

Women struggle in a sea cucumber fishery. An outcome from an ungovernable fishery

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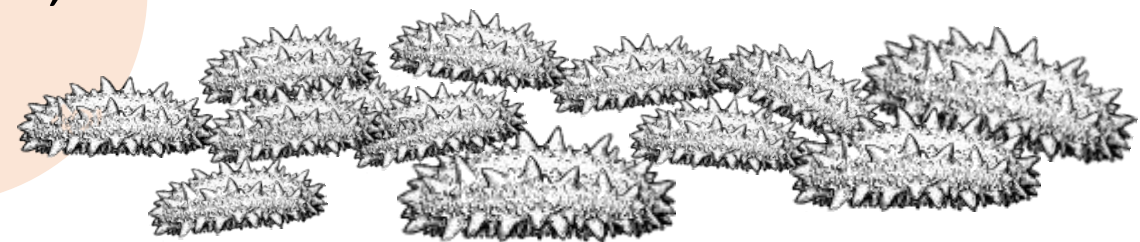
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Background

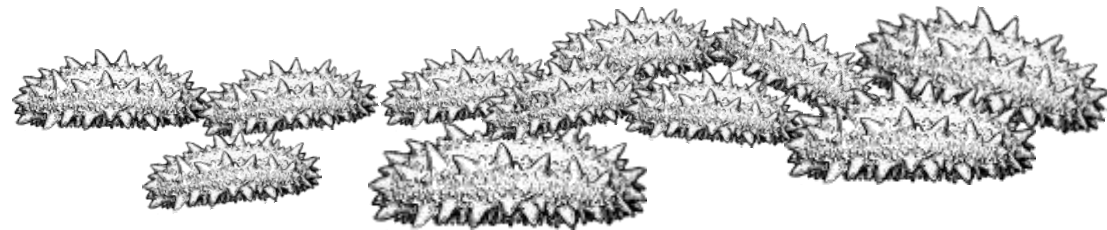
In Yucatan, Mexico, the sea cucumber fishery began **informally** in **2000**, with a low-intermittent fishing effort. When the buyers' interest increased the prices and fishing effort substantially augmented, being followed by illegal fishing-fishers and traders, creating **informal fishing-trade channels** and, **social and biological concerns**.

This fishery has generated extra income for fishers' communities, the income obtained by the fishers and by the entrance of women into the sea cucumber processing, but at the same time it had some **negative impacts** on coastal communities, **particularly for women**.



Research objective

- The paper explores **the socioeconomic importance of women's processing activities** and **the social costs** suffered by women.

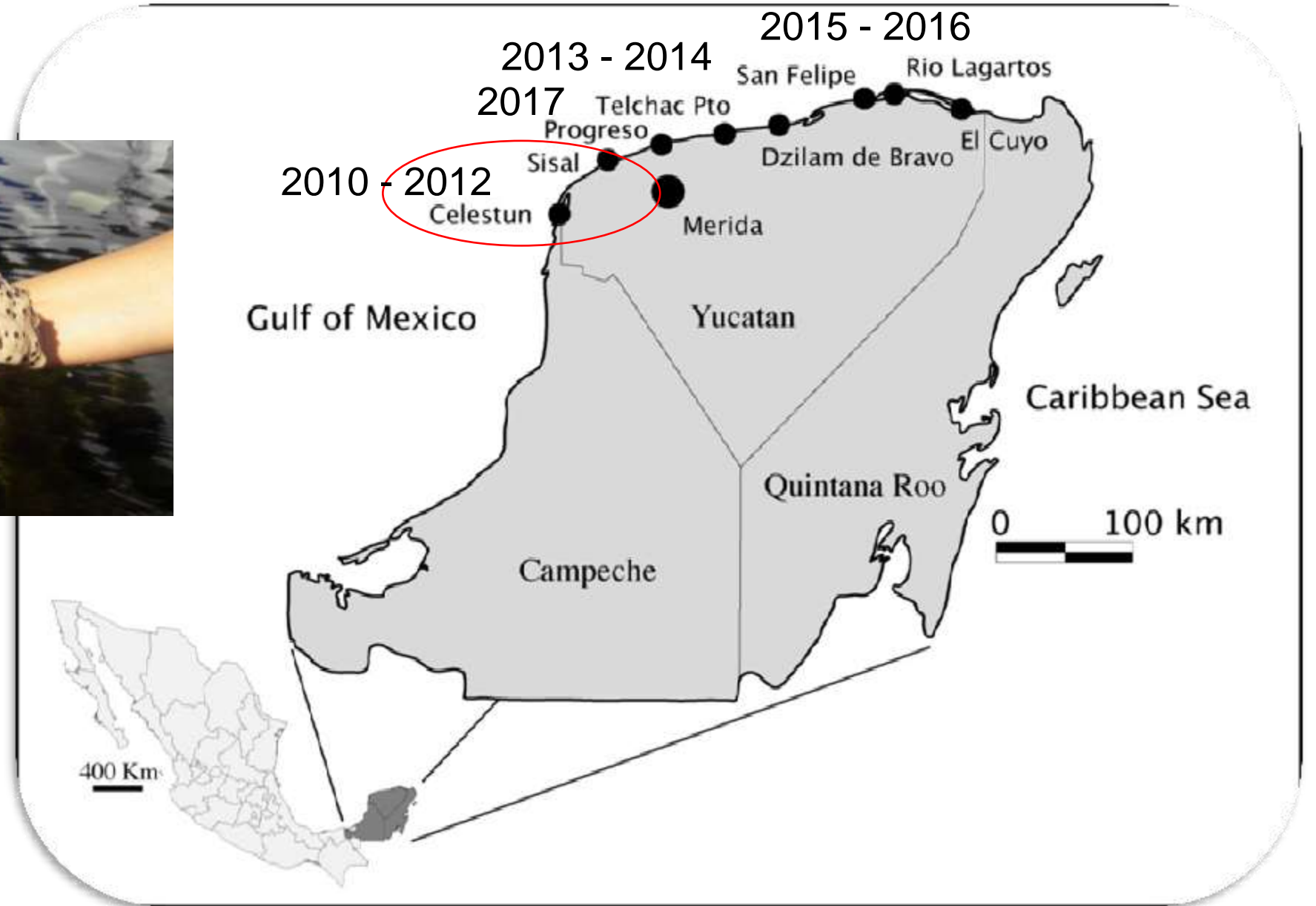


Methodological approach

- The research design was mainly **qualitative** and **explorative**.
- An **interview** tool, based on **semi-structured** interviews, was developed to find out the general situation of women's work. About 35 women were interviewed in their working places, and 3 key informants from the community of Sisal and Celestún.
- The interviewed women were selected through snowball sampling because they participated directly in sea cucumber processing
- Fieldwork was carried out in the sea cucumber fishery in **Yucatan**, between 2016-17.



Study site



Ungovernable systems

- **Fisheries being ungovernable** has been appointed by Symes (1997), as characterized by the misreporting of catches, blackfish landing, gear and access violations; facts that suggest a degree of '**lawlessness**' in the fishing industry.
- **Informal institutions** can shape a stronger political behavior and outcomes than formal rules (Helme and Levitsky, 2004).
- This can be developed within the **scope of structural and organizational factors** where the formal and informal sectors are complementary, and the institutional environment interconnects both of them (Chen, 2007).
- In order to endure, the **informal economic system** there are linkages between the formal and informal sectors supported by an organization constructed in terms of a **socio-economic network** capable of keeping the backward and forward linkages in operation.



Results

The actors in the sea cucumber fishery



Processing: mostly women

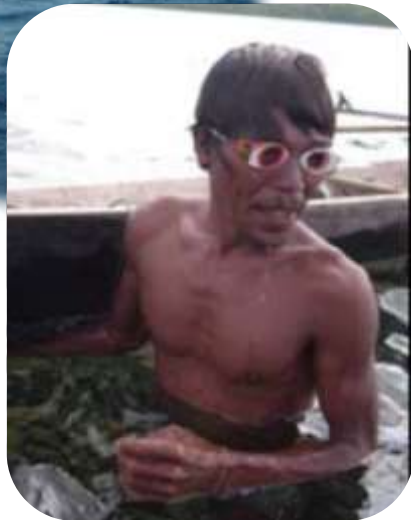
Local and international buyers



Local and federal police



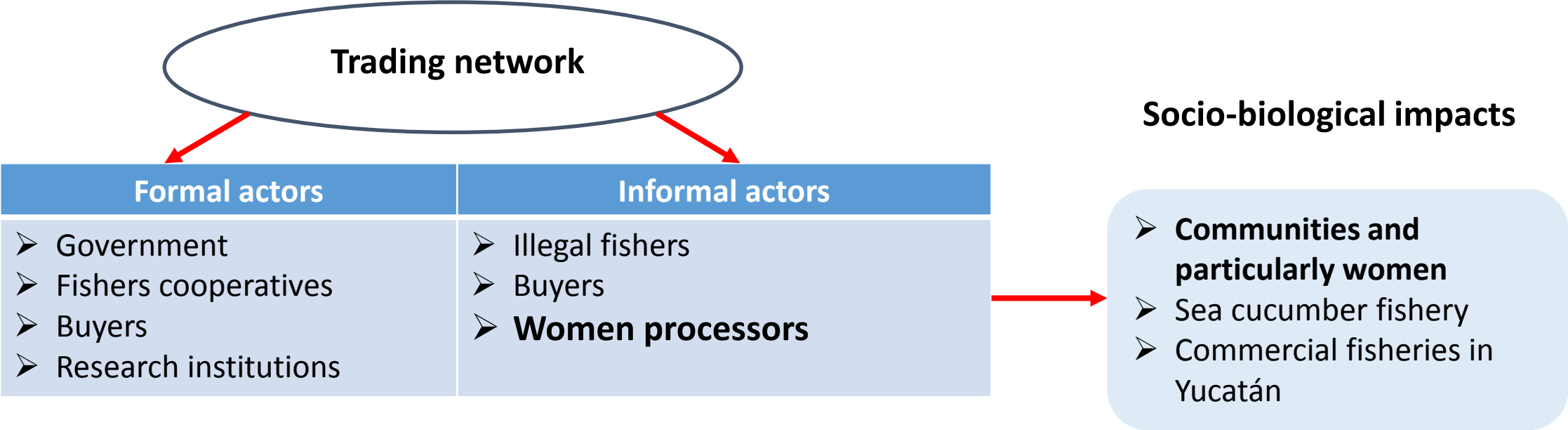
Research and governmental institutions



Fishers' cooperatives and Legal and illegal fishers



Catch-trading informal system



Sea cucumber fishery

IUU fishing

- The quota per fishing trip (250kg), was exceeded between 66 and 75% of the times.
- Between 2010 and 2012, 36% of the catch was under the minimal size.
- Despite the number of permits increase from **6 on 2006** to **598 in 2017**, most boats were fishing illegally.
- To be able to sell the seacucamber middlemen would buy the invoices from the cooperatives who had permits but could not fish.



Women's work

Gutting and drying



Women's contribution

- Value addition.
- Earnings between 11 and 28 USD per day.
- Earnings would be invested in the household.
- “there was an extra income for our home”.



Women's struggle

- “the sea cucumber took away our husbands”
- Increase of drug taking and prostitution services. (payment is done with sea cucumber)
- The last communities were the most affected.
- Fishers death.
- Families break downs due to the large extra-income.
- Most fishers wasted the money earned.
- No further employment.
- Illegal fishing.
- All would get the same payment.



Informality- women's' work was not registered, no social security or medical care

Final remarks

- Income was only temporary.
- Social and biological negative impacts on coastal communities and in Yucatan's fisheries.
- At the beginning women were participating directly in the processing, but buyers redirected the processing to different actors. So women continue in the fishery but **as passive actors**, as the fisher's wives facing all the social impacts caused by the economic income produced by the sea cucumber fishery.



Thank you for your attention

Acknowledgments

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