

Fisherfolk perspectives on vulnerability: climate and policy intertwine in small-scale fisheries in Southern Brazil



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Research questions

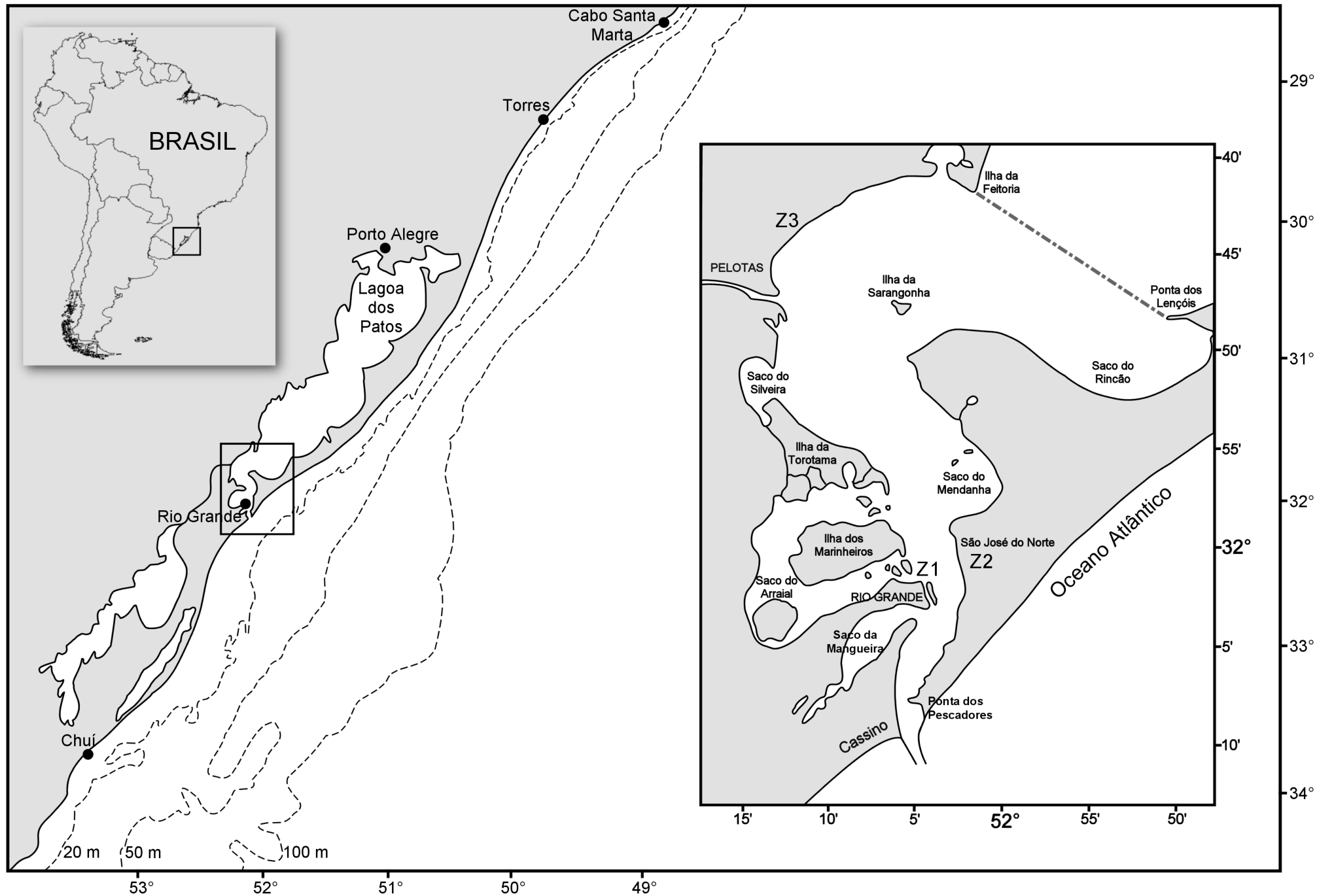
- > How do fisherfolk perceive their vulnerability context?
- >> What are the processes affecting fisherfolk's exposure and sensitivity to risk?

Analytical framework

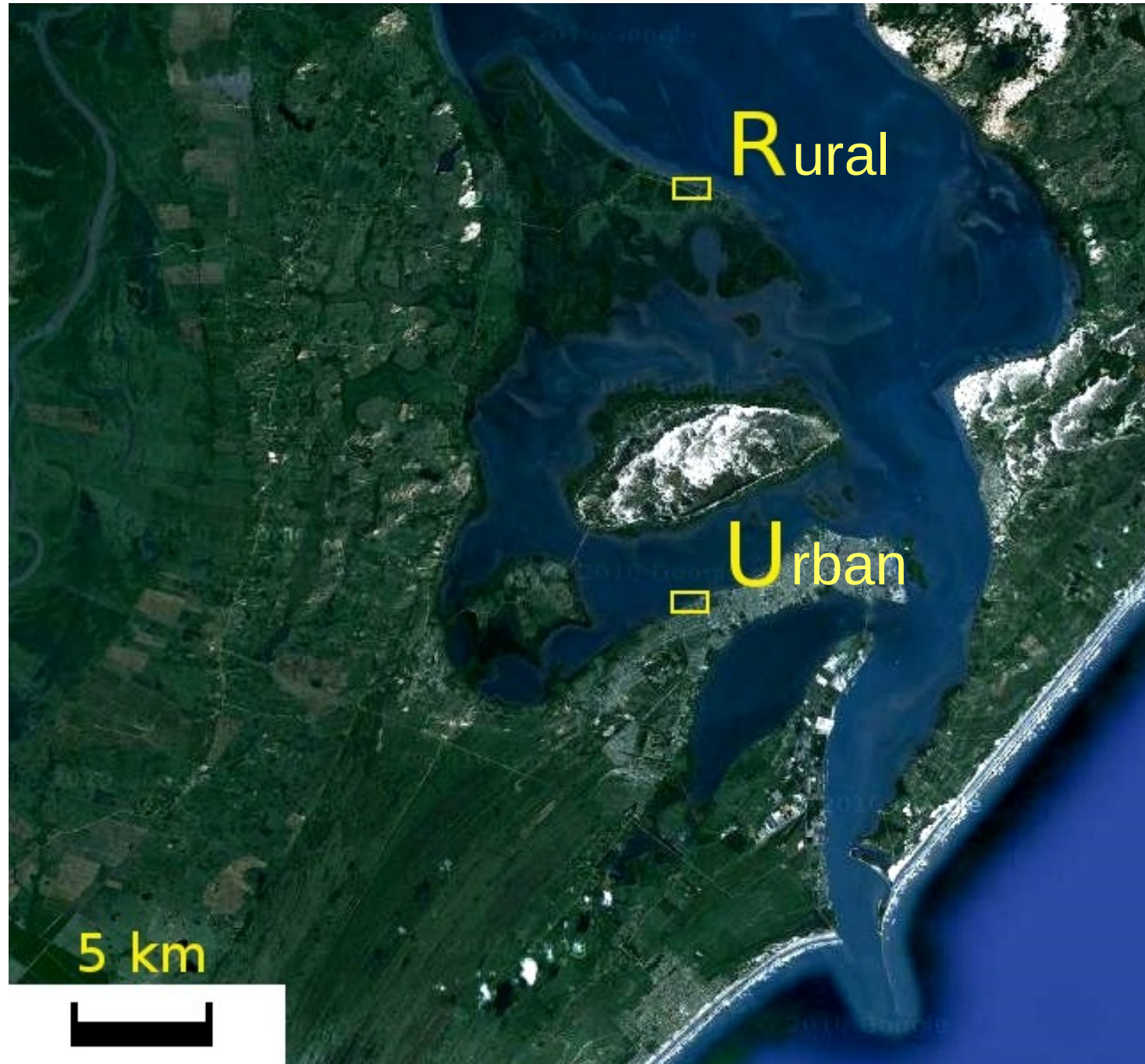
- > relationship between fisheries, poverty and vulnerability
- > minimising effects of shocks vs generating wealth - relevance in policy

Allison and Ellis 2001, *Mar Pol*; Allison et al 2009, *FnF*
Bené 2009, *J Dev St.*; Bené and Friend, 2011 *Prog Dev St*

Southern Brazil, Patos Lagoon estuary



Study sites



An aerial satellite image of a coastal estuary system. The water is dark blue, and the surrounding land is green with some brown patches. Two study sites are marked with yellow squares and labeled 'R' and 'U'. Site 'R' is located in the upper part of the estuary, and site 'U' is located in the lower part, near a large island. A scale bar in the bottom left corner indicates 5 km.

Context

- > ~3500 people depend on the estuarine fisheries
- > Main target *Farfantepenaeus paulensis*, pink shrimp
- > Governance
 - > co-management
 - >> season closure
 - >> gear type
 - >> minimum size

5 km





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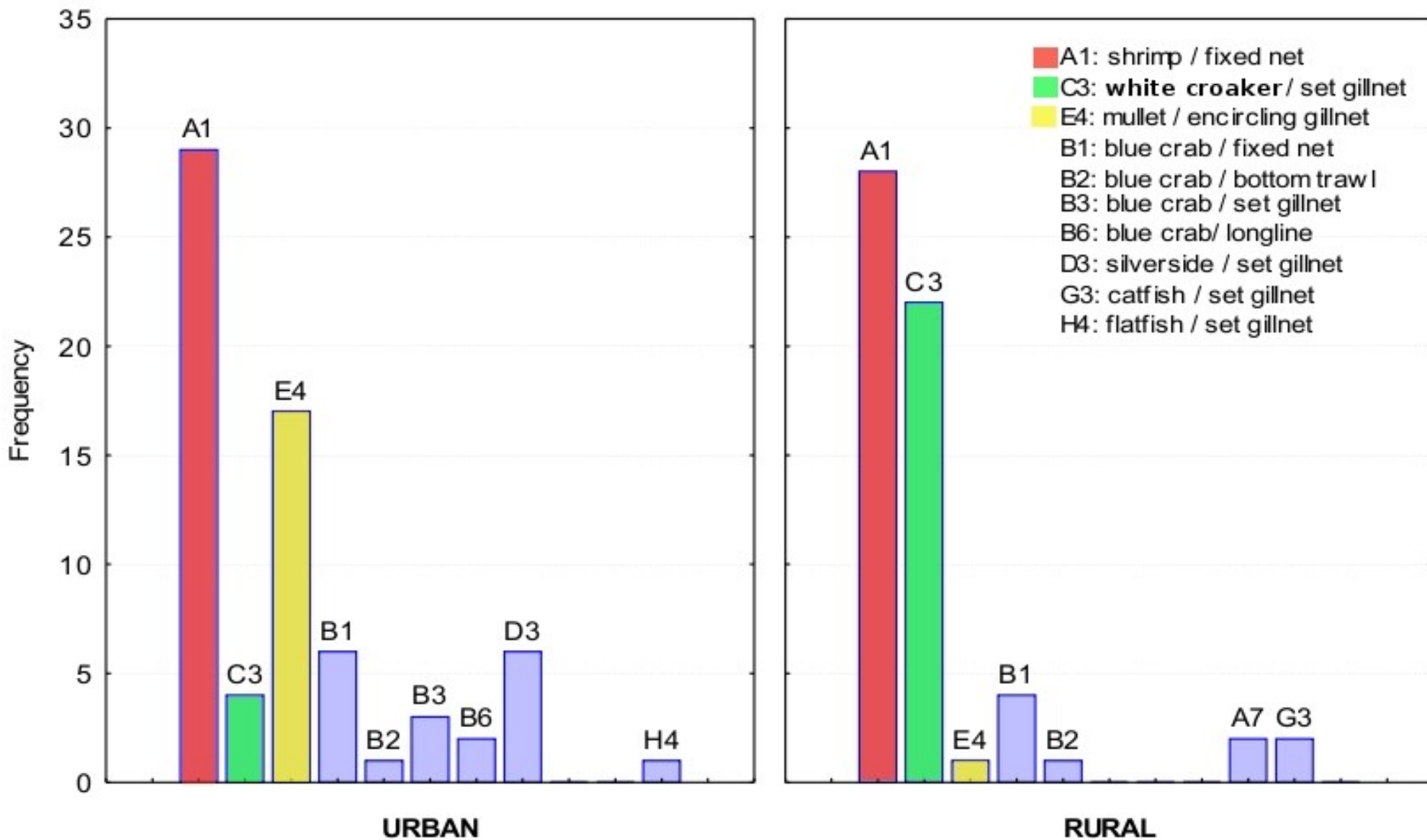
Methods

- > six months of fieldwork
- > fishing seasons 2007/08 and 2008/09
- > mixed methods
 - >> household survey
 - >> observation + interviews

5 km

Fishing strategies in the Patos Lagoon estuary

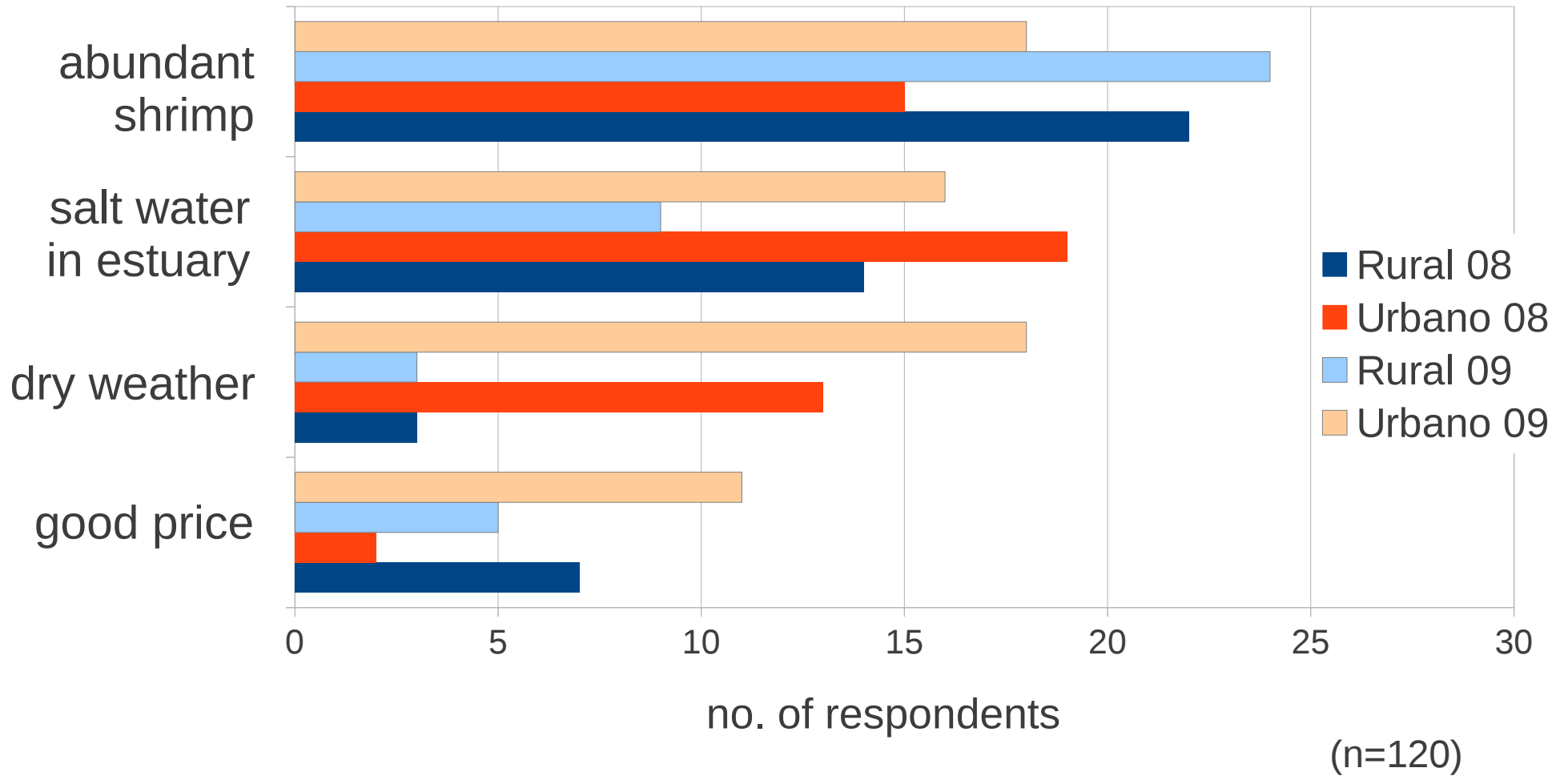
Combinations of target species and gear



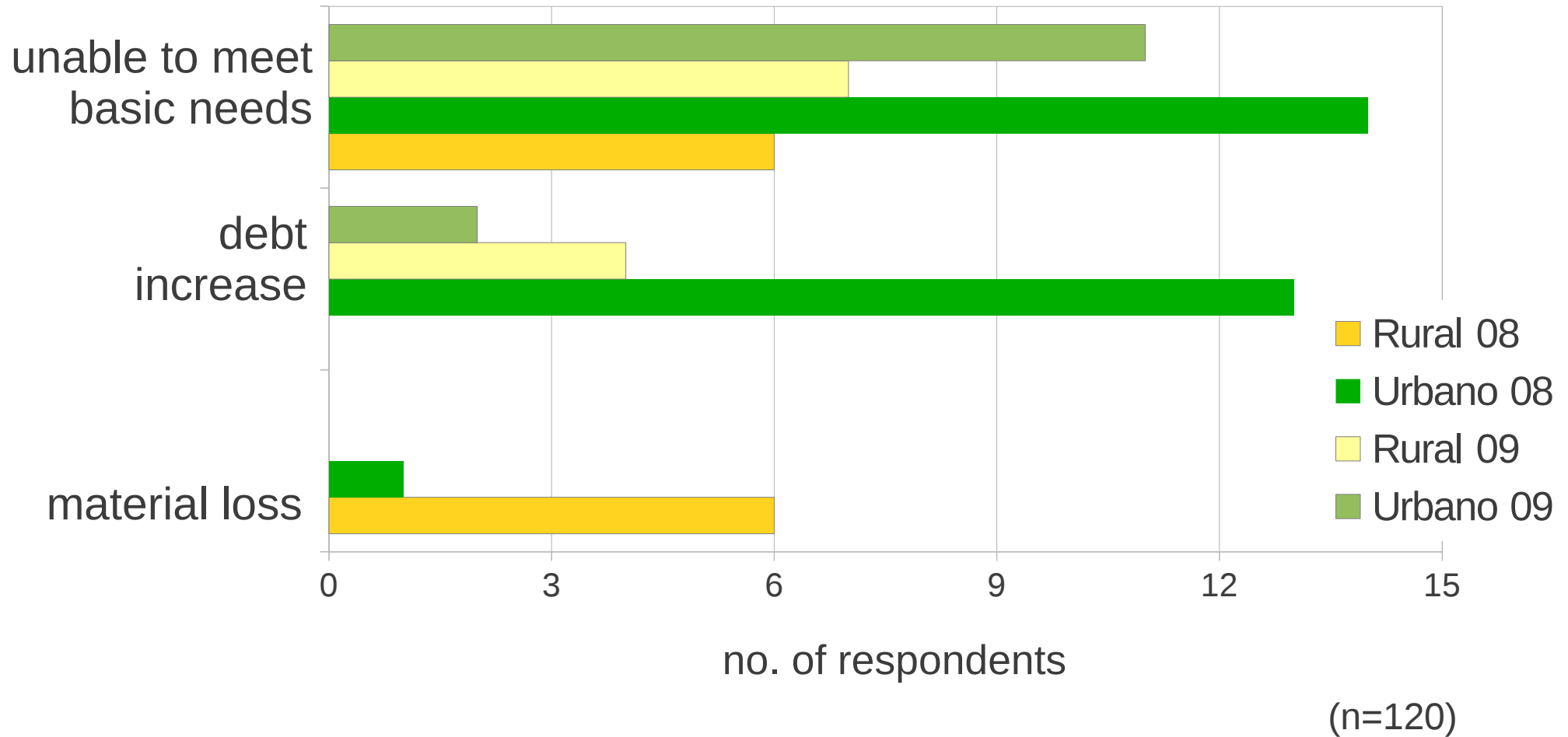
Frequency is number of households. n=60, data for 2007/08 season



What were the **causes** of your **most** successful fishing season?



What were the **consequences** of your **least** successful fishing season?





Inter-related hazards - qualitative analysis:

(1) Overcapacity

- > gov. credit and benefits are incentive for increase in number of fishers
- >> favourable market results in more intense use of bottom trawling

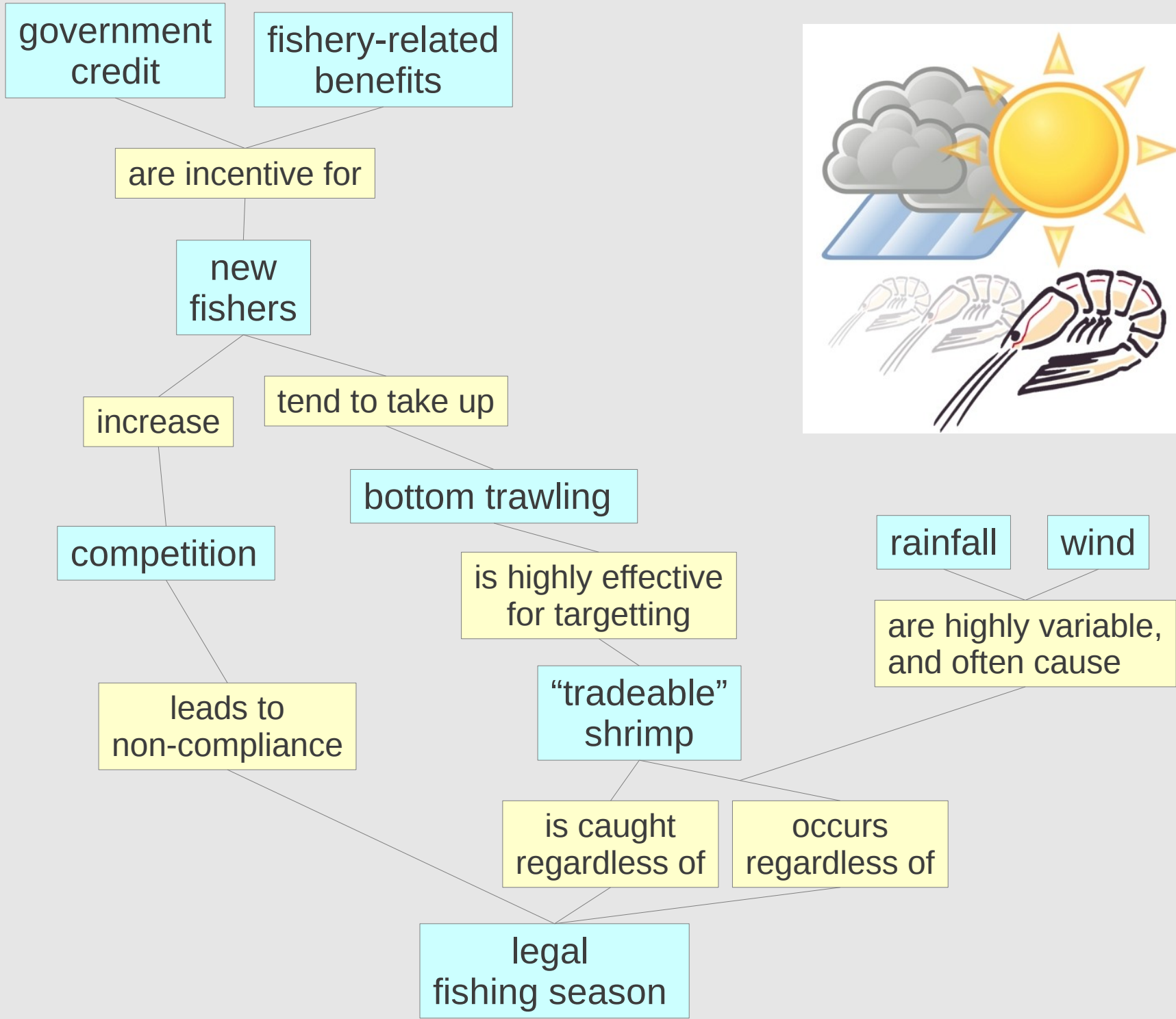
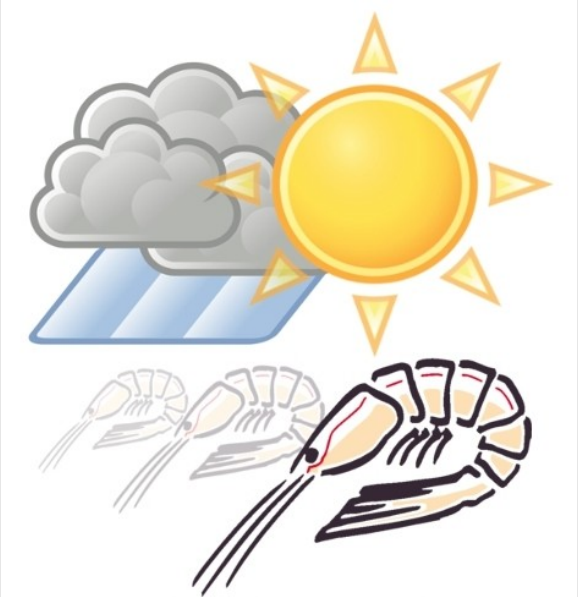
(2) Climate variability

- > rainfall + wind determine fish/shellfish abundance and movement
- >> high variability and uncertainty
- >> non-compliance to regulations

(3) Pressure on estuarine stocks

- > excessive fishing capacity of industrial coastal fleet





**Fisherfolk perspective: vulnerability is determined by environment
and
policy**

**Increased adaptive capacity and more just and sustainable SSF
depend on integrating fisherfolk's perspectives in policy-making.**





Thanks!

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