

# **A Value Chain Analysis of Fish Products from Pantar Island, Eastern Indonesia**

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# Background

- Fish products are critical to livelihoods of rural and remote coastal dwelling people in Pantar island and neighbouring islands
- They contribute to food security and source of cash income
- Fish trade at local level is one way to improve the value of fish

# Objectives

- To understand how the trade in key fish species operates
- To identify interventions to enhance position and participation of local communities along the value chain as one way to improve their livelihoods (in terms of income and food)

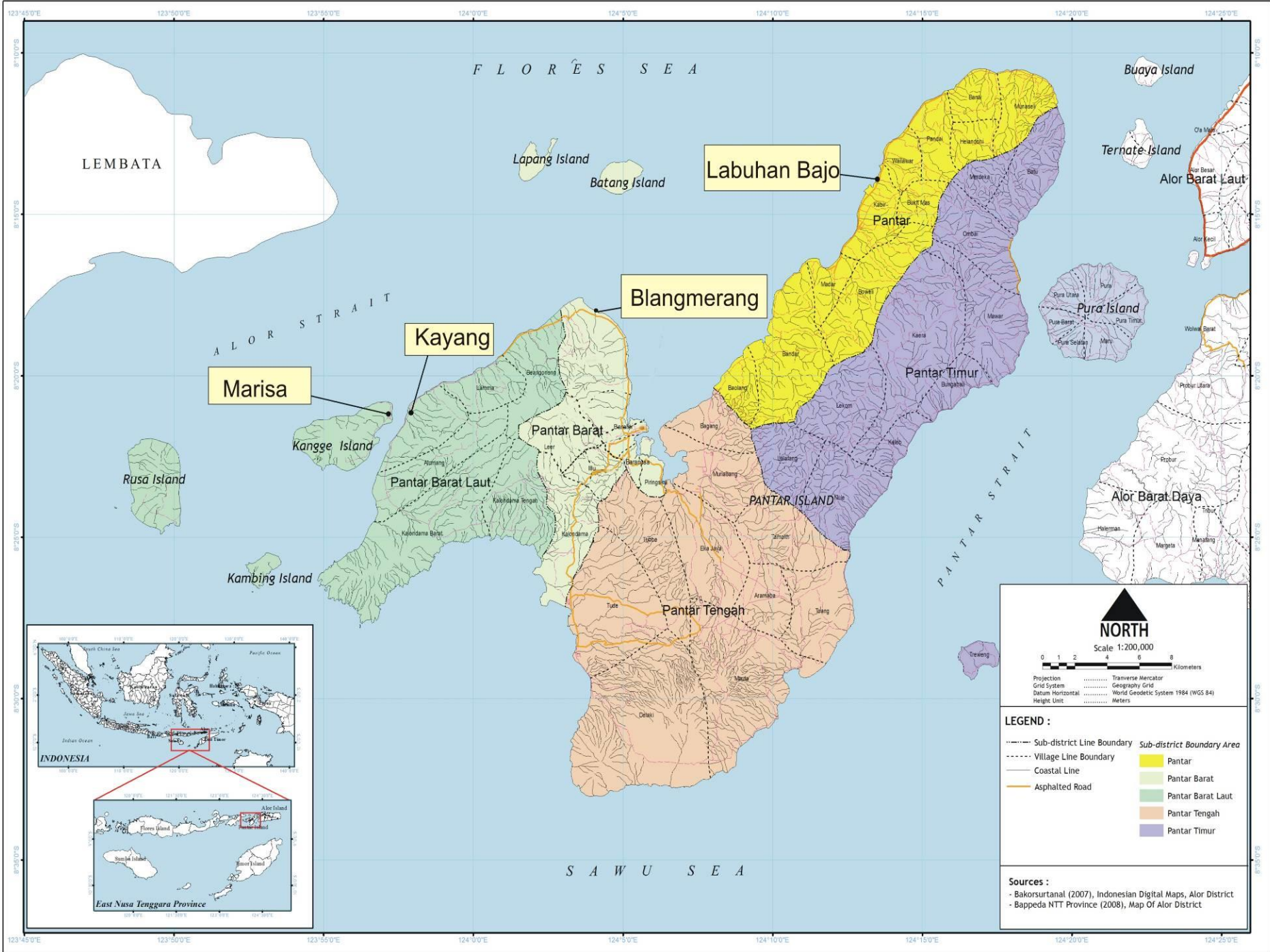
# Key issues in VCA

- The core processes of a VCA (e.g. input, production, collection, intermediary trade, wholesale and retail marketing, and consumption)
- Actors who provide services and goods at each point of the value chain.
- The relationships and power differential among actors
- How price is determined

# Method

- Participatory Rural Appraisal (PRA)
- Focus Group Discussion (FGD)
- Interviews with key informants
- Observation

**Duration: June 2008- July 2010**

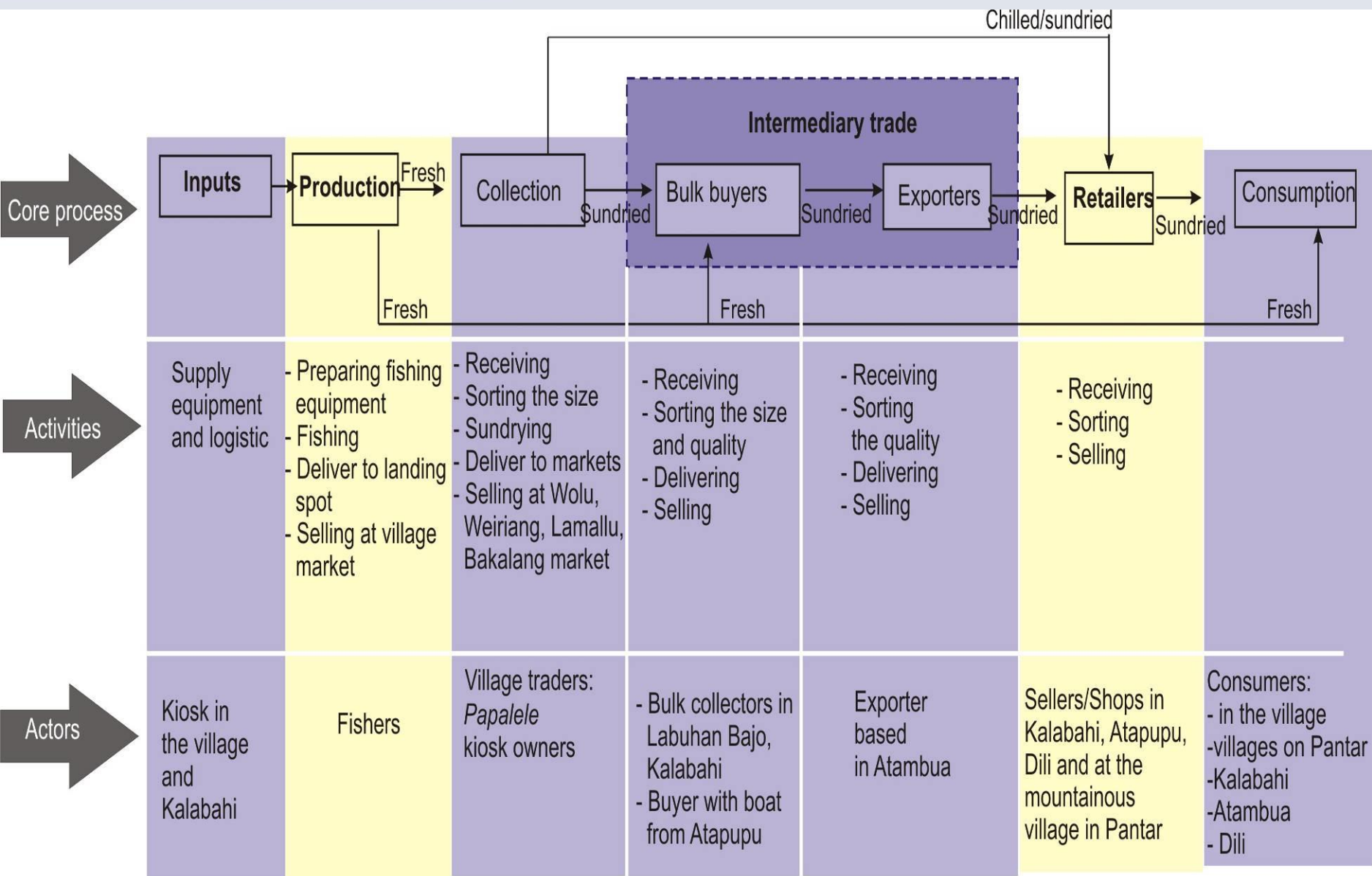




# Main fish species traded

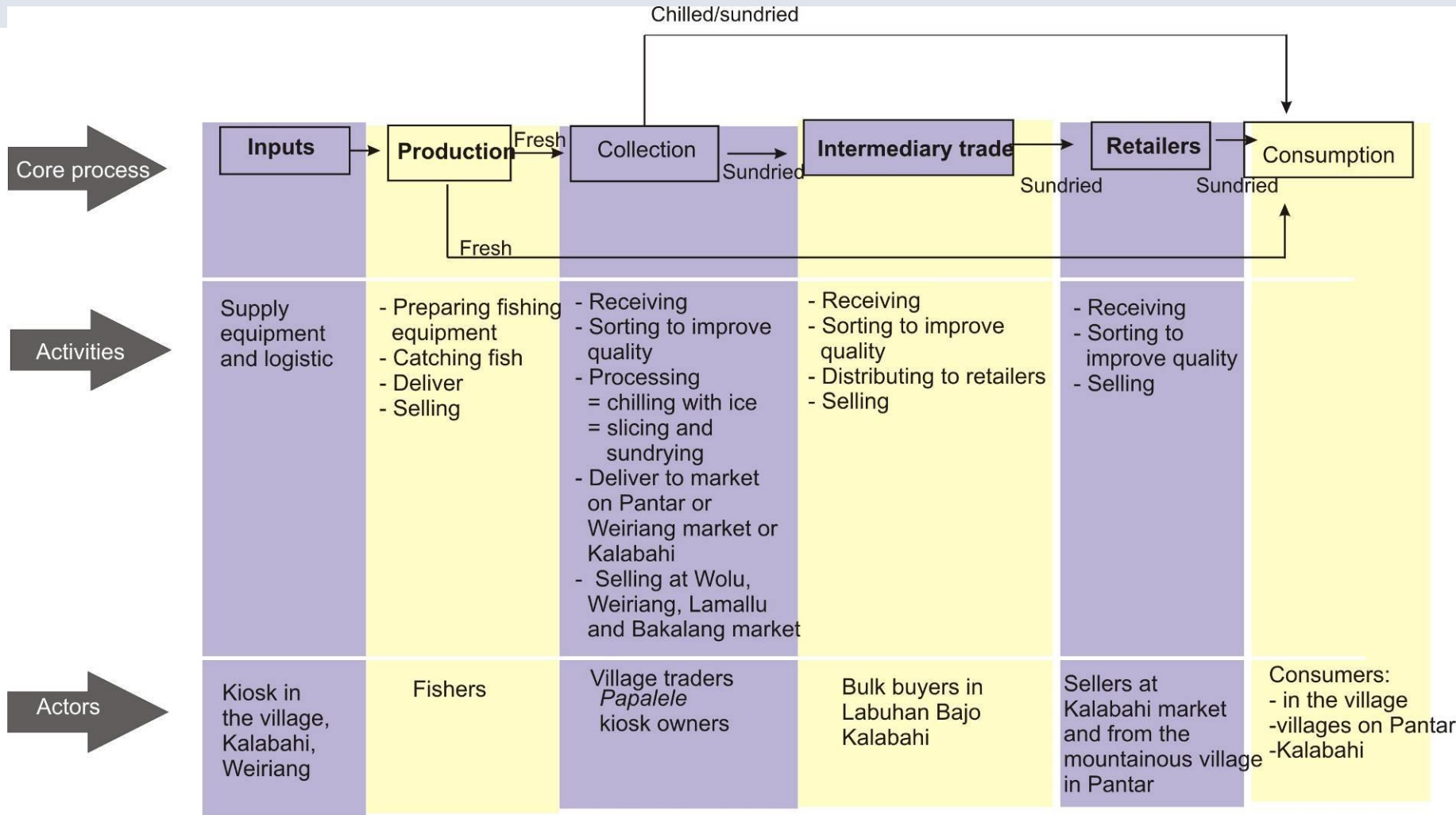


# Halfbeak value chain

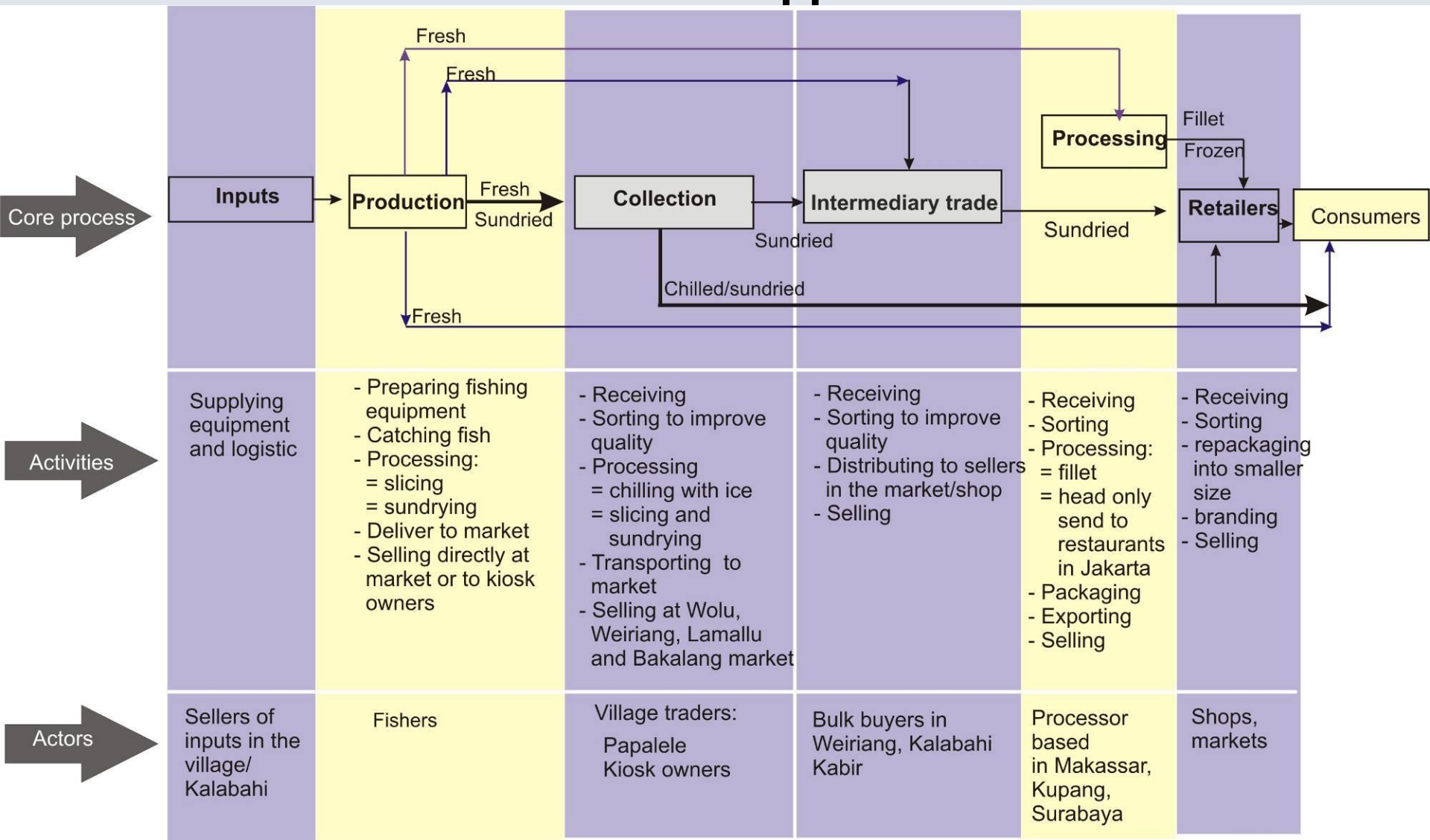




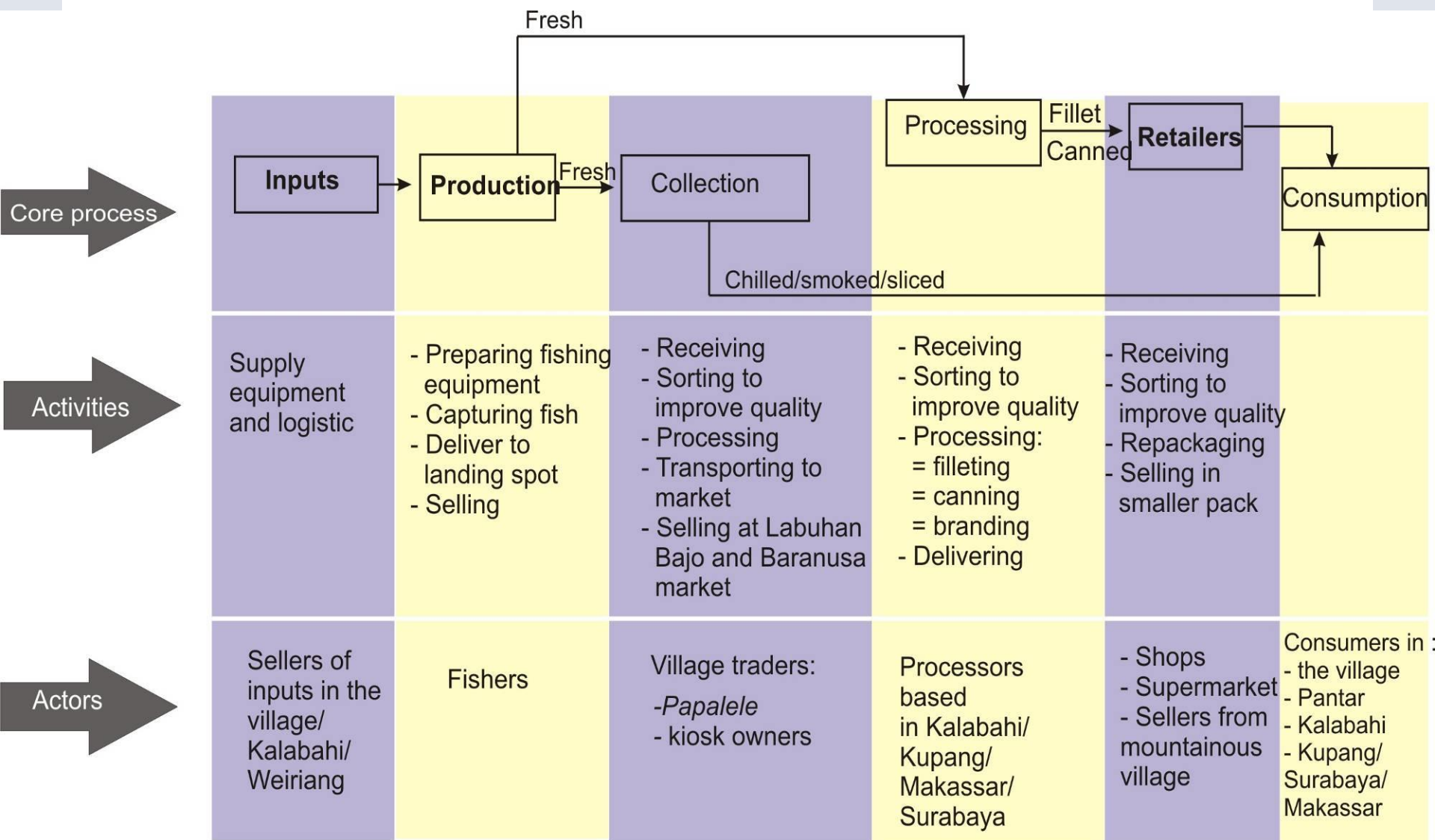
# Round scad



# Coral trout, parrot fish and red snapper value chain

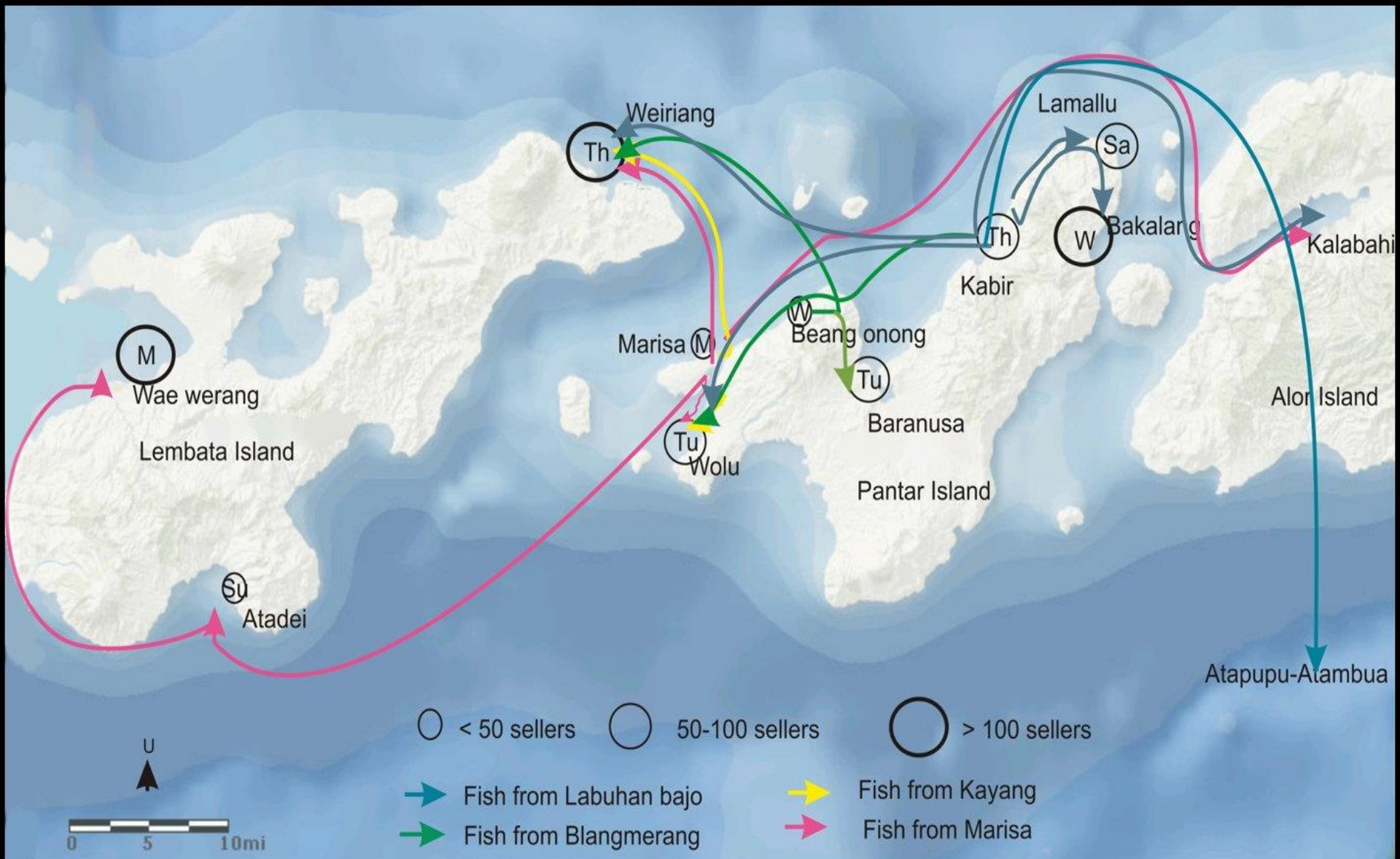


# Eastern little tuna, skipjack tuna and trevally





# Locations of markets and route of fish products in and out of Pantar Island



# The Key Actors

- Input providers
- The fishers
- village traders (*Papalele*)
- bulk buyers
- processors
- Retailer
- Consumers



# *Papalele*



# Relationship among actors

- Business relationships
- Trust and personal connections

# Price setting

- **Barter**
- **Sale for cash**
  - the volume of the fish captured and the sizes of the fresh fish
  - quality sun-dried fish (i.e., based on moisture content).



## Average selling price for fresh fish at village level in Pantar in 2009 (fishers and *papalele*)

<b>Fresh fish</b>	<b>Fishers sell to <i>papalele</i></b>	<b><i>Papalele</i> sell to end consumers or bulk collectors</b>
Halfbeaks in Labuhan Bajo and Baranusa (low catch of fishing season)	Rp5000/10 fishes (A\$0.625)	Rp10,000/10 fish (A\$1.25)
Halfbeaks in Labuhan Bajo (west monsoon)	Rp1000/6 fish (A\$0.125)	Rp5000/12 fish (A\$0.625)
Round scad in Marisa Village 25 cm in length	Rp10,000/15 fish (A\$1.25)	-
Round scad in Labuhan Bajo, Marisa and Kayang Villages	Rp1000/4 fish (A\$ 0.125)	Rp5000/8 fish (A\$0.625)
Coral trout in Labuhan Bajo 35 cm at length	Rp10,000/fish (A\$2.50)	Rp15,000-20,000/fish (A\$1.875-2.50)

## Cost and margin of a trader selling halfbeaks in Kalabahi and Atapupu in 2009

	Bh sold to buyer in Atapupu		Bh sold to buyer in Kalabahi	
	Indonesian Rupiah (Rp)	A\$	Indonesian Rupiah (Rp)	A\$
Bh purchased at this cost: 1600 kg	16,000,000 (@ 10,000/kg)	2,000 (@ 1.25)	16,000,000 (@ 10,000/kg)	2,000 (@ 1.25)
Bh sold to buyer at this price:	27,200,000 (@ 17,000/kg)	3,400 (@ A\$2.125)	11,200,000 (@ 7000/kg)	140 (0.87)
Marketing cost:	1,500,000	187.50	500,000	62.50
Rental boat:	500,000	62.50	250,000	31.25
Petrol:	300,000	37.50	0	0
Payment for goods	120,000	15	0	0
(@Rp50/kg):	200,000	25	200,000	25
Seaport fee:	100,000	12.50	100,000	12.5
Truck:	2,720,000	340	1,050,000	131.25
Labour:				
Total:				
Bh's income	8,480,000	1,060	(5,850,000)	(731.25)



# Price differences for fresh fish species purchased by traders from Kupang/Makassar and village *papalele*

	Bulk buyer from Kupang/Makassar*		<i>Papalele**</i>	
	(Rp)	A\$	(Rp)	A\$
One tuna at 30 kg	180,000 (@ 6000-9000 per kg)	22.50 (@0.75-1.125 per kg)	60,000/fish	7.50/fish
Grouper at 60 cm length	60,000 (@ 12,000/kg)	7.50 (@ 1.25/kg)	40,000/fish	5.00/fish
Other grouper at 20 cm length	8,000/kg	1.00/kg	1,600/fish	0.20/fish
Coral trout	8,000/kg	1.00/kg	5,000/fish	0.60/fish

# Results

- The value chains of the fish production were diverse and complex, with a number of village, island and regional and international linkages.
- Fish (fresh and sun-dried) were bartered.
- Sold as fresh, chilled, salted, smoked or sun-dried, and were sold whole or filleted.
- Sold for local consumption in Pantar and sold for local consumption in inter-regional island markets.

# Main FISH species fished and traded

	<b>Sold in village</b>	<b>Sold outside of village but on island</b>	<b>Sold on another island</b>	<b>Sold internationally</b>
<b>Halfbeaks</b>	<b>Fresh, chilled</b>	<b>Chilled, sun-dried</b>	<b>Sun-dried</b>	<b>Sun-dried</b>
<b>Round scad</b>	<b>Fresh, chilled</b>	<b>Chilled, sun-dried</b>	<b>Sun-dried</b>	<b>-</b>
<b>Coral trout</b>	<b>Fresh</b>	<b>Chilled, sun-dried</b>	<b>Chilled, sun-dried</b>	<b>Frozen</b>
<b>Parrot fish</b>	<b>Fresh</b>	<b>Chilled, sun-dried</b>	<b>Chilled, sun-dried</b>	<b>Frozen</b>
<b>Red snapper</b>	<b>Fresh</b>	<b>Chilled, sun-dried</b>	<b>Chilled, sun-dried</b>	<b>Frozen</b>
<b>Eastern little tuna</b>	<b>Fresh smoked</b>	<b>Chilled</b>	<b>Frozen, canned</b>	<b>Canned</b>
<b>Skipjack tuna</b>	<b>Fresh, smoked</b>	<b>Chilled</b>	<b>Frozen, canned</b>	<b>Canned</b>
<b>Trevally</b>	<b>Fresh, smoked</b>	<b>Chilled</b>	<b>Frozen, canned</b>	<b>Canned</b>

# Results

- Three main products traded:
  - Fresh or iced fish
  - Smoked fish
  - Sun dried fish



# Opportunities

- The integrated chain of products from Pantar to the international market shows the potential for producers to capture higher value
- However, bulk buying traders who have links with national and international markets are also a threat to the natural assets.
- this type of trading was not favoured by *papalele*, due to the decreased number of fish landings in the actual village and subsequent impact on the *papalele* earnings
- affect the availability of local fish and consumption, and thus food security, as fish were an affordable source of protein in Pantar



# Risk faced by actors in each chain

- the fishers : poor bargaining power to get better prices and reduced stocks.
- *Papalele*: fish decaying due to the limited availability of ice and salt and poor transportation from land sites to local markets.
- Limited access to credit for new initiatives or product expansions

## Constraints expressed by fishers and village traders in four villages

Stage in the value chain	Labuhan Bajo	Blangmerang	Kayang	Marisa
Inputs	No concern	No concern	No concern	No concern
Production	<ul style="list-style-type: none"> <li>- the catch is unpredictable</li> <li>- FAD construction is not strong to survive from current and wave</li> <li>- fishing business is not favoured for bank loans</li> </ul>	<ul style="list-style-type: none"> <li>- only one mid-water mini trawl to catch pelagic fish</li> <li>- the FAD is not strong</li> <li>- fishing business is not favoured for bank loans</li> </ul>	No concern	No concern
Collection: By village traders ( <i>papalele</i> )	<ul style="list-style-type: none"> <li>- poor road condition to Bakalang market</li> <li>- scarcity and high price of ice</li> <li>- poor storage to carry the chilled fish to the market</li> <li>- during rainy season, fish are not dried properly</li> <li>- lack of credit to purchase more fish</li> </ul>	<ul style="list-style-type: none"> <li>- poor road condition to markets?</li> <li>- scarcity and high price of ice</li> <li>- poor storage to carry the chilled fish to the market</li> <li>- during rainy season, fish are not dried properly</li> <li>- lack of credit to purchase more fish</li> </ul>	<ul style="list-style-type: none"> <li>- poor road condition to Wolu market</li> <li>- lack of ice</li> <li>- lack of salt availability</li> <li>- during rainy season, fish are not dried properly</li> <li>- lack of credit to purchase more fish</li> </ul>	<ul style="list-style-type: none"> <li>- poor road condition to Wolu market</li> <li>- lack of ice</li> <li>- during rainy season, fish are not dried properly</li> <li>- lack of credit to purchase more fish</li> </ul>

## Potential strategies for upgrading the product

- Methods;
- Other interventions:
  - Resource management
  - A reliable supply of ice and salt
  - strengthening the capacity in a group

# Conclusions

- Pantar was strongly linked with the macro-economy in the region
- Actors with different roles were involved at every level of the value chains
- Addressing the constraints and upgrading the products are key in strengthening the participation of the communities along the chain.

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# Thank you

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