

Disorderly occupation on the edge of a beach at Ajuruteua

Ádria Rafaela Vulcão Pereira¹, Aline do Rosário Pinheiro², Jackellyne Lourrane Soares de Sousa³,
Murilo Patrick Reis Lima⁴, Nelielson Pinheiro da Silva⁵, Valéria de Miranda Lisboa⁶, Yane
Andrade da Paixão⁷, Iracely Rodrigues da Silva⁸.

ABSTRACT

The disorderly occupation on the shore of Ajuruteua Beach, located on the Bragantina Peninsula in the state of Pará, has caused significant environmental impacts due to population expansion and tourism without adequate planning. This qualitative study carried out an analysis of the occupation of the Ajuruteua waterfront during May 2024, using walks, direct observations, detailed notes and sketches of the area. The results show that more than 90% of the waterfront is occupied with various types of buildings, including housing, restaurants, inns, kiosks, markets and bars, as well as a significant accumulation of garbage, especially plastics and glass. The vegetation in the area is practically absent and environmental preservation is minimal, both on the beach and after the beach. The study highlights the need to implement environmental conservation policies, environmental education programs, rigorous inspection, promotion of ecotourism, an integrated waterfront management plan, and support for scientific research to mitigate negative impacts and promote the sustainable use of natural resources.

Keywords: Disorderly urbanization, Environmental impacts, Coastal management.

INTRODUCTION

Ajuruteua beach is considered one of the most beautiful beaches in the northeast of Pará, located on the Bragantina Peninsula, 36 km from the city of Bragança-PA, with approximately 2.5 km in length (MONTEIRO et al, 2009). Its territory has four ecosystems: the mangrove, the sandbank, the dunes and the beach. Until the beginning of the 1980s, it was practically uninhabited, being frequented only by fishermen, who worked there, and by visitors (CARVALHO, 2000). The construction of the PA-458 highway (36 km long, of which 20 km cross mangrove areas), between the city of Bragança and Ajuruteua beach, enabled population expansion, the beginning of tourism without planning and, consequently, the exploitation and degradation of the region's natural resources, through the occupation of mangrove areas and dune fields (QUARESMA & SANTOS, 2023).

The transformations that have occurred in recent decades have caused significant problems related

¹ Pedagogy student-Federal University of Pará (UFPA)

² Pedagogy Student-Federal University of Pará (UFPA)

³ Pedagogy Student-Federal University of Pará (UFPA)

⁴ Pedagogy Student-Federal University of Pará (UFPA)

⁵ Pedagogy Student-Federal University of Pará (UFPA)

⁶ Pedagogy Student - Federal University of Pará (UFPA)

⁷ Pedagogy student - Federal University of Pará (UFPA)

⁸ Doctor in Environmental Biology - Federal University of Pará (UFPA)

to the disorderly occupation and inadequate exploitation of natural resources. Population expansion and tourism without proper planning have resulted in negative impacts on coastal ecosystems, leading to the degradation, in part, of the coastal environment.

OBJECTIVE

Taking into account the importance of Ajuruteua beach for the coast of Pará, the present work aimed to make a survey on the occupation on the shore of Ajuruteua beach, identifying the types of constructions and accesses to the beach.

METHODOLOGY

This study has a qualitative approach, through field research, analyzing the occupation of the Ajuruteua waterfront, observed during the month of May 2024. The research techniques carried out were walking along the shore, with direct observations, detailed notes and the elaboration of a sketch of the study. The choice of this technique sought to provide an immersive and contextualized perspective of the occupation of the waterfront, allowing the collection of relevant data for the proposed analysis.

During the walk, detailed observations of the activities, structures and interactions present on the shore were carried out. The notes recorded during the construction of the work included detailed descriptions of the physical and social characteristics of the environment. The sketches provided a visual representation of the spatial characteristics of the waterfront, helping to understand the organization of the observed spaces.

RESULTS

From the analyses carried out, it was found that more than 90% of the Ajuruteua waterfront is occupied and with low levels of environmental preservation. Several types of constructions were identified in this area, including houses, restaurants, inns, kiosks, vacant lots, markets, liquor warehouses and bars, evidencing the variety of activities and establishments present along the coast and the lack of preservation of environments such as the beach and the post-beach (Chart 1).

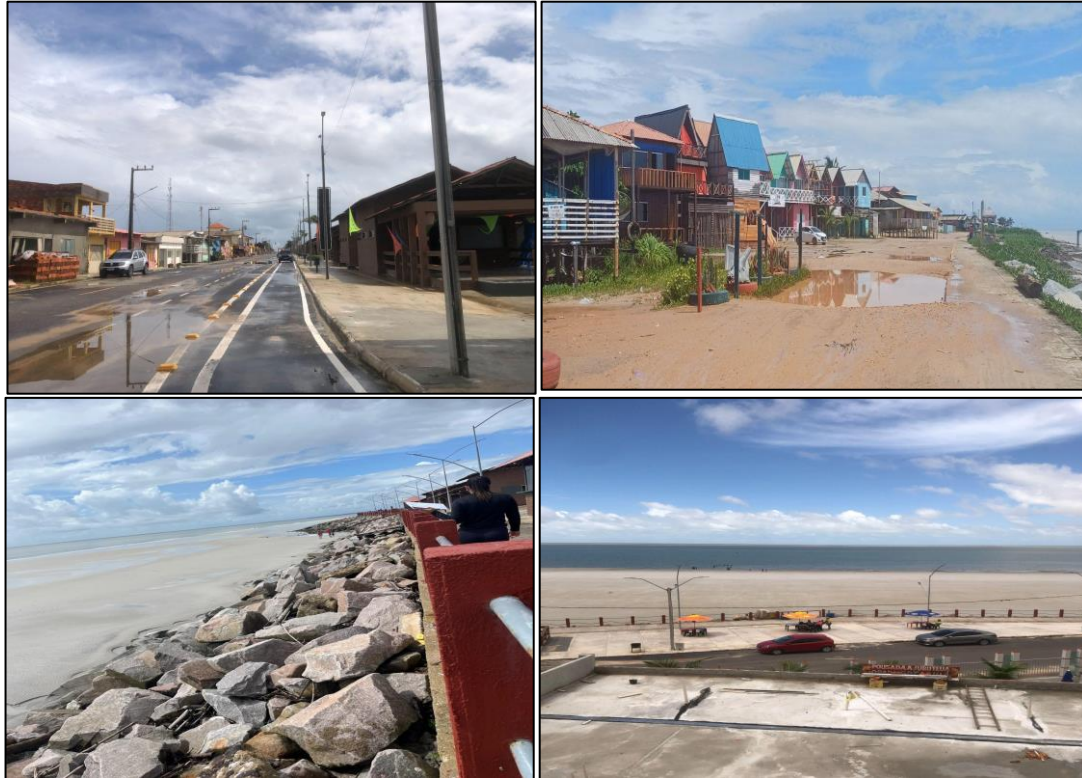
Table 1. Physical characteristics of the beach frame

| | |
|------------|------------------|
| Post-beach | Poorly preserved |
| Beach face | Poorly preserved |
| Buildings | Intense |
| Vegetation | Absent |

The observations allow us to understand that the post-beach is poorly preserved, due to the large number of constructions present in the place, as well as the face of the beach (Figure 1). The uncontrolled

accumulation of garbage, which is mostly plastic and glass, the presence of buildings is intense and consists of houses, inns and businesses, and as for the vegetation on the perimeter of the shoreline, it is absent.

Figure 1: Occupation of the ajuruteua waterfront, 2024



This scenario of disorderly occupation is also observed on other beaches on the coast of Pará, such as Atalaia beach, where, according to Ranieri & Robrini (2015), the effects of human interference are being increasingly consolidated, with irregular construction of hotels and summer residences on areas of dunes that limit the coastline (stable dunes that have been removed for allotment).

In view of this perspective, this research is justified by the increase in irregular urban expansion and inadequate anthropogenic actions that alter the environment, such as the quality of local water, from the discharge of domestic sewage, solid waste, vehicle oils, among other aggravating factors of socio-environmental problems.

FINAL THOUGHTS

Considering this panorama, it becomes evident that there is a need to carefully evaluate the development and occupation along the Ajuruteua waterfront, indicating policies that aim to reconcile human activities and protect the environment. As possible suggestions, we indicate:

Implementation of Environmental Conservation Zones: Establish specific areas where the



preservation of natural ecosystems is a priority, limiting human activities that may cause degradation.

Environmental Education Programs: Create educational campaigns and programs to raise awareness among the local population and tourists about the importance of environmental preservation and sustainable practices.

Strict Control and Enforcement: Strengthen enforcement mechanisms to ensure that economic and tourism activities comply with environmental standards, preventing irregular occupation and pollution.

Ecotourism Promotion: Encourage tourism activities that value and preserve the environment, such as ecological tours, observation of fauna and flora, and sustainable cultural experiences.

Integrated Waterfront Management Plan: Develop a comprehensive plan that involves the local community, public authorities and environmental organizations for participatory and integrated waterfront management of Ajuruteua. **Promotion of Scientific Research:** Support and fund scientific research aimed at better understanding local ecosystems and developing innovative solutions for the conservation and sustainable use of natural resources.



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