among themselves, upon the APAs, since, although the local potentialities are identified, according to the Management Plans of the APAs and the one of Rebio of Tinguá, it did not seem to us that the Management Plans left the paper so that such potentialities are stimulated. The interviews revealed the existence of vulnerability indicators that need to be made a priority by the managers of such APAs among them, essential infrastructural problems, shortfall of human and financial resources for the monitoring, among others.

With such critical scenario, it is not surprisingly that conflicting relationships arise, between the public authority, the inhabitants involved with the APAs and those that take advantage of their territories, relationships revealed in the different perspectives the agents have about the same. The reports do not point out institutional solutions in the short or medium run, regarding a series of questions, whether they are of environmental or social character. Additionally, the perpetuation of the socio-environmental inequality, existing in such areas, confirms what was presented in the theoretical grounds.

It is applicable to highlight that since the study approaches three APAs, which represents a wide territory, a greater deepening in the investigation on such areas became difficult, especially

for the territorial dimension of each of them, as well for the time dimension of the study, thus, it would be required to deploy a longer time in the gathering of the field data.

It may also be said that there are huge challenges ahead to be faced to achieve a proper management level of the protected areas in Brazil, although the official documents want to show that such areas are important to the regional and national development, in the singular experience of the city of Nova Iguaçu, the public authorities were not able yet to provide answers to the vulnerabilities present therein so that they become development spaces.

The research concludes that, in general, there is a need of formulation of public policies in different fronts, involving since policies of social inclusion, which aim at the generation of employment and income, environmental education, and community participation in the management of the APAs, or even with the dissemination of the co-management idea of such public asset, which are such areas and that their populations have a central role in such co-management idea. It may constitute a good path to strengthen the social bases of the set of agents that interact with such territories, and to the effective construction of the socio-environmental sustainability and durability of the Environmental Protection Areas in Baixada Fluminense and of the country as a whole.

## References

ACSELRAD, H. Conflitos Ambientais – a atualidade do objeto, In: ACSELRAD, H. (Org.). **Conflitos ambientais no Brasil**. Rio de Janeiro: Relume Dumará/ Fundação Henrich Böll, 2004a, p. 7-11.

ACSELRAD, H. As práticas espaciais e o campo dos conflitos ambientais. In: ACSELRAD, H. (Org.). **Conflitos ambientais no Brasil**. Rio de Janeiro: Relume Dumará/ Fundação Henrich Böll, 2004b, p.13-35.

ACSELRAD, H.; ALMEIDA A. W. de; BERMAN, C.; BRANDÃO, C.A.; CARNEIRO, E.; LEROY, J. P. Desigualdade ambiental e acumulação por espoliação: O que está em jogo na questão ambiental? **E-cadernos CES - Social Studies Center of Coimbra University** v. 17, 2012, p. 164-183. Available at: <https://www.ces.uc.pt/ecadernos/media/ecadernos17/07.ColetivoBras.Pesq.DesigualdadeAmbienta1.pdf> Access on: May 17, 2016.

ALVES, H. P. da F. Desigualdade ambiental no município de São Paulo: Uma análise da exposição diferenciada de grupos sociais a situação de risco ambiental através do uso de metodologias de geoprocessamento. **Revista Brasileira de Estudos de População**, v. 24, n. 2, 2007, p. 301-316. Available at: <http://www.scielo.br/pdf/rbepop/v24n2/07.pdf> Access on: May 15, 2016.

BARDIN, L. Análise de conteúdo. Lisbon: Editions 70, 1977.

BESSA, E. da S. O lugar dos homens na natureza social: uma proposta reflexiva sobre o meio ambiente. 1993. 152 p. Thesis (Master Degree in Urban and Regional Planning). IPPUR, UFRJ, Rio de Janeiro.

BIERNACKI, P.; WALDORF, D. Snowball sampling-problems and techniques of chain referral sampling. **Sociological Methods and Research**, v. 10, n. 2, p. 141-163, 1981.

BRAZIL. Constitution of the Federative Republic of Brazil of 1988. Brasília, 1988. Available at: [http://www.planalto.gov.br/ccivil\\_03/constituicao/ConstituicaoCompilado.htm](http://www.planalto.gov.br/ccivil_03/constituicao/ConstituicaoCompilado.htm) Access on: Apr 20, 2016.

\_\_\_\_\_. Law no. 6.938, of August 31, 1981. It establishes the National Environment Policy, constitutes the National Environment System (Sisnama). Brasília, DF, 1981. Available at: [http://www.planalto.gov.br/ccivil\\_03/Leis/L6938.htm](http://www.planalto.gov.br/ccivil_03/Leis/L6938.htm) Access on: Apr 20, 2016.

\_\_\_\_\_. Law no. 9.985, of July 18, 2000. It regulates art. 225, § 1, items I, II, III, and IV of the Federal Constitution, institutes the National System of Nature Conservation Units. Brasília, DF. Available at: [http://www.planalto.gov.br/ccivil\\_03/Leis/L9985.htm](http://www.planalto.gov.br/ccivil_03/Leis/L9985.htm) Access on: Jan 20, 2018.

BRITO, D. M. C.; BASTOS, C. M. C. B.; FARIAS, R. T. S. de; BRITO, D. C.; DIAS, G. A. de D. D. Conflitos socioambientais no século XXI. **PRACS: Revista da Humanidades do Curso de Ciências Sociais da**

- UNIFAP, v. 4, p. 51-58, 2011. Available at: <https://periodicos.unifap.br/index.php/pracs/article/view/371> Access on: May 10, 2016.
- CADER, R.; VIEIRA, L. A política ambiental do Brasil ontem e hoje. **Revista Eco** 21, 2015. Available at: <http://www.eco21.com.br/textos/textos.asp?ID=1601> Access on: Apr 25, 2016.
- CHIARAVALLOTI, R. M. Local communities and conservation in the Pantanal wetland, Brazil. 2016. 215 p. Dissertation (Doctorate in Anthropology). University College London, London, United Kingdom.
- GASKELL, G. Entrevistas individuais e grupais. In: BAUER, M.; GASKELL, G. (Orgs.). **Pesquisa qualitativa com texto, imagem e som**. Petrópolis, RJ: Vozes, 2002, p. 64-89.
- GIL, A. C. **Métodos e técnicas de pesquisa social**. São Paulo: Atlas, 1986.
- GIL, A. C. **Como elaborar projetos de pesquisa**. São Paulo: Atlas, 2002.
- HOEFFEL, J. L. de M.; FADINI, A. A. B.; SEIXAS, S. R. da C. **Sustentabilidade, qualidade de vida e identidade local – olhares sobre as APAs Cantareira, SP e Fernão Dias, MG**. São Carlos: RiMa Editora, 2010.
- IBAMA. **National report on protected areas in Brazil/Ministry of Environment**. Biodiversity and Forests Office, Department of Protected Areas Brasília: MMA. (Protected Areas of Brazil Series, no. 5), 2007.
- ICMBio. **Tinguá REBIO Management Plan** 2006. Available at: [http://www.icmbio.gov.br/portal/images/stories/imgs-unidades-coservacao/rebio\\_tingua.pdf](http://www.icmbio.gov.br/portal/images/stories/imgs-unidades-coservacao/rebio_tingua.pdf) Access on: Oct 17, 2017.
- LIMA, G. S.; ALMEIDA, M. P. de; RIBEIRO, G. A. **Manejo e conservação de áreas protegidas**. Viçosa: Editora Engenharia Florestal, 2014.
- LITTLE, P. E. **Os desafios da política ambiental no Brasil**. In: LITTLE, P.E. (Org.). **Políticas ambientais no Brasil: análises, instrumentos e experiências (pp.)**. São Paulo: Peirópolis/ Brasília, DF: IIEB, 2003, p. 13-21.
- LITTLE, P. E. A etnografia dos conflitos socioambientais: bases metodológicas e empíricas. In: **II Meeting of the National Association of Graduation and Research in Environment and Society, Enanppas**, 2, 2004, Indaiatuba. São Paulo, 2004.
- MACHADO, C. J. S. **Desenvolvimento Sustentável para o Antropoceno**. Rio de Janeiro: E-papers, 2014.
- MARQUES, E. **As políticas públicas na Ciência Política**. In: MARQUES, E.; FARIA, C. A. P. de (Orgs.). **A política pública como campo multidisciplinar**. São Paulo: Editora Unesp/ Rio de Janeiro: Editora Fiocruz, 2013.
- MARTINS, A. L. L. Lazer e área protegida: conflitos na busca de “emoções agradáveis”. **Ambiente & Sociedade**, v. 14 n. 2, p. 51-67, 2011.
- MINISTRY OF THE ENVIRONMENT What is CONAMA? Brasília, DF. 1981. Available at: <http://www.mma.gov.br/port/conama/> Access on: Feb 5, 2017.
- MINISTRY OF THE ENVIRONMENT National Registry of Conservation Units. Brasília, DF. 2000. Available at: <http://www.mma.gov.br/areas-protegidas/cadastro-nacional-de-ucs> Access on: May 25, 2017.
- Nova Iguaçu. (City Hall). **Participative Master Plan of the City of Nova Iguaçu**, 2008.
- CETER OF PUBLIC POLICY STUDIES - NEPP. **Template of assessment of priority social programs: final report**. Program of support to the social management in Brazil – PAGES, 1999. Universidade Estadual de Campinas, Campinas, SP, Brazil. Available at: [http://www.paho.org/bra/index.php?option=com\\_docman&view=document&category\\_slug=atenca](http://www.paho.org/bra/index.php?option=com_docman&view=document&category_slug=atenca)

[o-primaria-em-saude-944&alias=557-modelo-avaliacao-programas-sociais-prioritarios-relatorio-final-7&Itemid=965](#) Access on: May 25, 2017.

OLIVEIRA, S. A releitura dos critérios de justiça na região dos Lagos do Rio de Janeiro. In: ACSELRAD, H. (Org.). **Conflitos ambientais no Brasil**. Rio de Janeiro: Relume Dumará/ Fundação Henrich Böll, 2004, p. 95-130.

SANTOS, M. **Metamorfoses do espaço habitado** (5a ed). São Paulo: Hucitec, 1997.

SIMMEL, G. The Sociology of Conflict. **American Journal of Sociology**. p. 490-525, 1903. Available at: [https://brocku.ca/MeadProject/Simmel/Simmel\\_1904a.html](https://brocku.ca/MeadProject/Simmel/Simmel_1904a.html) Access on: Jul 1, 2017.

SIMMEL, G. A natureza sociológica do conflito. In: MORAES FILHO, E. (Org.). **George Simmel: Sociologia**. São Paulo: Ática, 1983, p. 122-134.

SOUZA, C. Políticas públicas: uma revisão de literatura. **Sociologias**. 2006, v. 8, n. 16, 20-45. Available at: <http://www.scielo.br/pdf/soc/n16/a03n16> Access on: Nov 5, 2016.

THE CLUB OF ROME. **History**. Available at: <https://www.clubofrome.org/> Access on: May 1, 2017.

VERDE ENGENHARIA. **Plano de Manejo da APA de Tinguá**. Verde Engenharia, 2016 a.

VERDE ENGENHARIA. **Plano de Manejo da APA de Jaceruba**. Verde Engenharia, 2016b.

VERDE ENGENHARIA. **Plano de Manejo da APA de Rio D'Ouro**. Verde Engenharia, 2016c.

VERGARA, S. C. **Métodos de pesquisa em administração**. São Paulo: Atlas, 2005.



*Esta obra está licenciada com uma Licença Creative Commons Atribuição 4.0 Internacional.*