Adaptive capacity of small-scale fisheries in coastal Uruguay: synergies between national policies and local perspectives

Micaela Trimble, Jeremy Pittman, Paula Santos, Manuela Teruggi

South American Institute for Resilience and Sustainability Studies
Uruguay

IMBIZO6 - IMBeR

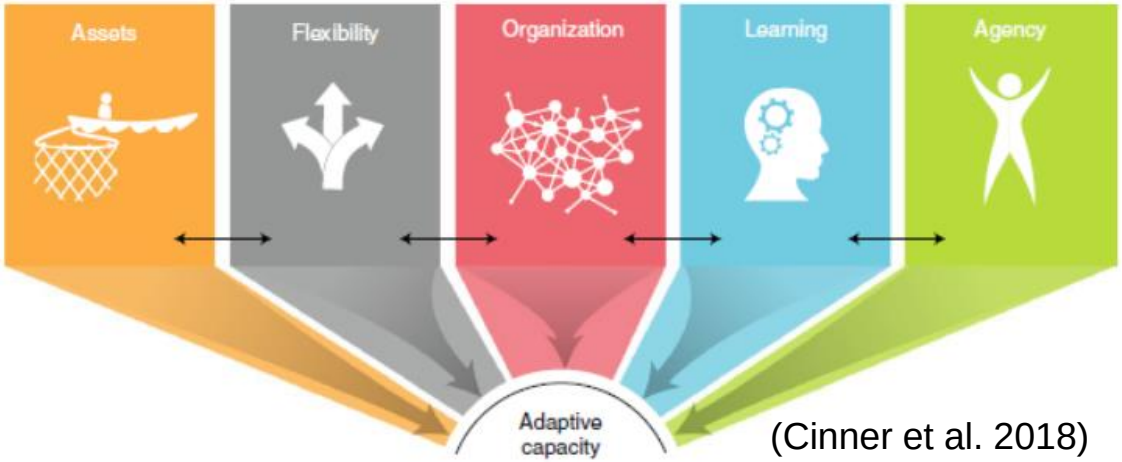
SARAS²
South American Institute for Resilience and Sustainability Studies

Context

SW Atlantic Ocean: changing currents; warming hotspot around the Río de la Plata, affecting Uruguayan fisheries

Adaptive capacity:

- Ability that allows humans, as individuals or as a group, to respond to changes and take advantage (Adger 2006)
- Capability to convert resources (human, social, physical, financial, and natural) into action (e.g. Coulthard 2012, Cinner et al. 2018)



(Cinner et al. 2018)

Objective

To assess the adaptive capacity (AC) of small-scale fisheries based on a local case study in Piriápolis (coastal Río de la Plata, Uruguay), investigating how AC variables interact with each other

Policy instruments at the national level

2013 – Fisheries Law

2017 – National Policy on Climate Change

2019 - National Adaptation Plan to Climate Change and Variability for Agriculture

- Marine/coastal Early warning systems
- Strengthening of fishers' associations
- Strengthening of Fisheries Local Councils (i.e., co-management boards)
- (among others)

Data collection and analysis

Semi-structured interviews (n=18) with small-scale fishers (May-June 2018)

Bayesian network analysis (*) to examine the interactions between the adaptive capacity variables:

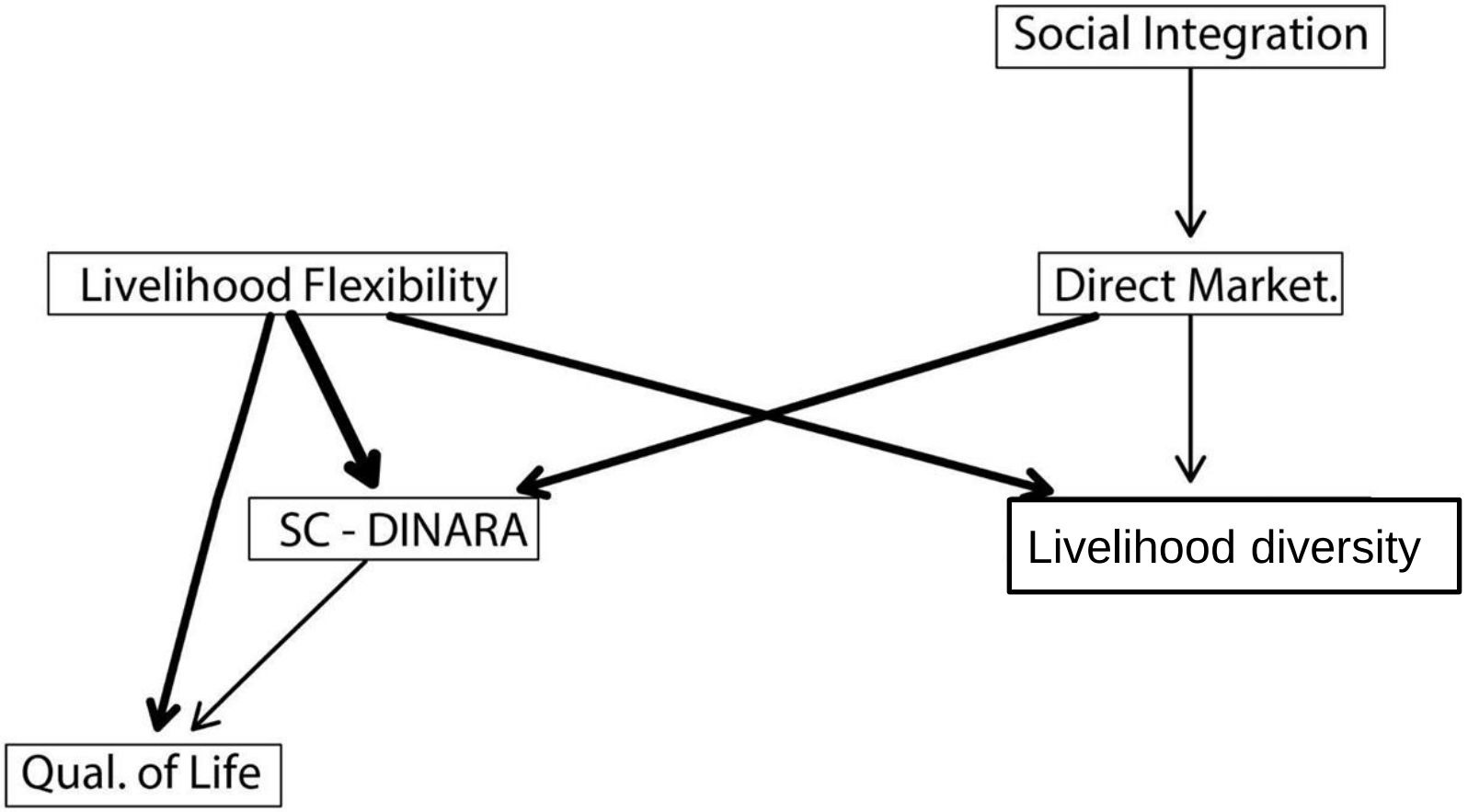
1. Direct marketing
2. Livelihood diversity
3. Livelihood flexibility
4. Social capital with DINARA (National Directorate for Aquatic Resources)
5. Social integration
6. Quality of life

(*) Probabilistic graphical networks approach that examines the conditional dependencies (i.e. the interactions) between variables.

AC – Descriptive Results (preliminary)

AC variables	% of fishers
Direct marketing	33.3
Livelihood diversity	33.3
Livelihood flexibility	55.5
Social capital with DINARA	22.2
Social integration	72.2
Quality of life	55.5

Bayesian Network Results (preliminary)



Conclusions

- Adaptive capacity variables interact with one another, and the interaction between them shapes the overall adaptive capacity of fishers (which appears to be “medium” in this case).

- Our findings demonstrate the importance of considering multiple variables simultaneously when crafting policies or conducting adaptive capacity assessments.

Thanks! Gracias!

E-mail: mica.trimble@saras-institute.org

www.saras-institute.org

E-mail: info@saras-institute.org
Twitter: sarasinstitute
Fanpage: saras.institute
Instagram: instituto.saras