




# An empirical analysis of the management model practiced in Protected Areas of the Sustainable use

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## Abstract

The success of Protected Areas (PA) depends on the type of governance practiced and the establishment of environmental management instruments. The management of CUs in Brazil is supposed to be participative and shared, but its execution is a challenge for environmental agencies. Therefore, the main purpose of this paper was to present the perception of the management councils about the management model practiced in the Area of Relevant Ecological Interest (ARIE, in Portuguese) “Manguezais da Foz do Rio Mamanguape/PB” and the Environmental Protection Area (APA, in Portuguese) of “Barra do Rio Mamanguape/PB”. Characterized as a qualitative research, the methodological instruments included participant observation techniques and semi-structured interviews. The investigation subjects were the representatives of the management council of the APA/ARIE. The results revealed a legally participative management, although the council is described as immature, without identity, messed up, and, occasionally, egocentric, because of the low representativeness and cohesion of the group. Among other factors that hinder the execution of a participative and shared management model in the PA, the analysis showed a low councilor’s participation in meetings and assemblies, also a centralizing behavior of the ICMBIO (institution responsible for managing the protected area), as well as multiple interests and power relations that exist in the group.

## INTRODUCTION

The involvement of Brazilian civil society in politics has a weak structure, because of the society’s submissive historic context since the

colonization process. The democracy rebuilt in Brazil was characterized by the promulgation of the 1988’s constitution. This moment was featured by the appearance of public spaces for decision making and public consultation, as well as the emergency of community associations

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(QUADROS et al., 2015).

Brazilian public policies, as well as environmental policies, were conceived and created in a scenario highlighted a controlling state and an authoritarian and bureaucratic political model (CÂMARA, 2013) in which the first instruments of environmental management did not guarantee the participation of civil society in decision-making, such as the Forest Code (1934 and 1965), Hunting and Fishing Code (1934), Animal Protection Decree (1934), Water Code (1934, 1935 and 1938), National Park (1937), Protection of National Historical and Artistic Heritage (1937), Code of Mines (1940) and Code of Mineral Waters (1945).

The decentralization of the management of environmental resources had significant advances from the institutionalization of National Environment Policy (BRASIL, 1981), that introduces the participatory management and the publication of 1988's Constitution, that raises the municipalities to federative units and share the duty to defend and preserve the environmental resources, between public power and civil society, according to art. 255 from the aforementioned constitution.

Changes in the formulation of Brazilian public policies were only possible because of the social movements that occurred in the 1960's and 1970's, in response to the environmental degradation and disasters that negatively affected the public health. Moreover, they were also promoted by the evolution of international policy, the economic, social and environmental problems that emerged in Brazil because of economic models that were adopted in the country (CAMARA, 2013) and, the democratization of issues related to environmental resources that reflected in the process of creation and implementation of PA.

The Rio 92 conference enrolled civil society in the management of environmental resources, with the institutionalization of instances and spheres of public consultations and decision making, such as councils, basin committees, among other collective spaces (QUADROS et al., 2015), although popular participation in the creation and management of PA was consolidated only with the publication of the National System of Protected Areas (SNUC) (BRASIL, 2000).

The SNUC guarantees "the effective participation of local populations in the creation, implantation and management of conservation units", determines the creation of management councils, of advisory or deliberative nature, which shall be chaired "by the responsible organ by its administration and constituted by representatives of public organs, from civil society

organizations and from traditional populations living in the area" (BRASIL, 2000, Section 29).

The management council works as a tool that makes easier and strengthens the democratic, integrated and participative management of the PAs (JACOBI, 2003) because it has the ability to enhance the dialogue between all stakeholders in a transparent and equal manner (MAGALHÃES et al., 2010). This instance, while ensuring the representation of people involved in the management of protected areas, seeks balance and equity in responding to social demands, and it has the power to develop the group's environmental awareness and promote behavioral changes (QUADROS et al., 2015).

Despite that, Câmara (2013) and Magalhães et al. (2010) realized that, despite their important role, many councils are unstable because of the low representativeness of civil society in the large discussions and formulation of public policies, due to the imperious behavior of the public power. However, the authors also point out that there are strategies aimed at strengthening the participation of civil society in such instances and decentralizing the power in the government institutions.

According to Scardua and Bursztyn (2003), decentralization is not only based on the behavioral and ideological change of public institutions, it must also have the solidarity and participation of civil society, so that local users and community members have responsibility and control over their own environmental resources.

In view of the fragile structure of the management councils, this article aimed at presenting the perceptions of the representatives of the advisory council of the Environmental Protection Area (APA, in Portuguese) da Barra do Rio Mamanguape/PB and the Area of Relevant Ecological Interest (ARIE, in Portuguese) Manguezais da Foz do Rio Mamanguape/PB . These are protected areas located in the north coast of Paraíba state- Brazil, and they are managed by the model of PAs.

This study is justified by the need to understand the complexities within the advisory board, to evaluate the management and the participation and representativeness of the council's group and the management model practiced in the PA.

## METHODOLOGICAL PROCEDURES

### *Study Area*

The APA of Barra do Rio Mamanguape was

created in September 10<sup>th</sup>, 1993, through Federal Decree n° 924 (BRASIL, 1993). Located in the northern portion of Paraíba State, between the municipalities of Rio Tinto, Lucena, Marcação and Baía da Traição. It has 14.640 hectares, encompassing the continental, estuarine and marine territories.

The ARIE Manguezais da Foz do Rio Mamanguape/PB was created on November 5<sup>th</sup> in 1985, by decree n° 91,890 (BRASIL, 1985). Holding an area of 5,721.07 hectares, the ARIE is located inside of APA of Barra do Rio Mamanguape, in the portion of the municipality of Rio Tinto in the state of Paraíba, with only mangrove and estuary areas.

The region's biome is the coastal marine type, comprising dune, sandbank forest and board forest ecosystems, as well as by corals and a large mangrove area (ICMBIO, 2014). Among the local fauna diversity, there is a variety of fishes, crustaceans, mollusks, aquatic and terrestrial mammals, insects, reptiles and birds (ICMBIO, 2014).

The economic activities practiced in the APA/ARIE Manguezais da Foz do Rio Mamanguape/PB are based on tourism and fishing of estuarine and marine resources such as crustaceans (crawfish, crab and shrimp), mollusks (oyster, shellfish, “taioba” and “sururu”) and varied specimens of the ichthyofauna. In the APA of Barra do Rio Mamanguape region, the economy also revolves around family farming, sugarcane production, shrimp farming and/or fish farming (ICMBIO, 2014).

### *Methodology*

The research is qualitative, since it worked with the universe of meanings, motives, aspirations, beliefs, values and attitudes (MINAYO; GOMES, 2011). To better comprehend and build the local reality, it was used the participant observation technique and semi-structured interview.

The subjects of the research were the representatives of the Advisory Council of APA of Barra do Rio of Mamanguape and the ARIE Manguezais da Foz do Rio Mamanguape, which is made up of 27 representatives, of which 15 are from the governmental follow-up (Table 1) and 12

are from the civil society follow-up (Table 2). From the 27 representatives, only 18 counselors participated.

The interview was semi-structured and guided by the collection of formal and informal statements (with or without tape recorder) with the help of a script. When the use of the tape recorder was not allowed, the field diary was used to record the most important speeches of the interviewees. The interviews were conducted individually with each research subject and took place at home or in their work environment.

According to Verso and Pedro (2012), the interview is a technique focused on the production and meaning of memory and analyzing this discourse makes it possible to understand the perception of the subject through their speeches, configuring itself as a production of empirical knowledge.

The research data analysis was based on the method of interpretation of meanings (MINAYO; GOMES, 2011), in which words and actions were analyzed, as well as the interrelations set, so that the objectives of the research were obtained through the comprehension, interpretation, and critic by the subject's reality. The participant observation for data collection was carried out during council meetings, working groups and technical assemblies, which allowed the researcher to experience the council routine, its actions and dialogues, and provided a broad reflection on the council, as well as on the role, representation and responsibilities of the directors.

Cavedon (1999) suggests that the use of participant observation occurs from the researcher's immersion in the daily life of a particular culture, and only through this process, the sociocultural universe and the research subject can be understood.

By virtue of the legal aspects, this study was approved by the Research Ethics Committee of the Federal University of Paraíba - UFPB, through the legal opinion n° 2.357.719. The interviews were conducted after reading and signing the Informed Consent Form, following the procedures established in Resolution n°. 466/12 of the National Health Council.

**Table 1.** List of representatives that compose the Governmental segment of the APA/ARIE Manguezais da Foz do Rio Mamanguape/PB.

GOVERNMENTAL SEGMENT REPRESENTANTS
Chico Mendes Institute for Biodiversity Conservation (head of the Conservation Unit);
City Hall of Rio Tinto/PB – one vacancy (holder and alternate);
City Hall of Lucena/PB – one vacancy (holder and alternate);
City Hall of Baía da Traição/PB – one vacancy (holder and alternate);
City Hall of Marcação/PB – one vacancy (holder and alternate);
Legislative Power, represented by the Rio Tinto City Council (holder) and the Marking City Council (alternate) - one vacancy (holder and alternate);
Paraíba State Environmental Administration Superintendence/SUDEMA – one vacancy (holder and alternate);
National Indian Foundation – FUNAI – one vacancy (holder and alternate);
Technical Assistance and Rural Extension Company – EMATER – one vacancy (holder and alternate);
State Secretariat of Tourism and Economic Development of Paraíba State – one vacancy (holder and alternate);
Paraíba State Water Management Executive Agency – AESA – one vacancy (holder and alternate);
Union Heritage Secretariat – SPU/PB
National Institute of Colonization and Agrarian Reform – INCRA – one vacancy (holder and alternate);
Federal University of Paraíba - UFPB – Holder /State University of Paraíba - UEPB – Alternate;
Aquatic Mammals Center - CMA/ICMBIO – one vacancy (holder and alternate);

Org.: From Author, 2017.

**Table 2.** List of representatives that compose the Civil segment.

USER SEGMENT/CIVIL SOCIETY REPRESENTATIVES
Fishing Colony Z-13 (holder) and Fishing Colony Z-14 (alternate);
Association of Shrimp Farmers of Paraíba - one vacancy (holder and alternate);
Local tourist sector;
Non-Governmental Socio-Environmental Organizations industry, represented by the Mammalian Aquatic Foundation - FMA (holder) and NGO Guajirú (alternate) - one vacancy (holder and alternate);
North Coast Watershed Committee of Paraíba - one vacancy (holder and alternate);
Sociocultural Non-Governmental Organization - one vacancy (holder and alternate);
Campina Beach Farmers Association (APA Residents' Representation) - one vacancy (holder and alternate);
Potiguara/PB Indigenous Representative - one vacancy (holder and alternate);
State of Paraíba Alcohol and Sugar Producers Union - one vacancy (holder and alternate);
Rural Workers Union of Rio Tinto Municipality - one vacancy (holder and alternate);
Micro and Small Business Support Service of Paraíba - SEBRAE/PB - one vacancy (holder and alternate);
National Rural Apprenticeship Service - SENAR (holder), and the Agriculture and Livestock Federation of Paraíba - FAEPA (alternate) - one vacancy (holder and alternate);

Org.: From Author, 2017.

## RESULTS AND DISCUSSIONS

The APA of Barra do Rio Mamanguape advisory council was established on May 25<sup>th</sup>, 2005, through the Ordinance of the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA, in Portuguese) n° 34.

According to this regulation, the council's purpose is to “assist the Chico Mendes Institute Conservation and Biodiversity (ICMBIO, in Portuguese) – institution responsible for Conservation Units management–, with the administration of the APA of Barra do Rio Mamanguape and implementation of environmental policies adopted for the Federal

Environmental Protection Areas, aiming at promoting the preservation, conservation and sustainable use of natural resources” (BRASIL, 2005, Art.1<sup>st</sup>).

The creation of the ARIE Manguezais da Foz do Rio Mamanguape occurred on May 2<sup>nd</sup>, 2013, through ICMBIO Ordinance n° 185. The council is made up of 24 senior representatives, of which 14 belong to the public power and 10 to the civil society, and its function is “to contribute to the effective fulfillment of the objectives of creation and implementation of the unit management plan” (BRASIL, 2013, Section 1<sup>st</sup>).

The Advisory Board that works on APA and ARIE is made up of the 27 full members of the APA of Barra do Rio Mamanguape, and they are the same council representatives of the ARIE adding three new counselors’ members. Thus, we have 15 members that represent the public power segment and 12 members of the civil society segment, presenting a small disparity (12/15).

When analyzing the engagement level based on the participants’ attendance at council meetings, there was a greater participation of representatives of the public sector segment compared to representatives of the civil society segment, which is represented mostly by the productive sector and non-governmental organizations (NGO).

The greater participation of these two sectors happens for several reasons, but I highlight the need for them to put their demands and interests constantly under discussion as a mechanism of conflict resolution. I also stress that this group understands well the function of the council, its role and its importance in meetings and decision making.

The recognition of the intense participation from the council is due to the observation of repeated discussions and demands, as well as the frequent positions always made by the same people. According to Ribeiro et al. (2010), the constant participation of a certain group can demonstrate the limit of the council's participation, as well as the favoring and/or the power relation of some segments in the decision making.

Regarding the lack of parity verified in the composition of the advisory council from APA/ARIE Manguezais da Foz do Rio Mamanguape/PB, this fact contradicts what is advocated in Act 9<sup>th</sup>, Section V of Normative Instruction ICMBIO 09/2014, when it determines that the public administration and civil society are defined taking into account parity, representativeness, equity in participation.

The importance of a joint advisory council is in the representation of the various sectors within

the PAs and their buffer zone, in social equity and in the quality of participation of the most vulnerable groups. This heterogeneous environment enriches discussions on various topics, impairs the construction of new knowledge, exposes the local reality and contributes to the resolution of conflicts and decision making.

The studies of Scardua and Bursztyn (2003) and Berkes (2009) show that even when councils ensure parity in their composition they may not be representative, since there are members committed to the interests of other sectors, showing an overlap of opinions in favor of an only sector. This condition was clearly noted in the studied council, where there was the overrepresentation of the sugar and alcohol sector, which has its interests protected by four counselors of different seats. This is clear in one of the speeches:

Of course, each one will defend their own interests, the problem is that they are people who are occupying chairs, but who actually defend the interests of others and not the chair that he is representing there. In fact, I have never heard a word about the entity he represents. (Counselor 1A).

Still analyzing the participation of the group in extraordinary meetings and assemblies between 2013 and 2016, it was found that the absence of representatives of civil segment is over 50%, highlighting the municipalities and community associations.

Given that the city halls from the municipalities of Marcação and Baia da Traição were absent from the meetings and assemblies of the advisory board in the last two years and their representatives were unknown, it was necessary to go to the city halls and identify them. At this moment, it was verified the total ignorance of both municipalities about the council and about the CU inserted in their territory. Scardua and Bursztyn (2003), evidence that the absence of city halls in the councils is an indication that environmental issues are not yet priorities in the agenda of municipalities.

Given that environmental issues should not be treated individually and/or exclusively by government institutions, local communities should be seen as a priority to achieve efficiency in the management of the natural environment. According to Bowles and Gintis (2002), social actors have relevant information about the environment, behavior, capacity and needs of environmental resources users.

The obstacles that hinder participatory and

shared environmental management, according to Scardua and Bursztyn (2003), lie in the centralizing and conservationist behavior of environmental agencies, lack of technical staff, qualification and training, absence of financial and infrastructure resources, deficiency of environmental management and social participation. Laschefski and Costa (2008) also point out the existence of multiple interests and complex power relations as possible impasses.

We verified in this study the centralizing behavior of the heads of the PA. we emphasize the times that civil society demands arrived at meetings and assemblies, and the heads, in the role of chairman of the council, did not give due attention and/or ignored the demands. A second moment was at the end of an assembly where one of the PA's chiefs said that regardless of the arguments, they (the head of APA and ARIE) would make the decision. This behavior, besides reflecting the unpreparedness of both bosses, weakens and discredits the councils.

Other conditions that delay the good management of the PAs is the deficient technical staff of the PA, which is composed for three ICMBIO employees, the recurrent cut of funds made by the government Temer,, which forced the managers to close the facilities of the manager to close the facilities of the Peixe- boi project, due to the precarious facilities and scrapped infrastructure, to hand over the building where the secretaries of both Pas worked and which equally hinder the maintenance of essential equipment for monitoring and inspection in the areas of mangrove and river.

In the view of the council representatives, the obstacles that hinder the management of APA and ARIE Manguezais da Foz do Rio Mamanguape/PB are: far-fetched language; inefficient vehicles of information; attractiveness of ICMBIO's schedules and imposed themes and resistance to incorporate some social demands; low transparency in PA's decisions and actions; lack of credibility from the council and from the ICMBIO; absence of the belonging sense from counselors, makes representatives uninterested and bureaucratization of meetings.

The technical language constantly used by the seniors' councilors on the meetings favors the distancing and evasion of poor and low-educated councilors, elitizing the council. Based on the council studied, the word elite, besides being associated with financially favored groups, is also related to the most educated people. Ribeiro et al. (2010) explain that the greater participation of highly educated individuals is not at all negative, since it positively favors discussions and proposals for unit management actions, because

it reflects a higher degree of education of councilors, but on the other hand, makes the participation of local communities impossible.

Pertinent to information vehicles used among the councils' representatives, it was found that the group's communication is currently improving due to the use of social networks, Emails, WhatsApp® and Facebook®, for example. Regarding the council's new ways of communicating with the local community and transparency of information, it was suggested by the counselors the use of community radios, sound cars, meetings in different places and the use of social networks, as they are efficient tools for spreading information, getting them to the communities in a timely manner.

The role of council representatives is to transmit information regarding the CUs to communities. However, no counselor considered it their job to do so, even though they are aware that it is their responsibility to provide feedback to the society. An example is given below:

For me the role of counselor is that of extensionist, we have to be the extension between our sector and society and from then on as well. What are the interests of society towards our sector? Because only in this way we will get a balance between the interests of the private sector whatever and the interests of society. If you are the bridge between what society wants and what the private sector has to offer and want for society, everything gets easier. (Counselor 20A).

The importance given to the exchange and access to information exposes the two faces of the co-management. The first is to generate knowledge and the second is to foster social learning. More than that, according to Berkes (2009) and Sandström et al. (2015) exchange and access information is to value the various epistemologies, is to unite local ecological with scientific knowledges, to build a new synthesis that will support decision making, building a more egalitarian environmental management, considering the environmental, social, economic, political and cultural contexts.

Regarding the meeting agendas, the council members realized that the topics were more often imposed, as did the decision making. This caused great dissatisfaction and disinterest in the group, as well as breaking with the democratic character of the council.

Themes are practically imposed by ICMBIO. There is a meeting only when

there is an agenda. [...] the council only legitimize decisions they need to make and is afraid to make alone. Then there the council convinces the councils, the councilors votes the majority in the decisions they would have to make, and henceforth the blame is on the council. So these are decisions that make the council an important thing for those who defend their interests, while the council is restricted only to approving or disapproving certain proposals, and even if the council disapproves, it can still be done contrary to the council's default in some cases. (Counselor 20A)

Contradicting the imperative and/or proactive stance of the environmental institution about bringing the themes to the agenda, it was verified that this is due to the passive stance of the council, as can be observed in the speech presented below.

One of the complains has always been this, because the agenda was never in everyone's interest, or it was much closed. Every meeting I send forward the letter to, I always send email before, and now there is the WhatsApp group, I always ask - does anyone have an agenda suggestion? Nobody answers. Then they complain that we are authoritarian. Therefore, people really lack interest. (Counselor 1A).

The avoidance and/or lack of interest of the representatives about the PAs management, allows the environmental agencies to continue the centralized, conservationist and vertical management. Ribeiro (2010) suggests that it is necessary to make social actors understand that the power of the council consists of the legitimacy and representativeness of the councilors and not because it is consultative or deliberative.

Berkes (2009) and Borsdorf (2013) believe that structuring collective spaces based on social networks and making it a field of collective knowledge construction is an alternative to making the council more active and sensitive to environmental issues. This would lead to principles of cooperation and trust among social actors, promoting group learning and awareness, encouraging the sharing of goals and forming cohesive groups, as well as fostering collaboration between institutions and conflict resolution.

Regarding the transparency of actions and information, Councilor 1A states that he is trying to pass the information within the council, however, it is difficult to do so because of the

council's (in)maturity, as can be understood from this report: "There are subjects that, if we take to the council right away, will create more confusion than help in the management. Therefore, we have a certain kindness to take these subjects to the council." (Councilor 1A).

The maturity of the board is associated with the stage of maturity of the PA's management. According to Armitage et al. (2007), the maturity of a board can be verified by changes in viewpoint, rules and norms elaboration, level of trust between the group, power and knowledge sharing, networking organizations, among others.

In the field of representations of the council's low sense of belonging, the following factors were found: the uncertainty of some board members about which board they belong to; the emphasis and/or priority given to APA issues; and, the duality that exists in the use of the acronym APA.

According to councilors' reports, the doubt that some councilors have about which council they serve on emerged during the process of setting up the APA advisory council, when the group was informed of the possibility of the council being shared by the two PAs. However, this confirmation was never provided by the ICMBIO.

There was a certain duality in the use of the acronym APA, especially in relation to those older councilors, belonging to the civil society segment. Sometimes the acronym APA is understood as a category of conservation unit, and others have a meaning associated with the ICMBIO, National Center for Research and Conservation of Aquatic Mammals (CMA, in Portuguese) and Aquatic Mammals Foundation (FMA, in Portuguese).

According to the bylaws of the APA/ARIE Advisory Council of Manguezais da Foz do Rio Mamanguape/PB, the director's term of office is two years, and it is up to the institutions of the council after this period to indicate or reaffirm the names of their representatives, so there are Councilors that have been at the institution since the council was created, such as the representative of the fishermen's colony and the association of shrimp farmers of Paraíba (state).

With regard to the understanding of what the APA and ARIE are, the interviewees demonstrate knowledge on the subject. Only two advisor from the civil society segment have limited knowledge in knowing that both PAs are protected areas, but do not understand their characteristics and there are two counselors who understand APA the institutions presented above and recognize ARIE as protected area.

To tell the truth the understanding is so little that us, who work within the area do not even know what that means. We only

know that we have to do it and we have to do this way but detail the meaning I do not know. (Counselor 25A)

According to Borsdorf (2013) it is essential that the councilors have a good knowledge of the region and that they are socially organized, to develop a sense of belonging, community and identity in the council. Thus, the councilors need training so that the group internalizes the conception of the APA of Barra do Rio Mamanguape and the ARIE Manguezais da Foz do Rio Mamanguape/PB. According to Scardua and Bursztyn (2003), training councilors allows them to respond to the demands of the community and not only to individual interests, without benefiting and/or prioritizing the needs of some sectors.

Regarding the effectiveness of the governance of protected areas, its structure has been hampered by the low participation and attendance of councilors, as well as by the multiple interests of the group. For instance:

[...] lack of commitment, so the group that is there says - I think they need this, I think that is missing this - they are pointing out the work, they are not doing [...]. I do not see them as active, only passive. (Counselor 1A).

[...] There we are an organism for the interests of society, but we must not forget that within that hive every little bee has its purpose, interest and function, so within the council we cannot disconnect from the objectives of its sector. (Counselor 20A).

[...] each entity that is there is representing a category and an interest, but as a citizen, also knowledgeable of the law, I was there to contribute. I was really sad, because sometimes I saw that what the councilor suggested as an idea was not accepted. (Counselor 24A).

I think a lot of people got disinterested because they set up a meeting, talk, then set another, but in the meetings, it does not give an effective thing. Result is too little. (Counselor 17A).

Finally, when asked about the management model practiced at the APA/ARIE Manguezais da Foz do Rio Mamanguape, it was clear that the intention is to be participatory and shared, however, the effectiveness of this model has not yet been achieved due to all the problems, in

addition to the recurring changes in management, which contributes to its interruption and a new process being started.

I think the intention to be a participatory process, it is everyone's expectation. But I think we still for different reasons are far bellow of occupying this place, either side because the meeting ends each one turns to their institutional dynamics and is touching the suffocation of each day, whoever. This integration moment is in these 4 hours of bureaucratic meeting and only. (Counselor 21A).

However, there are also speeches that perceive totally top-down management, where the decision-making comes to the council already defined, not being a democratic instance, according to the report of board member 25A.

There, the opinion is totally from the chefs of APA, including many times I have seen counselor 22, who is a person who hits head on and speaks everything and often has his speech disregarded [...]. I have often seen this happen. And so, what she consults often gets the strength, grounds or what she is consulting, but not the final value or value she consults, and it is quite clear. When you say anything that goes against it, it says: it is the against [...]. (Counselor 25A)

Although issues related to environmental complexities should be treated in a democratic and participatory manner, according to Scardua and Bursztyn (2003), democracy is only possible through the participation and representativeness of social actors. However, Ribeiro et al. (2010) states that when this right is restricted to them, the structure of the council is weakened, loses its legitimacy and its representativeness.

The results showed that the main reasons for the inefficient and non-participative management are: a) the low involvement of the directors; b) the multiple interests of the council; c) little or no dialogue between council and community and ICMBIO-community; d) and the reduced ICMBIO technical team responsible for the units.

Considering the improvement of the council's performance, the councilors realized that there is a need for better qualification, that the agenda should be attractive, that the subjects the council deals with should be more closely related to local reality and not just issues pertaining to the work of the CU leadership. It was also verified that the council needs to embrace a more open and altruistic role in face of the needs of the



community, showing the importance of the society, that the environment is democratic, building strong relationships of trust and cooperation, in solidarity with social and environmental issues.

## FINAL CONSIDERATIONS

The environmental management of APA of Barra do Rio Mamanguape and the ARIE Manguezais da Foz do Rio Mamanguape/PB is in a constant process of construction and deconstruction of participatory management. This is a result of the recurring changes of managers and the interruption of actions aimed at the management of the conservation units, which have created in the councilors the feeling that they lost time and work.

Although parity in the composition of the council is important and needed, it is more important to make the council a space for dialogue and, above all, for the construction of knowledge, making the representatives from ICMBIO give up the posture and the hierarchical context and adopt the role of mediators, inside and outside the council.

Making any council participatory and representative is not an easy and quick task, it is needed persistence and strategies to sensitize such different people, especially when the council is discredited and unmotivated, such as the PAs advisory council. No matter how enthusiastic and clueless new social actors arrive about the dynamics of the council, over time, many tend to turn to their own interests, giving up the interests of the community and the objectives of the council.

We stress once again the importance of ICMBIO's managers performing ongoing activities aimed at sensitizing and empowering councilors so that everyone fully understand their role on and the council's. All councilors should have their voice, knowledge and life history valued, so they will feel that they belong to the council and to the conservation unit.

Council representatives need to know the protected areas, both legally and physically. While understanding the APA and ARIE from the legal perspective will allow councilors to know the peculiarities of each protected area, it's possible uses, as well as the rules and laws governing this environment, knowing the CU physically will provide a realistic view of the region.

Holding meetings in different communities would be an efficient way to show the local reality to council representatives and bring residents and

users closer to the APA and ARIE management. This approach is essential to build trust between the heads of the units and the community, improving the involvement of communities in the preservation of environmental resources. With a view to make management shared, it is suggested that council representatives organize community meetings, and it is up to them to determine the place, a topic of interest to the community to be included in the agenda and to invite community members. It will be up to the board to support the advisor who will be hosting the meeting when requested. This will be a milestone in promoting the social organization, empowerment and integration of board members.

Finally, the management of APA and ARIE Manguezais da Foz do Rio Mamanguape is participatory, due to the existence of the advisory council. However, when analyzing the structure of the council, it comes across an immature, unidentified, disorganized and sometimes egocentric instance that results from the low participation and cohesion of the group.

Because of the low council's autonomy, we perceive the practice of shared management very distant from the reality of governance from the protected areas studied here.

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