



Graduate School of Agricultural and Life Sciences Aquatic Bioscience Atmosphere and Ocean Research Institute International

2nd year Doctoral Course

# Towards a transformative fisheries improvement in Japan

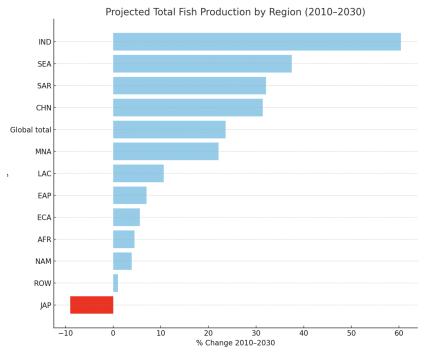
~ Insights from MSC certification with multi-stakeholder collaboration ~

Yoko <u>Tamura</u><sup>1,2</sup> Mitsutaku Makino<sup>1</sup>

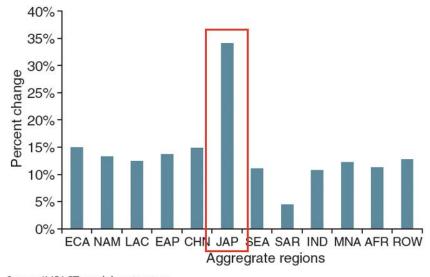
<sup>&</sup>lt;sup>1</sup>The University of Tokyo, Tokyo, Japan.

<sup>&</sup>lt;sup>2</sup> Global Marine Consulting

#### **Crisis and Growth Potential in**



(Both graphs: World Bank, Fish to 2030, Prospects for Fisheries and Aquaculture, 2013.)



Source: IMPACT model projections.

Note: ECA = Europe and Central Asia; NAM = North America; LAC = Latin America and Caribbean; CHN = China; JAP = Japan; EAP = other East Asia and the Pacific; SEA = Southeast Asia; IND = India; SAR = other South Asia; MNA = Middle East and North Africa; AFR = Sub-Saharan Africa; ROW = rest of the world.

Fisheries Crisis: Projected with the worst negative growth in the world.

Growth Potential: Forecasted growth by 2030 if fishery management improves.

Legal Alignment: 2020 Fisheries' Law revision aligned with global standards.

→ MSC Pre-assessment results to identify current critical gaps

## MSC Certified Fisheries in Japan

Source: MSC Japan website



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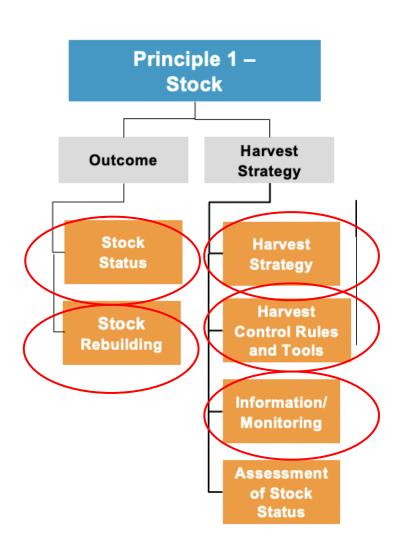
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Since 2013, many pre-assessments have been conducted for coastal fisheries across Japan,

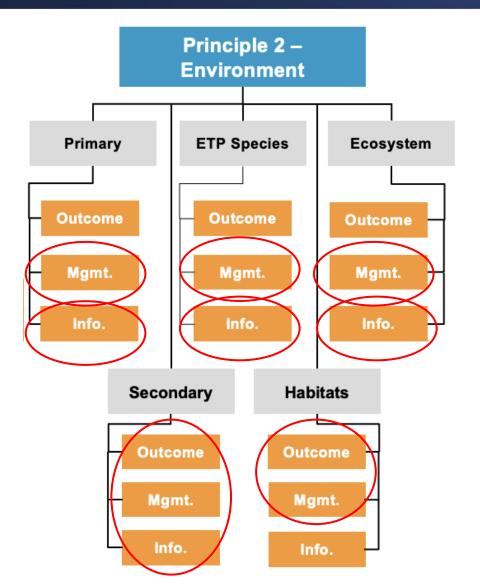
→ only 2 coastal fisheries certified. The author participated in a diverse range of 17 audits (66 fisheries)

### Principle 1 (Stock assessment) improvement needs



- Logbook report implementation, and its monitoring by government (PI 1.1.1)
- Linking stock assessments to management strategies at equivalent level to MSY (PI 1.1.2, 1.2.1)
- Stock-based management of widelydistributed (transboundary) fishery resources

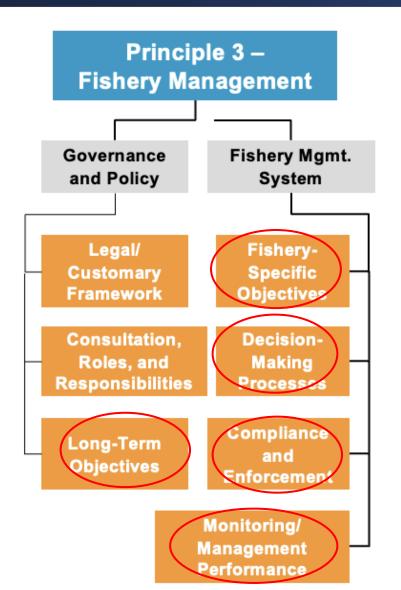
# Principle 2 (Ecosystem management) improvement needs



## General lack in Ecosystem-based management

- Reporting bycatch and endangered species data.
- Carrying capacity of fishing grounds
- Over-reliance on artificial propagation (may fall outside of scope)
- Genetic impact on natural ecosystems
- Habitat modification (seabed plowing, large artificial reef installment, etc.).
- Proper gear disposal and plastic waste
- Bait fish sustainability

# Principle 3 (Management) improvement needs



- Fishery-specific long-term goal
- Decision-making process based on scientific evidences.
- Stakeholder participation mechanism
- Transparency (observer data and meeting records sharing upon requests)
- Compliance and penalties
- Management effectiveness evaluation (fishery management plans, management measures, subsidies).

Principle 1 & 2 are connected to Principle 3.

#### MSC pre-assessments identify critical issues

#### **Stock management**

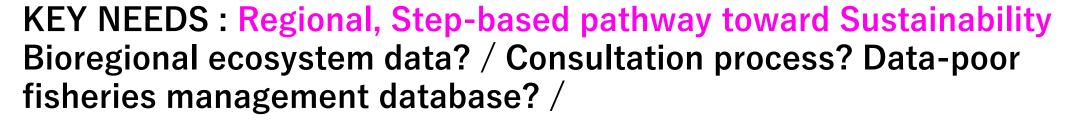
- Reliance on selfgovernance for shared stock (Lack of sciencebased management and coordination)
- Data poor

## (Gap analysis) Ecosystem

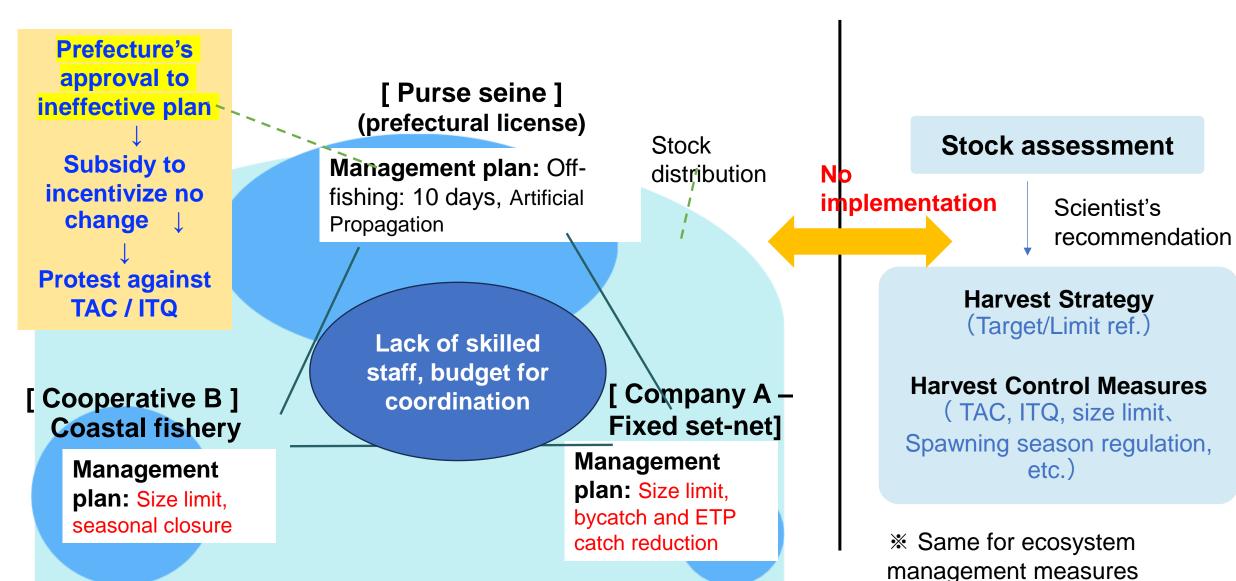
- Lack of ecosystem-based management
- Excessive reliance on artificial propagation

#### Governance

- Lack of transparent decision-making / stakeholders' participation
- Subsidies to lead to overfishing



## Current Co-management in coastal fisheries: Lack of science-based coordination





# Guideline for stakeholder engagement on aquatic resource management-related processes









Government Of Western Australia, Department of Fisheries, 2016. Bellchambers et al, 2016, Adopting MSC Certification of Western Australian fisheries at a jurisdictional level: The benefits and Challenges

## Needs of Transformation on decision-making processes

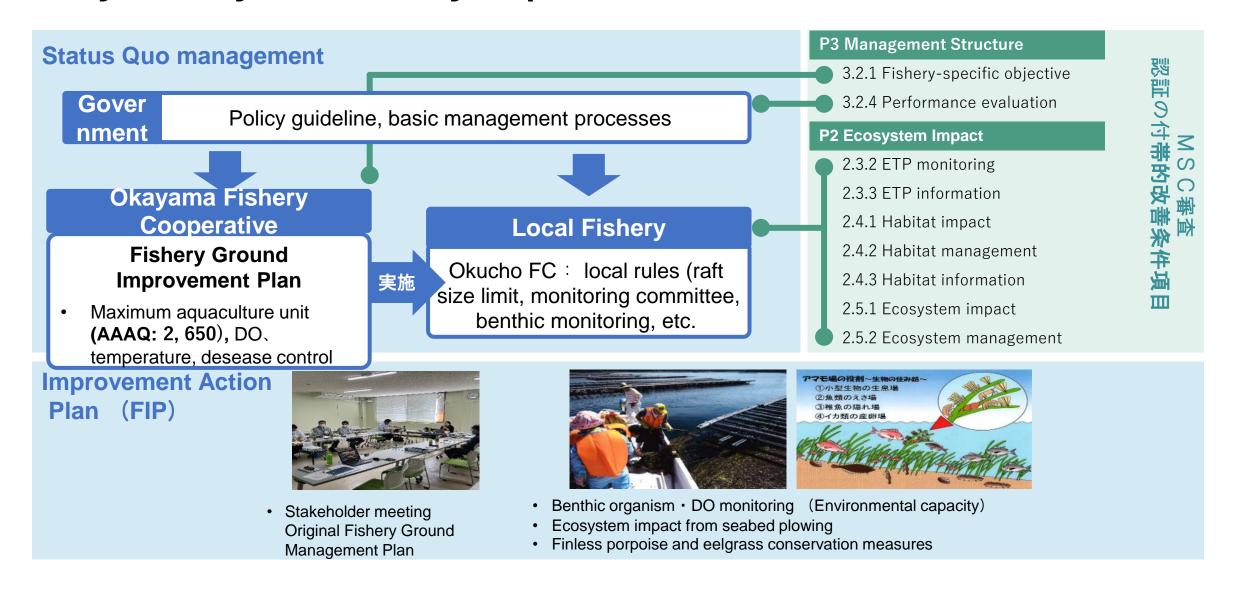
- In Western Australia, the government funded MSC preassessment for all fisheries, revealing deficiencies in the stakeholder consultation processes.
- → Re-created Co-management system from scratch → Government coordinates stakeholders for science-based stock management, with transparent process.
  - ➤ Japanese Co-management needs to be updated, to embrace current science and justice.

## Decision-making processes with transparency and inclusion

**Establishing science-based "Resources Management Agreement"** 

Government **Fishery** Long-term Short-term Research Objective CLOSE benefit Certification Impartial 3<sup>rd</sup> party assessment, coordination based on OPEN **FIP Coordinator** science Socio-economic Incentives **Transdisciplinar**  Diverse ecological and social y Science science **Buyers and** NGOs and local Industries supporting Local perspectives and sustainable seafood **FIP** company social support stakeholders

#### Okayama Oyster Fishery improvements with MSC Certification



(Proposed)

## Improvement Pathway for Japanese fisheries

Learn & start

Small, datapoor, less managed fishery

Data collection

International Collaboration

Model development

Sciencebased coordination

Best practice sharing

**Cost Share** Collaboration

Industry support (financial)

Government Support (policy) **Technology** 

Shared Database

**EBPM** 

Al

Managers Training Goal To 2030

Sustainable Fishery

**Food Security** 

Policy improvement

**Cost** Reduction

**Equity** 

70% Japanese fisheries: Small-Scale and Data Poor

Pathway defined locally, facilitated by skilled coordinators, incentivized by 3<sup>rd</sup> party ecolabel

#### **Summary & Policy recommendation:**

- Updating co-management system is key to promote sound "Resources Management Agreement" necessary for coastal fisheries.
- The lack of budget and skilled staff (and training) to coordinate is currently a significant impediment to implementing the sound co-management.
- Certification gap analysis informs where fisheries need to improve each fishery & generally in Japan.
- Private-sector collaboration using certification scheme works to incentivize policy implementation at fishery scale.