### Making Waves in Small-Scale Fisheries : a Systematic Review of Gender-Inclusive Management

Chambon, M., Miñarro, S., Santiago, A.F., Porcher, V., Reyes-Garcia, V., Drouet, H.T., & Ziveri, P.

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#### What is to be a fisher?

Octopus hunters – Wasini island, coastal Kenya ©Chambon Mouna

# Gender and fisheries: why does it matter? *Background*

#### Women and men engage in fisheries equally

• Women make up 50% of the fisheries workforce globally

Women's contribution to small-scale fisheries (SSF) is substantial

 SSF –or artisanal fisheries- are critical for ensuring food security in coastal communities

#### Scholars have shed light on women's multiple roles in SSF:

- Pre-production
- Production
- Post-production
- Care-work

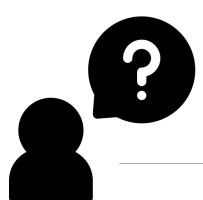


### Women's roles in SSF: a hidden story Background

- Yet, the roles of women in SSF have long been overlooked
- This is particularly true for fisheries management, which raises several concerns :
  - Biased understanding of SSF
  - Risk of overlooking key socio-ecological interactions
  - Detrimental gender-blind management strategies

 Scholars have called for inclusive management processes 
 Further research is needed to comprehensively address inclusive management in SSF





### Research Questions Background

→ We conducted a systematic review of peer-reviewed literature on women's participation in small-scale fisheries management:

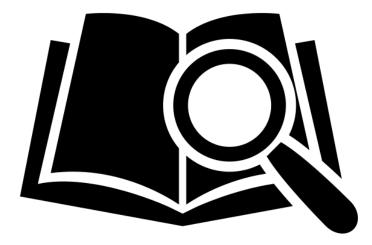
RQ1. What are the historical, geographical, and topical trends characterizing the existing literature on women's participation in SSF management?

\* RQ2. What is the extent of women's participation in SSF management?

RQ3. How does women's participation in SSF management vary depending on their roles in the SSF value chain and the type of management approach?

RQ4. What are the barriers and enablers for women's participation in SSF management?

RQ5. What are the socio-cultural, economic and environmental impacts associated to women's participation -or lack thereof- in SSF management?



### Publication selection Methods

#### Searching

- Topical search
- Databases: Scopus & WoS
- Initial search in 2021, updated 2022
- No geographical restriction
- o 4 inclusions criteria

#### ➔ Total of 103 publications selected

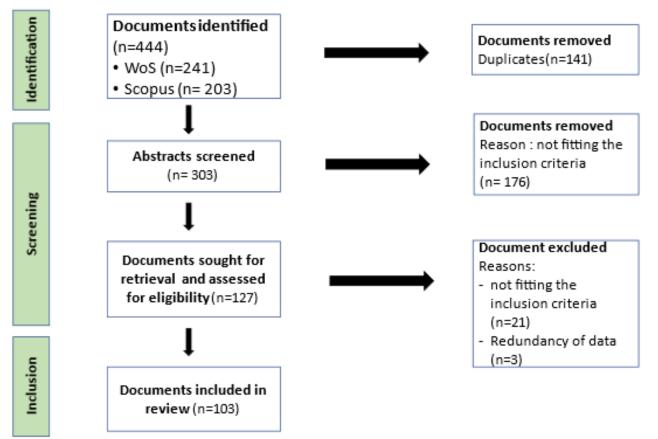


Figure 1- Flow chart presenting the selection of document



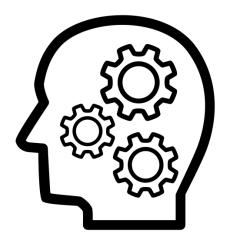
### Data collection and analysis Methods

#### Data collection & coding

- Background & bibliographic information
- Women's participation level in SSF management: excluded, active, or limited participation
- Role in the SSF sector: pre-, post- and production activities, care work
- Barriers and enablers: socio-cultural, economic, technological, institutional barriers & enablers
- Impacts: direction (ie., positive or negative) and type of impact (i.e., socio-cultural, economic, environmental)

#### Analysis: mixing qualitative and quantitative methods

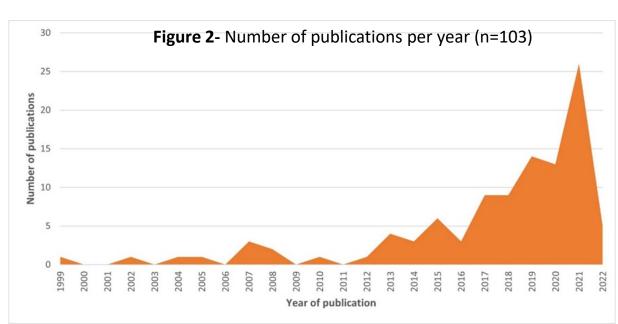
- Quotation analysis
- Frequency statistics (frequency count)
- Inferential statistics (Pearson's Chi-squared test ; non-metric multidimensional scaling)

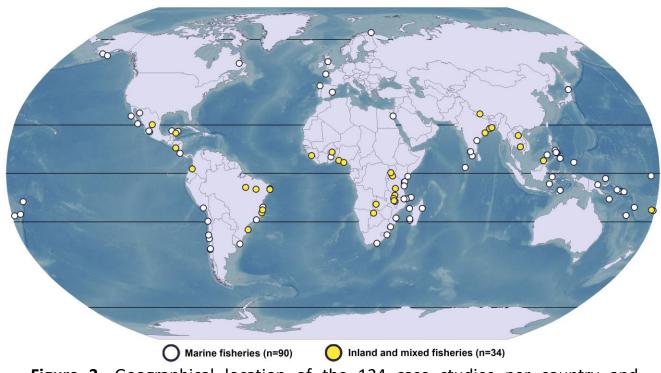


### Trends in the literature Results

#### A growing field

Largely focusing on tropical marine fisheries in co-managed settings



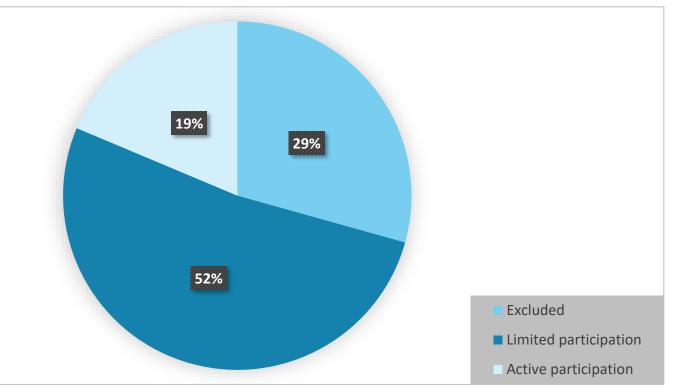


**Figure 3-** Geographical location of the 124 case studies per country and fisheries type. The map was built under QGIS 3.22.7, using bathymetric data from General Bathymetric Chart of the Oceans (gebco.net)

### Participation in SSF management Results

### Women had no or limited participation in SSF management in > 80% of cases

- Women participating in management tasks also engaged in other stages of the SSF value chain, especially production
- Women were more engaged in SSF management in co-managed sites, but their participation was limited.



**Figure 4** -Percentage of case studies per women's participation level in SSF management (n= 75 case studies)

### Barriers and enablers Results

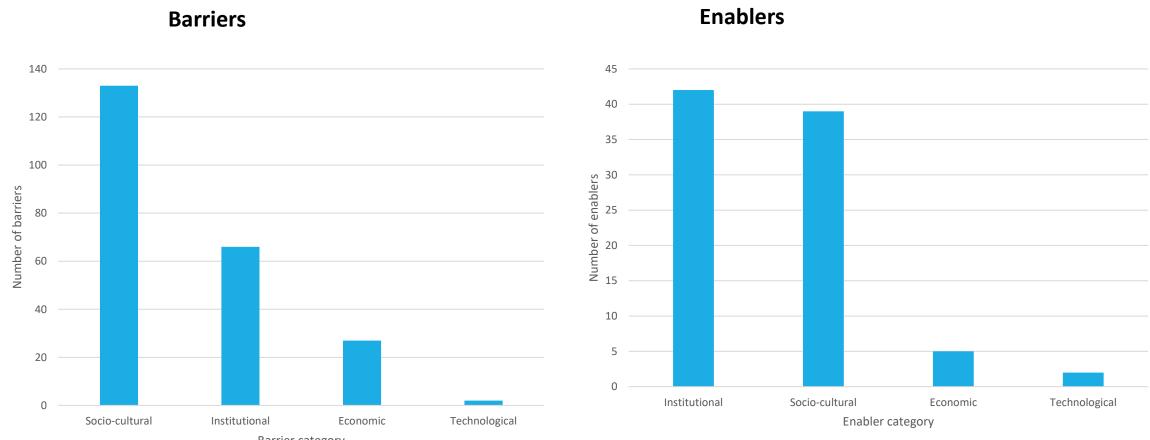


Figure 6 & 7- Number of reported barriers (n= 228) and enablers (n=88) respectively per category.

### **Impacts** *Results*

- Significant relationship between women's participation level in SSF management and impact direction
- Mostly socio-cultural impacts. Few environmental impacts
- Socio-cultural impacts primarily affected the socio-ecological system

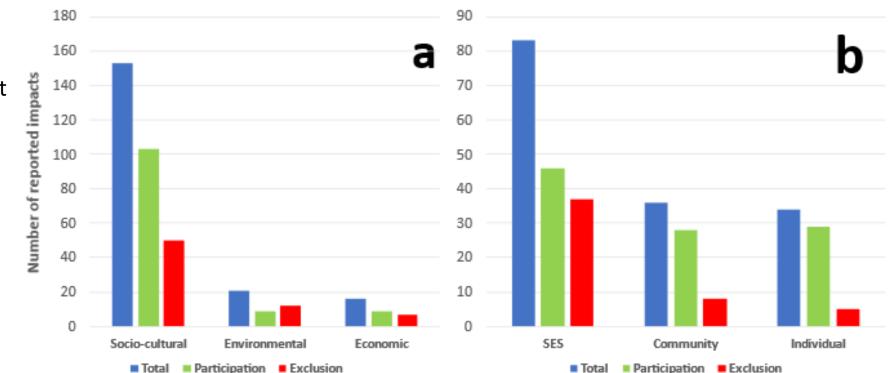
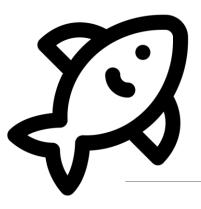


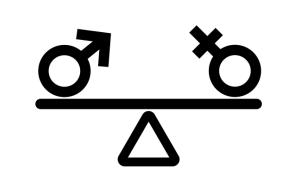
Figure 8- Bar charts displaying the number of reported impacts per impact category (i.e., socio-cultural, environmental, economic) and participation levels of women in small-scale fisheries management processes (i.e., participation, exclusion) (n= 190 reported impacts) (a), and the number of reported socio-cultural impacts at the social-ecological system (SES), community, and individual levels and participation levels of women in small-scale fisheries management processes (n= 153 reported socio-cultural impacts) (b).



## Limitations and interpretation

#### Limitations

- Lack of sex-disaggregated data
- Search restricted to peer-reviewed literature, mostly English publications



#### Interpretation

- A growing research field but that remains characterized by a paucity of gender data
- Women's participation in SSF management remains low, suggesting that fisheries management is very androcentric, as documented in others sectors
- Co-management alone might not be enough to increase women's participation in SSF management
- Societal change is not spontaneous but requires policy incentives that address structural gender inequalities
- Women's lack of participation in SSF management was not neutral but associated to negative outcomes

### **Conclusion and perspectives**

Critical need for a better integration of gender into:

#### Data collection methods in fisheries research

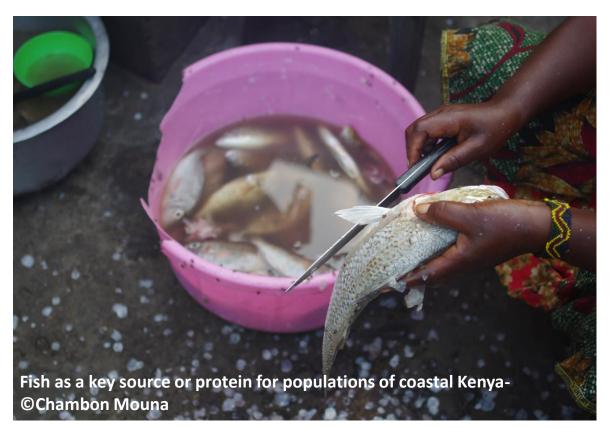
> To improve our understanding of SSF socio-ecological systems

#### SSF management and decision-making

To truly achieve gender equity in SSF and improve SSF management

#### Ecological research on SSF social-ecological systems

To provide a comprehensive and meaningful analysis of the role and impact of women in SSF management



### Acknowledgements







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# Thank you! Q&A







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