



DESENVOLVIMENTO
E MEIO AMBIENTE

SISTEMA
ELETRÔNICO
DE REVISTAS
SER | UFPR

www.ser.ufpr.br

The legal framework of timber forest management and the autonomy of the traditional populations in Amazon protected areas

Os regulamentos do manejo florestal madeireiro e a autonomia das populações tradicionais em unidades de conservação da Amazônia

Jéssica PACHECO¹, Cláudia AZEVEDO-RAMOS¹

¹ Center for Higher Amazonian Studies (Naea), Federal University of Pará (UFPA), Belém, PA, Brazil.

* E-mail of contact: jessicapacheco02@hotmail.com

Article received on June 5, 2018, final version accepted on March 12, 2019.

ABSTRACT: This study analyzed whether the legal framework of the timber community forest management (CFM) in federal protected areas (PA) of the Brazilian Amazon interferes in the autonomy of the traditional populations in carrying out their productive activities. It was verified that the legal framework of the CFM in PA, constituted by rules of territorial, procedural and technical dimensions, interfere in the community's autonomy in the management of the forest resource, in the process of obtaining the CFM license and in the logging techniques used. The failure to comply with the legal determination to elaborate differentiated sustainable forest management plans for communities has conditioned traditional populations to standardized requirements to the detriment of the constitutional and legal recognition attributed to a culturally distinct social group. In addition, the licensing of CFM is also conditional on the fulfillment of previous obligations of the environmental agency itself. It was concluded that the autonomy of the traditional populations in the CFM is conditioned from its beginning, since the way of use and manage the natural resources by communities is not the guiding of the legal framework of CFM. The simplification and adaptation to the legislation of some normative instruments could increase the degree of community autonomy in CFM, enhancing its multiplication in the Amazon. Some priority changes in the regulations were proposed in this study.

Keywords: Amazon; autonomy; community forest management; legal framework; traditional populations.

RESUMO: Este estudo analisou se os regulamentos do manejo florestal comunitário (MFC) madeireiro em unidades de conservação (UC) federais na Amazônia brasileira interferem na autonomia das populações tradicionais em executarem suas atividades produtivas. Constatou-se que os regulamentos do MFC madeireiro em UC são constituídos por regras de dimensões territoriais, procedimentais e técnicas, que interferem na autonomia comunitária na gestão do recurso florestal, no processo de obtenção da licença do MFC e nas técnicas de execução da atividade. O não cumprimento da determinação legal de elaboração de planos de manejo florestal sustentável diferenciados para comunidades tem condicionado as populações tradicionais a exigências de licenciamento e técnicas padronizadas em detrimento do reconhecimento constitucional e legal atribuído a um grupo culturalmente diferenciado. Além disso, o licenciamento do MFC está também condicionado ao cumprimento de obrigações prévias do próprio órgão ambiental. Concluiu-se que a autonomia das populações tradicionais no MFC madeireiro em UC é condicionada desde o início, pois a forma comunitária de uso e gestão dos recursos naturais não é o elemento orientador das estruturas legais do MFC madeireiro em UC. A simplificação e a adequação à legislação de alguns instrumentos normativos poderiam aumentar o grau de autonomia comunitária no MFC madeireiro, facilitando sua multiplicação na Amazônia. Algumas mudanças prioritárias nos regulamentos foram propostas neste estudo.

Palavras-chave: Amazônia; autonomia; manejo florestal comunitário; populações tradicionais; regulamentos.

1. Introduction

Forests have a crucial role in sustainability, economic growth and the quality of life for the Brazilian population, and government action to protect and sustainably use these resources are reaffirmed as some of the principles of the Brazilian Forest Code (art. 1, items II, III, Law No. 12.651/2012), which aims to foster sustainable development.

Commonly called community forests, 57% of Brazil's public forests belong to traditional populations and other rural workers (SFB, 2017), including indigenous peoples, communities located in extractive reserves (Resex), sustainable development reserves (SDR), and in sustainable federal settlements. This scenario, most prominent in the Amazon region, shows that the achievement of sustainable development in the area can be challenging to achieve if it is enforced without the involvement of these social groups or if their circumstances are not considered.

Since the 1990s, the management of forest resources by traditional populations, especially timber – called community forest management (CFM) – in public forests of the Brazilian Amazon has been the subject of debate regarding the struggle for land rights, the use of natural resources, and challenges for greater social inclusion of these populations (Amaral, 1998; Pacheco, 2017).

Common problems in the timber CFM have accumulated over time, among them: excessive bureaucracy; lengthy processing; favoring of illegal activities; need for simplification; inadequacy to the reality of community production and management; complexity of administrative procedures; technical complexity; high costs; financial dependence on community members; and need for training (Amaral & Amaral Neto, 2005; Cavalheiro et al., 2008; Porro et al., 2008; Menezes et al., 2014; Waldhoff, 2014; Azevedo-Ramos & Pacheco, 2016).

Given the complexities of CFM, traditional populations are conditioned to a community ma-

management standard different from conventional management, being submitted to technical and administrative standards that lead them to seek support from outside the community, be it technical, financial or administrative (Medina & Pokorny, 2014). Part of this support and the management authorization itself are conditioned to regulations arising from the legislation and also from those established by the managing body of the conservation unit. Thus, the following question arises: how do timber forest management regulations interfere with the autonomy of traditional populations?

Benatti (2002a; 2011) points out that the degree of autonomy of traditional populations in the use of land and natural resources is limited since the legal norms of the State restrict their decisions. This occurs due to the common property ownership, consisting of the areas of use of traditional populations, focused on “[...] agriculture, animal husbandry, hunting, fishing, and gathering, [...] regulated by the Government” (Benatti, 2011, p. 93).

Thus, the objective of this study was to analyze how much regulations of the community forest management in public forests in the Brazilian Amazon interfere in the degree of autonomy for timber extraction of traditional populations. To this end, the normative structures of the CFM were assessed, followed by an analysis of the degree of autonomy granted to the communities and how rights guaranteed in the legal system are being enforced in this activity.

This study considers that since traditional populations inhabit public areas, some general norms imposed by the government apply to them. Therefore, community autonomy in CFM is understood here as the free decision of traditional populations to choose their own actions related to forest manage-

ment and its resources, within the legal requirements of the State (Pacheco, 2017).

requirements of the State (Pacheco, 2017).

2. Material and methods

The subjects of the study were the traditional populations living in federal conservation units (CU) of the Brazilian Amazon, particularly in Resex, SDR and National Forest (Flona) areas. The legal definition of traditional populations was adopted, according to article 3, item I, of Decree No. 6.040/2007:

[...] culturally differentiated groups that recognize themselves as such, that have their own forms of social organization, that occupy and use territories and natural resources due to their cultural, social, religious, ancestral and economic values, using technologies, innovations, and practices inherited and transmitted by tradition.

The present study was based on a documentary analysis of the following documents: laws and regulations of the Brazilian legal system regarding the territorial rights of traditional populations in CU, as well as the legal instruments (LI) of the CFM for timber extraction in the CU; bibliographies on: community forest management, environmental protection and use of natural resources; identity and territorial principles of traditional populations; and legal doctrine, primarily environmental, constitutional, and administrative.

Based on the literature mentioned above, constitutional and infra-constitutional norms were analyzed in terms of the rights of traditional

communities over the use of their territory and the management of renewable natural resources, especially timber forests, as well as the legal and administrative conditions of CFM in the CU.

The regulations of CFM in CU have been distinguished from one another based on their purpose, to identify the nature of the rules that interfere in a community's autonomy. These rules are divided by Schlager and Ostrom (1992), who, on collective-choice property rights systems, categorize them into: (1) at an operational level; and (2) of collective choice.

Property rights at the operational level consist of the rights of access and extraction, concerning, respectively, the right to enter a space and enjoy the benefits and the right to collect their resources. Collective-choice rights include rights of management, exclusion, and alienation. Management is the right to determine how, when and where to enter that space and extract a resource, and when and how its structure can be changed. The exclusion right consists of who can and cannot have access to the resource. The alienation right refers to the right to sell or lease one or other of the aforementioned collective-choice rights (Schlager & Ostrom, 1992).

Subsequently, the legal and infralegal instruments of CFM in CU that regulate each property right described by Schlager & Ostrom (1992) were identified. In addition, we verified whether these instruments repeated in each of these rights. Furthermore, we determined which and how many types of rules adjust each one of the property rights. Based on these parameters, the limits of autonomy of traditional communities were identified in each type of rule, serving as a basis for the analysis of the degree of autonomy in CFM in CU.

When considering the way traditional populations carry out their production activities, which involves the use of renewable natural resources (Diegues, 2000; Benatti, 2003; Vianna, 2008), its practices consist of what Packer (2015, p. 35) calls “legal form”, which integrates the “community forms”:

The transgenerational management of the commons over the territories ends up generating customary extra-state norms that regulate the traditional knowledge and the collective forms of work associated with the conservation of biodiversity and agrobiodiversity. Applied law and socially effective models over these biodiverse territories are mainly collective agreements, oral or written, that regulate the management and use of specific resources in the area [...].

In view of this, in the territories of traditional populations, legal systems from different sources coexist (Benatti, 2002a), such as those produced by the State and customary ones – which led this study to be based on the assumption of a legal pluralism in the productive relations of these groups – as well as the activities that integrate the CFM in CU. This is because legal pluralism consists of “[...] normative practices in the same sociopolitical space, intertwined by conflicts or consensus, and may or may not be official and have its *raison d'être* in the existential, material or cultural needs” (Wolkmer, 2001, p. XVI).

3. Results

3.1. The territorial rights of traditional populations and access to renewable natural

resources in Conservation Units

The main constitutional legal norms and the legislation that regulates the territorial rights of

traditional populations in CU, as well as the fundamental elements that must be ensured for the proper enforcement of these rights, are described in Table 1.

TABLE 1 – Constitutional legal norms and infraconstitutional legislation that regulate the territorial rights of traditional populations in Conservation Units.

Year	Legal instrument	Origin	Purpose
1988	Federal Constitution of Brazil: mainly articles 215 and 216	Original Constituent Power Act	Guarantees the exercise of cultural rights and the ways of creating, doing, and living of traditional populations as intangible cultural heritage.
2000	Law No. 9985	Legislative Power Act	Recognizes the rights of territorial and natural resource use of communities
2006	Law No. 11284	Legislative Power Act	Establishes the allocation of public forests to traditional populations as a form of forest management
1989	ILO Convention 169 concerning indigenous peoples and tribal peoples	Promulgated by Decree No. 5051 of 19 Apr 2004	Institutes as a state duty the coordinated action to protect the rights of communities and to guarantee the respect to their integrity.
2007	Decree No. 6040 of 7 Feb 2007	Executive Power Act	Establishes the National Policy for the Sustainable Development of Traditional Peoples and Communities
1998	Convention on Biological Diversity	Promulgated by Decree No. 2519 of 16 Mar 1998	Recognizes that the lifestyles of traditional populations depend on the conservation of biological diversity
2006	Convention for the Safeguarding of Intangible Cultural Heritage	Promulgated by Decree No. 5753 of 12 Apr 2006	Safeguards the intangible cultural heritage of communities, groups, and individuals
2007	Convention on the Protection and Promotion of the Diversity of Cultural Expressions	Promulgated by Decree No. 6177 of 01 Aug 2007	Protects and promotes the diversity of cultural expressions

SOURCE: Authors (2018).

The Brazilian Federal Constitution of 1988 recognizes the traditional populations a collective existence, guaranteeing them the full exercise of cultural rights, and that the State must protect them (art. 215, caput). Goods of material and immaterial

nature that refer to the identity, action, and memory of these groups are cultural heritage, including forms of expression and ways of creating, doing and living (art. 216, items I and II, CF/88). Thus, Brazil recognizes the ethnic diversity and multicultural

of its population (Duprat, 2002). The identities of traditional populations are now recognized and protected by law.

With the ratification of Convention 169 of the International Labor Organization (ILO), and its subsequent promulgation, Brazil took responsibility for developing coordinated actions to ensure respect for the integrity and protection of the rights of traditional populations, among which are: i) of property and ownership over traditionally occupied lands (art. 14, item 1); ii) the participation in the use, management, and conservation of the natural resources of these lands (art. 15, item 1); iii) to be consulted, by appropriate means and by their representative institutions when these providing for legislative or administrative measures likely to affect the communities directly; and iv) to control, to the greatest extent possible, their own economic, social, and cultural development. As for the communities in CU, only the right of possession over the land is assured to them, whose domain has remained public.

The Convention on Biological Diversity (CBD), on the other hand, recognizes the close dependence of the maintenance of biological resources on the lifestyles of traditional populations. The Convention on the Protection and Promotion of the Diversity of Cultural Expressions recognizes the importance of traditional knowledge in contributing to sustainable development. Finally, in the Convention for the Safeguarding of the Intangible Cultural Heritage, for some of its purposes, the States must safeguard and respect the intangible cultural heritage of the communities and promote awareness at the local, national and international levels on the importance of intangible cultural heritage.

The National Policy of Traditional Peoples and Communities (PNPCT) (Decree No. 6040/2007) aims at the sustainable development of these populations in order to strengthen and guarantee them territorial, social, environmental, economic and cultural rights; it prioritizes the implementation of infrastructure that is suitable to local socio-cultural realities, and the protection and promotion of rights over their knowledge, practices, and uses (art. 3, item XV). In addition, productive inclusion through the development of sustainable technologies is also an envisioned objective, based on respect for the system of social organization of traditional populations and the valorization of local natural resources and their practices, knowledge, and technologies (art. 3, point XVII).

The regularization of community territories is a fundamental right (Treccani, 2014). This recognition occurs in different ways, such as the creation of the following conservation units (CU): Resex; SDR; and the allocation of areas to communities found in Flona. These are ways of managing public forests for sustainable production under Law No. 11284/2006.

The ownership and use of the territory of the communities in CU must be regulated by a Contract for the Concession of the Real Right of Use (CCR-RU) (art. 13, Decree No. 4340/2002), between the communities and the State, pursuant to Decree-Law No. 271/1967 and Law No. 11284/06 (art. 6, § 3). Thus, with the CCRRU, the CU is in the public domain, but its ownership and use remain with the communities. The management of the federal CUs is carried out by a Deliberative Council (Resex and SDR) or a Consultative Council (Flona), under the presidency of the Chico Mendes Institute for Biodiversity Conservation (ICMbio).

Because of this, traditional populations are reserved rights that involve the use of land and its natural resources and decision-making on the management of the areas that make up the CU. As residents of public areas, traditional populations are assigned the duty and right to carry out sustainable practices consistent with the conservation of biodiversity; that is, they are subject to participate in the preservation, recovery, defense, and maintenance of the area, and subject to the state rules that regulate the use of natural resources (Santilli, 2005).

3.2. Legislation and regulations on community forest management of timber extraction resources in the Amazon Conservation Unit

Different legal and infralegal instruments regulate Community Forest Management (CFM) of timber extraction resources in the Amazon CU. Its main instruments were identified and served as a basis for the analysis of this study (Table 2).

TABLE 2 – Constitutional and infraconstitutional legal norms that directly or indirectly interfere with CFM in CU in the Amazon.

Year	Legal instrument/regulation	Origin	Purpose
1988	Federal Constitution of Brazil: emphasis on Article 225	Original Constituent Power Act	Determines the ecologically balanced environment as a fundamental right and duty of all to preserve it
2000	Law No. 9985	Legislative Power Act	Allows logging in CU
2006	Law No. 11284	Legislative Power Act	Defines sustainable forest management
2012	Law No. 12651	Legislative Power Act	Concerns licensing for logging in forests
1981	Law No. 6938	Legislative Power Act	Establishes principles to be attained by the National Environmental Policy
2002	Decree No. 4340	Executive Power Act	Regulates Law No. 9985/2000
2006	Decree No. 5975	Executive Power Act	Regulates Law No. 12.651/2012
2007	Decree No. 6063	Executive Power Act	Regulates Law No. 11284/2006
2009	Decree No. 6874	Executive Power Act	Establishes the Federal Program for Community and Family Forest Management
2009	Resolution of the National Environmental Council (Conama) No. 406	Administrative Act	Establishes the technical parameters for preparation, presentation, technical evaluation, and execution of the SFMP for the Amazon biome
2006	Ministry of the Environment LI – (MMA) No. 4	Administrative Act	Establishes the obligation to obtain prior authorization for the technical analysis of the SFMP
2006	LI MMA No. 5	Administrative Act	Lays down the technical procedures for preparation, presentation, execution and technical evaluation of SFMP in the Amazon biome
2011	LI ICBio No. 16	Administrative Act	Regulates the guidelines and administrative procedures for the approval of the community SFMP in Resex, SDR and Flona.

SOURCE: Authors (2018).

Article 225 of the Federal Constitution is the primary regulator of the use and management of timber forest resources, establishing the protection of flora as a state and collective obligation and prohibiting practices that endanger its ecological function (article 225, § 1, item VII). Thus, maintaining ecological services of natural resources is one of the main objectives of environmental protection (Benatti, 2002b, p. 264).

In sustainable forest management, the objective is to obtain economic, social and environmental benefits (art. 1, item VI, Law No. 11284/2006). Thus, in carrying out this activity, the search for economic development cannot make the ecological balance of the environment unfeasible, nor can it prevent it, under the principle of sustainable development, implicit in the caput of article 225 of the Constitution of 1988.

Therefore, in order to ensure that ecological services are maintained, forest exploitation is subject to prior approval by the Sustainable Forest Management Plan (SFMP) (art. 31, caput, Law No. 12651/2012), which has as its legal basis the principles of precaution and prevention, inferred from Article 2, items I, IV and IX of Law No. 6938/1981. These are precautionary principles to ensure the implementation of sustainable development because “[...] public authorities seek to implement effective legal instruments that can preventively avoid or mitigate impacts on the environment” (Benatti, 2002b, p. 264).

According to Law No. 12.651/2012, in article 31, § 1, technical and scientific foundations must be met in the execution of the SFMP, listing them as follows: i) characterization of the physical and biological means; ii) determination of the existing supply; iii) intensity of exploitation compatible with

the environmental support capacity of the forest; iv) cutting cycle consistent with the time to restore the volume of extracted material from the forest; v) promotion of the natural regeneration of the forest; vi) adoption of an adequate silvicultural system; vii) adoption of a suitable exploitation system; viii) monitoring the development of the remaining forest; ix) adoption of measures to mitigate environmental and social impacts. To meet these requirements, the SFMP must provide techniques for forest management, exploration, replacement and management, and they should conform to the diverse ecosystems within the forest cover.

The approval of the SFMP by the delegated environmental agency is what confers the license to carry out sustainable forest management. In this sense, the Forest Code establishes that other stages of environmental licensing should not be applied beyond this approval (art. 31, § 2).

In addition, the SFMP should not have a single standard, but different arrangements according to the scale of management and the category of the proponent. Specifically, the law states that the SFMP arrangements should differentiate at a corporate scale, small scale and a community scale (art. 31, § 5, Law No. 12651/2012).

The Forest Code also provides that, for forest management to be carried out on small farms or rural family settlements, simplified procedures for preparation, analysis, and approval of the SFMP must be established by the delegated environmental agency (art. 31, § 6, arts. 56 and 57, Law No. 12651/2012). This legal determination includes forest management carried out by traditional populations, since, for the Forest Code, the treatment given to small family farms or rural settlements

extends to the areas where traditional groups reside (art. 3, single paragraph).

However, the Forest Code does not refer to what differentiations the provisions should have, nor to the simplified form that the procedure should take for the SFMP to be approved and carried out on small family farms or rural settlements, which requires the Federal Executive Branch to issue a decree to establish the necessary regulations to implement the provisions of the law (Lehfeld et al., 2013).

The infralegal instruments that regulate logging, in turn, differentiate as to the intensity of the activity (full and low intensity) and differentiate community initiatives as to the form of formal organization as a proponent (associations or cooperatives). In the case of communities in CU, the

SFMP licensing has a regulation determined by the LI ICMBio No. 16/2011, suited to the form of management of these areas, established by Law No. 9985/2000.

However, the infralegal instruments referring to logging in force predated the New Forest Code and were therefore prepared to regulate Law No. 4771/1965. Because of this, the Federal Executive Branch is responsible for analyzing the compatibility of the legal instruments and the current Forest Code, as well as preparing a decree that regulates it.

3.2.1. The steps of CFM licensing in CU

The licensing of CFM forest management in federal CU is the responsibility of ICMBio, regulated by LI ICMBio No. 16/2011 (Figure 1).

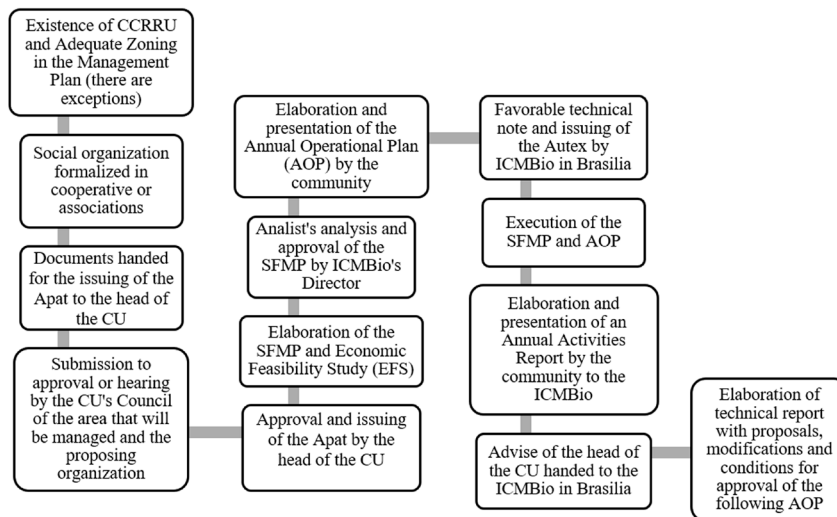


FIGURE 1 – Flowchart of administrative procedures for analysis and approval, monitoring and evaluation of the execution of SFMP in CFM of CU based on LI ICMBio No. 16/2011.

SOURCE: adapted from Azevedo-Ramos & Pacheco (2016).

This instrument establishes the existence of adequate zoning for forest activity in the CU management plan as requirements for the CFM, as well as the approval of CCRRU. Exceptionally, the ICMBio waives the need for these requirements provided that the SFMP ensures sustainability and arranges the harvesting of forest materials. These materials already contributed to the subsistence of the population before the creation of the CU.

In Resex Verde para Sempre (VpS), in the state of Pará, the Espírito Santo community already harvested wood before the creation of the CU, both for community use and informally, for commercialization in the local market, whose income was an essential complement to the economy of some of the community families (Porro et al., 2008). Currently, the community organization carries out logging activities through sustainable forest management through an SFMP-approved license, even though the Resex management plan did not exist at the time, meeting the exception in LI ICMBio No. 16/2011 (Pacheco, 2017).

Under the terms of LI ICMBio No. 16/2011, different administrative procedures comprise the CFM licensing, aimed mainly at issuing the Prior Authorization to the Technical Analysis of the SFMP (Apat), the approvals of the SFMP and the Annual Operational Plan (AOP).

To propose the CFM, the community must organize itself as an association or cooperative. To issue an Apat, organizations must submit the required documents to the head of the CU. The process

regarding the area to be managed by the proposing organization is then forwarded to a Council hearing for approval or is immediately approved. After the Apat issued, the Economic Feasibility Study (EFS) and the SFMP should be prepared. The proposer and holder is responsible for the administrative and financial management and implementation¹ of the forest management plan. In general, communities have relied on partnerships with external organizations to do this. At Resex VpS, for example, NGOs and government agencies, such as the Brazilian Forest Service, supported the preparation of the EFS (Pacheco, 2017).

After the EFS and SFMP are submitted to the local unit of the ICMBio, the CU is subjected to a field inspection for the adaptation of the CFM to the socio-environmental context. With the opinion of the head of the unit, the process is forwarded to Technical Analysis of ICMBio in Brasilia, following the approval of the SFMP by the president of the body.

The approval of the SFMP allows the community organization, now holder, to prepare an AOP, which includes Annual Production Unit (APU) harvesting plan and the Technical Responsibility Note (TRN) of the forest engineer responsible for the execution of the AOP. The approval of this document also depends on an analysis by the ICMBio in Brasilia to issue the Authorization for Exploration (Autex). After the activities have ended, the community organization will present a report to the head of the CU, who will send it to ICMBio in Brasilia.

¹ The implementation activities include the preparation of inventories, timber harvesting, stock control, the commercialization of the product and the labor, and social security and tax obligations arising from the activities (LI ICMBio No. 16/2011).

The latter shall submit proposals and, if necessary, conditions to the subsequent AOP.

The exploration phase of the SFMP is limited to a specific period in the year, called the harvest period and cannot be carried out during the so-called embargo period. Both periods are foreseen in a forest calendar, as a rule established by the state environmental agency.

The Conama Resolution No. 406/2009 and LI MMA No. 5/2006 classify the SFMP in:

(1) low intensity, which does not foresee the use of machines to carry logs; and (2) full, which predicts for the use of machines to drag logs. The LI MMA No. 5/2006 provides that, as from the second AOP, the environmental agency may opt for the declaratory AOP, whose Autex is not conditioned to the approval of the AOP for up to two consecutive declaratory AOPs. In this case, if the AOP is pending, the SFMP holder has up to 30 days to correct it, under penalty of suspension from Autex.

The Conama Resolution No. 406/2009 and LI MMA No. 5/2006 provide for possible changes

in the technical parameters of a SFMP, depending on the presentation of studies that, when justified by the technical manager, meet the technical and scientific foundations set by Article 31, § 1, of the Forest Code, considering the local specificities.

3.3. The degree of autonomy of traditional populations in community forest management in the Conservation Unit

In Table 3, all levels of property rights are represented in the legal frameworks, according to the property rights of operational level and collective choice, as per Schlager and Ostrom (1992). Laws No. 9985/2000 and No. 11284/2006 cover all levels of rights. The “access and extraction,” “disposal” and “exclusion” levels are directly affected by CU’s rules on access and management of, while the “management” level, in addition to these rules, is regulated by those related to administrative procedures for licensing and technical implementation of CFM.

TABLE 3 – Main legal and infra-legal instruments that directly or indirectly interfere with the rights of operational level and collective choice in CFM in CU.

Levels	Property rights	
	Operational level	Collective choice
Access and extraction	Law No. 9985/00 Law No. 11284/06 Decree No. 4340/02 Decree No. 6063/07 LI ICMBio No. 3/07 LI ICMBio No. 35/2013	
Management		Law No. 9985/00 Law No. 11284/06 Law No. 12651/12 Decree No. 4340/02 Decree No. 6063/07 Decree No. 5975/06 LI ICMBio No. 16/2011 Conama Resolution No. 406/09 LI MMA No. 5/2006
Exclusion		Law No. 9985/00 Law No. 11284/06 Decree No. 4340/02 Decree No. 6063/07 LI ICMBio No. 16/11
Alienation		Law No. 9985/00 Law No. 11284/06 Decree No. 4340/02 Decree No. 6063/07 LI ICMBio No. 16/11

SOURCE: Authors (2018).

In light of this, it is evident that the autonomy of traditional populations in the CFM in CUs is interfered with by legal and infralegal instruments that consist of three different dimensions: i) territorial rules; ii) procedural rules; iii) technical rules.

3.3.1. Territorial rules dimension

The forecast of the forest area for CFM in the CU management plan is a requirement for its implementation. Thus, for traditional populations to be able to access and extract timber forest resources

to exercise their right to economic reproduction (art. 3, item I, Decree No. 640/2007), the rules of that plan must be adapted to the organizational and productive reality of the community. Therefore, the degree of community autonomy in the CFM for timber extraction is conditioned to the norms contained in the CU management plan.

Although it is a right of the traditional populations in Resex, SDR and Flona, it is up to the ICM-Bio to foster the participation of the populations in the preparation or revision of the management plan of the unit (art. 27, § 2, Law No. 9985/2000). Given

the complexity of the plan, community autonomy is entirely dependent on the financial and technical structure of the agency and its priorities or political will, which are factors that interfere in the preparation or revision of a CU management plan.

In this regard, in the Tapajós Flona, in the state of Pará, the Cooperativa Mista da Flona Tapajós (Coomflona), made up of traditional community members whose main economic activity is the CFM, depended on ICMBio provisions so that it could plan its activities for after 2017. This happened because, with the delimitation of indigenous lands in the CU, the cooperative's management area was considerably reduced, leaving only the APU to be explored in 2017. With a scenario of uncertainties for the future of the CFM, the cooperative began to claim the urgent need to update the CU management plan to complete the forest management harvesting cycle. The agency's primary justification for that period of delay in revising the management plan was the lack of financial resources and technical staff (Pacheco, 2017).

The scenario presented so far shows that the performance of economic activities for the use of forest resources by communities depends on compliance with ICMBio's legal obligations. The elaboration or revision of the CU management plan is an example of this, since for a plan to be elaborated or revised, administrative and organizational measures of the ICMBio must be consulted, even if such a plan is fundamental for the use of the unit's resources by the communities. Therefore, they end up depending on the ICMBio to access forest resources for economic purposes.

On the one hand, the management plan is an essential document for achieving the objectives of each CU category, and the procedures for its pre-

paration must commence upon the creation of the CU, in order to comply with the maximum period of five years from its inception (article 27, paragraph 3 of Law No. 9985/2000). On the other hand, in the case of activities related to the development strategies of traditional populations, guaranteed by the Federal Constitution, PNPCT (art. 2), and by the ILO Convention 169 (art. 7, item 1), it is necessary to guarantee greater community autonomy. This would demand the legal provision of alternative instruments for the solution of specific short-term demands, to avoid that activities like the CFM become impossible or impeded due to the difficulty of preparing or revising the management plan within a reasonable time. Thus, if this plan were to be prepared, the CFM could be evaluated for compatibility with this document.

The CCRRU is an important document that legitimizes access to and extraction of forest resources in CU by communities. However, since it must follow the management plan (art. 13, Decree No. 4.340/2002), the CCRRU is conditioned to the sustainability criteria of the management plan. Furthermore, the enactment of the CCRRU depends on another duty of the State, which is the preparation of that plan. The lack of CCRRU weakens the legal security of community land ownership and therefore diminishes the degree of community autonomy over forest resources. For this reason, the enactment of the CCRRU must immediately follow the creation of the CU, with a definite deadline, without depending on the prior preparation of the management plan, but with a clause that refers to future adjustments to it.

At the level of the right of exclusion, the right of ownership of the land gives autonomy to the communities to prevent that non-beneficiaries of the

CU access and manage the forest resources (Law No. 9985/00, art. 17, § 2, and art. 18, § 1; and Law No. 11284/06, art. 6, item I, § 1 and 3, and art. 18). In addition, the ICMBio is obliged to ensure this right, since it must guarantee that the objectives of the CU are achieved (Law No. 11516/07).

At the level of the right of alienation, communities do not have the autonomy to sell or lease their land ownership rights, since the CU is a public good. On the other hand, regarding forest resources, there is relative autonomy, and contracts with companies for specific logging services may be signed, with the prior knowledge of ICMBio (art. 14, § 6, 7 and 8, LI ICMBio No. 16/2011).

3.3.2. Procedural rules dimension

In the dimension of procedural rules, the provision for the exception of the mandatory management plan of the CU and the CCRRU as requirements for the CFM (art. 7, caput of LI ICMBio No. 16/2011) represents an essential advance for its licensing speed for populations that extracted timber before the creation of the CU, mitigating possible harmful interference from the dimension of territorial rules, such as the slowness in the preparation of the management plan and the CCRRU.

However, for communities in which logging is not a tradition, it is assumed that there is still little autonomy since the existence of both the management plan and the CCRRU is required as a rule to initiate the CFM. This shows clear administrative protection, in which the community right to use, manage and conserve natural resources is conditioned to the efficiency of the environmental agency

in complying with its legal obligations, subjecting traditional populations to total dependence.

In highlighting the need for a non-mandatory management plan and CCRRU for the licensing of the SFMP, there is no contradiction with the need for the immediate preparation of such documents, as highlighted in the dimension of territorial rules. Much like documents that strengthen legal security of land ownership and natural resources, the existence of the CCRRU and the management **plan increases the degree of autonomy** of traditional populations. However, as an administrative procedure for the licensing of the SFMP, this obligation **reduces the degree of community autonomy** in proposing and carrying out forest management.

Community autonomy is also limited by the requirement to form an association or cooperative for the management of CFM. On the one hand, this requirement can be an obstacle for traditional communities, commonly characterized by their own modes of social organization and representation and that do not have the financial capital to manage these entities. On the other hand, the adaptation to the requirement to establish an association or cooperative did not represent a relative difficulty in recent studies involving communities in CU (Pacheco, 2017). However, the topic requires further studies given the Amazonian sociocultural diversity.

In forest management licensing, the Forest Code states that SFMP should be differentiated, not only in terms of the proposing group but also in scale (art 31, § 5). There are fixed technical differentiations concerning the “full” and “low intensity” SFMP. However, the regulations do not differentiate the administrative steps between the two categories, and therefore may disincentivize the “Low intensity” one, which, in general, is matches technologies

and the financial and organizational conditions of much of the Amazonian communities, when they start an activity for commercial purposes.

In addition, the CFM licensing for timber extraction in protected areas is also characterized by omissions and legal inadequacies that decrease community autonomy and hinder the exercise of certain rights. Initially, it should be noted that in order to comply with its administrative obligations, there are no deadlines set for ICMBio in LI ICMBio No. 16/2011, specifically in fundamental steps for the speed of licensing, such as the issuance of Apat and the approval of the SFMP and the AOP, with the consequent issuance of the Autex. The absence of a deadline compromises the right ensured in article 5, item LXXVIII, of the constitutional text, which is the right to a reasonable duration of the process, not only judicial but also administrative, as well as the means to ensure quicker processing. The lack of such determination inhibits communities from demanding efficiency from the licensing body.

In addition, the centralization of the main decisions on the licensing of the CFM at the ICMBio headquarters in Brasilia does not generate a means of active participation of communities in decision-making processes related to their rights, which is one of the principles of the PNPCT (art. 1, item X, Decree No. 6040/2007). By not assigning this competence to the local unit of the ICMBio, or at least to its closest coordination, access to information and process monitoring are hindered. The justification presented by ICMBio is the lack of structure and technical staff in the local units (Pacheco, 2017). However, the reality is not different in the headquarters of the organ, who is still responsible for all of Brazil.

It is well known that a good part of the communities of the Amazon are located in areas of difficult access. Thus, the centralization of the main decisions in the ICMBio in Brasilia does not comply with one of the objectives of the PNPCT, which is the implementation of infrastructure appropriate to the sociocultural realities of traditional populations (art. 3, item III, Decree No. 6040/2007).

By analyzing the Forest Code's ruling on logging license, and by verifying how environmental agencies have regulated them, important scores can be highlighted. Under the terms of the Forest Code, the SFMP's approval is the only step towards issuing a license for forest management (art. 31, § 2; and art. 4 of Decree No. 5975/2006). Thus, any other procedures to directly issue the license to carry out the management shall be undue.

Regarding the legal institute of the license, according to Carvalho Filho (2010), three aspects involving this type of act of state consent are identified: i) the approval of the public administration for the private individual to perform the activity is needed; ii) it always depends on the request of the private individual, that is, it is never conferred *ex officio*; iii) the activity must be legitimated in order to be performed by the private individual.

Thus, in the exploration stage of CFM, it can be noted that: i) an operational plan with the intended activities for one year and the maximum volume to be exploited must be submitted to the agency; ii) the authorization to carry out the exploration stage depends on the request made by the holder, manifested in the AOP submitted; iii) the legitimacy of the execution of the exploration relies on the issuance of the Autex by the environmental agency.

In light of this, in the CFM in CU model, the AOP constitutes another stage of license in forest

management, in breach of what is established in the Forest Code (art. 31, § 2). In addition to unduly having to wait for the environmental agency to approve the AOP for Autex to be issued, the community entity must still observe the harvest period of its region to carry out the exploration. Thus, there is a risk of not being able to operate in a given year, considering that the holder submits the AOP in a reasonable time, but that the agency does not issue the Autex within the same time frame.

Finally, the license is a binding act, that is, if the interested party meets the legal requirements, there is the right to issue it, without refusal (Silva, 2003), but the performance of the activity is legitimized with the consent of the agency for the license. Therefore, such administrative act has a declaratory nature (Di Pietro, 1993; Carvalho Filho, 2010).

Management monitoring should be ensured by an annual report that describes the activities carried out, to be submitted to the environmental agency (art. 31, § 3, Law No. 12651/12). However, to ensure that ecological services are maintained, the legislator determines that the SFMP's execution should be subject to inspection, an administrative act that is both preventive and repressive (Carvalho Filho, 2010). The activity must be monitored and controlled routinely by the competent body via technical inspections (art. 31, § 4, Law No. 12651/2012; art. 7, Decree No. 5975/2006).

Therefore, the SFMP proponent can present a plan that ensures the environmental sustainability of the CFM, i.e., complies with the legal requirements. In turn, the environmental agency may take two actions: to declare the recognition of the holder's right and issue its license, and to inspect the activity, ensuring that the legal requirements are met.

3.3.3. *Technical rules dimension*

According to the infralegal instruments, in order to execute the CFM in the Amazon, the following rules should be complied with: i) the proponent must have sufficient financial resources; ii) it is necessary to know how to deal with technical languages; iii) the advice of a forest engineering professional is mandatory; iv) a considerable period of time should be dedicated to the activity; v) there is little space to test other varieties of knowledge and techniques.

Therefore, in order to comply with article 225, § 1, item VII, of the Federal Constitution, and the technical and scientific foundations set forth in article 31, § 1, of the Forest Code – containing instructions on the maintenance of forest ecological services –, the SFMP regulations, set forth in Conama Resolution No. 406/2009 and LI MMA No. 05/2006, prioritize technicality, which can be called the “**forest engineering standard**”. The first implication of these findings is that communities have little or no autonomy to use traditional methods, techniques, and practices in CFM in CU, and to develop management adapted to their productive organization.

Even the Low-Intensity SFMP category may generate negative impacts on the productive organization of communities, characterized by diversification (Benatti, 2003; 2011). Compared to the Full SFMP, the Low Intensity SFMP does not differentiate in terms of the mandatory hiring of a forest engineer, the model of community organization for proposing and managing the activity, the techniques used for the level of exploitation, the knowledge of technical languages and, possibly, the time to be

devoted to the activity. These requirements give rise to the impracticability of forest management in communities strongly characterized by a diversified economy (Benatti, 2003; 2011), in which the logging activity is just one of many others.

In the experience of the Juçara community of Resex VpS, the time frame required by the CFM made it impossible for a large number of community members who needed to dedicate themselves to other activities such as farming and flour to partake in logging. Over time, the few community members involved have been unable to remain managing the area, although there is still interest in extracting from it (Porro et al., 2008; Pacheco, 2017).

The language adopted in the regulations related to management techniques is indistinct for any proponent category. This fact contradicts the premise of the PNPCT (art. 1, item IV, Decree No. 6040/2007), which establishes that these groups must have access to information and knowledge of documents in accessible language.

In general, traditional communities that have managed to execute the SFMP in the technical and organizational molds of the current rules needed to rely on partnerships with NGOs and government agencies, which also serve to meet the financial and administrative demands of the activity (Porro et al., 2008; Espada, 2015). This does not mean that they cannot adapt to the imposed reality or even show satisfaction with the technical procedures adopted (Pacheco, 2017). On the contrary, overcoming difficulties in CFM is a source of pride. However, as a public policy, the dissemination of experience throughout the Amazon expanse becomes quite problematic.

4. Discussions

This study shows that the degree of autonomy of traditional populations in the CFM for timber extraction in CU is the result of interrelationships between three different dimensions of rules that structure the legal and infralegal instruments associated with the activity. Thus, we conclude that the customs and rights of minority groups do not model these rules, but that, on the contrary, traditional customs must be shaped to the rules of forest management.

The result is that there is often a total lack of community autonomy. The strong dependence on third parties, in the long term, is a significant consequence of this reality, whether in complying with certain stages of the CFM, or in obtaining the technical and financial investments that the complexity of this management model requires. Even so, in several community initiatives, adapting their mode of organization and production techniques to the rules of forest management to meet an economically viable production made it unfeasible to develop their own logging activity (Louman et al., 2008; Porro et al., 2008).

Based on the contributions of Schlager and Ostrom (1992), the operational level and collective choice rights in CFM in CU are predominantly based on official standards, or *de jure* rights. However, *de facto* rights, i.e., property rights held by communities, already regulated their management mode (Diegues, 2000; Benatti, 2003; Vianna, 2008; Packer, 2015).

Although traditional peoples' own ways of creating, doing and living is legally recognized as a fundamental right, there is a prevailing overlap

in CFM in CU of de jure property rights over de facto ones. In the community productive organization, for example, one of the main consequences of this overlap is, as Benatti (2002b) points out, the lack of integration between the different economic initiatives carried out by these groups and the official norms that regulate their activities, such as forest management with agriculture, generating dissonance with the agroecological possession they exercise.

In CFM in CU, de jure property rights standards are mainly made up of rules created at the level of public administration. Two shreds of evidence of non-observance of de jure rights concerning de facto rights are: i) the non-regulation of SFMP suited to a community; and ii) the prevalence of the “forest engineering standard” in the dimension of technical rules. Both examples reinforce the idea of legal homogenization highlighted by Bourdieu (2001). This is a feature of the globalized economy, in which a legal unit is sought to ensure greater legal certainty, regulating situations to give global unity to devices, facilitating the transit of subjects and goods.

In the case of the lack of differentiated SFMP for traditional populations with simplified procedures, the omission of the public administration is evident by not issuing a decree regulating the new Forest Code. In addition, there is another conflict, which is the hierarchy of rules created by the public administration and the customary rules in the legal system, an aspect that requires special analysis.

4.1. Administrative rules vs. customs of traditional populations: brief legal remarks

The customs of traditional populations, manifested in their practices, forms of organization and knowledge, integrate what Packer (2015, p. 35) calls “community forms.” This involves the application of “[...] legal, technological and practical” forms of these groups. The historical construction of a social and cultural relationship of communities with the appropriated space and the management of their resources creates, according to Benatti (2011, p. 103), “[...] rules of coexistence and exploitation of natural resources”, constituting what the author calls “customary community right of management”.

As customary law dictates, community customs are a subsidiary source of law. Therefore, they cannot repeal a law but are fully enforceable so long as they do not contradict it. That is, “[...] the custom that can lead to the extinction of the fauna or flora, or deforestation practices in the permanent preservation area of the rural settlement is not sustained” (Benatti, 2011, p. 103).

The customs of traditional populations are assured as a source of law (Benatti, 2011), according to article 216, item II, of the Federal Constitution, and Law No. 9985/2000, which guarantees, in several provisions, that the ways of life and culture of the populations that inhabit these areas are protected, also defended by Decree No. 6040/2007 and the ILO Convention 169.

The administrative rules that govern the CFM in CU are general acts edited by the public administration to complement the laws and allow the effectiveness of its application (Carvalho Filho, 2010). Thus, the public administration cannot contradict or change the law on the grounds that it is regulating; otherwise, it will abuse its regulatory power. The decrees and regulations constitute how this power is formalized.

Thus, administrative rules cannot create rights and obligations², but only subsidiary obligations that must necessarily be in line with legal requirements.

Therefore, the provisions of administrative rules, which affect territorial, procedural and technical rules of the CFM in CU, must comply with community customs, except where these oppose laws that comply with the Federal Constitution such as the Forest Code, the Public Forest Management Laws of the SNCU (Sistema Nacional de Unidades de Conservação da Natureza) and environmental crimes (Law No. 9605/1998).

Thus, the normativity of an activity carried out by traditional populations not based on the understanding of their way of life puts their rules at risk of unconstitutionality and lack of effectiveness (Duprat, 2002).

The requirements of the technical standard established by government agencies to carry out timber extraction reflect the needs of the markets in terms of product quality (Louman et al., 2008), which is a necessity of traditional communities by the time they market their product. However, what is deemed necessary does not conflict with the logging techniques that ensure product quality and safety standards. More adaptive and diversified management, integrated with the productive community organization that ensures a gradual development of the potential of the community in forest management, would be beneficial since it would lead to a progressive increase in the degree of autonomy to conduct the activity.

4.2. *Three-dimensional autonomy analysis*

The analysis of each dimension of rules shows that the autonomy of traditional populations is interfered with to such an extent that forest management becomes unfeasible because the conditions of some procedures block the very process of issuing a CFM license in CU. Although the higher legislation emphasizes that the SFMP is enforced to ensure that the ecological function of timber forest resources is maintained, the agency's regulations of obligations are proportionally more significant than the administrative procedures for licensing. This increases these procedures' complexity and length, as cited by the literature (Benatti et al., 2003; Amaral & Amaral Neto, 2005; Porro et al., 2008; Pokorny & Johnson, 2008; Pacheco, 2012; Menezes et al., 2014; Waldhoff, 2014), which contributes to the vast decrease in community autonomy. This bottleneck culminates in a community that is unable to carry out a legalized activity, and in a state that does not supervise or ensure the sustainable management of sustainable activity in the Amazon forest.

Thus, from the identified interrelationships and under the exclusive point of view of regulatory instruments, a three-dimensional figure to visualize the autonomy (Figure 2) of these communities enhances the understanding of the three dimensions of rules, as follows:

a) The dimension of the Territorial Rules: on which legal provisions, in the broadest sense, and infralegal infer, encompassing regulatory rules

² One of the fundamental premises that guide the Brazilian legal system is: "no one will be obliged to do or not do anything except by virtue of the law" (art. 5, items II, CF/88).

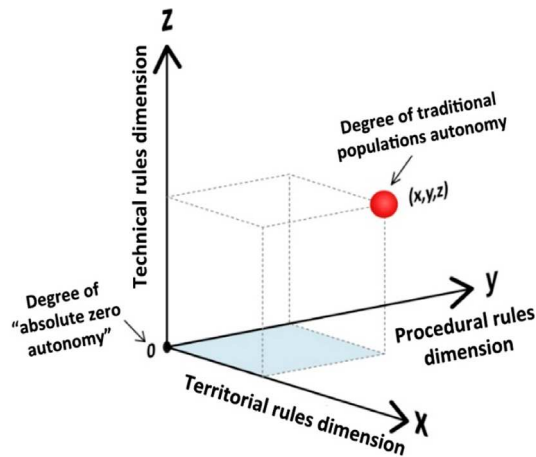


FIGURE 2 – Three-dimensional representation of the autonomy of traditional populations, according to the legal and infralegal instruments that focus on the CFM for timber extraction.

SOURCE: Authors (2018).

for access and management of the territory where community management of renewable natural resources will be carried out;

b) The dimension of Procedural Rules: on which legal provisions, in a broad sense, and infralegal infer, encompassing rules regulating administrative procedures for issuing a license to carry out community management of renewable natural resources;

c) The dimension of the Technical Rules: is the dimension of the rules that are subject to legal provisions, in a broad sense, and infralegal infer, encompassing rules regulating the techniques that should be employed in the implementation of community management of renewable natural resources.

In each dimension of rules (axes x, y, z), traditional populations have a degree of relative autonomy given by the rules, represented by the

respective axis of each dimension. In CFM in CU, the degree of community autonomy is represented by the “meeting point” of the individual axes in the three dimensions highlighted (e.g., point x, y, z). The closer it is to the point of origin, the lower the degree of community autonomy. A “zero range” degree may be reached separately on either axis. In the joint analysis of the three dimensions, when the point focuses on the origin, there is a degree of “absolute zero autonomy,” that is, the traditional populations do not have any autonomy concerning the regulations.

Based this study, the guidelines objectively pointed out should be observed in the creation or adjustment of regulations that interfere with the autonomy of traditional populations to implement CFM in CU, considering, in particular, the simpli-

fication of procedures provided for in the Forest Code (Law No. 12651/2012):

1) To resume the other stages of forest management, the requirement for AOP approval as a condition for issuing Autex should be repealed. The AOP shall be declared, with changes reported to the unit up to the approved production limit in the SFMP, whose execution shall be subject to frequent inspections;

2) Differentiated provisions of SFMP must be regulated on a corporate, small-scale, and community scale by introducing relevant changes that differentiate the modalities, with the active participation of interested groups;

3) The differentiated provisions of the community SMPF must be regulated to ensure applicability to the diverse modes of social organization and productive capacity of traditional populations;

4) Administrative procedures that force communities to depend on compliance or the existence of conditions associated with exclusive obligations of government agencies must be revoked;

5) Differentiated administrative procedures must be established according to the different intensity categories of the existing SMP;

6) Deadlines for the environmental agency to comply with its obligations must be fixed, under penalty of automatic approval, preventing delays from making the planning and management of timber forest management unfeasible or negatively affecting it;

7) The approval of the SFMP and AOP must be decentralized and attributed to the local administrative units of the environmental agency;

8) The requirement for TRN for forest engineers in the CFM must be accompanied by legal

co-responsibility for the design and implementation of the SFMP;

9) Administrative rules with a more accessible language must be developed;

10) The SFMP must be recognized as declaratory, automatically authorized when complying with all the requirements of the required technical standards, and frequently monitored by environmental agencies.

5. Conclusions

The degree of autonomy of the traditional populations in the CFM for timber extraction in CU is a result of the interrelationships between three different dimensions of rules, territorial, procedural and technical, which make up the legal and infralegal regulatory instruments of the current model of CFM in CU.

The exercise of the right of traditional communities to use, manage and conserve natural resources, through timber forest management, is subject, in different administrative procedures, to compliance with the obligations of the environmental agency itself, which is both manager and licensor of the area. This conditional situation generates barriers to sustainable community development, which must be overcome, at various times, independently of the group's initiative and opens up opportunities for the opposite effect of this development, which is illegal exploitation, either by traditional groups themselves or by pressure from external sources.

In the current CFM model, the autonomy of traditional populations is conditioned from the outset. Thus, it is necessary to have a CFM model that is more adaptable to a community's producti-

ve organization, whose starting point for its legal structures and rules dimensions is the community system of use and management of natural resources.

Non-compliance with the legal purpose to create differentiated provisions of the Sustainable Community Forest Management Plan and simplified procedures have conditioned traditional communities to standardized licensing and production organization requirements, to the detriment of constitutional and legal recognition of their customs as a source of law and their rights related to the condition of culturally differentiated group. The simplification and adaptation to the legislation of some infralegal instruments could increase the degree of community autonomy in the CFM for timber extraction in CU, prompting its spread in the Amazon forest on a larger scale.

References

Amaral, P. Manejo florestal comunitário na Amazônia: primeira oficina de manejo florestal comunitário para troca de experiência entre 12 iniciativas na Amazônia Brasileira. Relatório. Porto Dias: WWF; SUNY, 1998.

Amaral, P.; Amaral Neto, M. Manejo florestal comunitário: processos e aprendizagens na Amazônia brasileira e na América Latina. Belém: IEB; IMAZON, 2005.

Azevedo-Ramos, C. B.; Pacheco, J. S. Economia florestal comunitária e familiar na Amazônia. In: Pezzuti, J.; Azevedo-Ramos, C. (Orgs.). Desafios Amazônicos. Belém: Naea, 1. ed., p. 357-398, 2016.

Benatti, J. H.; Mcgrath, D. G.; De Oliveira, A. C. M. Políticas públicas e manejo comunitário de recursos naturais na Amazônia. *Ambiente & Sociedade*, 7(2), 137-154, 2003. Disponível em: <http://www.scielo.br/pdf/asoc/v6n2/a09v06n2.pdf>.

Benatti, J. H. A titularidade da propriedade coletiva e o

manejo florestal comunitário. *Revista de Direito Ambiental*, 26, 126-151, 2002a.

Benatti, J. H. Manejo florestal e o uso alternativo do solo na Amazônia. In: Lima, A. (Org.). *O Direito para o Brasil Socioambiental*. Porto Alegre: [S.l]: S. Fabris; Instituto Socioambiental, p. 237-276, 2002b.

Benatti, J. H. *Posse agroecológica e manejo florestal*. Curitiba: Juruá, 2003.

Benatti, J. H. Propriedade comum na Amazônia: acesso e uso dos recursos naturais pelas populações tradicionais. In: Sauer, S.; Almeida, W. (Orgs.). *Terras e territórios na Amazônia*. Brasília: UNB, p. 93-113, 2011.

Bourdieu, P. *Contrafogos 2: por um movimento social europeu*. Rio de Janeiro: J. Zahar, 2001.

Brasil. Decreto-Lei n.º 271, de 28 de fevereiro de 1967. Dispõe sobre loteamento urbano, responsabilidade do loteador concessão de uso e espaço aéreo e dá outras providências. Brasília: DOU de 28/02/1967.

Brasil. Lei n.º 6.938, de 31 de agosto de 1981. Dispõe sobre a Política Nacional do Meio Ambiente, seus fins e mecanismos de formulação e aplicação, e dá outras providências. Brasília: DOU de 02/09/1981.

Brasil. Constituição da República Federativa do Brasil, de 5 de outubro de 1988. Disponível em: http://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm.

Brasil. Decreto n.º 2.519, de 16 de março de 1998. Promulga a Convenção sobre a Diversidade Biológica, de 05 de junho de 1992. Brasília: DOU de 17/03/1998.

Brasil. Lei n.º 9.605, de 12 de fevereiro de 1998. Dispõe sobre as sanções penais e administrativas derivadas de condutas e atividades lesivas ao meio ambiente, e dá outras providências. Brasília: DOU de 13/02/1998.

Brasil. Lei n.º 9.985, de 18 de julho de 2000. Regulamenta o art. 225, § 1º, incisos I, II, III e VII da Constituição Federal, institui o Sistema Nacional de Unidades de Conservação da Natureza e dá outras providências. Brasília: DOU de 19/07/2000.

Brasil. Decreto n.º 4.340, de 22 de agosto de 2002. Regulamenta artigos da Lei n.º 9.985, de 18 de julho de 2000,

que dispõe sobre o Sistema Nacional de Unidades de Conservação da Natureza – SNUC, e dá outras providências. Brasília: DOU de 23/08/2002.

Brasil. Decreto n.º 5.051, de 19 de abril de 2004. Promulga a Convenção n.º 169 da Organização Internacional do Trabalho – OIT sobre Povos Indígenas e Tribais. Brasília: DOU de 20/04/2004.

Brasil. Lei n.º 11.284, de 02 de março de 2006. Dispõe sobre a gestão de florestas públicas para a produção sustentável, dentre outros. Brasília: DOU de 03/03/2006.

Brasil. Decreto n.º 5.753, de 12 de abril de 2006. Promulga a Convenção para a Salvaguarda do Patrimônio Cultural Imaterial. Brasília: DOU de 13/04/2006.

Brasil. Decreto n.º 5.975, de 30 de novembro de 2006. Regulamenta os arts. 12, parte final, 15, 16, 19, 20 e 21 da Lei n.º 4.771, de 15 de setembro de 1965, o art. 4o, inciso III, da Lei no 6.938, de 31 de agosto de 1981, o art. 2o da Lei no 10.650, de 16 de abril de 2003, altera e acrescenta dispositivos aos Decretos nos 3.179, de 21 de setembro de 1999, e 3.420, de 20 de abril de 2000, e dá outras providências. Brasília: DOU de 01/12/2006.

Brasil. Decreto n.º 6.040, de 7 de fevereiro de 2007. Institui a Política Nacional de Desenvolvimento Sustentável dos Povos e Comunidades Tradicionais. Brasília: DOU de 08/02/2007.

Brasil. Decreto n.º 6.063, de 20 de março de 2007. Regulamenta, no âmbito federal, dispositivos da Lei n.º 11.284, de 20 de março de 2006, que dispõe sobre a gestão de florestas públicas para a produção sustentável, e dá outras providências. Brasília: DOU de 21/03/2007.

Brasil. Decreto n.º 6.177, de 01 de agosto de 2007. Promulga a Convenção sobre a Proteção e Promoção da Diversidade das Expressões Culturais. Brasília: DOU de 02/08/2007.

Brasil. Decreto n.º 11.516, de 28 de agosto de 2007. Dispõe sobre a criação do Instituto Chico Mendes de Conservação da Biodiversidade – Instituto Chico Mendes, e dá outras providências. Brasília: DOU de 28/08/2007.

Brasil. Decreto n.º 6.874, de 5 de junho de 2009. Institui, no âmbito dos Ministérios do Meio Ambiente e do Desenvolvimento Agrário, o Programa Federal de Manejo Florestal

Comunitário e Familiar – PMFC, e dá outras providências. Brasília: DOU de 08/06/2009.

Brasil. Lei n.º 12.651, de 25 de maio de 2012. Dispõe sobre a proteção da vegetação nativa; altera as Leis n.º 6.938, de 31 de agosto de 1981, 9.393 de 19 de dezembro de 1996, e 11.428, de 22 de dezembro de 2006; revoga as Leis n.º 4.771, de 15 de setembro de 1965, e 7.754, de 14 de abril de 1989, e a Medida Provisória n.º 2.166-67, de 24 de agosto de 2001; e dá outras providências. Brasília: DOU de 28/05/2012.

Carvalho Filho, J. Manual de direito administrativo. Rio de Janeiro: Lumen Juris, 23. ed. rev., ampl. e atualizada até 31.12.2009, 2010.

Cavalheiro, K.; Sabogal, C.; Amaral, P. Análise da Legislação para o Manejo Florestal por Produtores de Pequena Escala na Amazônia Brasileira. In: Cavalheiro, K.; Sabogal, C.; Amaral, P.; CIFOR; Proyecto ForLive; AMAZON; UFRA. Estudo comparativo “Análise do Marco Legal para o Manejo Florestal por Produtores de Pequena Escala na Amazônia”. Belém: FORLIVE, 2008.

CONAMA – Conselho Nacional de Meio Ambiente. Resolução n.º 406. Brasília: DOU de 06/02/2009.

Diegues, A. C. S. Os saberes tradicionais e a biodiversidade no Brasil. São Paulo: MMA; COBIO; NUPAUB; USP, 2000.

Di Pietro, M. S. Z. Direito administrativo. São Paulo: Atlas, 1993.

Duprat, D. M. O Estado pluriétnico. In: Lima, A. C. S.; Hoffman, M. B. Além da tutela: bases para uma política indigenista III. São Paulo: Contracapa, 2002. Disponível em: <http://laced.etc.br/site/arquivos/04-Alemda-tutela.pdf>.

Espada, A. L. V. Parceria enquanto dimensão da governança ambiental para o manejo florestal comunitário na Amazônia: o caso da Floresta Nacional do Tapajós. Belém, Dissertação (Mestrado em Gestão dos Recursos Naturais e Desenvolvimento Local na Amazônia) – UFPA, 2015.

ICMBIO – Instituto Chico Mendes de Conservação e Biodiversidade. Instrução Normativa n.º 3, de 18 de setembro de 2007. Brasília: DOU de 20/09/2007.

ICMBIO – Instituto Chico Mendes de Conservação e Biodiversidade. Instrução Normativa n.º 16, de 04 de agosto de 2011. Brasília: DOU de 08/08/2011.

- ICMBIO – Instituto Chico Mendes de Conservação e Biodiversidade. Instrução Normativa n.º 35, de 27 de dezembro de 2013. Brasília: DOU de 30/12/2013.
- Lehfeld, L. S.; De Carvalho, N. C. B.; Balbim, L. I. N. Código florestal comentado e anotado (artigo por artigo). Rio de Janeiro: Forense; São Paulo: Método, 2013.
- Louman, B.; García-Fernández, C.; Sabogal, C.; Ehringhaus, C.; Villacrés, D. Capacidades técnicas y desafíos del manejo forestal comunitario. In: Sabogal, C.; De Jong, W.; Pokorny, B.; Louman, B. (Orgs.). Manejo forestal comunitario en America Latina: experiencias, lecciones aprendidas y retos para future. Borgor: CIFOR, p. 75-112, 2008.
- Medina, G.; Pokorny, B. Avaliação financeira do manejo florestal comunitário. Goiânia: Kelps, 2014.
- Menezes, M. C.; Barbosa, C. W. S.; Medina, G.; Lima, C. A. T.; Trindade, N. G. P.; Cavalcante, T. V.; Almeida, O. Tradicional da floresta para a extração de madeira por populações tradicionais e desafios para o manejo sustentável. In: Castro, E.M. R.; Figueiredo, S. L. (Orgs.). Sociedade, campo social e espaço público. Belém: Naea, 1. ed., p. 430-442, 2014.
- MMA – Ministério do Meio Ambiente. Instrução Normativa n.º 4, de 11 de dezembro de 2006. Brasília: DOU de 13/12/2006.
- MMA – Ministério do Meio Ambiente. Instrução Normativa n.º 5, de 11 de dezembro de 2006. Brasília: DOU de 13/12/2006.
- Pacheco, J. S. Análise da autonomia das populações tradicionais no manejo comunitário de recursos florestais madeireiros em unidade de conservação da Amazônia. Belém, Dissertação (Mestrado em Planejamento do Desenvolvimento) - UFPA, 2017.
- Pacheco, P. Smallholders and Communities in Timber Markets: Conditions Shaping Diverse Forms of Engagement in Tropical Latin America. *Conservation and Society*, 10(2), 114-123, 2012.
- Packer, L. A. Novo código florestal & pagamentos por serviços ambientais: regime proprietário sobre os bens comuns. Curitiba: Juruá, 2015.
- Pokorny, B., Johnson, J. Community Forestry in the Amazon: the unsolved challenge of forests and poor. *Nat Resour. Perspect.*, 112(4), 2008. Disponível em: <https://www.odi.org/publications/1144-community-forestry-amazon-unsolved-challenge-forests-and-poor>.
- Porro, N.; Germana, C.; López, C.; Medina, G.; Ramirez, Y.; Amaral, M.; Amaral, P. Capacidades organizativas para el manejo forestal comunitario frente a las demandas y expectativas oficiales. In: Sabogal, C.; De Jong, W.; Pokorny, B.; Louman, B. (Orgs.). Manejo forestal comunitario en America Latina: experiencias, lecciones aprendidas y retos para future. Borgor: CIFOR, p. 35-66, 2008.
- Santilli, J. Socioambientalismo e novos direitos: proteção jurídica à diversidade biológica e cultural. São Paulo: Peirópolis, 2005.
- Schlager, E.; Ostrom, E. Property-rights regimes and Natural Resources: a conceptual analysis. *Land Economics*, 68(3), 249-262, 1992.
- SFB – Serviço Florestal Brasileiro. *Cadastro Nacional de Florestas Públicas – Atualização 2017*. Disponível em: <www.florestal.gov.br> Acesso em: jun. 2018.
- Silva, J. A. Direito ambiental Constitucional. São Paulo: Malheiros, 4.ed., p. 281-282, 2003.
- Treccani, G. D. Populações Tradicionais e Mineração. In: Dias, J. C.; Gomes, M. A. M. (Orgs.). Direito e desenvolvimento. Rio de Janeiro; Belém; São Paulo: Forense, CESUPA e Método, 1. ed. v. 1, p. 161-190, 2014.
- Vianna, L. P. De invisíveis a protagonistas: populações tradicionais e unidades de conservação. São Paulo: Annablume; FAPESP, 2008.
- Waldhoff, P. Resultados da avaliação do manejo florestal comunitário sobre os meios de vida de seus protagonistas: destaque para conservação ambiental em detrimento a produção e autonomia. Piracicaba, Tese (Doutorado em Ciências) – Escola Superior de Agricultura “Luz de Queiroz”, SP, 2014.
- Wolkmer, A.C. Pluralismo jurídico: fundamentos de uma nova cultura no Direito. São Paulo: Alfa Omega, 2001.