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GENDER DYNAMICS IN *SAMA-BAJO* FISHERIES: CONSTRAINTS AND OPPORTUNITIES IN BLUE SWIMMING CRAB AND TUNA VALUE CHAINS

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Background: Indonesian SSF Blue Swimming Crab (BSC) & Tuna Fisheries Context

Indonesia: the world's largest BSC & Tuna producer

Indonesian BSC Fishery:

- 30,000 tonnes produced (2023)
- 65,000 small-scale fishers employed
- 185,000 women in the processing sector
- USD 450+ million export revenue (2022)

Source: (Damayanti et al., 2025, Davies et al., 2024; FAO, 2022; & Wiloso et al., 2022)

Indonesian Tuna Fishery:

- The second-largest Indonesian export commodity, valued at USD 282 million (approximately IDR 4.4 trillion)
- 1,300 fishing fleets operate in Indonesian waters
- Indonesia Dominates Tuna Export Markets: frozen tuna loins to the USA and frozen skipjack to Japan

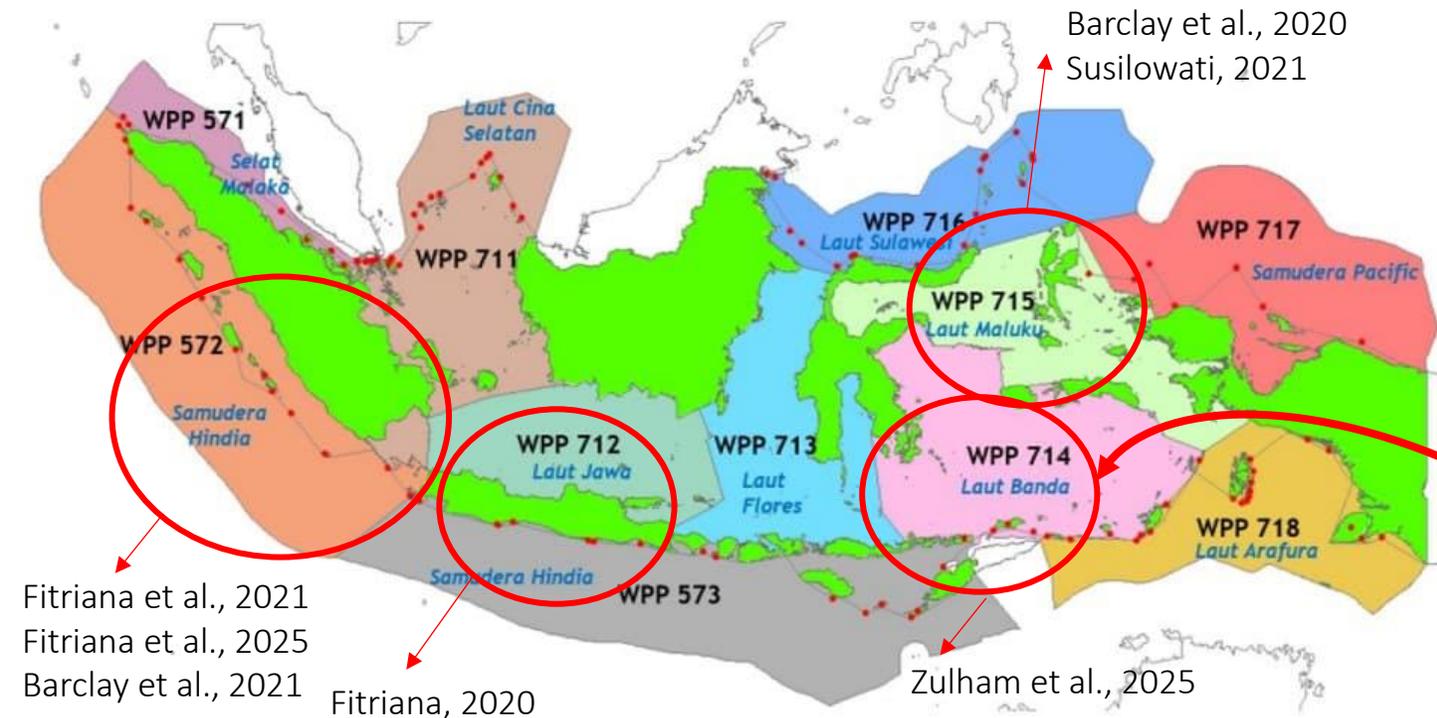
Source: (Marco, 2024, Fajriadi., 2025 & FAO, 2022)



However, Indonesia's BSC and Tuna fisheries confront some challenges.

Background:

Gaps in understanding gendered constraints across value chains



- Gender-based constraints in the BSC and tuna value chain in the Indonesian SSF context are under-researched.
- Research that examines comprehensive gender justice is scarce, particularly in post-harvest sectors with high women's participation (Rao et al., 2024)
- No studies in WPP NRI 714 have applied integrated gender and intersectionality frameworks to examine social injustice and women's diverse experiences in BSC and tuna value chains.

Source: <https://www.handaselaras.com/wilayah-pengelolaan-perikanan-negara/>

To oversee its fisheries, Indonesia has divided its waters into eleven 'Wilayah Pengelolaan Perikanan Negara Republik Indonesia' (WPP NRI) or Fisheries Management Areas (FMAs), which cross several provincial boundaries (Halim et al., 2020).

Study Objectives

Aim

To conduct a gender-focused value chain analysis of post-harvest segments, examining how constraints and opportunities specifically impact Sama-Bajo women's livelihoods in two small island communities in Southeast Sulawesi

Key Questions

1. What gendered roles do key actors play at each stage of the local value chains?
2. How do women's intersectional characteristics affect their roles, benefits, and constraints in the fishery value chain?



Scan me!

Sama-Bajo Women
In Southeast Sulawesi, Indonesia



Research Method and Approach

Methods & Tools

- Single-gender Focus Group Discussions (FGDs)
- Small-Group Interviews (SGIs)
- Key Informant Interviews (KIIs)
- Participant observations.
- A gendered value chain constraints analysis
- NVivo 14 for data coding and management.

Framework & Approaches

- Case Study Approach
- Value Chain Framework
- Intersectionality Approach

SSF value chain

(Source: Stacey & Govan, 2021, p.19)



Identifying Gender Based Constraints in the SSF value chain

(Source: Stacey & Govan, 2021, p.19)

Activity per stage	Constraints faced by women	Causes/factors leading to GBC	Consequences on the value chain	Actions to address GBC
Preparation				
Harvesting				
Processing				
Wholesale				
Retail				

Data Collection Methods

Data Collection Methods	Santiri Village			Mola Nelayan Bhakti			Total Participants
	Number of participants based on Gender						
	Female	Male	Transgender	Female	Male	Transgender	
Single-gender Focus Group Discussions (FGDs)	9	8	NA	8	9	NA	34
Small-group Interviews (SGIs)	9	NA	1	11	2	1	24
Key Informant Interviews (KIIs)	13	2	1	6	2	NA	24
Total	31	10	2	25	13	1	82




 Some FGD research participants were also interviewed individually and/or in a small-group interview.



Key Findings: Gender Sensitive BSC Value Chain

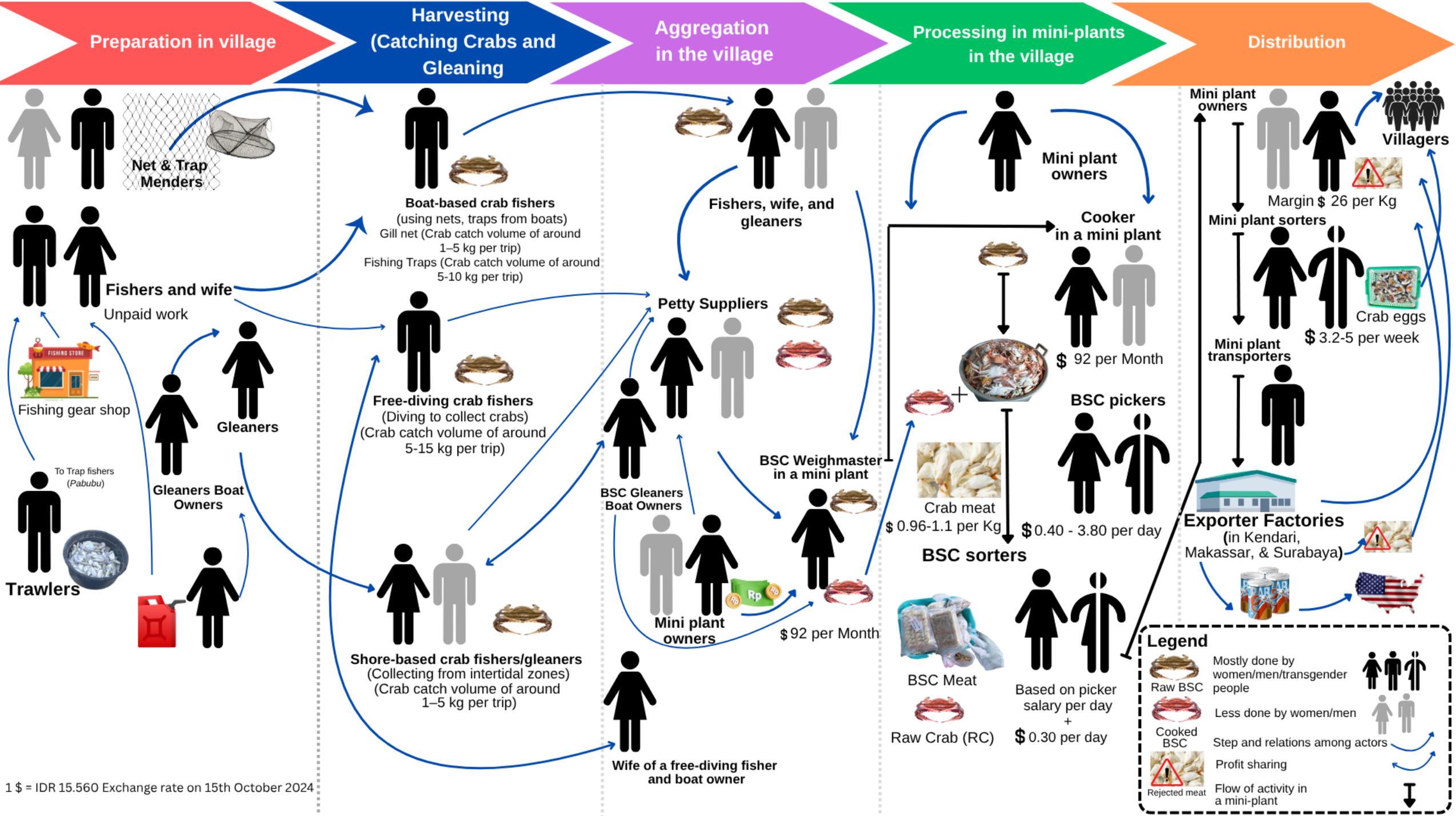


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BSC Processing Gender-based Constraints

Activity	Constraints faced by women	Causes/factors leading to GBC	Consequences on the value chain	Actions to address GBC
BSC Processing in Mini plants	<ul style="list-style-type: none"> • Economic constraints • Time conflict • Time poverty during crab peak season • Workplace Tensions and Conflicts • Health and well-being constraints 	<ul style="list-style-type: none"> • Gender social norms. • Wage system in mini plants • Women's livelihood diversity. 	<ul style="list-style-type: none"> • Shortage of Women's Labor and Low Productivity • Rejected meat by exporters • Raw BSC price drop • Masculinize the BSC processing stage 	<ul style="list-style-type: none"> • Childcare facilities • Individual productivity bonuses & Skill-based pay for experienced pickers. • Women's rotating group 'Arisan' informal institutions. • Recycling initiatives for the pickers (Damayanti et al., 2025)



Discussion

- **The Hidden Costs of Livelihood Diversification**

Previous belief: Multiple income sources = better outcomes for women

Our Finding: Support Lawless et al. (2019); Livelihood diversification can trap women in lower-value activities and prevent them from accessing better opportunities in crab picking stations.

- **Unmasking the True Constraint: Gender as BSC's Primary Bottleneck**

Previous assumption: Environmental bottlenecks, including overfishing, mangrove loss, pollution, and destructive fishing gear, are systematically depleting BSC stocks and undermining ecosystem stability (Yulianto et al., 2024).

Our finding: Social bottlenecks: Low productivity among women processors due to many gender issues can lead to BSC meat issues, reducing raw crab prices and potentially causing fishers to abandon BSC fishing, which disrupts supply.

- **Marital Status as a Participation Barrier**

Previous understanding: Gender was the main constraint (Fitriana, 2020 & Damayanti et al., 2025).

Our finding: Marriage and having toddlers specifically create unique constraints; married women face different barriers than unmarried & widowed women in accessing value chain opportunities. ➡ The Problematic Accommodation of Women's Participation in Mini Plants.



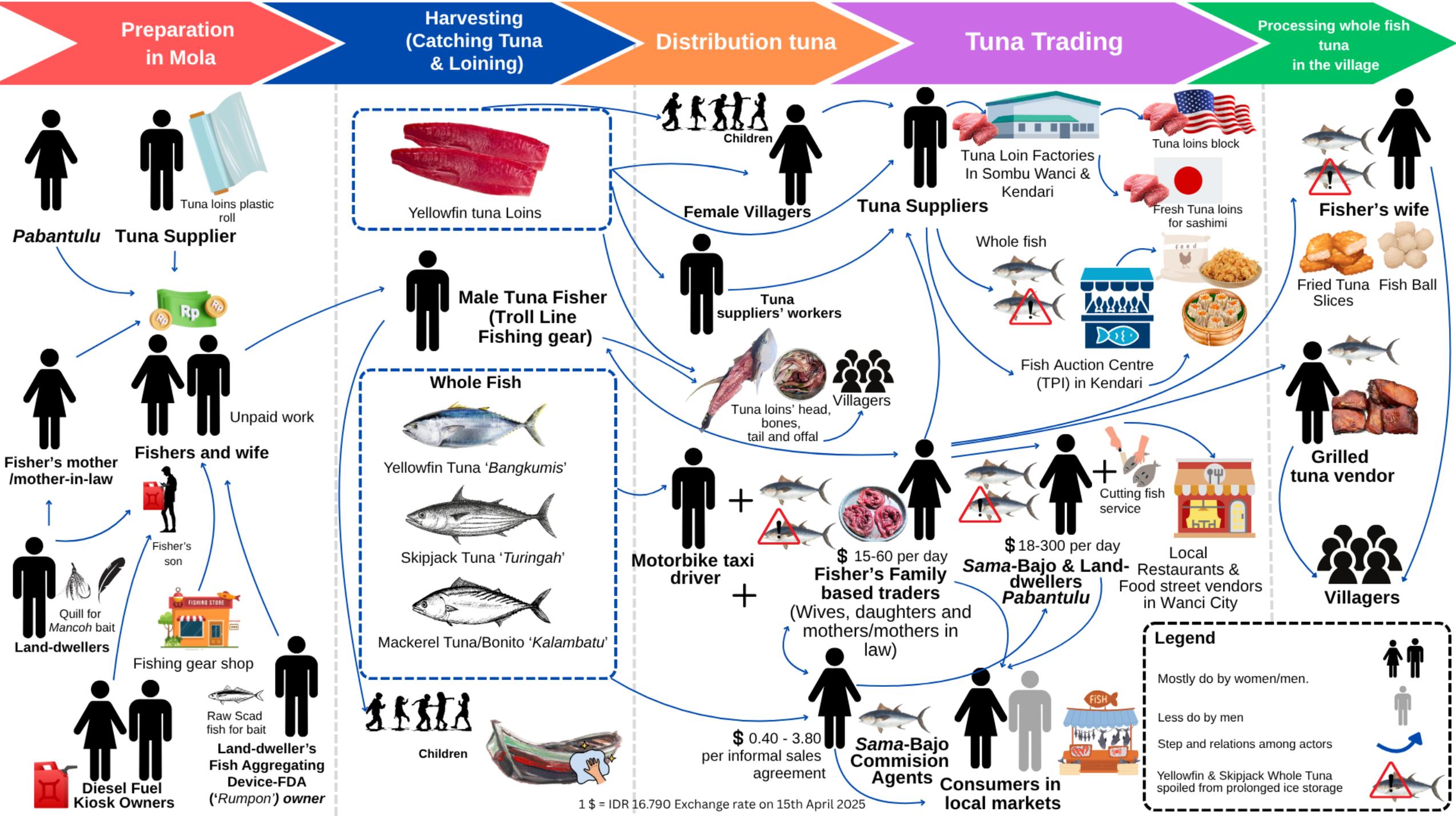
Key Findings: Gender Sensitive Tuna Value Chain



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Tuna Trading Gender-based Constraints

Activity	Constraints faced by women	Causes/factors leading to GBC	Consequences on the value chain	Actions to address GBC
Tuna Trading	<ul style="list-style-type: none"> • Spatial Discrimination • Ethnic-based differential market treatment • Trustworthiness issue • Time conflict • Health issue • Young women excluded from tuna market 	<ul style="list-style-type: none"> • Gender norms (gender expectations, taboos, and stereotypes) • Ethnic discrimination • Seasonal tuna supply 	<ul style="list-style-type: none"> • Low Profit • Changing fish Target 	<ul style="list-style-type: none"> • Market Comfortable Spot • Peak season advantages • Lean season advantages



Land-dwellers Tuna Trading Space



Sama-Bajo Tuna Trading Space



Discussion

- **Reef Fishing Pressure Issues**

Previous understanding: Tuna fishing serves as an important livelihood diversification tool, helping to reduce pressure on coral reef resources (Gillet et al., 2008).

Our finding: Women control the fish trade and determine what's profitable. When tuna prices drop, women switch to trading reef fish, causing their husbands to also switch from catching tuna to catching reef fish.

- **Ethnic discrimination in accessing the market spot**

Previous understanding: Female fish traders experience discrimination in loan access and transport compared to their male counterparts (Pedroza-Gutiérrez and Hapke, 2022)

Our finding: *Sama-Bajo* female tuna traders face ethnic discrimination when securing market stalls, creating barriers not experienced by land-dwelling female traders. ➡ Low profit.

- **When Family Roles Multiply, Tuna Profits Disappear**

Previous understanding: Multiple identities (gender, age, race, class, migrant status) intersect to create different levels of privilege or marginalization in tuna value chains, where gender norms combine with other discriminatory categories (Barclay et al., 2021).

Our finding: Women with the most family responsibilities (wives + mothers-in-law + grandmothers) experience the worst economic outcomes in tuna trading because they are trapped between business needs and social expectations.

Summary

- BSC Mini plant labourers (non-traditional roles) VS Tuna traders (traditional roles).
- *Sama-Bajo* gender norms shape work opportunities: BSC picker and sorter positions are exclusively performed by women and transgender individuals; Market-based tuna whole fish selling in the local markets is completely accessible only to (adult and elderly) women.
- Gender norms combined with other issues create significant constraints for women in post-harvest segments.
- Women's low participation in BSC processing VS Women's low profit in tuna trading.
- BSC Processing node: Married women, BSC fisher's wife with young children face the highest barriers → limited women's labour supply, and low productivity.
- Tuna Trade Node: Young women cannot enter the tuna trade. Women with Multiple Family Roles (Fishermen's Wives, Mothers-in-Law, Grandmothers) struggle the most with → Difficulty generating profits from tuna trading in the local market.
- Research limitations.





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Bhakti Village Communities



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