

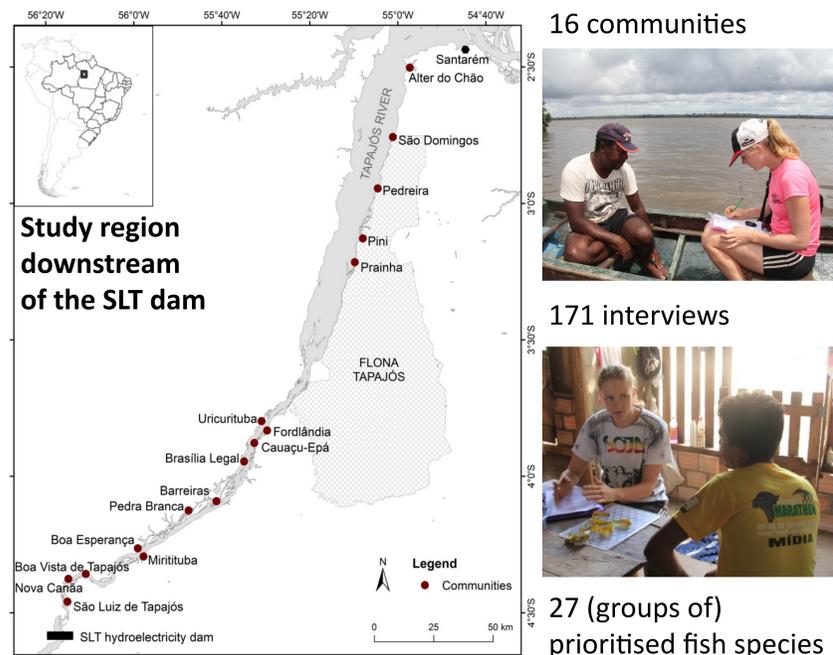
Introduction

Brazil's hydroelectricity sector is rapidly expanding (Latrubesse et al., 2017). Impacts of dams on fisheries downstream have been overlooked by impact assessments (Castro-Diaz et al., 2018).

Objective:

To analyse the socio-ecological vulnerability of small-scale fisheries located downstream from the proposed São Luis do Tapajós (SLT) dam.

Methods

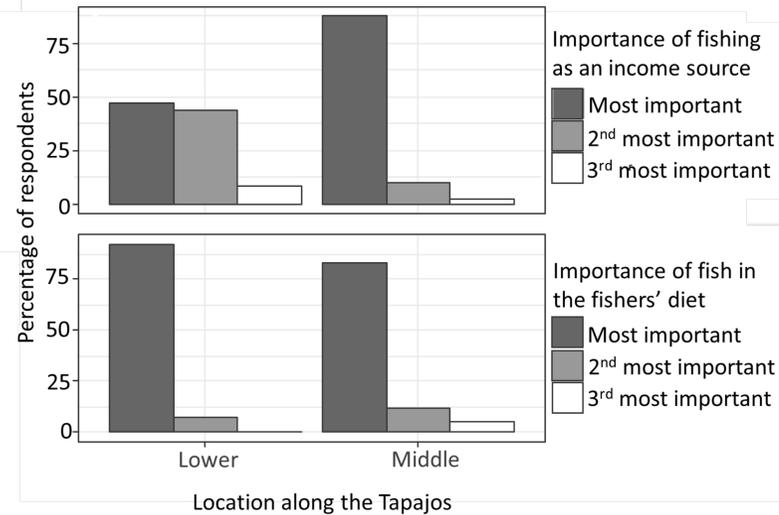


Fish were divided into susceptibility categories (considered potentially affected through damming) according to their biological characteristics:

- Use of floodplain
- Spawning at the beginning or during flooding
- Other biological characteristics (e.g. migration within Tapajós)



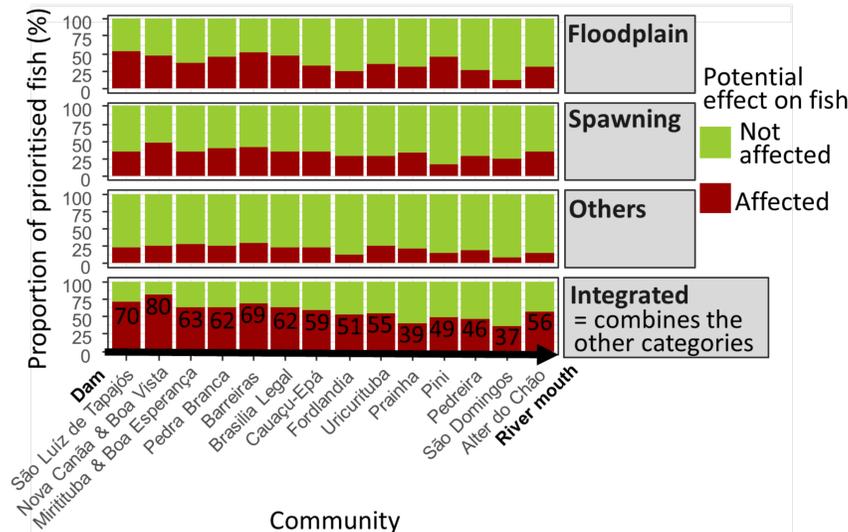
Results



Fish has a great importance for the fishers' diet and economies.



Estimated potential effects of damming on fishing on the communities, based on the proportion of prioritised fish and their susceptibility to impoundment



Impacts of the dam on fisheries potentially extend to the mouth of the river contrary to the idea that the impact ceases few kilometers downstream of the dam.

Discussion

Expected losses in fishery catches to households as well as local and regional economies could:

- lead to financial shortcomings & emotional disruption at the household & community level
- threaten food security on a household (food provisioning) and regional (fish market) scale

Regional differences in fishing have to be considered to develop mitigation measures tailored to the communities specific needs.



Conclusion

Ignoring the potential effects of the SLT dam is a serious understatement of its real socio-ecological impacts.

Without more careful consideration, declines in small-scale fisheries and the pressure this puts on their associated fishers, their families and both the local and regional economies are certain to accompany the development of the SLT.

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LinkedIn @Anne Runde

