

# Improving sustainability of Filipino tuna fisheries through private incentive mechanisms

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# Overview of the presentation

## 1. Problem statement

- Tuna fishery and private incentive mechanisms
- Why focus on Filipino tuna fishers?

## 2. Objective and research questions of this paper

## 3. Global Value Chain (GVC) Analysis

- What is upgrading?
- The conditions for upgrading

## 4. Methodology

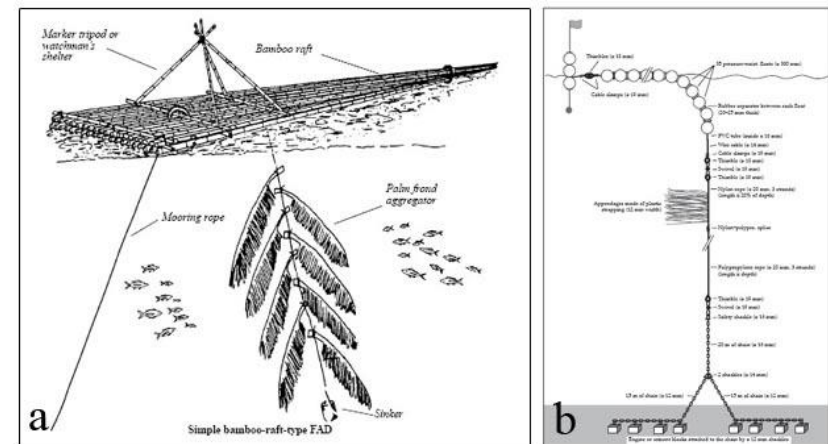
## 5. Results

## 6. Conclusions and recommendations

# Problem Statement

- Tuna fishery

- Unsustainable fishing practices (Illegal Unreported Unregulated fishing, unsustainable fishing methods)
- Decline in fish stocks



# Stock status of tuna species

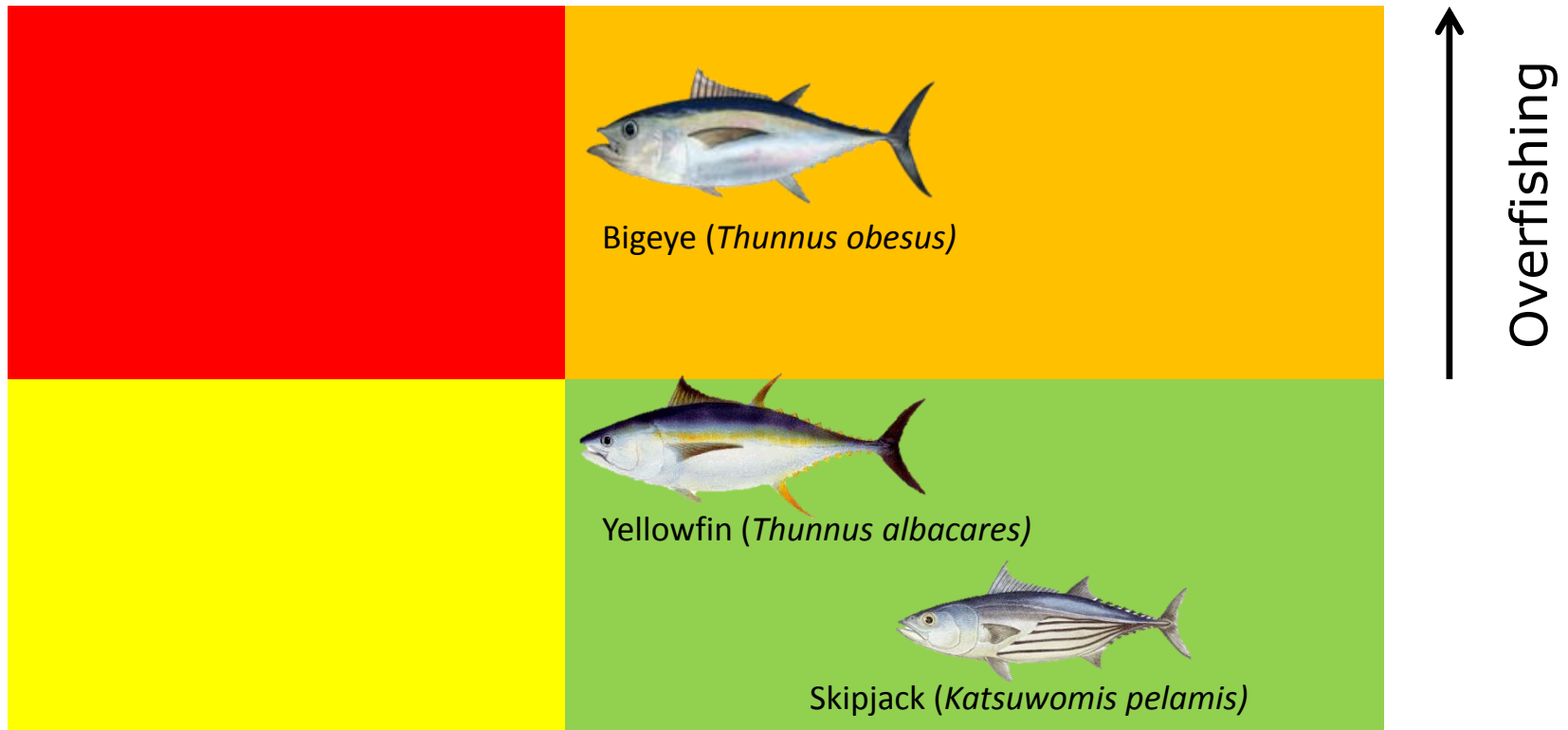


Figure 1. Stock status of yellowfin, bigeye and skipjack tuna using Kobe diagram (SPC, 2012)

# Proliferation of market-based incentive mechanisms



- The failure of regulatory-based approach over fishery leads to a shift to private incentive mechanisms
- Target: changing fishers' fishing practices
- Means: provide economic incentives such as market access or price premiums, improved production efficiency
- Fishery Improvement Project (FIP), Marine Stewardship Council (MSC) certification, International Seafood Sustainability Foundation (ISSF) association



# Why Filipino tuna fishers?

- One of the key players in Western and Central Pacific Ocean (WCPO)
- Continuous build-up of partnerships/alliances between Philippines and PNA countries
- 4<sup>th</sup> major producer in the world



# Main objective and sub-research questions

- To analyse and compare the ways different types of private incentive mechanisms facilitate and influence upgrading of Filipino tuna fishers in the value chains.
  
- Sub-research questions:
  - (1) In what ways do powerful actors in the chain or 'lead firms' use private incentive mechanisms to govern tuna value chains and to determine producers' terms of participation?

# Sub research questions continued...

(2) In what manner does the existing institutional arrangement at the level of the producer where the private incentive mechanisms operate, influence the abilities of fishers to upgrade?

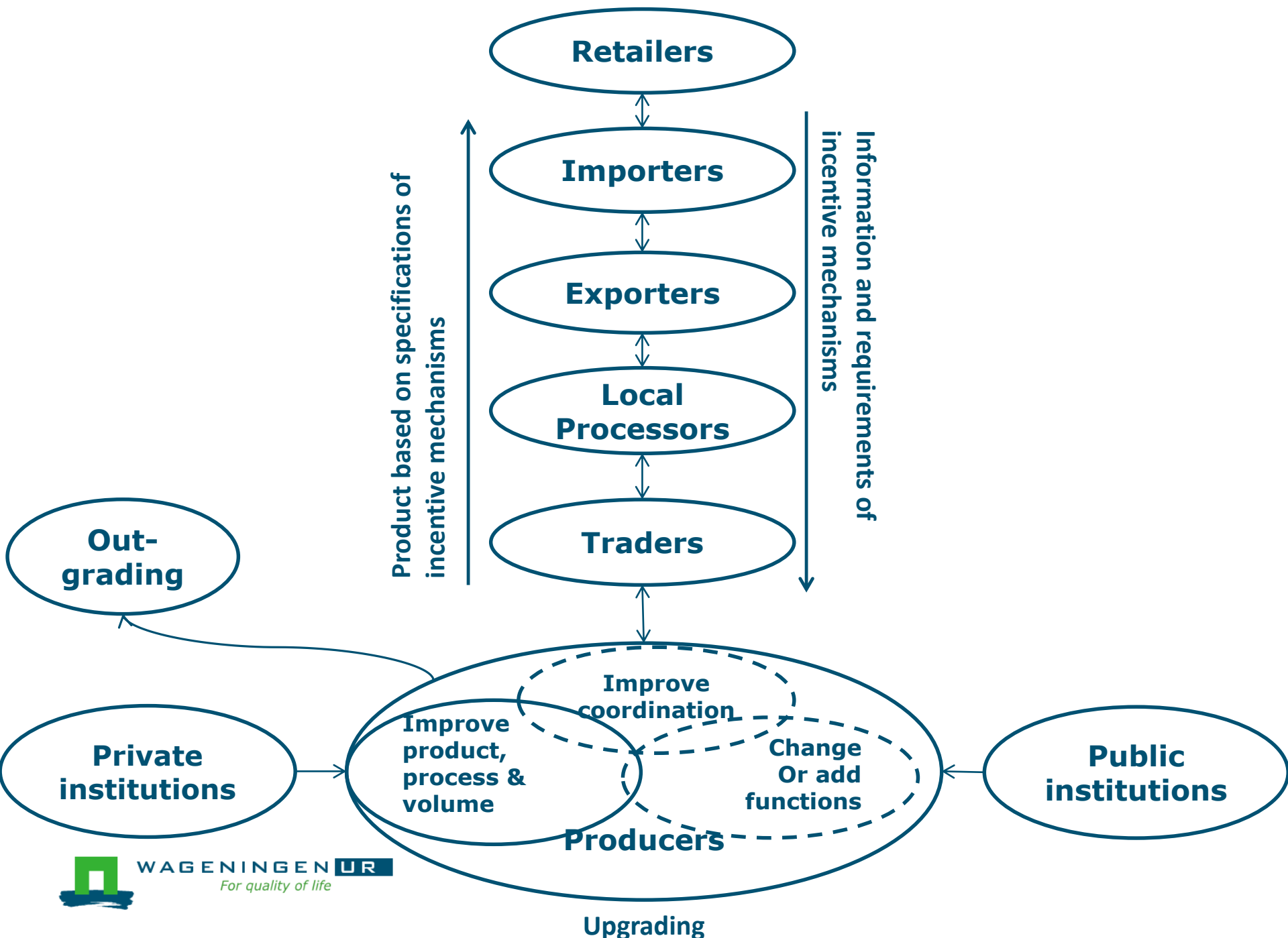
(3) In what ways do the governance of value chain and the institutional set-up at producer level determine fishers' upgrading strategies in each private incentive mechanism?



# Theoretical framework

## Global Value Chain (GVC) Analysis

- **GVC** is method for understanding the participation of firms in an international chain (Gereffi et al. 1994)



# Types of Upgrading

- refers to the process of improving production to 'move up' the chain (Humphrey and Schmitz 2000; Humphrey and Schmitz 2002), while balancing rewards and risk" (Ponte and Ewert 2009)



Kinds of upgrading:

- Improve product, process and volume
- Change or add functions
- Improve coordination ('vertical' and 'horizontal' contractualisation)

# Conditions for Upgrading

- Needs willingness to upgrade, explained by:
  - Capabilities
    - 'what people are able to do and to be' (Sen 1990, Nussbaum 2003).
    - Requires resources (material, relational, institutional)
  - Long-term goals (improvement in livelihoods, sustainable sources of income, minimise risks)



# Methodology

## Data Analysis

- Qualitative Method using multiple case studies
- GVC case study concepts – defined and operationalised:
  1. coordination for vertical dimension
  2. institutional setting and institutional support for horizontal dimension
  3. capabilities as influenced by both horizontal and vertical dimensions)
  4. Upgrading – improvement in producti practices



# Methodology (continued...)

## Data Collection

- Review of scientific and grey literature
- 158 in-depth interviews with tuna fishery stakeholders for 10 months
- Fisheries site visit in Philippines: (Lagonoy Region, Occidental Mindoro, General Santos city, and Navotas Manila) and in Papua New Guinea: (Lae and Port Moresby)
- International industrial meetings



# Results 1: vertical dimension

Chain governance by lead firms:

	<b>FIP</b>	<b>MSC</b>	<b>ISSF</b>
<b>Species traded</b>	<ul style="list-style-type: none"> <li>• Yellowfin</li> </ul>	<ul style="list-style-type: none"> <li>• Skipjack</li> </ul>	<ul style="list-style-type: none"> <li>• Skipjack</li> <li>• Yellowfin</li> </ul>
<b>Lead Firms</b>	<ul style="list-style-type: none"> <li>• European retailers (SeaFresh, Coop, Bell Seafood)</li> </ul>	<ul style="list-style-type: none"> <li>• Pacifical (distributors)</li> </ul>	<ul style="list-style-type: none"> <li>• ISSF member brands and processors</li> </ul>
<b>Coordination instruments</b>	<ul style="list-style-type: none"> <li>• Catch document</li> <li>• Accreditations</li> </ul>	<ul style="list-style-type: none"> <li>• MSC certificate</li> <li>• Chain of Custody (CoC)</li> <li>• B2B arrangement</li> </ul>	<ul style="list-style-type: none"> <li>• Pro-active Vessel Register (PVR)</li> </ul>
<b>Method of transmitting information</b>	<ul style="list-style-type: none"> <li>• Stakeholder workshops</li> <li>• Fisher meetings</li> <li>• Excursions</li> </ul>	<ul style="list-style-type: none"> <li>• Manuals</li> <li>• Business meetings</li> <li>• International conferences</li> <li>• Internet</li> </ul>	<ul style="list-style-type: none"> <li>• Skippers' training</li> <li>• International conferences</li> <li>• Internet</li> </ul>





# Results 1: (vertical) continued...

Fishers' terms of participation in the chain:

	<b>FIP</b>	<b>MSC</b>	<b>ISSF</b>
<b>Fisher-level requirements</b>	<ul style="list-style-type: none"><li>• Catch documentation</li><li>• Hand line fishing</li></ul>	<ul style="list-style-type: none"><li>• Catch documentation</li><li>• Free school fishing</li><li>• Vessel Monitoring System (VMS)</li></ul>	<ul style="list-style-type: none"><li>• Unique Vessel Identifier</li><li>• Sustainable FAD fishing</li></ul>
<b>Other specific product requirements</b>	<ul style="list-style-type: none"><li>• <math>\geq 35</math> kilos tuna</li><li>• Grade A or export quality</li></ul>	<ul style="list-style-type: none"><li>• Separate MSC- and non-MSC fish, Canning grade quality</li></ul>	<ul style="list-style-type: none"><li>• Canning grade quality</li><li>• Size-requirement</li></ul>

# Results 2: horizontal dimension

## 2. Existing institutional arrangements

### 2A. Institutional setting limits producers' capabilities!

	<b>FIP</b>	<b>MSC</b>	<b>ISSF</b>
<b>Public and private institutions involved</b>	<ul style="list-style-type: none"><li>• Local Government Units (LGUs)</li><li>• World-Wildlife Fund for Nature (WWF)-Philippines</li></ul>	<ul style="list-style-type: none"><li>• PNA government</li><li>• National Fisheries Authority in PNG</li></ul>	<ul style="list-style-type: none"><li>• Bureau of Fisheries and Aquatic Resources (BFAR)</li><li>• Western and Central Pacific Fishery Commission (WCPFC)</li></ul>
<b>Institutional setting</b>	<ul style="list-style-type: none"><li>• Casa buying system</li><li>• Fisher registration</li></ul>	<ul style="list-style-type: none"><li>• Sharing system</li><li>• Vessel Day Scheme</li></ul>	<ul style="list-style-type: none"><li>• Sharing system</li><li>• FAD-closure</li><li>• Monitoring, Control and Surveillance (MCS) activities</li></ul>

# Result 2: (horizontal) continued...

Existing institutional supports

2.B. Institutional support improve fishers' capabilities!

<b>Types of institutional supports</b>	<ul style="list-style-type: none"><li>• Trainings on improving fish quality and fishing practices</li><li>• organising fishers</li><li>• seminars on values formation and fishery management</li></ul>		
	<ul style="list-style-type: none"><li>• Observers-on-board programs</li><li>• Vessel Monitoring System (VMS)</li><li>• Electronic catch documentation</li></ul>	<ul style="list-style-type: none"><li>• Skippers training on FAD design</li><li>• observers on board</li></ul>	

# Results: Upgrading of fishers

## ***CASE 1: FIPs***

- LONG-TERM GOALS – to secure long-term income, to improve fishers' livelihoods, to improve fish stocks
- UPGRADING
  - Short-term improvement: 10 out of 43 fishers change the practices. They fish by considering both quality and quantity.

“(‘...when I catch a single 40 kilos tuna, I do the proper killing and handling of tuna, and I immediately return to sell the tuna at higher value’)
  - Other fishers didn't upgrade (fishing based on quantity) due to food security issues, to recover costs of fishing operation, incentive is stocked at local traders
  - Long-term: Forming fishers' association



# Results: Upgrading (continued...)

## ***CASE 2: MSC***

- LONG-TERM GOALS – to have sustainable long-term income, to minimise business risks
- UPGRADING
  - Short-term improvement: catching not only based on volume (quantity) but also based on quality, Use of double net separators to separate MSC- and non-MSC fish
  - Majority didn't comply due to high risks, high costs, unquestionable incentives, there is a premium but the costs is also high
  - Long-term improvement: convert the fishing techniques from FAD- to free-school fishing, joint venture with processors

# Results: Upgrading (continued...)

## ***Case 3: ISSF***

- LONG-TERM GOALS – to sustain long-term income, to minimise business risks, to improve fish stocks
- UPGRADING
  - Short-term improvement: majority maintain their old practice due to high costs of participation, incentive is only for brands and marketers
  - Long-term improvement: only one Filipino fishing company are able to comply with ISSF coordination instrument
  - Joint venture with ISSF processors

# Conclusions

- The vertical and horizontal actors influence the capabilities of fishers, which ultimately determine fishers' upgrading strategies
- The private incentive mechanisms deliver different upgrading strategies such as:
  - a. short-term upgrading: improvement in product, process, and volume
  - b. long-term upgrading: 'horizontal contractualisation' (forming fisher association for FIPs)
- 'vertical contractualisation' (joint ventures of fishing companies and processors for MSC)



# Conclusions (continued...)

- The incentive offered by private based incentive mechanisms still fails to reach a lot of fishers.

# Future work

## Quantitative analysis

- Short term decision making of fishers
- Long term decision making of fishers
- Design of new or improved incentive mechanisms based on ex ante modelling

# MSC Fieldwork photos





# FIP Fieldwork photos



WAGENINGENUR  
For quality of life



# ISSF Fieldwork photos



# Thank you!

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Or visit us at:  
[www.besttuna.org](http://www.besttuna.org)

