



Gender integration promotes sustainable coastal fisheries resource use: case studies and policy implication from Japan

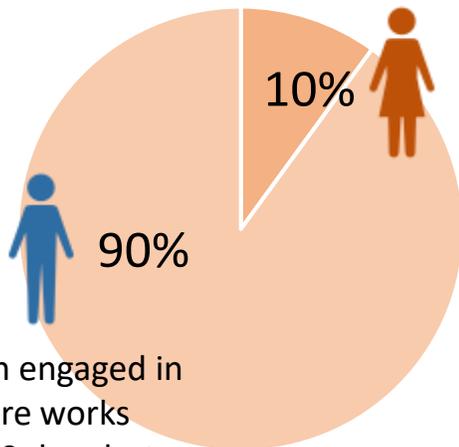
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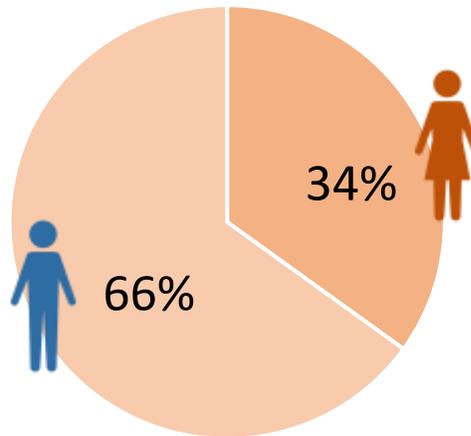


Fisher (Offshore workers)

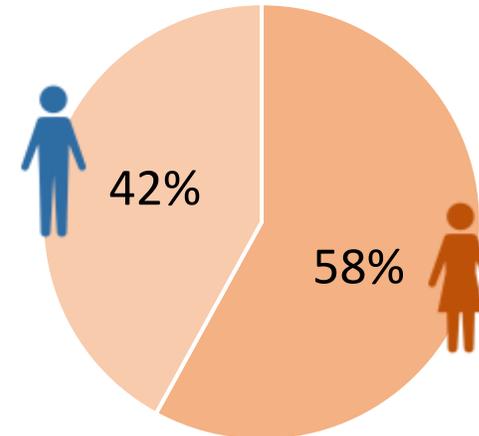


* Person engaged in offshore works over 30 days last year

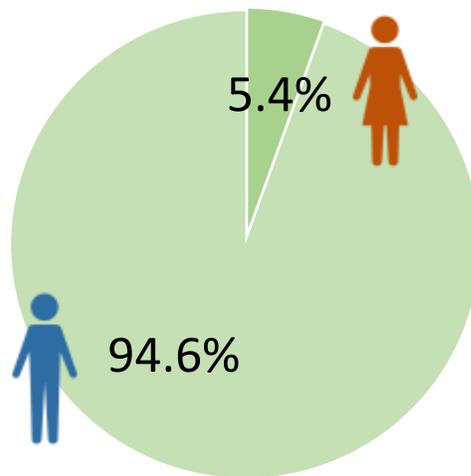
Onshore workers



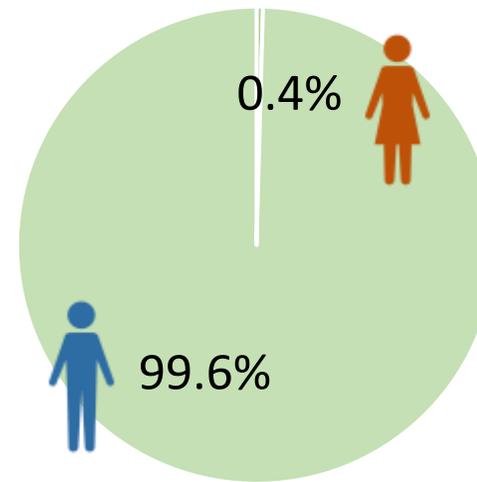
Fish processing workers



FCA regular members



FCA board members



Land-based work: Female-dominated / Gender imbalance in decision-making organization



Basic Plan for Fisheries in Japan (2022): Promotion of women's participation in fisheries sector

Collaboration among **different gender groups**
in small-scale coastal fisheries



Impacts?



Sustainability of
coastal fisheries resource use

This study explores:

- How collaboration among different gender groups impacts on sustainability of fisheries resource use
- What are challenges? What policy intervention would be needed?



Tagert sites (5 sites)

Case 4: Oarai FCA, Ibaraki

'Mothers' Restaurant' run by fisheries cooperatives



Processing & Marketing

Case 5: Shin-Minato FRA, Toyama

Female president at FCA



Decision making

Case 1: Amaha FCA, Chiba

Husband-wife fishing operation (Gill net)

Production
Capture fishery



Case 3: Iwaya brunch, Hibikinada FCA, Fukuoka

Processing and management of *Akamoku* seaweed

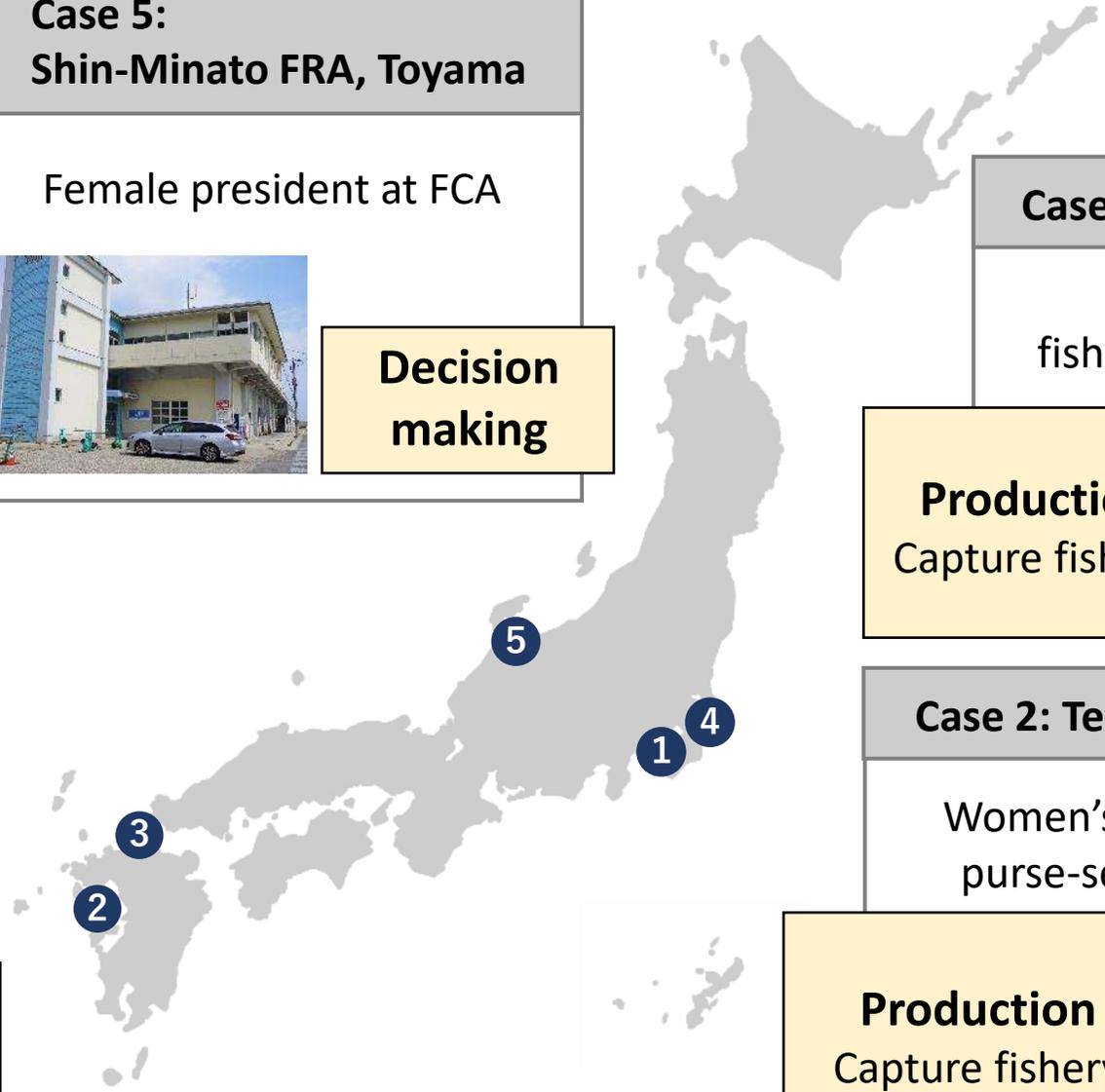


Processing

Case 2: Tenyo Inc., Nagasaki

Women's engagement in purse-seine net fishery

Production
Capture fishery



Semi-structured interview

Episodic-interview method (Flick 2011)

Sematic knowledge

In the fisheries of this community, how “gender” identifies roles and behaviors of the people?

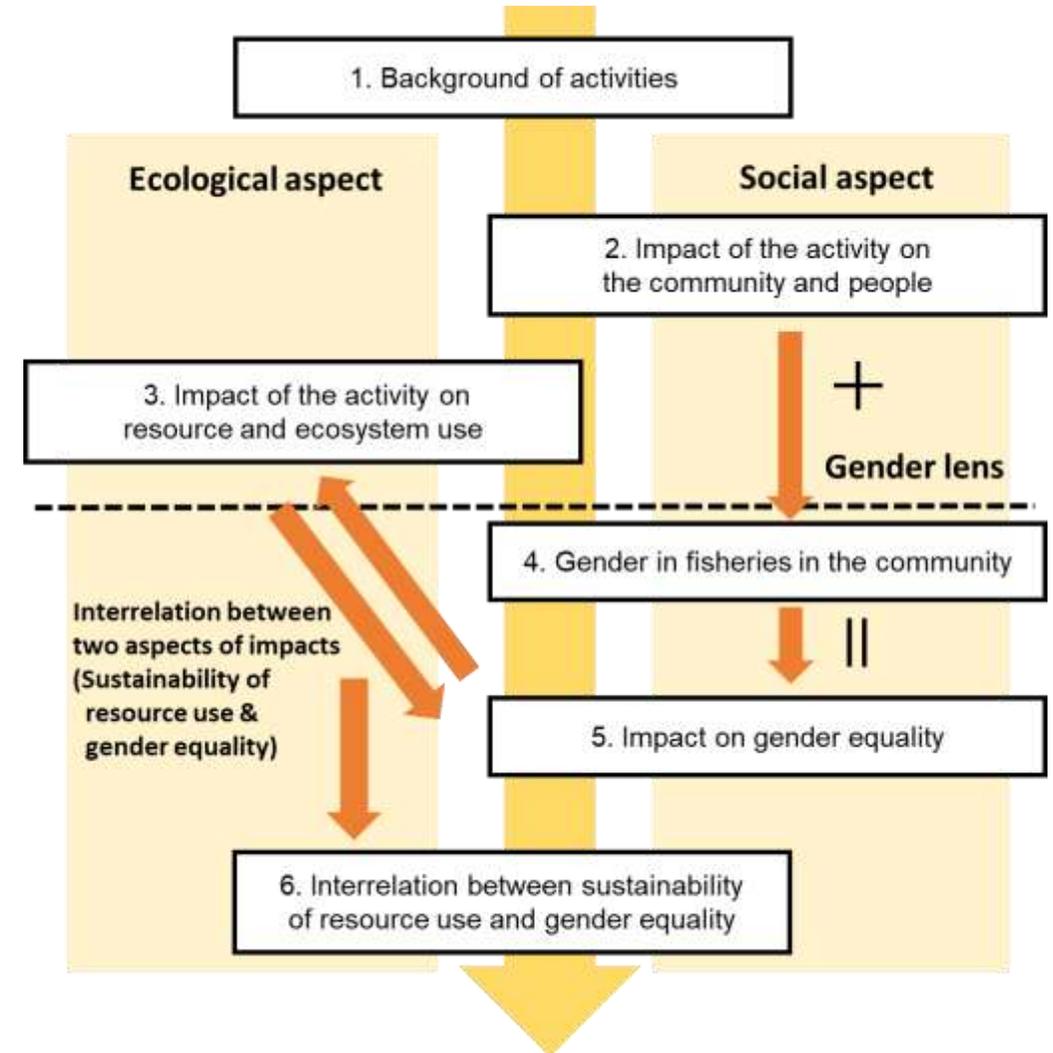
Please explain with the example of your own experience, as well as those of your family, friends, and neighbors.

Episodic knowledge

Qualitative Analysis (Nvivo 14)

Three-step coding (Saldana 2013)

- (1) Initial-coding (In Vivo coding)
- (2) Focused coding
- (3) Axial coding





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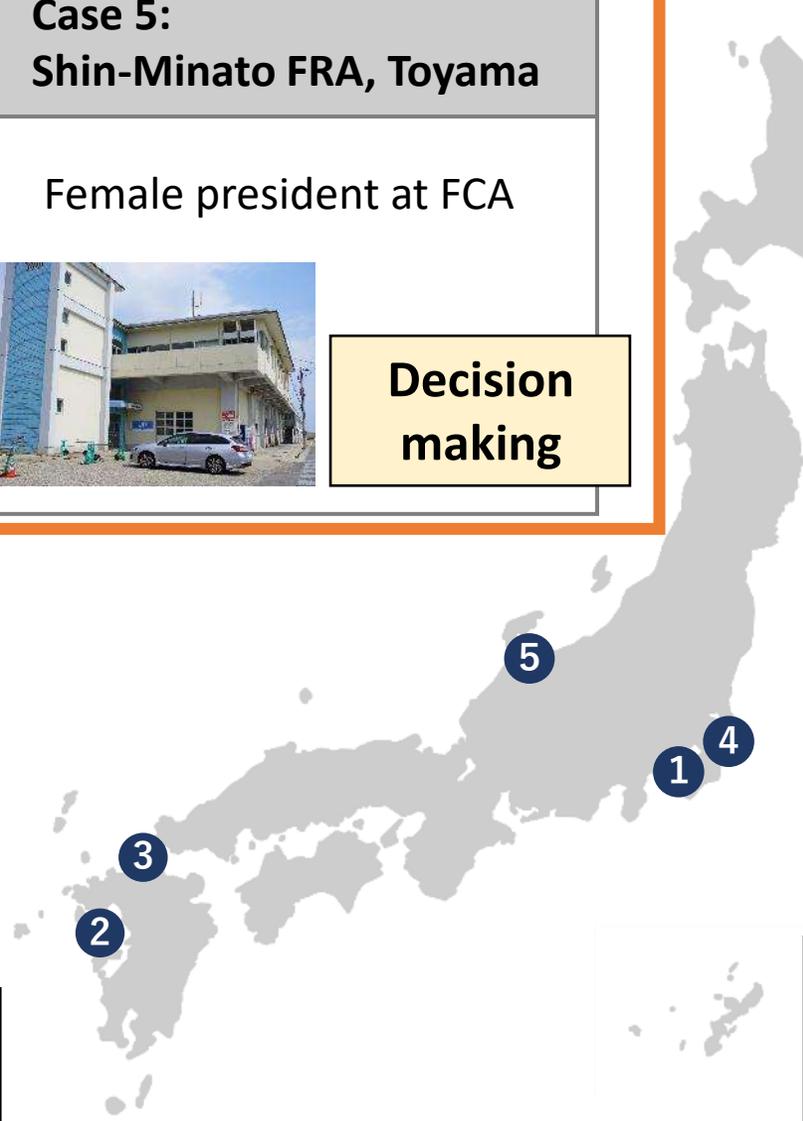


Processing

Case 2: Tenyo Inc., Nagasaki

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purse-seine fishery

Production
Capture fishery



Case 1: Amaha FCA, Chiba

Husband-wife fishing operation (Gill net)

⇒ Impacts of shifting from **father-son/brothers** to **couple operation**

Survey period: December 12-14, 2023

Respondents:

- 6 couples operating fishing boat
- 1 Fisheries Cooperative Association officer

Male	7
Female	6
Total	13



Impacts on **social aspects**

- **Reduced communication costs on board**
- **Improved relationship between husband and wife**
- Lower psychological stress for male fishers (e.g., free from pressure of hiring crew)



- Increased burden for female fishers (e.g. fishing operation + household chores)



- Changing gender norms in fisheries

Impacts on **ecological aspects**

- **Safety improvement for wives**
- ▼
- **Improved resource management awareness** (e.g., Higher compliance for closed fishing days)



Case 1: Amaha FCA, Chiba

Husband-wife fishing operation (Gill net)

Safety improvement for wives and reduced fishing operation (respect for resource management)

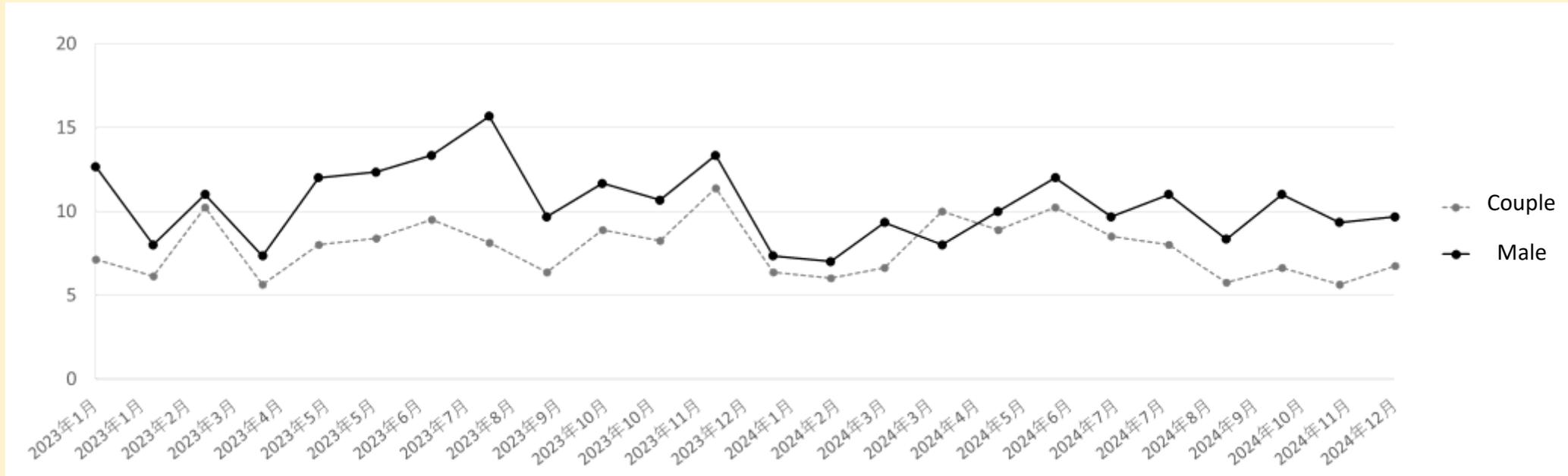


Fig. Average fishing days per month: male operation (n=3) vs. couple operation (n=8)

Couple operation had fewer fishing days over two years (Mann–Whitney U test, $p < 0.001$)

Case 4: Oarai FCA, Ibaraki

'Mothers' Restaurant' run by fisheries cooperatives

- ⇒ The restaurant was opened in 2010
- ⇒ Sales in 2019 was 150 million yen (=approx. 1 million USD)

Survey period: August 8-10, 2023

Respondents: Women working at the restaurant,
Male fishers, FCA board member, FCA officer,
Municipal government officer

Male	5
Female	2
Total	7



Impacts on **social aspects**



- **Job & income creation for women**
- **Economic benefit for FCA**
- **Economic benefit for male fishers** through purchasing local catch and processing
- Contribution to local economic revitalization

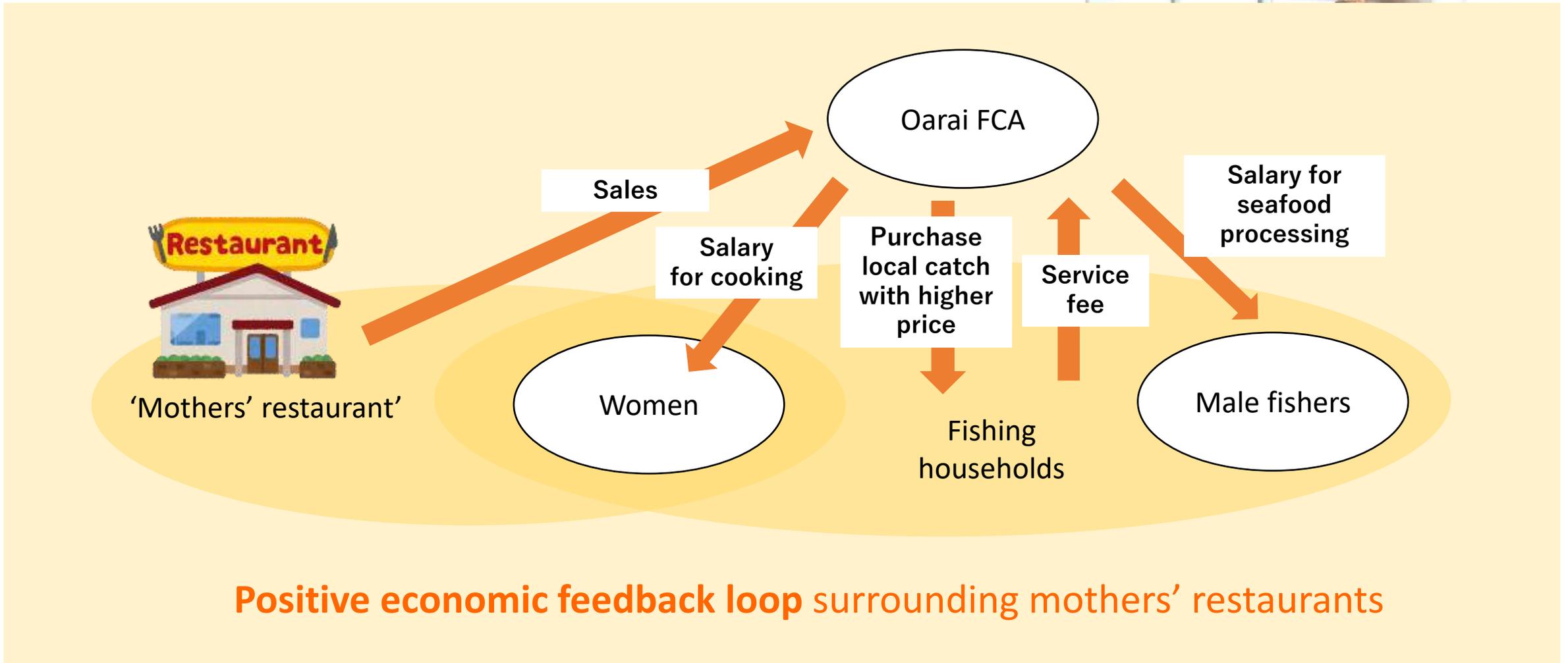
Impacts on **ecological aspects**



- Value addition to local catch
- Utilization of new target species (Climate change adaptation)

Case 4: Oarai FCA, Ibaraki

'Mothers' Restaurant' run by fisheries cooperatives



Positive economic feedback loop surrounding mothers' restaurants

Case 5: Shin-Minato FRA, Toyama

Female president at FCA

- ⇒ 2003: President of Women's Group joined the FCA board
- ⇒ 2008: First female president of FCA
- ⇒ 2016: First female president of prefectural federation of FCA

Survey period: July 22-23, 2024

Respondents: FCA Board members,
FCA officer, Prefectural federation of FCA officer

Male	2
Female	3
Total	5



Impacts on **social aspects**

- Acceptance of female leader through support and collaboration with others
- **Improvement of onshore facilities** (e.g., ice-making plants)
- **Request for financial support to national government**
- Showcasing female leader as role model

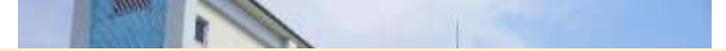


Impacts on **ecological aspects**

- Initiation of resource management (e.g., pooled operations for shiroebi, resource management plans for set nets)
- Promotion of branding for prefectural fishery products

Case 5: Shin-Minato FRA, Toyama

Female president at FRA



Factors Behind the Success of Female FCA President

Environmental Factors

- Supports from family, FCA officers, and other fishers
- Nomination of president of Women's group engaged to the FCA board
- **Less care burden for this lady**
- More female FCA regular members
(approximately 15%; 30/196 person; 2024)

Background experience

- **Perception as a women engaged financial management onshore**
- **Networks built through FCA women's group activities**

Also foster female leadership in other communities?



Tagert sites (5 sites)

**Case 5:
Shin-Minato FRA, Toyama**

Female president at FRA



Effective supports based on female leader's perception and network

Case 1: Amaha FCA, Chiba

Husband-wife fishing operation (Gill net)



Safety improvements enhances resource management awareness

Case 2: Tenyo Inc., Nagasaki

Women's engagement in purse-seine fishery



Changes in communication provided safer space for both male/female fisher

Case 3: Iwaya brunch, Hibikinada FRA, Fukuoka

Processing and management of *Akamoku* seaweed



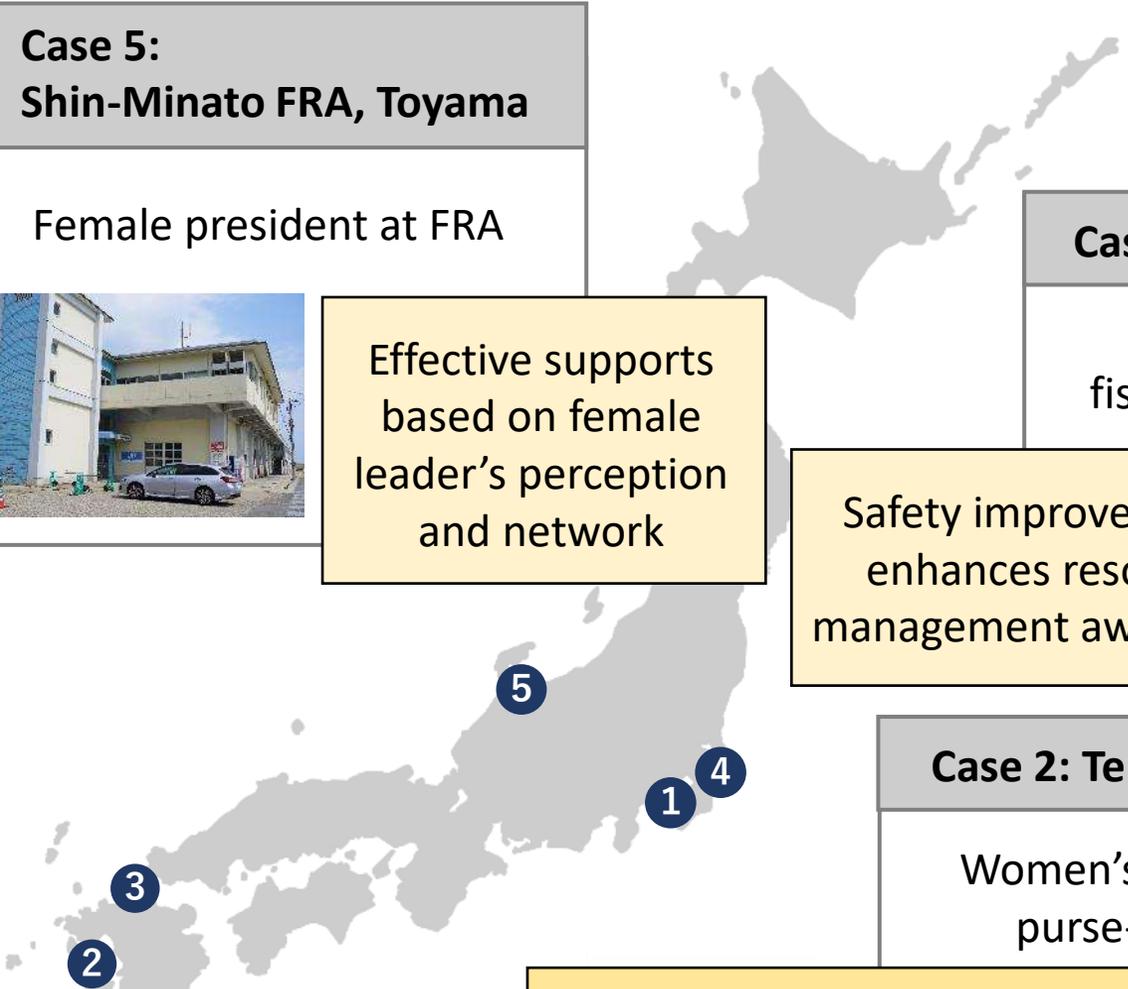
Sustainable seaweed resource management through integrated knowledge

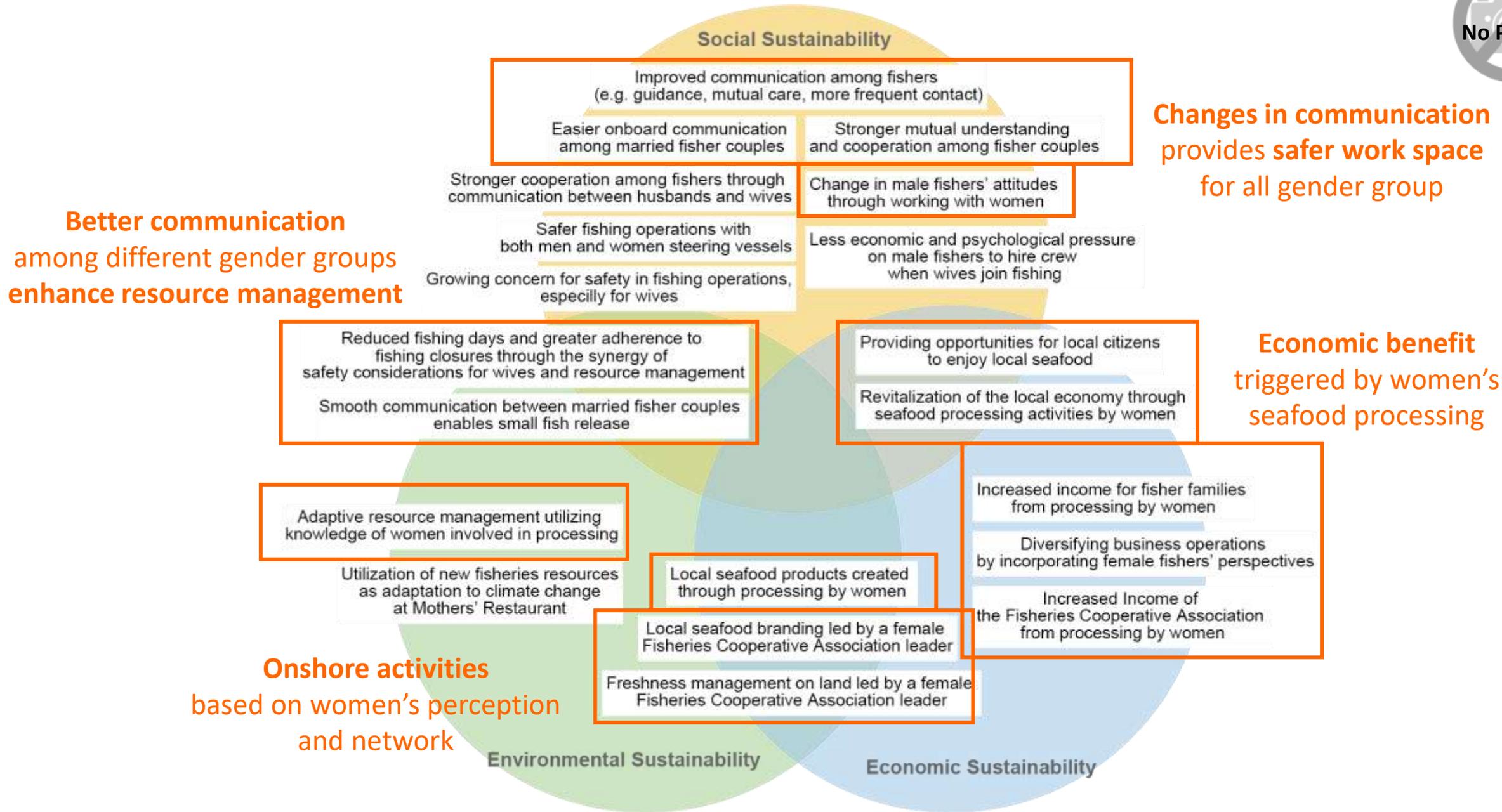
Case 4: Oarai FRA, Ibaraki

'Mothers' Restaurant' run by fisheries cooperatives



Financial benefit for all stakeholders







Changes in communication creates safe work space

Collaboration among different gender groups



Strengthened communication

+

Integration of gender-differentiated knowledge, techniques, and networks



Contribution to **social, environmental, and economic sustainability** of fisheries resource use





Challenges remain...

Challenges from traditional gender roles

- **Care burden** for women
- **Cultural taboo** for women gets onboard
- **“1 member from 1 household” tradition** in FCA

Challenges from transformative roles

- Needs for **gender-free ports, vessel, and fishing gear**



Basic Plan for Fisheries in Japan (2022):

Promotion of women’s participation in fisheries sector

⇒ ‘Promotion of women’s participation into current structure of fisheries sector

⇒ **Reproducing gender inequality** in traditional gender roles?

Shift from **‘Promotion of women’s participation to current structure’**
to **‘Gender mainstreaming to transform the structure’** is needed



3 potential scenarios: shift to 'Gender mainstreaming' in Japanese fisheries policies

Scenario A: Integration of 'Gender' at the Terminology/Concept Level

'Promoting women's participation in existing fisheries'

⇒ 'Transforming fisheries structures to prevent gender-based inequalities'

Implementation cost: Low Effectiveness: Low Impact: Low

Start here?

Scenario B: Mainstreaming Gender at the Operational Level

(e.g.) Conduct gender analysis, develop quantitative indicators for resource allocation, M&E

Implementation cost: Medium **Effectiveness: High** Impact: Medium

Scenario C: Mainstreaming Gender at the Institutional Level

(e.g.) Develop fisheries-specific gender mainstreaming policy documents

Implementation cost: High Effectiveness: High **Impact: High**

This shift would **foster collaboration** among different gender group and further **promote sustainability of coastal fisheries resource use**

