



INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE
MANAGEMENT OF FOREST RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN
MOZAMBIQUE

ENVOLVIMENTO DA COMUNIDADE DE MUICHI NA TOMADA DE DECISÃO SOBRE A GESTÃO
DOS RECURSOS FLORESTAIS NO DISTRITO DE NIPEPE, NORTE DE MOÇAMBIQUE

PARTICIPACIÓN DE LA COMUNIDAD MUICHI EN LA TOMA DE DECISIONES SOBRE LA
GESTIÓN DE LOS RECURSOS FORESTALES EN EL DISTRITO DE NIPEPE, MOZAMBIQUE
SEPTENTRIONAL

Amândio Castro de Andrade¹, Diolene Francisco Ali², Yurissan Das Nuros António Muachapeu³, Isolda Rosalina Ilídio Chuva Tamele⁴

e371636

<https://doi.org/10.47820/recima21.v3i7.1636>

PUBLICADO: 07/2022

ABSTRACT

The present study was developed in Niassa Province, Niipepe District, specifically in the community of Muichi with the objective of assessing the involvement of the local community in decision making about forest resource management. Thus, to answer the study objective, 109 respondents were interviewed, being: traditional authorities (3), members of natural resource management committees (5), community members (95), representatives from the private sector (03) and from NGOs (3). Data were obtained through the use of non-probability snowball sampling or snowball sampling, techniques such as questionnaire survey, semi-structured interviews, informal conversations, institutional records or document analysis, and direct field observation were employed. The data were analyzed in the Microsoft Excel 2019 program and IBM SPSS Statistics 26 based on content analysis and pattern matching which consists of grouping the similar responses of the respondents into their corresponding categories of information and explaining the differences so that conclusions can be drawn. It was observed that the community has a low level of control over the Forest resources, and its participation in the decision making process has been limited due to factors such as: the non-representation of the community in the district advisory councils, the lack of financial resources, the lack of human resources to assist in the inspection process has been the factor that most creates difficulty in the Forest resources inspection process.

KEYWORDS: Community Organization. Decision-making. Forest Resources.

RESUMO

O presente estudo foi desenvolvido na província do Niassa, Distrito de Niipepe, especificamente na comunidade de Muichi com o objetivo de avaliar o envolvimento da comunidade local na tomada de decisão sobre a gestão de recursos florestais. Desta feita, para responder ao objetivo de estudo, foram entrevistadas 109 respondentes sendo: autoridades tradicionais (3), membros de comités de gestão de recursos naturais (5), membros da comunidade (95), representantes do sector privado (03) e de ONG'S (3). Os dados foram obtidos através do uso da amostragem não probabilística bola de neve ou *snowball sampling*, foram empregues técnicas como o inquérito por questionário, entrevistas semiestruturadas, conversas informais, registos institucionais ou análise documental e observação direta em campo. Os dados foram analisados no programa Microsoft Excel 2019 e a IBM SPSS Statistics 26, tendo como base a análise de conteúdos e coincidência de padrões que consistem em agrupar as respostas similares dos entrevistados em suas correspondentes categorias de informação e explicar as diferenças de modo que sejam tiradas as conclusões. Observou-se que a comunidade possui um baixo nível de controle sobre os recursos Florestais, e a sua participação no processo de tomada de decisão tem sido limitado devido a fatores como: a não representatividade da comunidade

¹ Associação Moçambicana para o Desenvolvimento Rural Sustentável

² Centro de Aprendizagem e Capacitação da Sociedade Civil

³ Universidade Lúrio-Faculdade de Ciências Agrárias

⁴ Universidade Eduardo Mondlane-Faculdade de Agronomia e Engenharia Florestal



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST
RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE

Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

nos conselhos consultivos distritais, a falta de recursos financeiros, sendo que a falta de recursos humanos para auxílio no processo de fiscalização tem sido o fator que mais cria dificuldade no processo de fiscalização dos recursos Florestais.

PALAVRAS-CHAVE: Organização comunitária. Tomada de decisão. Recursos florestais.

RESUMEN

El presente estudio se llevó a cabo en la prefectura de Niassa, distrito de Nipepe, específicamente en la comunidad muichi con el objetivo de evaluar la participación de la comunidad local en la toma de decisiones sobre la gestión de los recursos forestales. Esta vez, para cumplir con el objetivo del estudio, se entrevistó a 109 encuestados: autoridades tradicionales (3), miembros de comités de gestión de recursos naturales (5), miembros de la comunidad (95), representantes del sector privado (03) y ONG (3). Los datos se obtuvieron mediante el uso de muestreo de bola de nieve no probabilístico o muestreo de bola de nieve, se utilizaron muestras técnicas como encuesta de cuestionario, entrevistas semiestructuradas, conversaciones informales, registros institucionales o análisis documental y observación directa en campo. Los datos fueron analizados en el programa Microsoft Excel 2019 e IBM SPSS Statistics 26, a partir del análisis de contenido y coincidencia de patrones que consisten en agrupar respuestas similares de los encuestados en sus correspondientes categorías de información y explicar las diferencias para que se saquen conclusiones. Se observó que la comunidad tiene un bajo nivel de control sobre los recursos forestales, y su participación en el proceso de toma de decisiones ha sido limitada debido a factores como: la falta de representatividad de la comunidad en los consejos consultivos distritales, la falta de recursos financieros y la falta de recursos humanos para ayudar en el proceso de inspección ha sido el factor que más crea dificultades en el proceso de supervisión de los recursos forestales.

PALABRAS CLAVE: Organización comunitaria. Toma de decisiones. Recursos forestales.

INTRODUCTION

According to the national statistics institute (INE), Mozambique is located in Southern Africa, has a total area of 799,380 km² and an estimated population of 27.9 million (INE). And about 80% of the population lives and depends on forest resources for their livelihoods. According to the Ministry of Land Environment and Rural Development (MITADER), Niassa province has the largest total forest area and the largest productive forest area. Although Niassa's productive forest area is shown to be larger compared to that of other provinces, it accounts for only 36% of Niassa's total forest area, because a large forest area (≈48%) is in the Niassa Special Reserve and the protection area accounts for approximately 20% of Niassa's forest area (MITADER, 2018).

The management of natural resources by local communities or Community Management of natural resources (MCRN) is one of the strategies adopted by the government to implement the social objective of the forest and wildlife policy and strategy to simultaneously improve the living conditions of the rural community, ensure participatory and sustainable management of natural resources in order to reduce poverty.

MCRN officially emerged in 1997, thus, it is defined as the control and use of resources with the villages by the local communities for their own benefit and long-term sustainability of the resources (MATAKALA; MUSHOVE, 2001).



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST
RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE

Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

Community participation is a fundamental aspect in civic life and democratic tradition. Citizens' involvement in various economic and cultural activities reflects their expectations and aspirations that arise naturally in human society, and this involvement is considered a social norm of community life (BRACHT, 1991, *apud* NARCISO, 2004).

Aiming to assess the level of involvement of the Muichi community in decision-making on forest resource management in the district of Niipepe, northern Mozambique. Thus, contributing to the knowledge on the decision making process, management of forest resources and the existence of an entity responsible for their management. Consequently, help in improving the natural resource management system and the decision on the benefits generated and the degree of legitimization and recognition of the organizations provided for the management of resources in order to carry out effective management of natural resources and the basis for gender studies in other communities with similar characteristics.

METHODOLOGY

STUDY AREA

The study was conducted in the community of Muichi in Niipepe district, Niassa province, Mozambique (Figure 1). According to the Ministry of State Administration (MAE) the district of Niipepe is located in the southeast of Niassa province, having as its boundaries, to the south the province of Nampula, to the east the province of Cabo Delgado, to the north the district of Marrupa and to the west the district of Maua.



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE
Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ildio Chuva Tamele

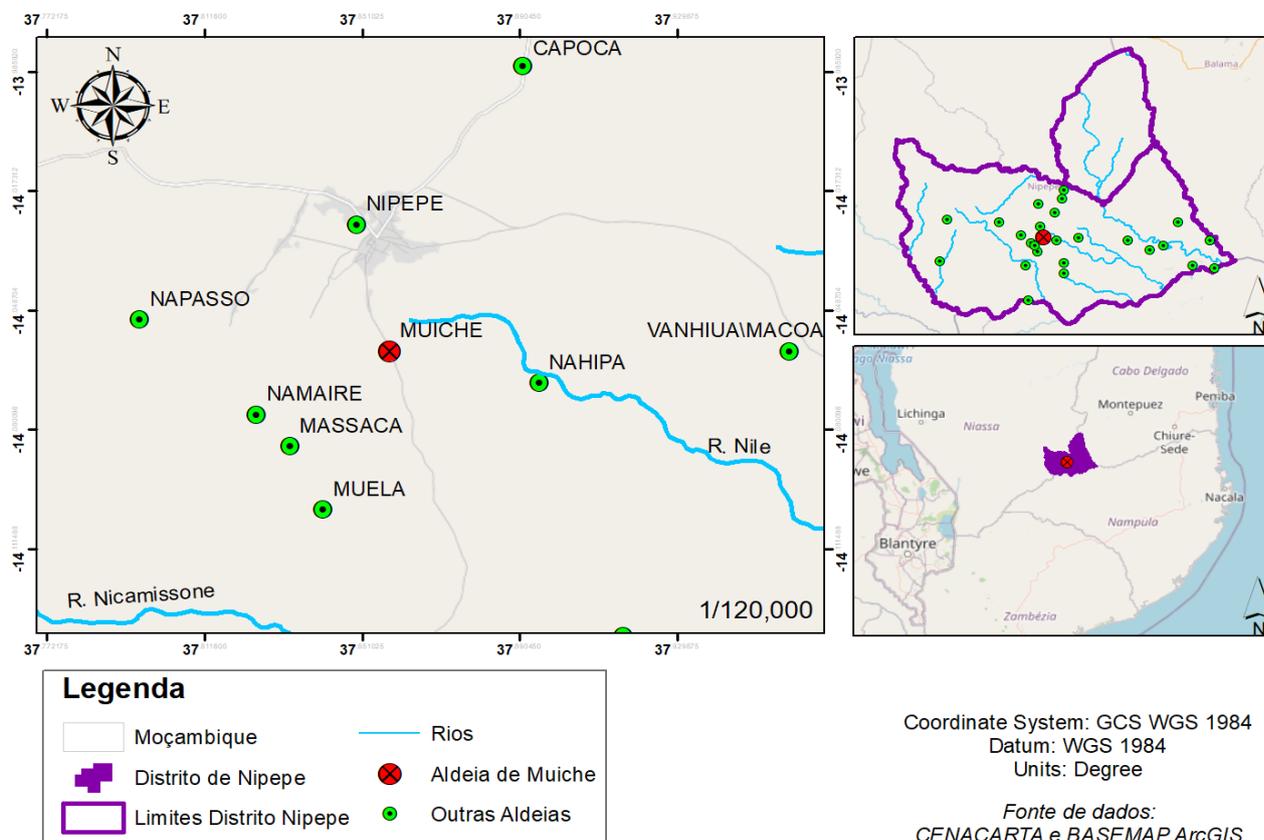


Figure 1: Study area location

The district of Niipepe is characterized by dry semi-arid and sub-humid climates. The average annual rainfall ranges from 800 to 1200 mm, while the reference potential evapotranspiration (ET_o) is between 1300 and 1500 mm. In terms of average temperature during the crop growing period, the average annual temperature ranges between 20 and 25°C. It corresponds to the land with altitudes between 200 and 500 meters of undulating relief, interrupted from time to time by the rocky formations of "inselbergs". Physiographically the area consists of a low plateau zone that gradually passes to a more dissected relief with more intermediate slopes, from the subplateau zone of transition to the coastal zone.

DATA SURVEY

To allow greater capacity to obtain data as well as allowed greater flexibility and reformulation of questions asked in synthesis that they were not clear to the interviewee. Applied to 109 people being: traditional authorities (3), management committee members (5), community members (95), private sector representatives (3) and NGO's (3). Non-probability snowball sampling was used, in which individuals were selected according to several categories such as: gender, age and occupation.



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST
RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE

Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

Additional data such as total number of inhabitants, level of deforestation, and number of institutions related to community management in the region were obtained through document analysis and direct observation. Techniques such as questionnaire survey, where the questions presented reflected the objectives to be verified in the research, were presented with closed or fixed-response questions (also having open-ended questions), presenting the same number of questions to all respondents. Semi-structured interviews were used to allow greater capacity to obtain data and allowed greater flexibility and reformulation of the questions asked in situations where they were not clear to the interviewee. Documentary analysis consisted of collecting information in records of the organizations that operate in that district and in the District Services for Economic Activities (SDAE) about community management of natural resources, such as: environmental management project, reports and minutes of meetings, association legalization forms, and the community agenda. Direct observation was used to validate the answers given by the interviewees, as well as to identify the benefits from the management, such as: trees used to obtain wood, firewood, charcoal, and areas for religious services. For the data analysis, the grouping of information by similarity of patterns was done, based on similar answers coming from interviews. For this purpose, data related to each topic was grouped, identical responses were joined and interpreted.

DATA ANALYSIS

For the data analysis of the present study, the Pattern Coincidence method was used, which for Chambule (2007), consists of grouping the similar responses of respondents into their corresponding categories of information by similarity and explaining the differences and drawing conclusions. Microsoft Excel 2019 and IBM SPSS Statistics 26 statistical packages were used for data entry, processing, graph generation, and quantitative data analysis. Those that were not possible to represent in quantitative or numerical form were represented in descriptive form, that is, meaning was attributed to the information collected, establishing relationship between the information gathered, known as the protocol produced by the subjects investigated, where the central theme has various meanings according to various points of view. It was also through the statistical package IBM SPSS Statistics 26, performed the statistical test Chi-Square Test. For Neto & Stein (2015), the Chi-square test is a non-parametric test applied in the comparison two or more independent groups not necessarily of the same size and the variable must be of nominal measurement.

RESULTS AND DISCUSSIONS

COMMUNITY PARTICIPATION IN NATURAL RESOURCE MANAGEMENT

The results of the interviews indicate that 62.5% of the members of the Muichi community participate in natural resource management, while 37.5% do not.

Due to the influence of the members considered most influential in the Muichi community and the members that make up the natural resources management committee (CGRN), the community



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE

Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

has not actively participated in the sustainable management of natural resources, which in a way shows the weak capacity to guarantee the correct use of these resources, a case that is verified in a large part of the communities within the country. And, taking into account that the communities are the owners of the natural resources and depend on these for their survival, they, as a whole, should be seen as the main stakeholder in the management process, and not only the influential and constituent members of the CGRN.

The results of this study are similar to the study carried out in the community of Mucombezi, Sofala province by Chipanga (2005), where it was observed that community participation was limited only to information related to meetings or other community events, besides the fact that they were only consulted in the preparation of natural resource management plans. However, they never effectively participated in the management process. Thus, according to the citizen participation scale, the Muichi community is at the very low level on natural resource management (ARNSTEIN, 1969).

The non-representation of the community in the district consultative councils is also considered a limiting factor, due to allegations such as the lack of knowledge and technical skills of the community members, the lack of incentives for agents who need to travel long distances, the limited integration of community organizations, and political influence. Thus, it is important to note that if the participation of the communities in the District Consultative Councils is lacking, then the district development plans drawn up do not illustrate the true situation of the district, as well as do not aim to resolve the real local conflicts presented. It is the duty of the District Consultative Council to involve communities in the consultation process about the specific needs of the district in order to comply with the participatory local development program. Aires and Nguiraze (2012) state in their study on Consultative Councils as governance imperatives that citizen participation is a mechanism for building more symmetrical relations, and there is also a need for "increased opportunities for insertion in public debates and also the availability of the necessary conditions for effective participation in the process of territorial development such as access to information, capacities of choices that enable rural communities to define and control the implementation of these policies".

It is important that people participate in community meetings at the level of planning programs or activities that affect them, as such participation leads to the feeling that their needs and interests are identified and taken into consideration. In a study on community involvement in forest resource management, Macuácue (2017) found that only 8% of the community in Changalane had responded that they participate and contribute in forest management compared to 92% who responded that they do not participate.

ROLE OF THE LOCAL COMMUNITY AND OTHER STAKEHOLDERS IN NATURAL RESOURCE MANAGEMENT IN MUICHI

Results from the present study (figure 2) indicate that 14% participate in awareness raising, 12% in enforcement, 3.4% in facilitation, 40.5% in protection and 30.1% hold customary use of natural resources. Most of the community members who participate in awareness raising and enforcement



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST
RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE

Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

are part of the Natural Resource Management Committee (NRMC) or even have kinship with the local leadership or members considered influential.

The communities play the role of guardians, overseers, regulators, and managers of natural resources, in order to ensure the continued generation of benefits from biodiversity, a better way to resolve conflicts involving the land, forest, and wildlife sector, and the expansion of conservation-related knowledge. Thus, the efforts of the community, together with the private sector and local government would be the best way to combat poverty, ensure self-sufficiency, rational use and its conservation including biodiversity in general, due to the growing recognition that the different actors, play a better role, when they combine their efforts, rather than each of these actors separately.

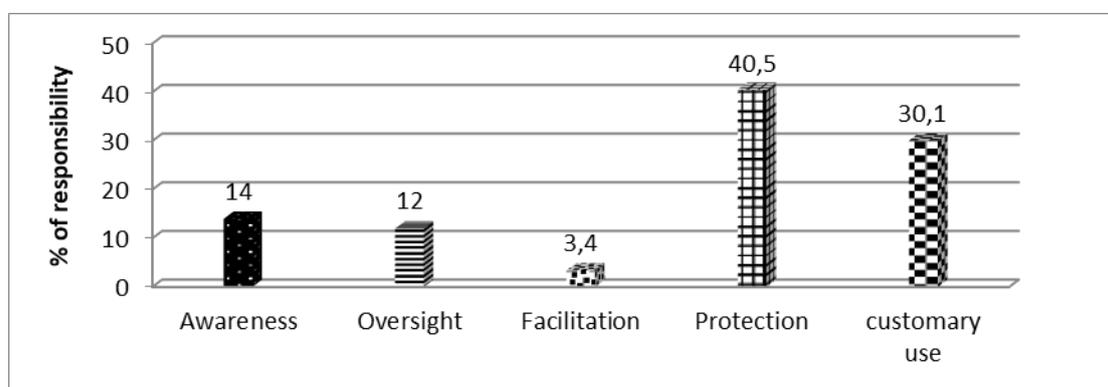


Figure 2: Community role in natural resource management in Muichi

Table 1: Stakeholder roles in relation to natural resource management in Mozambique

Stakeholders	Role in natural resources management
CGRN, FC	<p>Sensitize members of the local communities on the sustainable use of natural resources in coordination with the public sector; develop conflict resolution mechanisms;</p> <p>Collaborate in the enforcement of resources and report violators of the law to the authorities;</p> <p>Manage community funds, whether these benefits come from donations (national or foreign), established by legislation or through the execution of business plans within the scope of community development; and Initiate actions regarding the control of burning and other illegal activities</p>
Traditional Authority	Divulge the local uses and customs of access and use of natural resources in the



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST
RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE

Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

community's area of influence; Resolve conflicts in the access and use of natural resources in the community;

Mobilize and organize the community to participate in the processes of management and administration of natural resources;

Disseminate good management practices, exploitation, protection, conservation and sustainable use of natural resources in the community;

Participate in the supervision of natural resources;

Mobilize and organize the community to participate in consultation and auscultation meetings in the process of licensing natural resources in their area;

District government

Carry out policies in order to guarantee compliance with the legislation of the forestry and wildlife sector in force in the country;

Collaborate in the enforcement of resources; sensitize the communities to conserve the resources; and guarantee the sustainable use of natural resources.

Update and make available statistical information about NRs and; Produce periodic reports about NRs in the district;

Promote the organization of local communities and OCB, with a view to involvement in participative management of the NRs in their area of influence;

Promote and support forums, meetings and platforms for consultation, knowledge, discussion and articulation about NR in the district and local communities;

Private Sector

Carry out technical and financial feasibility and Environmental Impact studies of natural resource-based enterprises;

Establish sustainable projects of exploration, transformation and commercialization of RN and its derivatives, in the districts and in the communities;

Contribute in local development, through the creation of jobs, economic and social infrastructure;

Promote the involvement of communities, small and medium local operators, in value chains of natural resources and derivatives;

Establish partnerships in the development of production systems that promote sustainability and combat the illegal exploitation of natural resources in local communities;



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE
Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

AMDER, CESC and ROADS Legal facilitator in the revitalization and support of natural resource management committees, creation and operationalization of community funds;
Support the participation of local communities, or their representatives, in forums, meetings and platforms for consultation, knowledge, discussion and articulation on NR, within and outside the district, and in local communities
Build the capacity of the OCB's in matters of social preparation for the management of natural resources, and in techniques for tracking the benefits from the exploitation of these resources
Support in the registration and legalization of associations;
Disseminate laws regarding the use, exploitation and access to land and other natural resources;
Promote and disseminate technologies for the exploration, processing and commercialization of natural resources, appropriate for the environmental sustainability of local communities

3.3 Applicability of the legislation on forestry and wildlife exploitation fees

Mozambican legislation (Ministerial Diploma No. 93/2005 of May 4) stipulates that 20% of the license fees from forest and wildlife exploitation should be channeled to local communities, fees collected under the forest and wildlife legislation which emphasizes the following:

"Twenty percent of any forestry or wildlife exploitation fee is intended for the benefit of local communities in the area where the resources were extracted, pursuant to Article 35(5) of Law No. 10/99 of July 7."

The objective of the fund is not only to have a micro-project for the community or simple business plans, but a mechanism for empowerment and creation of more initiatives for development and sustainable management of natural resources in a more participatory way. The government authorities have the responsibility to annually channel the allotment to the beneficiary communities (RIBEIRO, 2009).

In addition to the 20% fee channeled to local communities, there is also the so-called forest and wildlife repopulation surcharge, which for forest and wildlife exploitation falls on a percentage of 15%, which is the surcharge for forest and wildlife repopulation, which is established by the Minister of Agriculture and Rural Development, by Ministerial Diploma, the mechanisms for the use of the referred funds for the repopulation of forests and wildlife, however, in a large part of the communities



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE

Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ildio Chuva Tamele

where there are forest and wildlife operators, such repopulation issue is not observed, that is, the applicability of the legislation is not respected, and this is a factor that requires attention.

Serra (2014), in a study related to the impact of forest exploitation for the development of communities in the province of Nampula, found that management plans are only fulfilled at the level of formalisms for licensing as a legal imposition. He adds, "This measure is not monitored, and in the areas covered by the research, nobody is repopulating. Even with the 15% of the repopulation fee that is retained in the province to ensure that there is repopulation, the districts do not receive these values, if not in the form of plastics for the sowing of nurseries".

In the case of the farm, the investors channel a social fund to the community. However, 97.6% of the interviewees do not know the fees paid by the companies that operate in their community, nor the amounts channeled by the government to the communities. The Mozambican Association for Sustainable Rural Development (AMDER) acts in the community as the biggest facilitator in the process of GRN, supporting in the deduction of the amounts and guiding in its application for the benefit of the community. Other institutions include the local government and non-governmental organizations such as the Civil Society Learning and Capacity Building Center (CESC) and the Network of Organizations for Environment and Sustainable Development (ROADS). The main actors in the dissemination of legislation are, according to the respondents, the local government (18.3%), The CESC (22%), ROADS (24.4%), and AMDER (32.9%).

DECISION ON ACCESS AND USE OF NATURAL RESOURCES

Results from the interviews show (61%) stated that the decision on access to natural resources is the community's own, followed by the district government (24.4%), private sector (4.9%), and civil society (9.8%). Similar finding was obtained by Antônio (2016), assessing the natural resource management system and the participation of local communities in the decision-making process in the administrative posts of Macaloge and Matchedje in the same district (Sanga) in which the management committee, the private institution Lipilichi Wilderness Investment and the National Directorate of Conservation Areas were named as the main stakeholders. Figure 3 shows in detail how the decision on access and use of forest resources is made in Muichi community.

Involving community members in the decision-making process regarding access to and use of natural resources is also a role that the State/Government should exercise in respect of the citizen's right to participation, as presented in the Local State Bodies Law in its Article 100:

"The local organs of the state shall ensure the participation of citizens, local communities, associations and other forms of organization, which aim to defend their interests, in the formation of decisions that concern them"



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE
Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

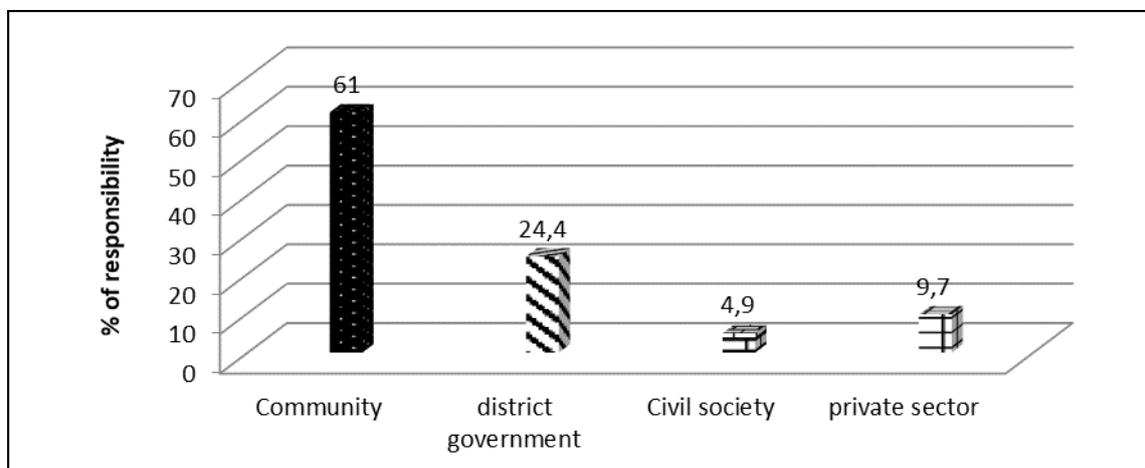


Figure 3: Decision on access and use of natural resources.

Community Natural Resource Management is often affected by the problems of unfair benefit sharing, and low levels of participation in decision making, which occurs when community institutions are too large in terms of membership. In agreement, Murphree (s/d) suggests that the natural resource management unit should be as small as possible within ecological and socio-political constraints, because large-scale bureaucratic structures tend to be ineffective, increasing the potential for inefficiency, corruption, and evasion of responsibility.

According to Child the more a resource is shared over large areas of land (e.g. wildlife resources), the more important it becomes that decision-making is shared by a larger number of resource users. "However, the larger the geographic scale, the greater the trade-off between highly interactive and participatory decision making and representative forms of decision making that begin to blur lines of accountability. It is easier to match the appropriate social and spatial scale with resources such as forests that are static or may not cover a large area of land."

Murphree (s/d) notes that community management of natural resources is based largely on the principles of common property resource management, where one of these principles is that all people covered by rules and decisions regarding resource use should participate in the development of such rules or decisions. "Implementing this principle also involves working with small groups of people who can easily get together and approve rules and make decisions together for the management of natural resources."

According to the citizen participation scale (ARNSTEIN, 1969), the community exercises the last level of participation, citizen control, in which decision-making powers are completely devolved to local communities. However, local observation found that in practice this participation is not effective since the government ends up getting involved in this process, as Massuque (2013) also found in a study conducted in the Niassa National Reserve, where he identified that Reserve Administration, the



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST
RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE

Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

district government and traditional authorities in partnership with the management committee were the main decision-making bodies on access and use of natural resources.

CONFLICT MANAGEMENT IN NATURAL RESOURCE MANAGEMENT AND ITS CAUSES

Regarding the management of natural resource conflicts 32.9%, state that access to land is the most registered conflict in the community, followed by gender discrimination in decision-making on natural resource management (24.4%), delay in channeling the 20% of the forest exploitation tax (23.2%), unequal distribution of the benefits of the 20% channeled to the community (18.3%), and 1.2% do not know about the potential conflicts existing in the community.

The origin of the delay in channeling the 20% in favor of the communities is the slowness in the process of organizing the local communities, because it is known that for the channeling as well as claiming the 20% benefits, the communities need to be organized in accordance with the legislation. However, also a big factor for the delay in channeling the 20% is the slowness of the district government in the process of channeling the funds when the communities are already organized, as well as the channeling of unrealistic funds, which consists of the disparity of values between the checks delivered to the communities and the real amount channeled into their bank accounts.

According to the Law of Local State Organs, the forms of community organization include those represented in the following table:



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE
Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

Form of Community Organization

Conceptualization

Local Council

It is a consultation body for the local government authorities, in the search for solutions to fundamental questions that affect the life of the people, their well-being and sustainable, integrated and harmonious development of the living conditions of the local community, in which the community authorities also participate.

Local Forum

This is a civil society institution that aims to organize the representatives of the communities and local interest groups to allow them to define their priorities.

Community Committees

They are forms of organization of the people to allow communities to mobilize themselves in identifying and seeking solutions to their problems, and they can refer other concerns to the relevant public sector structures. These can be set up to manage land and other natural resources, schools, health posts, and other non-profit institutions of a social nature.

Community funds

The communities can create community development funds on their own initiative, aimed at their own interests, as long as it is communicated to the Chief of the Administrative Post. The fund is considered created when it is registered at the Administrative Post's headquarters, and it can receive funding from the communities' own funds, from funds assigned by law, and from any national or foreign entity.

And this legislation does not leave the possibility of the respective communities being able to define other forms of organization.

The slow registration of the management committees in the district government, and the lack of documentation to open institutional bank accounts, contribute to the delay in the process of channeling the 20% in favor of the communities, says António (2016). To resolve the conflict regarding the issue of delay in the channeling of the 20% in favor of local communities, it is extremely important that the communities, the private sector, and the Government, taking into account the legislation that establishes the various forms of organization of the communities, verify the mechanism of organization that best suits the situation, and create conditions for such action to be put into practice. And, taking into account the aforementioned forms of organization, community funds constitute the best form of reception and management of the 20% in favor of local communities considering the conceptualization that the Law of Local State Organs establishes for it, which



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE

Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

contradicts Antônio (2016), who points out management committees as the mechanism for receiving the 20%.

These results are similar to those obtained by Manjate (2013), in his study on the categorization of conflicts in the use of natural resources in the Niassa National Reserve, which pointed to land dispute as one of the main conflicts (45% of respondents). For the resolution of land conflicts, 25.6% of the respondents point out that Negotiation is used, through meetings with the members of the natural resources management committee and the private sector and/or community members in case the conflict is between members of the same community, in order to overcome difficulties and reach a consensus. On the other hand, 19.5% of the interviewees affirmed that if there is no consensus, mediation is used, where a third party (usually the district government) is called in to mediate the conflict. A similar result was obtained in the study by Manjate (2013).

Regarding the delay in channeling the 20% of the natural resource exploitation fee and its uneven distribution, 24.4% stated that arbitration is used to resolve these conflicts. In this case, the management committee schedules a hearing with the district government in order to know the reasons for the delay in channeling the community benefits. The hearing is attended by the private sector/investor. For the case of gender separation in decision-making about natural resources, 15.9% affirm that adjudication is the way that has been used to resolve the conflict where the matter is taken to the district administration together with civil society as a facilitator in order to contribute to their solution. A duly organized group representing women from the community presents the conflict to the Administrator or the SDAE in the presence of the CGRN in order for them to be involved in natural resource decision making and to hold some leadership positions in the CGRN.

LIMITATION IN NATURAL RESOURCE MANAGEMENT

The lack of appropriate equipment for patrolling such as boots, uniforms, raincoats, firearms, and the lack of transportation is a limiting factor in the process of inspection and sustainable management of resources at the local level, not only for the community members, but also for the technicians of the district economic activities services that play such a role within the district. With the lack of transportation, it is possible to see that the members of the management councils, whose main activity is community mobilization, cannot travel to all the different points in the community for the dissemination and expansion of information about the laws that regulate access, use and enjoyment of natural resources, the various strategies for their sustainability, as well as the rights and duties of communities with respect to the resources they have. The lack of human and financial resources in the community were pointed out as the main limitations in the management of natural resources in Muichi. It must be considered, however, that these difficulties are common in several provinces of the country, negatively affecting the management of natural resources, as pointed out by Bila (2005).

FINAL CONSIDERATION



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE

Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

The Muichi community has low involvement in the decision-making process regarding management of natural resources, which in a way makes it appear more likely to occur from the incorrect use of the resources within it. This is due to limiting factors such as not community representation in advisory councils, the non-participation of the community in the inspection, due to lack of material such as boots, firearms, and or even transport to to exercise such a function, the lack of financial resources and even the lack of opportunity to participate in the decision-making process.

The lack of knowledge of the legislation that regulates the use and exploitation, as well as, establishes the rights and duties of communities over land and other natural resources, has created opportunities for the existence of conflicts such as the dispute over land, gender differentiation in the processes of decision-making, the delay and or not channeling the benefits from the exploitation of the resources that communities have, and conflict resolution management has been effective and efficient.

REFERENCES

ACTUAR - Associação Para Cooperação e o Desenvolvimento. **Integração de Uma Abordagem de Género na Gestão de Recursos Hídricos e Fundiários (Angola, Cabo Verde, Moçambique e Timor Leste)**. Coimbra: Associação Para Cooperação e o Desenvolvimento, 2010.

ANTÔNIO, S. A. **Avaliação do sistema de gestão dos recursos naturais e a participação das comunidades locais no processo de tomada de decisão no posto administrativo de Macalogue e Matchedje no distrito de Sanga**, Niassa: [s. n.], 2016.

ARNSTEIN, S. R. A ladder of citizen participation. **Journal of the American Institute of Planners**, v. 35, n. 4, p. 216- 224, 1969.

BILA, A. **Estratégia para fiscalização participativa de florestas e fauna bravia**. Maputo: DNFFB/FAO, 2005. 42 p.

CHAMBULE, E. E. **Levantamento e análise de conflitos na gestão de recursos naturais turísticos: Estudo de casa: Ponta de Ouro Província de Maputo**. 2007. TCC (Projecto Final) – Universidade Eduardo Mondlane, Maputo, 2007.

CHIPANGA, H. B. **Envolvimento das comunidades locais na tomada de decisões sobre os recursos florestais: Estudo de caso de Mucombezi, Nhamatanda**. 2005. Monografia ((Projecto Final) - Universidade Eduardo Mondlane, Maputo, 2005.

DOMINGOS, A. O Papel das comunidades na cogestão de recursos florestais no distrito de Chibabava - província de Sofala (2010-2015). **Revista de Ciências Sociais e Filosóficas**, v. 6, n. 11, p. 109-131.

MANJATE, M. J. **Categorização de Conflitos na Utilização dos Recursos Naturais na Reserva Nacional do Niassa**. Monografia - Universidade Lúrio, Nampula, 2013.

MASSUQUE, J. Z. **Análise do processo de gestão dos recursos naturais numa área protegida contendo populações humanas. Estudo de caso: Reserva Nacional do Niassa**, Monografia - Universidade Lúrio, Nampula, 2013.



RECIMA21 - REVISTA CIENTÍFICA MULTIDISCIPLINAR ISSN 2675-6218

INVOLVEMENT OF THE COMMUNITY OF MUICHI IN DECISION MAKING ON THE MANAGEMENT OF FOREST
RESOURCES IN THE DISTRICT OF NIPEPE, NORTHERN MOZAMBIQUE

Amândio Castro de Andrade, Diolene Francisco Ali, Yurissan Das Nuros António Muachapeu, Isolda Rosalina Ilídio Chuva Tamele

MATAKALA, P.; MUSHOVE, P. **Arranjos institucionais param o maneio comunitário dos recursos naturais (MCRN):** perfis e análise de 42 iniciativas de MCRN em Moçambique. Maputo: DNFFB, 2001. 142 p.

MITADER. Inventario Florestal Nacional. **Report**, n. 41, p. 180, 2018.

MURPRHEE, M. W. **United Communities as Resource Management Institutions:** Gatekeeper series N o 36. London: Institute for Environment and Development, s. d.

NARCISO, A. C. **A Participação Comunitária nos cuidados de Saúde Primaria:** a percepção dos utentes. 2004. Monografia (Licenciatura em Desenvolvimento Comunitário e Saúde Mental) – ISPA, Lisboa, 2004.

NETO, A. A. H.; STEIN, C. E. **Uma abordagem dos testes Não-Paramétricos com utilização do Excel.** Blumenau: FURB, 2015.

ORAM. **Documento de apresentação na reunião nacional sobre delimitação de terras comunitárias.** Maputo: [s. n.], 2010. Disponível em: <https://www.open.ac.uk/technology/mozambique/sites/www.open.ac.uk.technology>.

RIBEIRO, A. *et al.* **Atividades dos recursos naturais na Zambesia,** Zambesia: Prodeza, 2009.

SERRA, C. M. **Impato da exploração Florestal no desenvolvimento das comunidades na Província de Nampula.** Maputo: OMR-Observatório do meio rural destaque rural, 2014.