



Australian Government

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# Transforming Aquaculture and Fisheries for Gender Justice: Telling my story: A gender perspective on involvement in international fisheries Research and Development

**FIS/2020/110**  
**“Developing alternative small scale fishery models for women in the Fly River of Western Province, Papua New Guinea.”**



**“Tilapia, mud crabs & resilience:  
Women Leading Sustainable  
Fisheries in the Fly River, Western  
Province.”**



By Josephine Laka  
1 October 2025

This is where my story begins



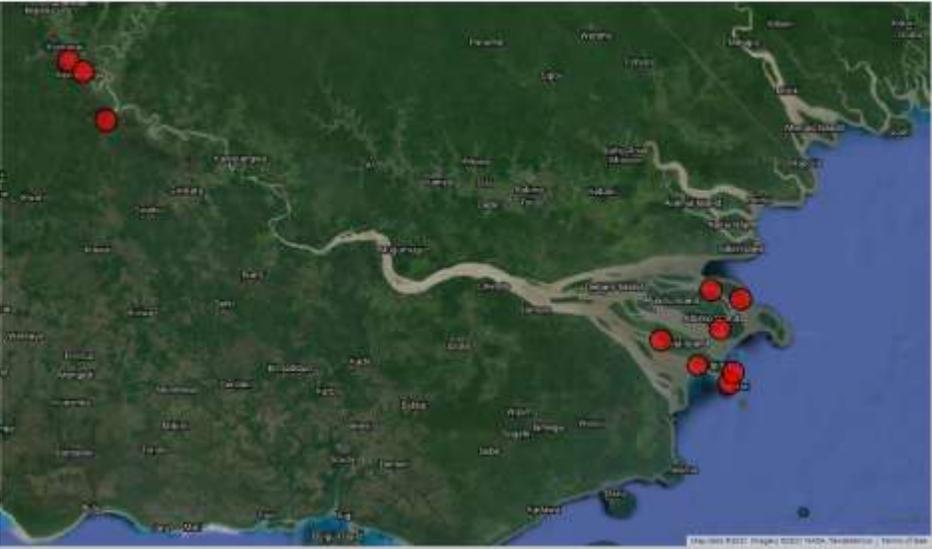
Middle Fly, Western Province - Tilapia



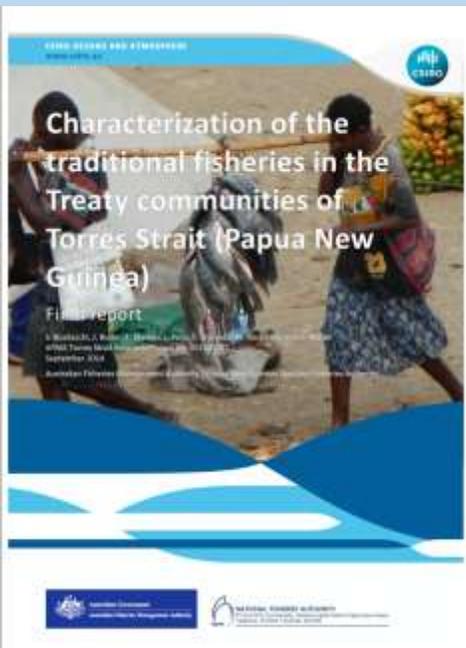
Papua New Guinea



South Fly, Western Province – Mud crabs



# Why this project?



## Women's Role in Fisheries

South Fly, Papua New Guinea

TILAPIA SHELLFISH CRABS PRAWNS

Women mainly fish for tilapia, shellfish, crabs and prawns. This is important for **local food security**.

Women also process the men's catches of beche-de-mer, shark fin and swim bladders (maw) by drying.

Fishing for tilapia and crabs are the main cash-generating activities for women. This income is important for **family nutrition, health and education**.

Tilapia and shellfish are mostly traded in the local market in Daru. There is high wastage due to a lack of processing skills and refrigeration, and unreliable transport.

Crabs provide direct income to women in all villages. They are mainly sent to Merauke, Torres Strait and Singapore. Prices are set by the buyers and some of this trade is illegal.

Graphic by Stacey McCormack @McCormackSA

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Logos: CSIRO, NIFA, Australian Government, Australian Centre for International Agricultural Research



## PROJECT GOAL

Design alternative fishery business models that are economically, socially and environmentally sustainable for Fly River communities, with a focus on women's roles

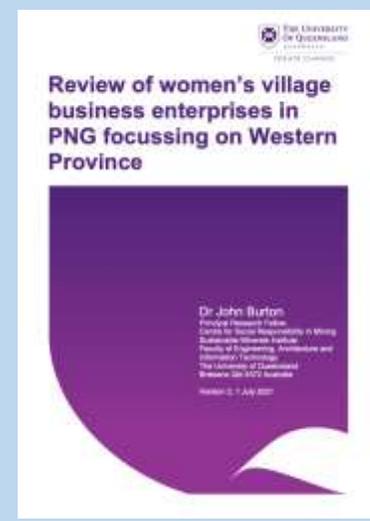
# Three steps guided the research:

1. Review business models in PNG and Melanesia – lessons of success/failure.

2. Value chain analysis – mud crab (South Fly) and tilapia (Middle Fly).

3. Co-design models linking business, resource management, and women's participation.

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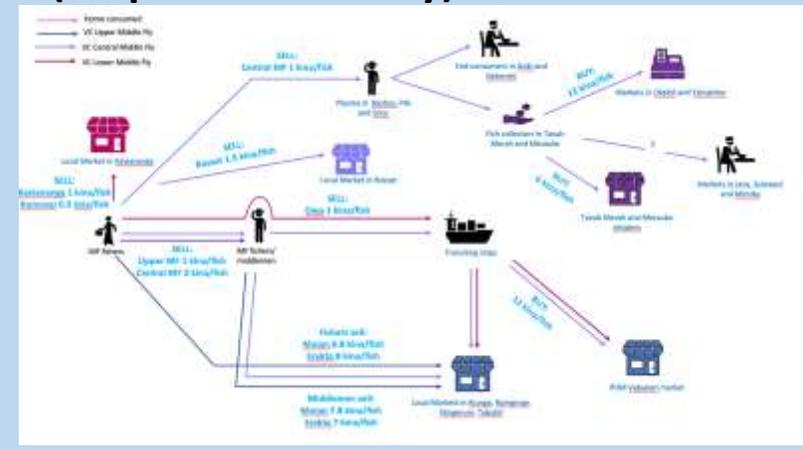


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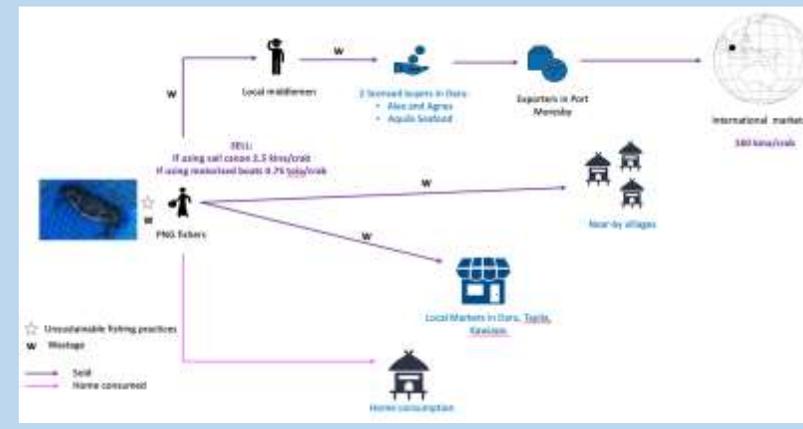


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## Activity 2: value chain analysis (tilapia – Middle Fly)



## Activity 2: value chain analysis (mud crabs – South Fly)



# What we found (PESTLE Analysis)

## Opportunities

- Strong demand for mud crab and tilapia
- Ok Tedi Women & Children Network Empowerment Program and Projects
- Local technical knowledge is adaptable.



## Risks

- Weak position of women in value chains.
- Environmental uncertainties (flooding, species status).
- Lack of capital, markets, and fisheries facilities

# Women at the Centre

- Women face low returns but play crucial roles in household resilience.
- Their economic empowerment can face social resistance but also drives community well-being.
- Need for training, financial literacy, and recognition of women's leadership in fisheries.



# Business Models Designed

**Archetypal model:** hub-and-spoke structure with:

**Fishers/Women** → catch/produce.

**Business agents** → women brokers, members of WCAs.

**Village trainers** → spread skills and sustainable practices.

**Buyers/Markets** → linked through trusted networks.

Principles: pooling products, shortening value chains, savings groups (VSLAs), gender equity, sustainability.



## Key Lessons

- Women's fishery businesses are fragile without support.
- Collaboration, training, and enabling partnerships strengthen resilience.
- Embedding sustainability rules into local institutions is critical.
- Empowering women boosts incomes, decision-making, and adaptive capacity.



**Common carp airbags**



**Weaved baskets**



**Dried deer venison**



**Deer Penis**

## Next steps

- ❖ Refine and trial the business models in communities.
- ❖ Build partnerships with government, OTDF, CSIRO, and women's associations.
- ❖ Conduct market and stock assessments for mud crab and tilapia.
- ❖ Scale results and share knowledge across PNG and Melanesia.



## Acknowledge

- Partners – ACIAR, CSIRO, OTDF, UQ & Blue Forest Indonesia
- OTDF Field Research Team
- Participants of the Middle and South Fly communities workshops
- Participants to the Provincial Workshop



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