

**OCCUPATION PROCESS AND SOCIO-ENVIRONMENTAL IMPACTS IN
THE TEPEQUÉM MOUNTAIN RANGE, AMAJAÍ-RR (2012-2022)**

**PROCESSO DE OCUPAÇÃO E IMPACTOS SOCIOAMBIENTAIS NA SERRA
DO TEPEQUÉM, AMAJAÍ-RR
(2012-2022)**

Raiandra Rodrigues Siqueira

Geography course, PIBIC/CNPq-UERR scholarship holder

raiandra.siqueira@alunos.uerr.edu.br
<https://orcid.org/0009-0003-5865-5018>;

Juan de Souza Matias

Geography course, PIBIC/CNPq-UERR scholarship holder

juan20souza@gmail.com
<https://orcid.org/0009-0002-5539-680X>

Márcia Teixeira Falcão

Professor in Biodiversity and Biotechnology advisor

marciafalcao.geog@uerr.edu.br
<https://orcid.org/0000-0003-3190-3192>

Sandra Kariny Saldanha de Oliveira

Professor in Biodiversity and Biotechnology co-supervisor

sandra@uerr.edu.br
<https://orcid.org/0000-0002-6274-4609>

RESUMO:

O objetivo da pesquisa é analisar o processo de ocupação e uso da terra na Serra do Tepequém, Amajari - Roraima, no período de 2012 a 2022 e os impactos socioambientais nas áreas de vulnerabilidade natural aos processos erosivos. A metodologia envolveu: autorização do comitê de ética em pesquisa, levantamento bibliográfico, visita *in loco*, entrevistas e registro fotográfico. Os resultados demonstram que algumas áreas que não passíveis de ocupação humana, estão sendo ocupadas, os moradores em sua maioria são de nacionalidade venezuelana, o que fragiliza não só o ambiente natural, mas a qualidade de vida das pessoas.

Palavras-chave: degradação ambiental; áreas de risco; erosões

SUMMARY:

The objective of the research is to analyze the process of occupation and use of land in Serra do Tepequém, Amajari - Roraima, from 2012 to 2022 and the socio-environmental impacts in areas of natural vulnerability to erosion processes. The methodology involved: authorization from the research ethics committee, bibliographical survey, on-site visit, interviews and photographic records. The results demonstrate that some areas that are not subject to human occupation are being occupied, the majority of residents are of

Venezuelan nationality, which weakens not only the natural environment, but people's quality of life.

Keywords: environmental degradation; Risk areas; erosions

INTRODUCTION

The Tepequém mountain range, located in the municipality of Amajarí, northern portion of the state of Roraima, possesses geological-geomorphological characteristics that make the study area distinctive in the Amazonian scenario. According to Alves and Beserra Neta (2015), the landscape is a result of both natural factors (paleoclimates and tectonic forces) and anthropogenic actions (mining activity). Therefore, the study proposal aims to address the following problem questions: how do occupations occur in areas of environmental risk in the Tepequém mountain range? What are the main socio-environmental problems faced by residents?

The research justification lies in contributing to territorial planning policies in the Tepequém mountain range region, considering areas of irregular occupation as an essential element for discussing risk areas and which factors/possible solutions can minimize the issue at hand.

Studies of this nature reinforce the importance of protecting natural resources and bring visibility to areas of irregular occupation, in spaces of dialogue that enable the identification, evaluation, analysis, and monitoring of land use conditions in the Tepequém mountain range. Thus, it can be considered that the issue of the land occupation and use process involves public agencies, politicians, and the population in general. An essential tool in this process is the promotion of public policies and education that fosters the emergence of critical consciousness and contributes to new forms of conduct.

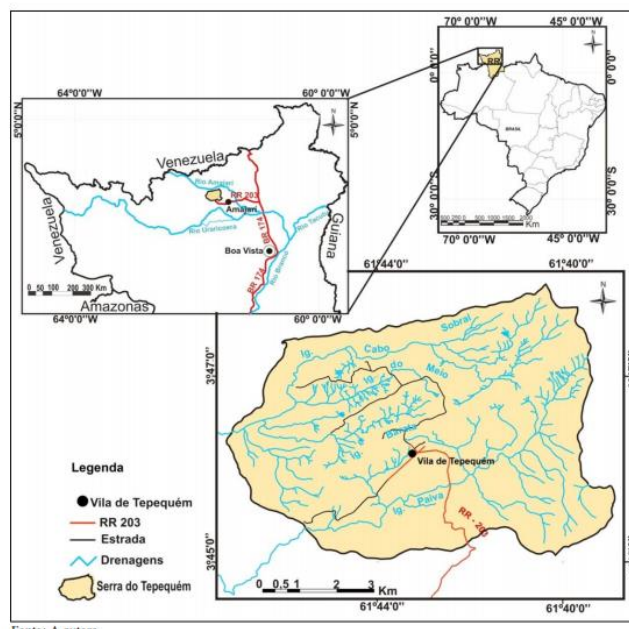
The environment is characterized by a set of dynamic, interdependent, and interrelated relationships between humans and the abiotic elements of ecosystems, providing life. It is in this space, rich in diversities, constantly changing, that life and the multiplicity of actions and reactions are perceived (MELLO FILHO, 1999).

The research aims to analyze the process of land occupation and use in the Tepequém mountain range, Amajarí - Roraima, from 2012 to 2022 and the socio-environmental impacts in areas vulnerable to erosive processes.

METHODOLOGY

The research was carried out in the Tepequém mountain range, municipality of Amajari, RR. Access to the region occurs through BR-174 (100 km) and then via 203 (110 km), both paved (Figure 01).

Figure 01: Location Map of the Tepequém Mountain Range, Amajari - RR



Source: Cunha, 2013

The development of the research occurred through the following stages: a) first stage - a bibliographic survey about Tepequém is being conducted. In this stage, articles, theses, and dissertations were researched in indexed databases; b) second stage - field visits were carried out, the first one to identify and confirm the research locus (during the dry season, September-November), and subsequently visits were made during the rainy season (May-June) to assess the impacts of irregular occupations and the problems faced by residents. During the field visit, information such as photos, geographical coordinates, and interviews were collected (project approved by the Research Ethics Committee of the State University of Roraima - CEP/UERR, through CAAE: 68295123.6.0000.5621).

RESULTS AND DISCUSSIONS

The Tepequém mountain range is located in the municipality of Amajari, in the northern portion of the state of Roraima. The region stands out for its tourist potential, resulting from its geological-geomorphological geodiversity and also from the historical process of mining, which left marks on the landscape that influenced the process of occupation and use, stemming from mining activity (from the 1930s to the 1990s), which caused various impacts on the natural environment, especially in geology characterized by the presence of sedimentary rocks of the Tepequém Formation, mainly consisting of conglomerate sandstones, siltstones, and mudstones (Paleoproterozoic). There is also the presence of acidic volcanic rocks, belonging to the Surumu Group. The geomorphology is represented by the presence of tabular relief, with a flat top, with an intermountain plain (Sedimentary Plateau of Roraima). The vegetation is characterized by the presence of grassy carpet, gallery forests, and dense ombrophilous forest (VELOSO et al. 1975). The hydrography is marked by the streams: Paiva and Cabo Sobral, which are part of the Amajari hydrographic basin. The climate is of the 'Am' type, hot and humid, with well-defined dry and rainy seasons, and precipitation varies on average from 1700 to 2000 mm annually (BARBOSA, 1997).

Occupations in areas of environmental risk are a concern for governments due to the various impacts that occur in the physical, social, and biological environment, leading to a deterioration in the quality of life of people, loss of scenic value, loss of ecosystem services, and others. In general, these occupations occur in already degraded areas that remain idle and become a conducive environment for irregular occupations, and they consolidate over time through occupation policies.

The historical process of the Tepequém Mountain Range is related to the practice of mining in the region since 1936, alongside cattle farming activities. From the 1950s and 1960s, mining activity intensified during the peak of diamond mining, attracting the attention of a large part of the population (FARIAS, VERAS, SANTOS, 2013).

In recent decades, the region has seen a new activity emerge: tourism, especially geotourism. Combined with ease of access, this has promoted interest in the construction of leisure homes for weekends and the establishment of guesthouses, leading to illegal occupations on federal lands and in areas that should be preserved (Figure 2a and b).

Figura 02: a) ocupações irregulares em áreas de risco; b) erosões ao longo das ocupações

b



Fonte: Márcia Falcão, 2023

During the on-site visit, irregular occupations were noted by both foreigners, residents, and owners of guesthouses who appropriated the space near the landing strip. Many plots of land were demarcated which, after the invasion process, become available for sale, with a value around 10 thousand reais. It is noteworthy that these areas are federal lands and cannot be occupied or sold.

Based on the interviews conducted, it is highlighted that the residents of the irregular occupation area are mostly foreigners who arrived in Brazil in search of opportunities and now live off informal jobs and donations. It is also noteworthy that the residents live without basic sanitation infrastructure (treated water, waste collection, and sewage), and the houses in general are made of tarpaulin and wood. The importance of political actions by the municipality in regularizing the situation by relocating these residents to other areas with better infrastructure is emphasized, aiming to improve their quality of life and contribute to achieving the Sustainable Development Goals, especially in terms of poverty eradication.

CONCLUSIONS

Therefore, it is essential to continue addressing themes with the purpose of enabling further reflection on the scenario of land occupation and use in the Tepequém Mountain Range, Amajari, especially due to the environmental relevance proposed in the theme of irregular occupation. We are faced with a topic that is increasingly in the spotlight due to recent environmental events in Brazil and worldwide.

It is hoped that the research will provide contributions to guiding occupations in areas of environmental risk, based on a critical and political perspective. It is believed that the situation diagnosed in the municipality sparks and opens up space for discussions and reflections considering the aspects related to the reality to be studied.

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