

ARTÍCULOS

From common pool resources to common assets: the self-management of afro-descendant territories in the amazon

De recursos comunes a activos comunes: la autogestión de los territorios quilombolas en la amazonía

De recursos de uso comum a bens comuns: a autogestão dos territórios afrodescendentes na Amazônia

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Abstract. The paper adopts the Common Pool Resource and Common Property Regime Theories to analyze how two Afro-descendant communities in Brazilian Amazon have built different structures of power-sharing, as evidenced by their self-governance, self-organization, and self-management practices. It focuses on the incidence of rules and biophysical and material conditions of communities. The research is based on the Casing Method (Ragin, 1992) with data gathered from semi-structured and unstructured interviews and documentary analysis. The article demonstrates that social constructions result from influences of institutional arrangements, official and informal rules, and the environmental and material communities' conditions. Afro-descendants begin with a notion of a collective based on ethnic identity while at the same time they assume the territory institutionalized by the state. In symbolic terms, Afro-descendants individualize and share common pool resources with the workforce in specific production processes that combines the logic of market and survival and social reproduction.

Key-words: Common Pool Resources; Self-Management, Afro-Descendant Communities, Common Assets, Governance, Brazilian Amazon.

Resumen. El artículo utiliza las teorías de los recursos comunes y de los regímenes de propiedad común para analizar cómo dos comunidades quilombolas en la Amazonía brasileña construyeron diferentes estructuras de poder compartido, evidenciadas por sus prácticas de autogobierno, autoorganización y autogestión. Se centra en la incidencia de las reglas y las condiciones biofísicas y materiales de las comunidades. La investigación se basa en el Método Casing (Ragin, 1992) con datos recolectados a partir de entrevistas semiestructuradas, no estructuradas y análisis de documentos. El artículo demuestra que las construcciones sociales son el resultado de la influencia de los acuerdos institucionales, las reglas oficiales e informales y las condiciones ambientales y materiales de las comunidades. Las comunidades quilombolas parten de una noción de colectivo basada en la identidad étnica al mismo tiempo en que asumen el territorio institucionalizado por el Estado. En términos simbólicos, individualizan y comparten activos comunes con la mano de obra en procesos productivos específicos que combinan la lógica del mercado, la supervivencia y la reproducción social.

Palabras clave: Recursos del Fondo Común; Autogestión, Comunidades Quilombolas, Bienes Comunes, Gobernanza, Amazonia Brasileña.

Resumo. O artigo adota as teorias de Recursos de Uso Comum e Regimes de Propriedade Comum para analisar como duas comunidades afrodescendentes na Amazônia brasileira construíram diferentes estruturas de compartilhamento de poder, como evidenciado por suas práticas de autogoverno, auto-organização e autogestão. O foco está na incidência das regras e nas condições biofísicas e materiais das comunidades. A pesquisa baseia-se no Método de Casos (Ragin, 1992), com dados coletados por meio de entrevistas semiestruturadas e não estruturadas e análise documental. O artigo demonstra que as construções sociais resultam de influências de arranjos institucionais, regras formais e informais, e das condições ambientais e materiais das comunidades. Os afrodescendentes começam com uma noção de coletivo baseada na identidade étnica, ao mesmo tempo que assumem o território institucionalizado pelo estado. Em termos simbólicos, os afrodescendentes individualizam e compartilham recursos de uso comum com a força de trabalho em processos de produção específicos que combinam a lógica de mercado, sobrevivência e reprodução social.

Palavras-chave. Recursos de Uso Comum; Autogestão; Comunidades Afrodescendentes; Bens Comuns; Governança; Amazônia Brasileira.

1. INTRODUCTION

Afro-descendants are ethnic-racial groups according to their self-declarations, their own historical trajectory and specific territorial relationships, who are presumed to be of black ancestry with history of resisting oppression in quilombos (Brasil, 2003). Until the mid-1970s these groups were considered to be an expression of denial of the slave system, constituting spaces of resistance and isolation within the black population. In the diverse origins and histories of these groups, we observe that they were recognized as black lands, typology used by authors who emphasized their collective nature, defined by their shared territories and identity (Schmitt; Turatti; Carvalho, 2002). In Brazil, Afro-descendant communities were formalized by the state from the 1988 Constitution which recognized the territory of Afro-descendant remnants of quilombo communities as their lands.

The collective management of Common Pool Resources has been widely discussed in the Brazilian and international literature. It focuses mainly on discussing how variations in institutional arrangements shape the resources sustainability (Ostrom, 1990; Johnson, 2004; Agrawal, Chhatre, Hadin, 2008; Feeny et al, 2011). Evidence of self-governed common property regimes success, whose collective actions are focused on long-term benefits from natural resources management (Ostrom, 2011), present a diversity of solutions that go beyond the state and market as regulatory bodies of access to, and use of, collectively appropriated resources by a limited group of users (Cunha, 2004, p. 24). In this study, the Common Pool Resource Theory is applied to analyses Amazon's Afro-descendant communities that have specific forms of using natural resources, which is related to the spatial and environmental distribution in their territories (Barbosa; Marin, 2010).

From a self-governance framework, afro-descendant communities determine the forms of access, appropriation, and the use of specific natural resources for each community and location. This structure allows community's individuals to define a set of rules for the shared use of resources from property rights that imply the definition of who can access, extract, manage and dispose of the common pool resources as well as the exclusion of access. In the case of Afro-descendant communities - the empirical units of this study - there is self-organization and the resources are appropriated collectively, however the territories are formally established by state policies and officially registered as collective property. In addition, what make Afro-descendant communities emblematic are their concomitant production for self-consumption and various market circuits (Almeida, 2002). Afro-descendants who belong to a community are co-owners and managers, who collectively define the rights arrangements for their common property regime. They make decisions collectively in the resident association and, at the same time, they are managed by these decisions. Thus, self-governance is established as a social institution that allows the operational management of common pool resources from the self-management practices.

This article aims to analyze to what extent rules, biophysical/material conditions, community attributes, and institutional arrangements affect the structure of their actions, the incentives that individuals face, and their results in Afro-descendant communities that have developed their own usage practices and forms of land appropriation. The study began with the hypothesis that individuals organize themselves and from self-governance they practice self-management of their common pool resources in formalized spaces, and this affects self-governance structures, incentives

and outcomes. To this end, we seek to articulate the Theories of Common Pool Resources (Ostrom, 2011; 1990) and Common Property Regime (Feeny et al, 2011; McKean, 1998) and a discussion of self-management emphasizing Afro-descendant communities and taking that the institutionalized territories aim, among other things, to guarantee social rights to ensure their social reproduction.

2. CONCEPTUAL MODELS: COMMON POOL RESOURCES AND THE COMMON PROPERTY REGIME IN AFRO-DESCENDANT COMMUNITIES

The commons is a system of resources where the exclusionary potential of ownership or the limitation of existing user ownership rights is not simple and the resource system is subtractable (Ostrom; Gardner; Walker, 1994). The first issue is the difficulty of developing instruments that exclude potential beneficiaries, as solutions to these difficulties generate costs, which opens possibilities for predatory use. The second issue is that units of resources exploited by an individual are no longer available to others, and thus are subtractable and therefore can be depleted (McKean, Ostrom, 2011, p 81.). Thus, this resource class has as a characteristic the difficult exclusion and its joint use involves high subtraction. According to McKean and Ostrom (2011), common pool resources refer to the resource physical qualities and not the social institutions associated with them. In addition, common property does not refer to absence of property or freely accessible resources, but to refer a particular group of individuals who have common rights and share access rights to a resource, which characterizes a form of property rather than its absence.

Ostrom et. Al (1994) and Johnson (2004) state that there is a substantial variety present within each type of resource. Private goods are characterized by their relative ease of exclusion in an economic and legal sense, but they have high subtraction as raw materials, and they are best analyzed using the Neoclassical Economic Theory of Markets. In contrast, common goods have a high subtraction of resource units, and there is difficulty in excluding users interested in their use. According to Feeny et al (2011), common property resources refer to a resource class where exclusion is difficult, and joint use involves subtraction, and the term property is used in reference to the term resources. According to the author, there are four categories of property rights regimes: free access; private propriety; communal property and state property.

There are three forms of logic which are relevant to the discussion of the use and management of common-pool resources: the Logic of Collective Action (Olson, 2011), The Tragedy of the Commons (Hardin, 1968), and the Theory of Common Pool Resources (Ostrom, 1990). The logic of collective action is based on individuals' choices that are made in order to maximize the satisfaction of their preferences and at the same time minimize the costs involved. Choices are made in a utilitarian way by calculating: can I earn something from this engagement?

To Olson (2011), individuals tend not to act together because they can benefit anyway, even if they do not collaborate. To Hardin (1968), the tragedy of the commons occurs at a time when the unavailability produced by exploitation to exhaustion is the result of the freedom of access to common resources. It would be avoided if common goods were privatized or defined as public property, with government regulations of their forms of use and users, because cooperation is unlikely. It is observed that the three forms of logic involved in the analysis of common resources management (Olson, 2011; Hardin, 1968; Ostrom, 1990). They include collective action and cooperation as determinants for positive or negative results in relation to the appropriation of common resources. Thus, the failure to establish cooperation and reach a common goal is the result of the rational action of individuals in search of their best interests (Cunha, 2004).

The private property is possible only if the government can protect it and make it effective (Block and Jan-kovic, 2016). Thus, we observe locally that Afro-descendant communities build spaces based on institutionalized territory, such as the resident association, to elaborate and adapt the rules on participants inclusion or exclusion, appropriation, monitoring, sanctioning and conflict resolution within arenas of collective choice. This corresponds to self-governance, in which participating individuals elaborate the rules that affect the sustainability of the resource system and its use (Ostrom, 1999). The context of Afro-descendant communities allows us to draw closer to Social Management, a theoretical field under construction in Latin America. This approach understand that action taken by the subjects in managing the rules govern their daily lives from dialogue, and their non-state interest is focused on the common good (Cançado; Pereira; Tenório, 2013). Social management can be seen as collective decision-making

based on enlightened understanding with process transparency as a precondition, and emancipation as a useful end (Cançado; Sausen; Villela, 2013).

The social management proposition is commonly observed among populations that have a common pool of ownership resources. It is because collective deliberation in terms of territory use and appropriation becomes imperative, in that everyone needs these common pool resources to ensure their survival and social reproduction. The emancipation is even more evident, because these individuals on one hand are fighting and self-governing and, on the other hand, are institutionalizing their participation from associations. In this sense, our empirical research conducted on Afro-descendant communities points to the relevance of different social values that can be found in these territories. Various environmental practices marginalized by classical capitalist logic have gained notoriety as the environmental practices of indigenous peoples, Afro-descendants, peasants, and riverside dwellers that link their livelihoods to nature conservation (Escobar, 2005; Martinez-Alier, 2007).

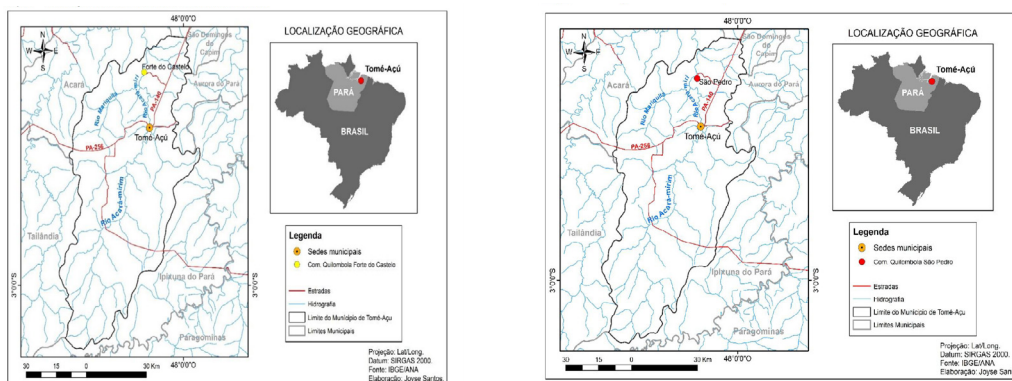
Based on Ostrom et al (2009) and the IAD Framework, we decided that the object of this study, within the context of Afro-descendant communities, could best be examined by taking into account the following existing sub-systems: (i) resource systems; (ii) resource units (iii) governance systems; and (iv) users. Each of these major sub-systems is composed of multiple useful variables.

3. METHODOLOGY

3.1. STUDY AREA

The first Afro-descendant community selected for this study was the community of Forte do Castelo, located in the *município* of Tomé-Açu, in Pará state. The resident association is made up of Afro-descendants who have established formal and informal rules from self-management. A specific property right arrangement was socially built, which allows the division of the common pool resources under a common property regime in individual territories belonging to family groups. Each group has rights to explore and dispose of existing resources in territories, with the flow of income not being shared (MAP 1).

Map 1. Communities of São Pedro and Forte do Castelo



Source: IBGE/ANA (2016)

The second Afro-descendant community chosen for analysis is called São Pedro. It is also located in the municipality of Tomé-Açu, on the banks of the Acará Mirim River. This community was selected because it has forest resources in its common pool resources. The resident association is formed by actors who recognize themselves as Afro-descendants, farmers, and riverside dwellers, who establish formal and informal rules from self-management. There are multiple territories and multiple identities, self-defined by the subjects for their territory appropriation and use, which are intertwined in everyday life, with separation being possible only in analytical terms. As for the multiple territories, these are characterized by diverse use of natural resources. The territory occupied by family groups is demarcated by the applied workforce. There is the institutionalized territory of the Afro-descendant community and the territory occupied by the riverside dwellers.

3.1. *Characterizing the Research Locus: The Perceptions of Social Actors*

3.1.1. *Forte do Castelo Quilombo Community: Self-Management and the Individualization of the Income Flow from Resource Units*

Access to the Forte do Castelo community is made by land or river. About 50 families live in the community and these subjects define themselves as a remnant of an Afro-descendant quilombo community. Their ethnic identity was officially recognized in 2014. The title of ownership of Afro-descendant land is a way of assuring family groups that have historically inherited the territory and its production links, social relations and reproductions. The co-owners demonstrate knowledge of the property rights arrangements that involve prohibition of the alienation of the territory under a common property regime.

In the community's common pool resources there are forest resources and clay, the latter being a non-renewable mineral resource. The non-renewable resource generates a highly predictable finite source of a resource unit type. One of the main sources of community income is the exploitation of this clay. After removing the clay, the community builds tanks for the practice of rudimentary fish farming aimed at internal consumption. The alienation of this clay comes from collective decision-making aimed at ensuring the survival and social reproduction of family groups belonging to the community. The community has collectively deliberated and prepared from self-management in a resident association assembly an arrangement of law in which each co-owner can exploit the natural resources existing in their territory. The applied workforce demarcates the individual territory of each family group.

3.1.2. *São Pedro Community: Self-Management within a Context of a Variety of Ethnic and Cultural Origins*

The São Pedro Afro-descendant community is located on the Acará Mirim River, and access to the community is made by river or dirt road. In this region there are direct descendants of African slaves who recognize their community as a remnant of a previous quilombo community in order to obtain the definitive and collective title to their lands from their ethnic identity. The region also includes social subjects who do not recognize themselves as Afro-descendants, but rather as riverside dwellers, resulting in an intergroup interaction of ethnic identity with the social context of the riverside way of life. Actors who recognize each other's differences congregate in the resident association to socially build their institutions for the territory use and appropriation from self-management, with the Acará Mirim River being the structuring nucleus, and the main means of production and social interconnection. In spite of their differences, they initially come together to fight for the recognition of the territory.

The struggle for recognition of the territory lasted for about 25 years and it started in the political sphere with councilors and state representatives. Regarding the struggle for recognition, Respondent B recalls: "For 25 years I've been fighting for the rights of black people here in Tomé Açu, for 25 years!" (Interview, 2016). Without political support, but with support from researchers who brought to light studies of the rights of family groups residing in this community, there was a reorganization of the social movement to seek the title of the entire territory as Afro-descendants. Currently, eight families have recognized themselves as Afro-descendants of quilombo communities in this territory.

However, the actors' opinions were divided into two different groups: those who did not accept giving their land to these Afro-descendants and those who declared themselves Afro-descendants and opted for this title. Due to the imminent "loss" of the individualized territory, which became collective once its title was given to Afro-descendants, a portion of these individuals resisted the institutionalization of the territory, particularly the riverside dwellers.

For the institutionalization and recognition of the community as Afro-descendant, it was necessary for land ownership to be collective, with no individual property in a direct transposition of the social scenario built up to that point. For a portion of the individuals, especially the riverside dwellers and farmers, this process was exogenous, as they did not identify themselves as Afro-descendants. Thus, several conflicts emerged from disputes over the rights to this territory between individuals who recognized themselves as Afro-descendants and the riverside dwellers and farmers who did not accept the demarcation. In fact, the main conflict is over the way in which the territory is used and appro-

appropriated. The group that did not identify itself as Afro-descendant did so mainly for the preservation of their individual property, which, with the demarcation of the area for Afro-descendants, became collective. Farmers, for example, predominantly use the land for economic purposes, such as wood exploitation. Afro-descendants, on the other hand, use the land for their social self-reproduction and have small-scale family farming as the basis of their subsistence. And those who consider themselves riverside dwellers combine small-scale farming with fishing activities. It should be noted, however, that although there are conflicts over the way in which the territory is used and appropriated, there is mutual respect between the different social groups that demonstrate harmonious coexistence.

Around the Acará Mirim River, social subjects organize themselves and practice self-management in relation to social, sexual, and age-related issues of work, skills, technical instruments, and above all their social reproduction. They socially reproduce the predominance of the family workforce in the production process which is based on family farming. A part of the Afro-descendant territory is set aside for common use, and this gives rise to a new symbolic territory which is intended for agriculture practice, where the co-owners own land considered to be “in trouble”. The production obtained in this territory is individualized for the family that applies its labor power there, although the symbolic territory is in common use by individuals belonging to the Afro-descendant community. This property right arrangement is a “word of mouth agreement” (Interview, 2016). This agreement demonstrates an informal institution built through self-management and even self-governance as a collective decision-making and regulatory mechanism for the use of the common pool resources. McKean (1998) understands common property regimes as arrangements that allow the privatizing of rights to assets without dividing the assets into parts. It is privatizing the rights without privatizing or parceling out rights to the stock or system of resources itself.

The São Pedro Afro-descendant community association has approximately 190 members with unique social, economic and political configurations. This is because this association brings together individuals who define themselves in distinct identities, sharing in common the territory that extends along the banks of the Acará Mirim River and the resources that exist there. It should be noted that self-governance, as a power-sharing structure, constitutes a catalyst for the adhesion of these different social actors as it brings together everyone as associates for collective decision-making and/or the construction of regulatory mechanisms for the use of the resources.

3.2. *INSTITUTIONAL ANALYSIS AND DEVELOPMENT*

We have chosen to use the Institutional Analysis and Development (IAD) (Ostrom, 2005) framework. Is was because the IAD has been applied to institutional analysis in collective action environments that allows for comparisons and evaluations of results and also interactions arising from situations and actions taken in the action arena by actors individually or together.

The IAD framework has been used to understand a wide range of social situations to understand the actors' behavior patterns and the observed results. It uses the concept of the action arena to predict and explain the results which are composed of elements that provide a systematic understanding of the collective action dilemma (McGinnis; Ostrom, 2010; Ostrom; Gardner; Walker, 1994).

In an IAD framework, the results come from pre-defined parameters. The action arenas assume the existence of an “action situations and actors” component and they refer to the scenario where individuals interact, exchange goods and services, engage in appropriation and provision activities, solve problems, fight, and enter into conflict, among other actions (Ostrom; Gardner; Walker, 1994; Janssen, 2015). Given the complexity “of the multiple local logics of production due to a variety of cultures and identities, and the ecological and economic practices that constantly emerge” (Escobar, 2005, p. 80) in different territories, including Afro-descendant territories, we will analyze the form of socioeconomic organization based on ties of friendship and kinship.

This conceptual analytical framework can be used to organize relevant variables from a common set of variables for the organization of socio-ecological systems studies (Ostrom et al, 2009). We collected data from informal and semi- structured interviews with community residents; follow-ups at resident association meetings; documentary analysis of Afro-descendants official documents; and from governmental official websites. We also used direct observation during the fieldwork research.

3.3 CASING METHOD

We adopted the Casing Method (Raging, 1992) to build up the qualitative analysis. This is a method that allows movement back and forth between theory and empiric data. Thus, we performed six casings. The first one was constituted from the Theory of the Commons, with the universe of observation being all commons. The second derived from the first and in it the common pool resources were defined, namely forest and mineral resources, managed by local communities under common ownership. In the third, the Afro-descendant communities were selected, since self-management is observed in them, under a common property regime. The fourth consisted of the selection of specific groups for investigation, including contemporary Afro-descendants since they are historically conspicuous and immediately available groups. The fifth involved the narrowing of our empirical focus, and this was where the selection of specific empirical units of analysis took place. The sixth empirical/theoretical casing involved the induction and formulation of the concept of a common asset, which was constructed from the analysis of evidence from our two empirical units of analysis from the fifth casing and theoretical findings from the three previous envelopes.

The construction of casings allows for a more complex analysis, as it considers the analytical categories and empirical data in a broad panorama of interrelationships regarding the analyzed object. The concept was adopted that our two Afro-descendant territories in different contexts presented distinctive elements for the analysis of the same object. An attempt was made to select Afro-descendant communities which are formally recognized and collectively titled, which characterizes their territories as common pool resources under a common property regime.

The follow section shows the main research outcomes based on the qualitative exam. It is a descriptive analysis. We do not make comparison between the communities, but we try to stress the main issues related to different structures of power-sharing, as evidenced by their self-governance, self-organization, and self-management practices.

4. POWER-SHARING, SELF-GOVERNANCE, SELF-ORGANIZATION AND SELF-MANAGEMENT PRACTICES IN THE COMMUNITIES OF CASTELO AND SÃO PEDRO

4.1 FORTE DO CASTELO COMMUNITY

This symbolic territory is constituted by ethnic, affective, cultural, family, historical and friendship relationships, which consists of a resource system under a regime of shared private property. At the same time, it is a territory individualized by Afro-descendants that seeks in the collective a meaning for their individualized social relations in terms of the family group, once it is not possible to separate them. Dissatisfaction among community members was perceived regarding ineffective participation and a lack of collaboration, which, according to them, is mainly outcome of interests conflicts and failure to reach a minimum consensus, which is one of the main limiting factors in collective decision-making. The design of the aforementioned context allows an approximation to the concept of self-governance (Ostrom, 1999) and Social Management, understood as an action undertaken by the subjects in a dialogue about the management of the rules that govern their daily lives, in the non-state public interest which are aimed at the common good (Cançado; Pereira; Tenório, 2013). On the other hand, social management is demonstrated by collective decision-making with no coercion and based on dialogue, language intelligibility, and an enlightened understanding where transparency is assumed and emancipation is its useful end (Cançado, Sausen; Villela, 2013).

Social Management is commonly observed among populations that have common pool resources under a common property regime, where collective deliberation on the territory use and appropriation becomes imperative, as everyone needs these common pool resources to guarantee their survival and social reproduction. As for collective communities and ethnic groups, emancipation is even more evident, as these individuals, on the one hand, fight and self-govern themselves and, on the other hand, institutionalize their participation through associations to legitimize their rights to remain in this territory.

To Ostrom (1990), there is a tendency for the government to try to impose uniform institutions across a jurisdiction without taking into account the local context. Accordingly, it makes the implementation extremely difficult for public agents and causes the institutions to be perceived as ineffective and inequitable, and the costs of monitoring and enforcing them are likely to be greater than if these institutions were shaped by local appropriators and adjusted to local contexts. Self-management is a practice that transcends the most diverse cultural, economic, and political environments as demonstrated from various experiences, whether in cooperatives, associations, unions or even collec-

tive communities on screen. Thus, during the fieldwork research, we verified the existence of a social group that built property rights arrangements under a common property regime, even before its recognition as an Afro-descendant community, which remained unchanged after the title. In terms of property arrangements, the respondent reports “There were already Afro-descendants here, but they were not recognized, because they did not have the knowledge” (Interview, 2016).

Socially, the notion of sustainability is built from the point of view of these Afro-descendants as a way to ensure survival and social reproduction for future generations, namely their descendants. In this sense, this ethnic group socially constructs the perception of a greater value of benefits than the sustainability *status quo*, which is an incentive to form and maintain self-management. The defense of a way of life strongly linked to the land and river can configure the struggle of Afro-descendant communities for the demarcation of their lands and for access to public policies, as a demand for environmental justice (Martinez-Alier, 2007). This is a way to remaining in their ancestral territory, thus ensuring their socioeconomic and cultural reproduction as bearers of an Afro-descendant identity.

According to Barbosa and Marin (2010, p. 32), the individualistic and concentrated nature of private property coexists with the traditional populations common pool resources system. In terms of symbolic individualization of the right to property, the respondent states “my land borders my sister’s land (...) they all know the limits of their lands (interviews, 2016). This corroborates what was discussed by McKean (1998) that states that shared private property arrangements present the following internal problems: a) collective action, since it is composed of more than one individual owner, and b) temptations to not follow shared rules, as individuals do not perceive that the guarantee from collective action is better than the situation obtained by action based on an optimal situation individually. However, in addition to formal institutions, there is also evidence of informal institutions which are focused on strategies that ensure the proper management and conservation of resources developed through self-management. Collectively they deliberate on rules for not exploiting palm oil production due to the environmental impact that it causes.

The community opted to adopt an Agroforestry System rather than intensively felling primary vegetation. Thus, in the Forte do Castelo community there are specific institutions for the resource units exploitation, within the institutionalized territory and the symbolic territory, all under common property. The territory social organization has led to the construction of property rights arrangements, which allow the symbolic privacy of rights over natural resources available in the area occupied by family groups. Thus, the allocation of benefits from the exploitation and commercialization of the resource units (clay), under common ownership, is individualized to the family group that occupies the area where these resources exist, and they are not distributed to the community, but rather the co-owners. Since the exploitation of resource units is related to agriculture, the breeding of animals is also perceived to be the same situation.

To Olson (2011), individuals tend not to act together because they can benefit anyway, even if they do not collaborate. If they are not excluded from the collective goods, once the goods are produced, they have little motivation to contribute voluntarily. Cooperation from collective action in common goods management happens if the number of individuals in a group is very small and if there is coercion or another special stratagem which leads rational and self-interested individuals to act to promote their common interests as a group (Olson, 2011).

The Afro-descendant community Forte do Castelo aggregates social subjects who develop their relations conditioned by strong dependence on, and knowledge of, the environment in which they live, and also poor coordination with the local markets and production based on family labor. Historically, they use equitable forms of social organization and low environmental impact techniques guided by cultural traits (Almeida, 2002; Cunha, 2004).

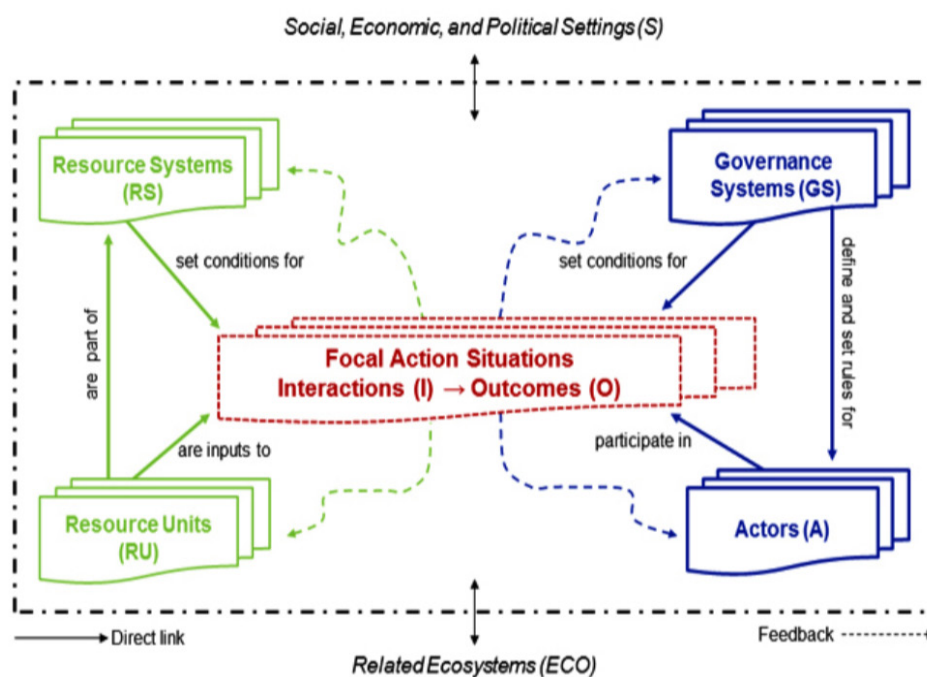
4.2 SÃO PEDRO COMMUNITY

São Pedro community does with different identities which are directly linked to the rules that guide the Afro-descendant territory. The spaces interact with public policies that do not recognize in practice the relationships social between these populations, which hinders their autonomy to think about the organization of their territory based on their experiences (Escobar, 2005). This can be observed in the conflicts that arise from their different understandings of individuals property rights, particularly between those who recognize themselves as Afro-descendants of remnants of quilombo communities and those who consider themselves riverside dwellers.

After the title of the territory was listed as Afro-descendant, there was a significant reduction in the number of resident association assemblies. As of the completion of this study, the association did not resume frequent meetings and did not provide access to financial resources, especially those destined for the National Agrarian Reform Program (PNRA).

As displayed in Figure 1, the actors interact in focal action situations which generate interactions and results which are affected by and affect the common pool resources and the self-governance system that interacts dialectically with social, economic and political configurations and their related ecosystems (Ostrom, 2011; (McGinnis; Ostrom, 2014). The arrows represent feedback and the arrows returns. The exogenous interference with the ecological system is related to the social, economic and political contexts which affects any component of the Socio-Ecological System Framework (McGinnis; Ostrom, 2014).

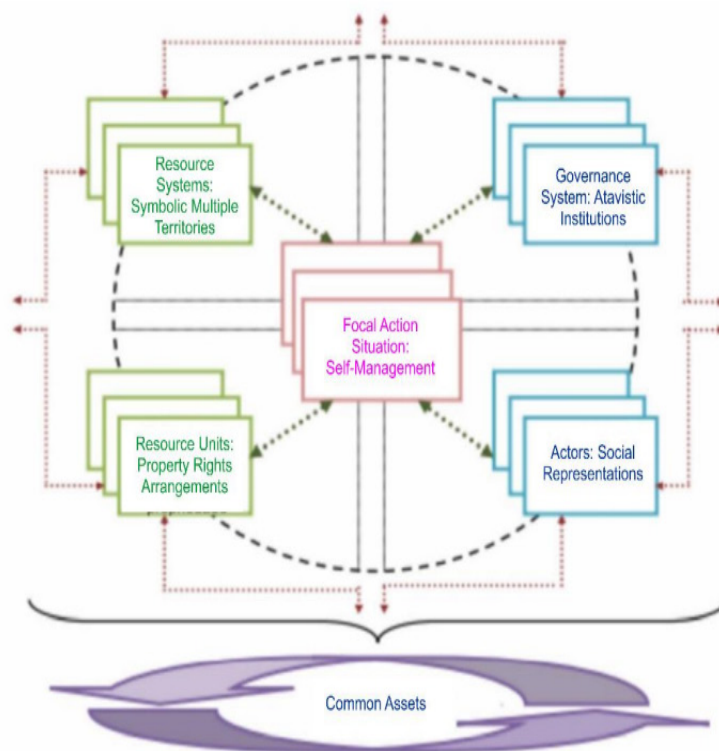
Figure 1. Social-ecological system (SES)



Source: MCGINNIS; OSTROM, 2014.

The empirical analysis of the two cases suggests a theoretical redefinition of the concept of common pool resources (Ostrom, 1990) for common assets within the context of Afro-descendant communities. This analytical reframing results directly from the interaction between the components of the SES Framework (Figure 2) which are the resource system, the resource users, actors, and the self-governance system, as a structure for defining their own institutions from power sharing and minimal consensus within a self-management action situation.

Common pool resources consist of natural resources, that is, resource units which are factors with economic potential or not that are available in nature. These features may have privacy rights in various contexts. In one way or another, Afro-descendant communities reframe common pool resources, transforming them into common assets. This is because common assets are factors in use, used either in the specific production processes of the Afro-descendant community or in practices aimed at subsistence or/and social reproduction. The processes of using and appropriating territory by Afro-descendants gives rise to a redefinition of the concept of common pool resources, because they individualize shared private property, individually appropriating the place of housing, the yard, and domestic animals (Diegues, 2011; Cardoso, 2015). In theoretical terms, from the discussion of the common pool of self-governing resources in Afro-descendant communities, it is possible to include an analytical perspective developed from the concept of common assets (Figure 2).

Figure 2. Common assets within the context of Afro-descendant communities

Source: Elaborated based on Ostrom (2005), Cançado et al (2014), McGinnis and Ostrom (2014), O'Dwyer (2002), Cardoso (2013), Castro (2006).

Hardin (1968) discusses the tragedy of the commons as a result of the search for unlimited individual interest in a limited system, which forces the individual to seek his or her own interest, believing in the freedom of access to the commons, which leads to the ruin of all. Ostrom developed the concept of common pool resources, referring to the physical qualities of a resource system. Ostrom recognizes that resources are part of the physical world. Elements can be added to this concept by understanding resources as natural resources available in nature, which may or may not have commercial value. This research guides an understanding of how these communities symbolically perceive the common pool of resources as an asset, that is, an acquired good, a legacy arising from their cultural and material heritage.

Assets are identified from future economic benefits as the result of rights acquired by agents as a result of some past transaction. Thus, the asset must have the characteristic of being attributable to specific entities, which can be exchanged (transferred separately or as part of a related group) and they must be measurable and punishable in terms of money (Sprouse; Moonitz, 1962). There are two past events that characterize the attribution of common assets to the Afro-descendant community and, at the same time, to the individual who belongs to that community, and both are considered specific entities. On the one hand, the state legitimizes the concession of a collective land title in the territory in the name of the resident association. On the other hand, common assets are noticeable in the Afro-descendant territory from an identity system and specific duties, where the subjects collectively take ownership and have acceded to common pool resources in production scale, either for the market, or for subsistence.

Common assets have a fundamental asset characteristic, analyzed by Fuji (2004), which is the potential to generate future benefits. These Afro-descendant communities start from the understanding of a common property regime and elaborate their institutions for access, extraction, management, and alienation under the auspices of their resident associations. The communities studied show the existence of an ethnic identity marked by kinship ties, a way of life, and self-definition. In this way, each empirical unit of analysis brings key elements, albeit within different social contexts, which are not a deterministic plan of the SES Framework (Seward; Xu, 2018).

Ostrom (1990) argues that even when particular rights are unitized, quantified, and salable, the resource system will likely be owned in common, rather than indistinctly. Based on this apprehension, common assets are also a social construction, based on the practices of use and appropriation of common pool units of resources in the territory under a common property regime, specifically in Afro-descendant communities. It is noteworthy that common assets are socially constructed in symbolic terms and not as organizational assets.

Escobar (2005) highlights the importance of these places as lived spaces for these populations. This author demonstrates that the phenomenon of globalization has had direct impacts on the weakening of these places, which compromises the understanding of “culture, knowledge, nature, and the economy” (p.69). In his view the claims of Afro-descendants in the Caribbean regarding the demarcation of their lands, go beyond the strictly material and consider above all, the right to exist as a cultural, political and ecological issue.

4. FINAL CONSIDERATIONS

We conclude that Afro-descendant communities self-organize themselves and that from self-governance and self-management of their common pool resources affects their self-governance structures and their incentives and results such as over-exploitation or measures of social performance.

We have found that the specific resource systems of these communities and their complex self-governance systems act as separate structures to define institutions that have their own power and minimal consensus-sharing features that interact with the self-management practiced by various actors in their common use areas.

This action situation suggests new meaning to the concept of common pool resources as common assets, the latter being apprehended by Afro-descendant communities as diversified social constructions to the detriment of specificities presented by the territory that permeate the institutions established by self-management.

An analysis of the social relations that develop in these Afro-descendant communities points to the coexistence of multiple territories and multiple identities, which are self-defined by these subjects in the appropriation and use of this territory and intermingle in daily life, thus forming multiple identities of farmers, riverside dwellers, and Afro-descendants. It is noteworthy that the territory is apprehended and demarcated by family groups which are the applied workforce.

Considering this, it is noticeable that Afro-descendant communities build multiple links through identity, place, and power as stated by Escobar (2005:70) that says that social actors build their identities without naturalizing or constructing places as a source of authentic identities. The construction of their identity takes place from the apprehension of the territory as a place of its social reproduction. In Afro-descendant communities context, rules, biophysical/material conditions, community attributes, and institutional arrangements affect and are affected by the structures of self-governance and social representations that are materialized in their imagination, social memory, and ethnic identity. Among these representations, the respect attributed to the “leader” stands out as an institution, being the holder of social history with significant influence on decisions taken in the territory. In addition, centenary trees, such as Brazil nut trees, symbolize the ancestral occupation of the territory and are used as marks of property by family groups in that territory. Afro-descendant communities practice self-management when taking decisions collectively and have their own logic of development oriented towards survival and social reproduction in which natural resources are a source of life, and the generation of surpluses in local or global market relationships are not their main objective.

References

ARDILA, C., L., VALENCIA, P., J., CEBALLOS, J. Simulación del mecanismo de Autogestión Comunitaria para la regulación del bagre como recurso de uso común. Cuaderno Activa, 9, 25-35. (2017).

AGRAWAL, A.; CHHATRE, A.; HARDIN, R. Changing governance of the world's forests. Science, v. 320, n. 5882, p. 1460-1462, 2008.

AGRAWAL, A.; CHHATRE, A. Forests, Governance, and Sustainability: common property theory and its contributions. **International Journal of the Commons**, v. 1, n. 1, outubro, 2007. p. 111-136.

ALMEIDA, A. W. B. Os quilombos e as novas etnias. In: O'DWYER, E. C (org). **Quilombos: Identidade Étnica e Territorialidade**. FGV: Rio de Janeiro, 2002. P. 43-82.

BLOCK, Walter; JANKOVIC, Ivan. Tragedy of the Partnership: A Critique of Elinor Ostrom. American Journal of Economics and Sociology, Inc. 2016.

BARBOSA, M. B. C; MARIN, R. E. A. Manejo e uso comum dos recursos naturais em populações quilombolas no Vale do Rio Capim. **Novos Cadernos NAEA**. V. 13, N. 1, P. 27-45, JUL. 2010.

CARDOSO, L. F. C. O Suor Marca a Terra”: Trabalho, Direito e Território Quilombola na Ilha do Marajó, Pará. **Ambiente & Sociedade** n São Paulo v. XVIII, n. 2 n p. 77-96 n abr.-jun. 2015.

CANÇADO, Pereira, J.R.; TENÓRIO, F.G. Gestão social: epistemologías de um paradigma –1. Ed. –Curitiba, PR: CRV, 2013.

_____, SAUSEN, J.O.; VILLELA, L.E. Gestão social *versus* gestão estratégica, IN: CANÇADO, A. C.; SAUSEN, J.O.; VILLELA, L.E. (Org) –Rio de Janeiro: Editora FGV, 2013.

CUNHA, L. H. Da “Tragédia Dos Comuns” à Ecologia Política: Perspectivas Analíticas para o Manejo Comunitário dos Recursos Naturais. **Raízes**. Vol. 23, N°s 01 e 02, jan.–dez./2004. P. 10-26.

DIEGUES, A. C. Repensando e Recriando as Formas de Apropriação Comum dos Espaços e Recursos Naturais. In: DIEGUES, A. C.; MOREIRA, A. de C. C. **Espaços e recursos naturais de uso comum**. São Paulo: Napaub-USP, 2011.

ESCOBAR, Arturo. O lugar da natureza e a natureza do lugar: globalização ou pós-desenvolvimento. IN: A colonialidade do saber: eurocentrismo e ciências sociais. Perspectivas latino-americana. CLACSO, 2005.

FEENY, D. et al. A Tragédia dos Comuns Vinte dois Anos Depois. In: DIEGUES, A. C.; MOREIRA, A. de C. C. **Espaços e recursos naturais de uso comum**. São Paulo: Napaub-USP, 2011.

FUJI, A. H. O Conceito de Lucro Econômico no Âmbito da Contabilidade Aplicada. **Revista Contabilidade & Finanças - USP**, São Paulo, n. 36, p. 74 - 86, setembro/dezembro 2004.

HARDIN, G. The Tragedy of the Commons. Science, v. 162, 1968.

JANSSEN, AM. A behavioral perspective on the governance of common resources, *Current Opinion in Environmental Sustainability* 2015.

JOHNSON, Craig. Uncommon Ground: The 'Poverty of History' in Common Property Discourse. *Development and Change* 35(3): 407–433, 2004.

McKEAN, M. A; OSTROM, E. Regimes de propriedade comum em florestas: somente uma relíquia do passado? In: DIEGUES, A. C.; MOREIRA, A. de C. C. **Espaços e recursos naturais de uso comum**. São Paulo: Nupaub-USP, 2011.

MCGINNIS, M. D.; OSTROM, E. IAD and SES Dynamic Flows: **Introducing the Program in Institutional Analysis of Social-Ecological Systems (PIASES) Framework**. (2010). Disponível em: <https://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/9250/McGinnis%20%26%20Ostrom_IAD%20and%20SES%20Dynamic%20Flows%204.pdf?sequence=1>. Acesso em 23 jan. 2017.

_____. Social-ecological system framework: initial changes and continuing challenges. *Ecology and Society* 19(2): 30, 2014. Disponível em: <<http://dx.doi.org/10.5751/ES-06387-190230>>.

MARTINEZ-ALIER, Joan. *O ecologismo dos pobres: conflitos ambientais e linguagens de valoração*. São Paulo: Contexto, 2007.

MCKEAN, M. A. Common Property: What is it, What is it Good for, and What Makes it Work? In: GIBSON, C.; MCKEAN, M. A; OSTROM, E (Ed.). **Forest resources and institutions**. FAO: 1998. P. 23-44.

OLSON, M. **A Lógica da Ação Coletiva: Os Benefícios Públicos e uma Teoria dos Grupos Sociais**. Tradução de: Fábio Fernandez. 1. ed. 1. Reim. São Paulo: Editora da USP: 2011.

OSTROM, E. **Governing the Commons: The Evolution of Institutions for Collective Action**. Cambridge University Press, 1990.

_____. **Self-Governance and Forest Resources**. ISSN 0854-9818 OCCASIONAL PAPER NO. 20 Feb. 1999. Disponível em: <http://www.cifor.org/publications/pdf_files/OccPapers/OP-20.pdf>. Retrieved on March 23, 2016.

_____, E et al. A General Framework for Analyzing Sustainability of Social-Ecological Systems. *Science* 325, 419 (2009).

_____. **Understanding Institutional Diversity**. Princeton: Princeton University Press, 2005.

OSTROM, E.; GARDNER, R.; WALKER, J.; Rules, Games, and Common-Pool Resources. The University of Michigan Press, 1994.

OSTROM, E.; HESS, C. **A framework for analyzing the knowledge commons. Understanding Knowledge as a Commons.** Edited by Charlotte Hess and Elinor Ostrom, MIT Press, Cambridge, Massachusetts, London, England, 2007.

RAGIN, C.C. "Casing" and the process of social inquiry. In: RAGIN, C. C.; BECKER, H. S. **What is a Case? Exploring the foundations of social inquiry.** Cambridge University: Press 1992.

SCHMITT, A.; TURATTI, M. C. M.; CARVALHO, M. C. P de. A Atualização do Conceito de Quilombo: Identidade e Território nas Definições Teóricas. **Ambiente & Sociedade** -Ano V –No 10 -1o Semestre de 2002.

SPROUSE, R. T.; MOONITZ, M. **A tentative set of broad accounting principles for business enterprises, 1962.** Disponível em: <<http://clio.lib.olemiss.edu/cdm/ref/collection/aicpa/id/166553>>. Retrieved in October 2017.

SEWARD; P., XU, Y. The case for making more use of the Ostrom design principles in groundwater governance research: a South African perspective, *Hydrogeology Journal*, 2018.