

BRAZIL CASE STUDY

Community-based tourism, artesanal fishing and conservation: a multi-use perspective in the Pirajubaé Marine Extractive Reserve







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Community-based tourism, artesanal fishing and conservation: a multi-use perspective in the Pirajubaé Marine Extractive Reserve

Federal University of Santa Catarina -Laboratory of Integrated Coastal Zone Management - LAGECI

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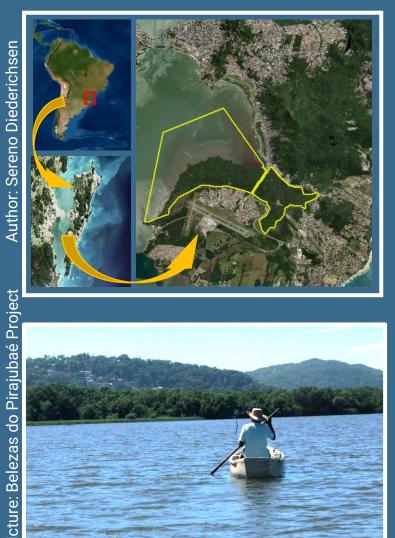
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Case study area - Pirajubaé Marine Extractive Reserve





The Pirajubaé Marine Extractive Reserve (PMER) is a Marine Protected Area established in 1992, with the main goal of ensuring the livelihood of the traditional fishing community and promote natural conservation. The Reserve is a federal Marine Protected Area (MPA) managed by Chico Mendes Institute for Biodiversity Conservation (ICMBio in Portuguese). PMER's space distribution consist of 1,721 hectares, including terrestrial mangrove portions and a marine sand bank, with a total of 260 fishermen.

Community-based tourism (CBT) was introduced in the PMER with the fluctuation of the fishing activity in 2015. Today the CBT is pilot project which aims to provide an additional financial source for fishermen, while maintaining the sustainability goals of the MPA. Our Multi-use (MU) case study aims to analyze the synergies between CBT, fishing, and conservation.

MUAA analysis - Steps 1 to 3

1. Results have shown that our multi-use (MU) case has a Regulatory Authority

- ICMBio has implemented regulatory instruments;
- Navy provides tourism licenses and boat permits to fishermen;
- **PMER** decision making operates through deliberative council, in which fisherman play an important role in the decision making.

2. There are specific goals established by MU Stakeholders

- Extra income or regularity of income;
- To better value fishing practices including historical uses and environmental knowledge.
- **3. MU supports PMER Goals** MU has been designed to match local resource users needs and characteristics, also promoting community identity and knowledge.

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MUAA analysis - Steps 4 to 7

MU goals

- Environmental goal to promote preservation of natural areas and environmental education about the relevance of coastal and marine ecosystems for society;
- Social goal to provide extra income to fisherman, and promote traditional fishing practices and knowledge.



Pictures: Belezas do Pirajubaé Project





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MUAA analysis - Steps 4 to 7

MU Level

- We found that both MU Developers and Fishermen benefit from MU;
- Based on Schupp et al., 2019 we classified the interaction between uses as Symbiotic Use. There is no direct linkage of one uses core function to the other;
- We found a Collaboration link between users, as Developer and Fishermen generate benefit to eachother, with no compromise of their activity.



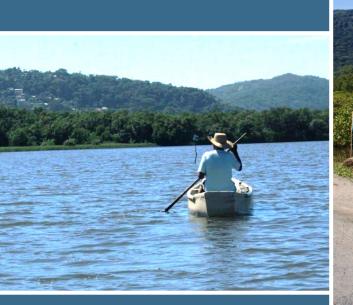
Pictures: Sereno Diederichsen

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MUAA analysis - Steps 4 to 7

Opportunities

- MU can support by generating value in fishing activities and practices – Ex. Demonstration of fishing gear;
- Environmental education and Ocean literacy Contribute to the understanding of coastal and marine natural areas to society.



Pictures: Belezas do Pirajubaé Project



icture: Sereno Diederichser



MUAA analysis - Steps 8 and 9

Existing challenges to the continuity of MU

- Lack of infrastructure Pier and visitors center;
- **Visitor consistence** Need to better promote the activities;
- Tourism boat/drivers license bureaucracy and financial cost of licenses.



Picture: Sereno Diederichsen

Picture: Belezas do Pirajubaé Project

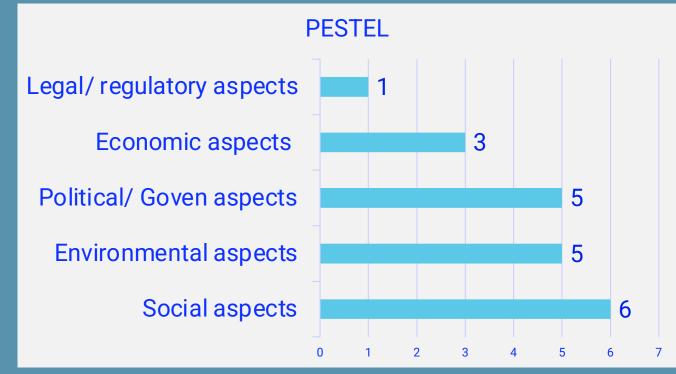
PESTEL preliminary results

Interview with key stakeholders

A total of 10 respondentes – 7 Primary stakeholders

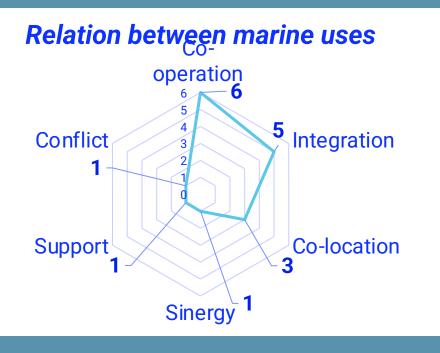
3 Tier 2 stakeholders

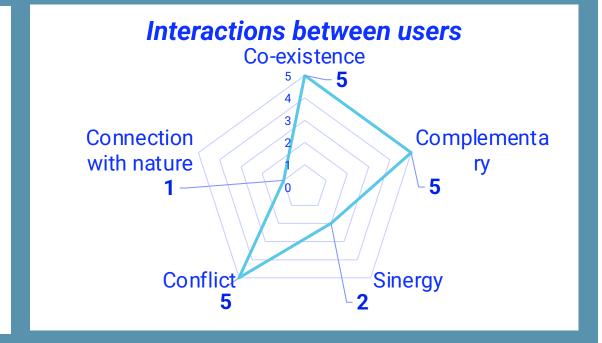
Divided in PESTEL's Aspects



PESTEL preliminary results

>> What multi-use is referring to?





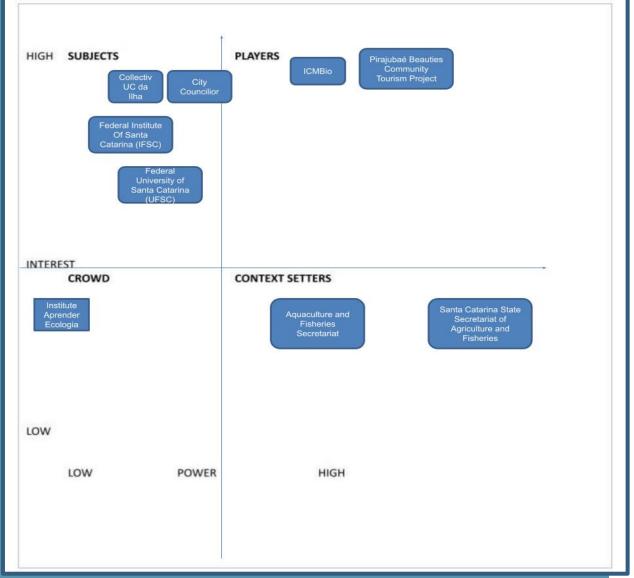
Respondents indicate that interaction between uses is mutually beneficial, operating through mainly co-operation and integration.

Respondents suggest good interaction between users, with great collaboration. Conflict appeared as a historical pattern of interaction between fishermen.

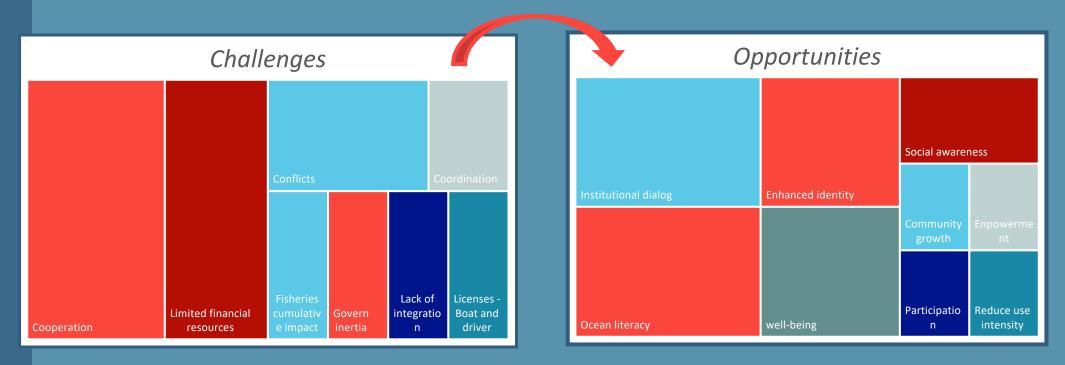
PESTEL preliminary results

Power versus Interest grid

Our analysis indicates great stakeholder interest in MU, especially from research institutions and NGO's. The regulatory organization – ICMBIO also presented a high interest, which is a contributing element to our MU case success. On the other hand, relevant public institutions demonstrated moderate interest in the topic of MU. This was justified due to the current initial status and small scale of MU operations.



2 PESTEL preliminary results >> What is Multi-use contribution?



MU has contributed in dealing with historical challenges, supporting communication and dialogue between fishermen, PMER staff, and others government organizations. For the fishermen specifically, MU has been a strategy to promote traditional knowledge and well-being. The activities aim to value their practices, knowledge, perspective, and interaction with the environment.





Main findings

- 1. In the Brazil case study MU operates through **collaboration** between uses. There is no compromise of existing uses;
- 2. MU can benefit **marginalized populations** extra income / promote local identity;
- 3. Tourism activity within MU contributes to **social awareness** historical uses of natural resources;
- 4. MU has the potential to promote **Ocean literacy and Conservation**, contributing to the understanding of **Coastal & Marine Ecosystems** relevance.



Picture: Sereno Diederichsen



Picture: Belezas do Pirajubaé Project





Thank you!







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