

# Beyond Nominal Participation:

Using Participatory Livelihood Mapping to Reimagine Gender-Inclusive Shrimp Aquaculture

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Carolina Astri | WRI Indonesia

# Background:



## **Inclusive Governance**

Reframes aquaculture from male-centered to shared roles, strengthening community decision-making and supporting governance that values women's and youth's contributions.



## **Aquaculture as survival**

Shrimp ponds and fisheries are the backbone of coastal households. When harvests fail, the whole community feels it.



## **Fragile systems**

Disease outbreaks and crop failures show why broader participation is needed to share risks.



## **Invisible roles**

Women handle finances and logistics, youth supply labor or aim to own ponds—yet their roles stay unrecognized.



## **Mapping as a tool**

Participatory mapping makes hidden contributions visible and shows diverse livelihood strategies.

# Setting the Context



## Wringin Putih–Rural Coastal

- **Landscape:** Coastal village with mangroves and traditional shrimp ponds; clearer community-level tenure.
- **Socio-cultural:** Strong communal ties; women active in mangrove product groups. Youth engaged but some face social issues.
- **Economy:** Diversified (ponds, fishing, farming, livestock). Women add value via small-scale processing.
- **Aquaculture:** Traditional ponds managed by families. Women support “indirectly” (feeding, sorting, food prep). Youth often laborers; limited access to capital.

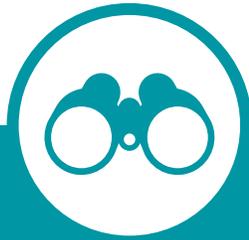


## Karangrejo–Urban Coastal

- **Landscape:** Semi-urban coast; limited land for ponds, insecure tenure.
- **Socio-cultural:** Women organized in PKK, strong in household finance. Youth participation low.
- **Economy:** Service-based (trading, tailoring, catering, repair shops). Women drive household economy.
- **Aquaculture:** Limited pond space, insecure. Reliance on direct shrimp sales. Women mostly finance/admin. Processing/value-add rare.

# Objectives

Therefore, this study aims to:



**Map livelihood spaces** in aquaculture to show how women, men, and youth sustain them.



**Make hidden roles visible** and uncover barriers like insecure land, external asset control, and high entry costs.



**Use participatory findings to inform inclusive community governance** and strengthen GEDSI practices, with lessons that can feed into broader aquaculture policy.

# Methods

We began with **participatory focus group discussions (PFGDs)** with women, men, and youth to explore labor divisions, resource access, and decision-making. This was followed by **participatory livelihood mapping**, where community members charted their spaces, roles, and strategies around shrimp farming in two Banyuwangi villages.



**Participatory FGD: Gathering Voices & Livelihood Data**

- 1. Select Participants:** Women’s groups, youth, farmers (diverse age, gender, roles)
- 2. Set the Context:** Build rapport, explain purpose, confirm place names, share daily routines
- 3. Identify Livelihoods:** Shrimp ponds, capture fisheries, tailoring, catering, trading, etc.
- 4. Rank Value:** Classify sources as high / medium / low, based on price, availability, importance, seasonality

**Participatory Livelihood Mapping: Visualizing Roles & Spaces**

- 1. Map Sources:** Who works where, outsider control → ponds, rivers, homes, markets, mangroves
- 2. Map Roles:** Who does what → make hidden roles visible (women feed, youth sort).
- 3. Seasonality & Risks:** Show peak/low times and shocks (disease, climate, prices).
- 4. Governance & Access:** Who controls assets? Note external/unequal ownership.
- 5. Validate & Reflect:** Review maps → inclusion, resilience, aspirations.

# Key Findings: Participatory FGD

## Karangrejo

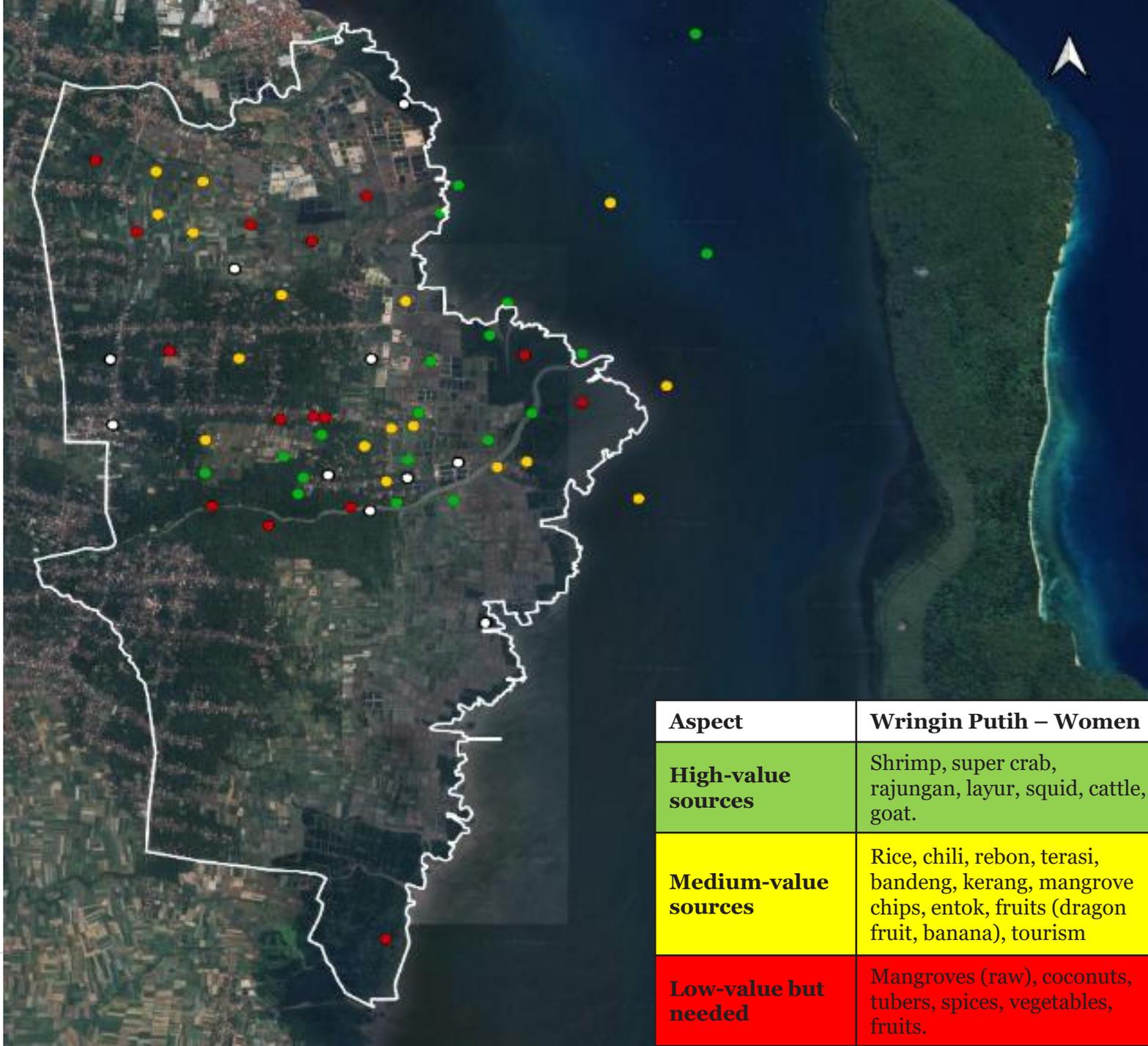
- ❑ Livelihoods more service/urban-based
- ❑ Women central in community finance and small businesses, but limited pond access due to land insecurity.

## Wringin Putih

- ❑ Livelihoods more resource-based
- ❑ Women/youth support ponds “indirectly”

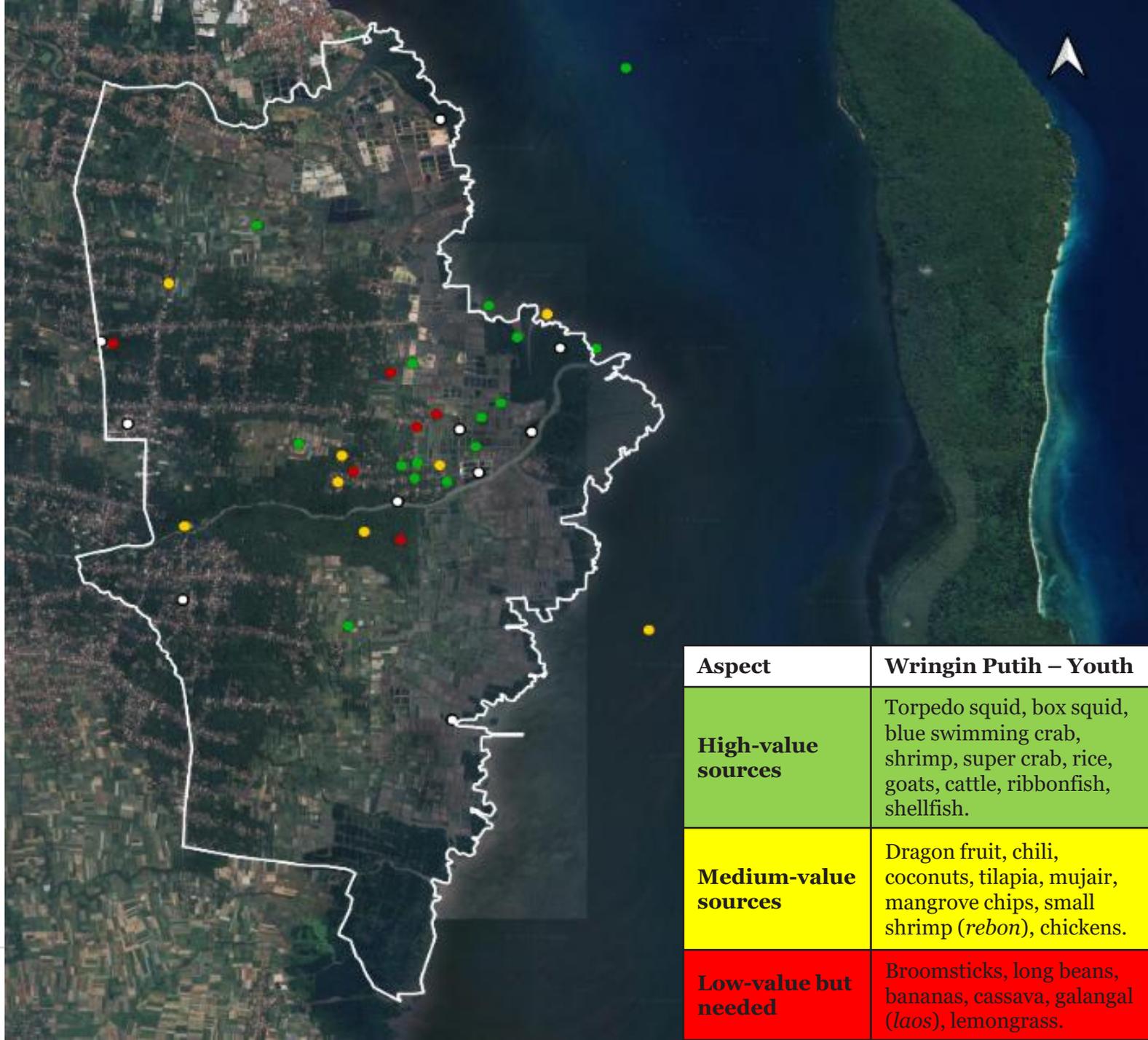
<b>Daily Roles</b> 	Women’s work centered on domestic care, but also <b>strong in supporting livelihoods</b>	Women also <b>balance domestic care with community activities</b> . Youth less involved in aquaculture, more in urban jobs.
<b>Economic Contribution</b> 	Women active in POKLAHSAR (mangrove chips, exploring shrimp-based products). <b>Income mostly from natural assets</b> (coconut, fisheries, ponds).	<b>More service-based</b> (trading, tailoring, catering, small shops). Women see PKK activities as income-earning, even treating them as “freelance” work.
<b>Aquaculture Involvement</b> 	Women “ <b>indirectly</b> ” <b>involved</b> —feeding shrimp when men absent, sorting harvests, handling pond finances. Youth <b>often laborers but lack capital to own ponds</b> .	Women <b>not much in pond operations</b> ; mainly finance/admin. Shrimp sold directly, little processing. Youth <b>interest in ponds is low</b> due to high entry costs.
<b>Household Finance</b> 	<b>Managed jointly with husbands</b> ; some men separate tambak money from household money.	Women hold stronger authority in managing family and even pond finances, though <b>few own/manage ponds directly</b> .

# Participatory Livelihood Mapping: Wringin Putih - Women



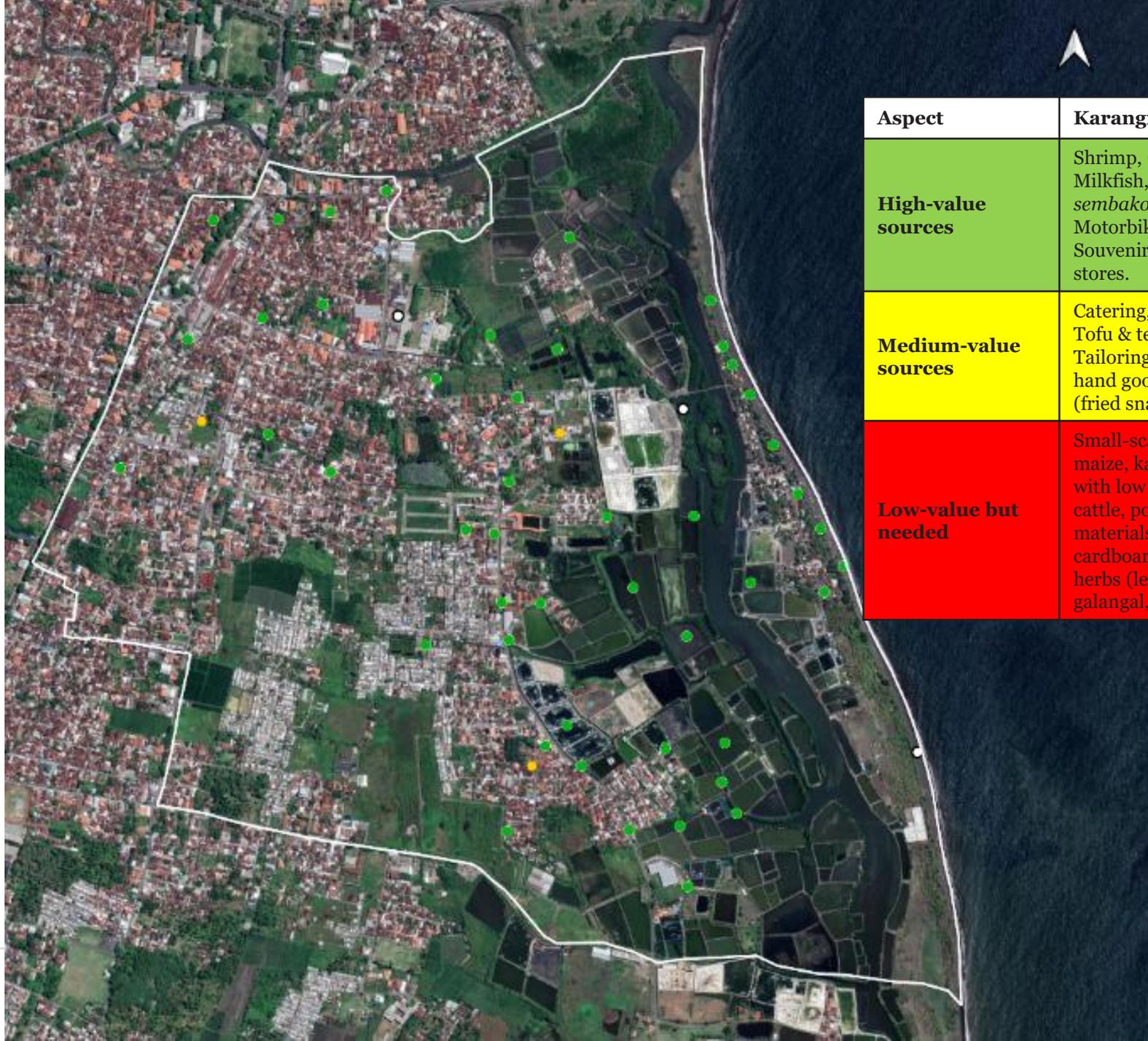
Aspect	Wringin Putih – Women
<b>High-value sources</b>	Shrimp, super crab, rajungan, layur, squid, cattle, goat.
<b>Medium-value sources</b>	Rice, chili, rebon, terasi, bandeng, kerang, mangrove chips, entok, fruits (dragon fruit, banana), tourism
<b>Low-value but needed</b>	Mangroves (raw), coconuts, tubers, spices, vegetables, fruits.

# Participatory Livelihood Mapping: Wringin Putih - Youth



Aspect	Wringin Putih – Youth
High-value sources	Torpedo squid, box squid, blue swimming crab, shrimp, super crab, rice, goats, cattle, ribbonfish, shellfish.
Medium-value sources	Dragon fruit, chili, coconuts, tilapia, mujair, mangrove chips, small shrimp ( <i>rebon</i> ), chickens.
Low-value but needed	Broomsticks, long beans, bananas, cassava, galangal ( <i>laos</i> ), lemongrass.

# Participatory Livelihood Mapping: Karangrejo - Women



Aspect	Karangrejo – Women
<b>High-value sources</b>	Shrimp, Crabs, Grouper, Milkfish, Groceries ( <i>warung sembako</i> ), Welding workshops, Motorbike repair shops, Souvenir trading, Convenience stores.
<b>Medium-value sources</b>	Catering, Laundry services, Tofu & tempe production, Tailoring, Loakan (second-hand goods), Small food stalls (fried snacks, iced drinks).
<b>Low-value but needed</b>	Small-scale crops (cassava, maize, kangkung), livestock with low numbers (goat, some cattle, poultry), recycled materials (plastic bottles, cardboard), and backyard herbs (lemongrass, turmeric, galangal, etc.).

# Conclusions:

Dimension	Wringin Putih (Rural-Coastal)	Karangrejo (Urban-Coastal)
<b>Women's roles</b>	Mapping reveals women as “shock absorbers”: filling gaps in ponds, sustaining processing, and food provision. Yet their roles remain informal, seen as support not production.	Women anchor household and service incomes, but in aquaculture they remain sidelined. They take responsibility for finances but lack authority over pond management.
<b>Youth's roles</b>	Youth aspire to pond ownership, but mapping exposes structural exclusion: high entry costs and land barriers. They are locked into labor roles, not decision-making.	Youth are nearly absent in aquaculture maps, signaling disengagement. Their energy shifts to casual/service work, reflecting lack of pathways into resource-based livelihoods.

# Conclusions:

Dimension	Wringin Putih (Rural-Coastal)	Karangrejo (Urban-Coastal)
<b>Livelihood spaces</b>	Livelihoods still rooted in natural assets. Women/youth circulate between ponds, farms, and mangroves, but recognition of their work is blurred. Mangroves only gain value when processed, showing how women’s labor “creates” economic worth.	Urban shift to service-based economy. Aquaculture spaces exist but marginalized by land conversion. Service roles (shops, workshops) dominate, where women are visible but aquaculture roles shrink.
<b>Barriers</b>	Recognition gap: women’s indirect pond work undervalued; youth face capital and asset exclusion. This sustains male dominance in decision-making.	Structural exclusion: insecure tenure, external (military) land control, and debt cycles block women and youth from access. Here, barriers are systemic, not cultural.
<b>Governance</b>	Community-based tenure gives some stability, but power still male-led. Women’s influence is through informal channels, which limits legitimacy.	Governance maps show asymmetry: a few actors control ponds, while most families (esp. women/youth) rely on jasa. Decision-making power is concentrated and exclusionary.

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***Participatory livelihood mapping reveals that communities see livelihoods as more than income — they are shaped by availability, seasonality, and social value. This perspective makes women’s and youth’s often hidden roles visible, and exposes the barriers that keep them from full recognition.***

# Recommendations:



## **Recognize women's roles**

Feeding shrimp, household finance, and caregiving should be acknowledged in aquaculture value chains.



## **Invest in youth inclusion**

Lower entry barriers for pond ownership; build capacity for youth to become future farm managers and entrepreneurs.



## **Promote livelihood diversification**

Support women's groups like *POKLAHSAR* to expand into value-added products; link migrant women's diverse portfolios to markets.



## **Revalue ecological assets**

Integrate mangroves into livelihoods through eco-tourism, crab habitat protection, and carbon schemes



## **Create shared decision-making spaces**

Facilitate mixed-gender, intergenerational forums where aquaculture rules (access, benefit-sharing, risk management) are negotiated openly.



## **Scale up mapping as governance tool**

Institutionalize participatory mapping as a regular practice in local planning (desa RPJMDes, BUMDes) to monitor changing livelihood spaces and ensure marginalized groups remain represented.



# Thank You.

CONTACT US

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[wri-indonesia.org](http://wri-indonesia.org)



+62 (21) 22775816



Wisma PMI 3rd Floor, Jl. Wijaya I No. 63,  
Kebayoran Baru, Jakarta Selatan, 12170