

Arapaima co-management: reconciling biodiversity conservation and human well-being in the Amazon?

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Introduction

Arapaima (*Arapaima* spp.) is the largest freshwater scale fish in the world, and an iconic element of the Amazon region. This fish yields high ecological, economic and cultural value to Amazonian ecosystems and people. Whereas in the past arapaima could reach up to 3 m long and weigh up to 200 kg, currently large specimens rarely exceed 1.5 m and 90 kg due to overfishing^[1]. Since the 2000s, arapaima fishery has been banned in Brazil except under a collaborative management plan approved by the government. Arapaima co-management plans are proliferating throughout the Amazon, and seem to be an important tool for biodiversity conservation^[2], poverty alleviation, and gender equality in fisheries.



Aims

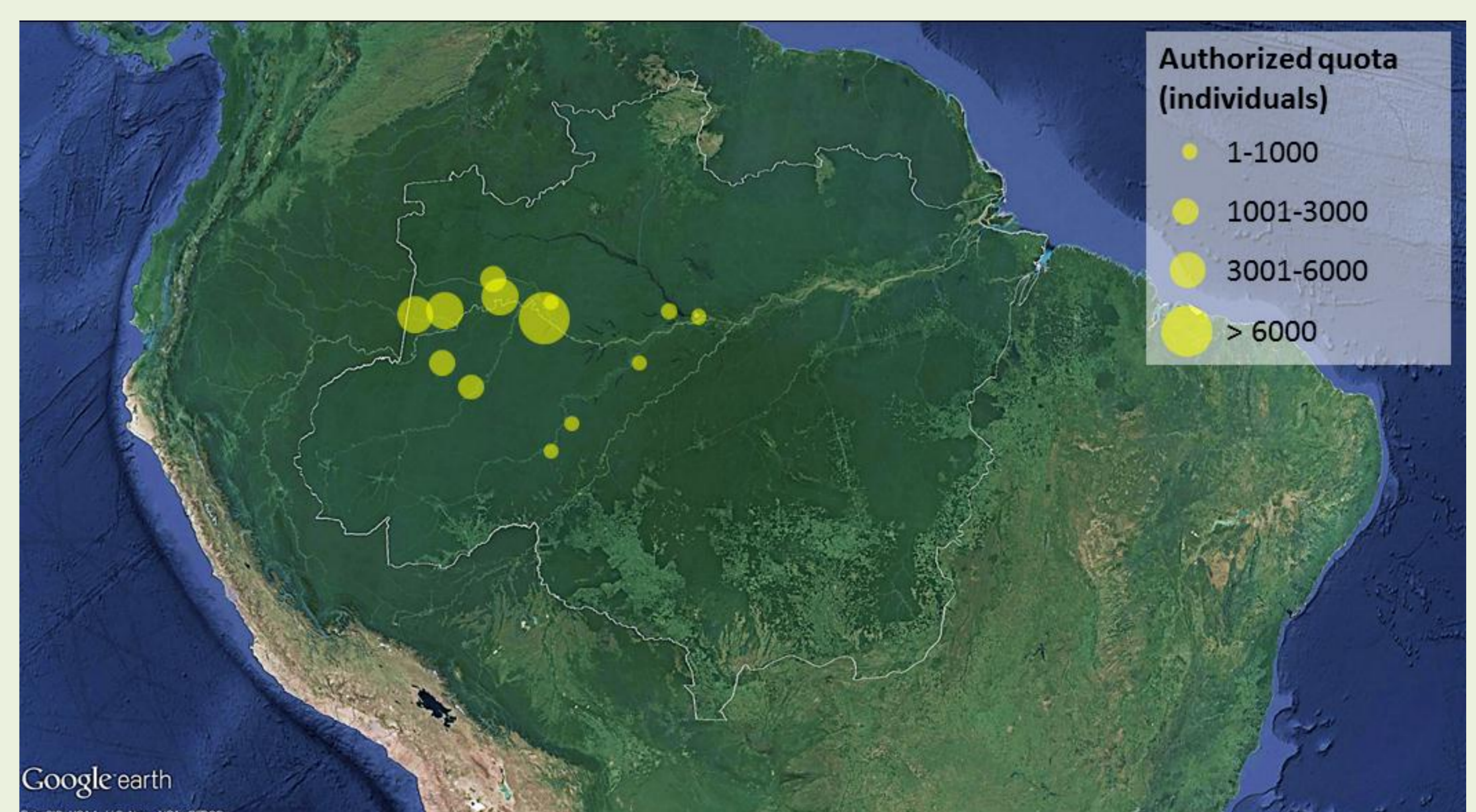
- Assess the historical trends of arapaima stocks (abundance/size)
- Verify the effect of arapaima co-management on arapaima stocks
- Estimate the economic impact of arapaima co-management
- Verify the relevance of arapaima co-management for women empowerment



Methods

Semi-structured interviews with local people from three important tributaries of the Amazon river (memory recall^[3] – captures and visualizations)

Records from the Brazilian Environmental Agency (~15 years data)



References

[1] Parker B.H. 2002. Arapaima: An Amazonian fish species of immense proportions. *Biodiversity* 3 (2): 21-24.

[2] Campos-Silva J.V, Peres C.A. 2016. Community-based management induces rapid recovery of a high value tropical freshwater fishery. *Scientific Reports* 6: 34745.

[3] Coll M., et al. 2014. Assessing fishing and marine biodiversity changes using fishers' perceptions: the Spanish Mediterranean and Gulf of Cadiz case study. *Plos one* 9:e85670.