

# **Seaweed Value Chain: Case Study in Pantar Island, Eastern Indonesia**

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# Background

- Indonesia is the largest producer of raw seaweed in the world
- 80% of Indonesia's seaweed production is for export
- Relative easy form of aquaculture to be developed in terms of skills required, low investment
- Still problems in increasing local seaweed production and upgrading the value of seaweed

# Objectives

- To investigate the role of Pantarese communities in the seaweed value chain
- To identify constraints in the development of seaweed industry in Pantar
- Identify ways to improve the participation of local communities in the value chain to improve livelihoods

# The discussion in VCA

- The core processes of a VCA (e.g. input, production, collection, intermediary trade, wholesale and retail marketing, and consumption)
- The actors
- Price and relative benefits
- Ways to improve participation



# Method

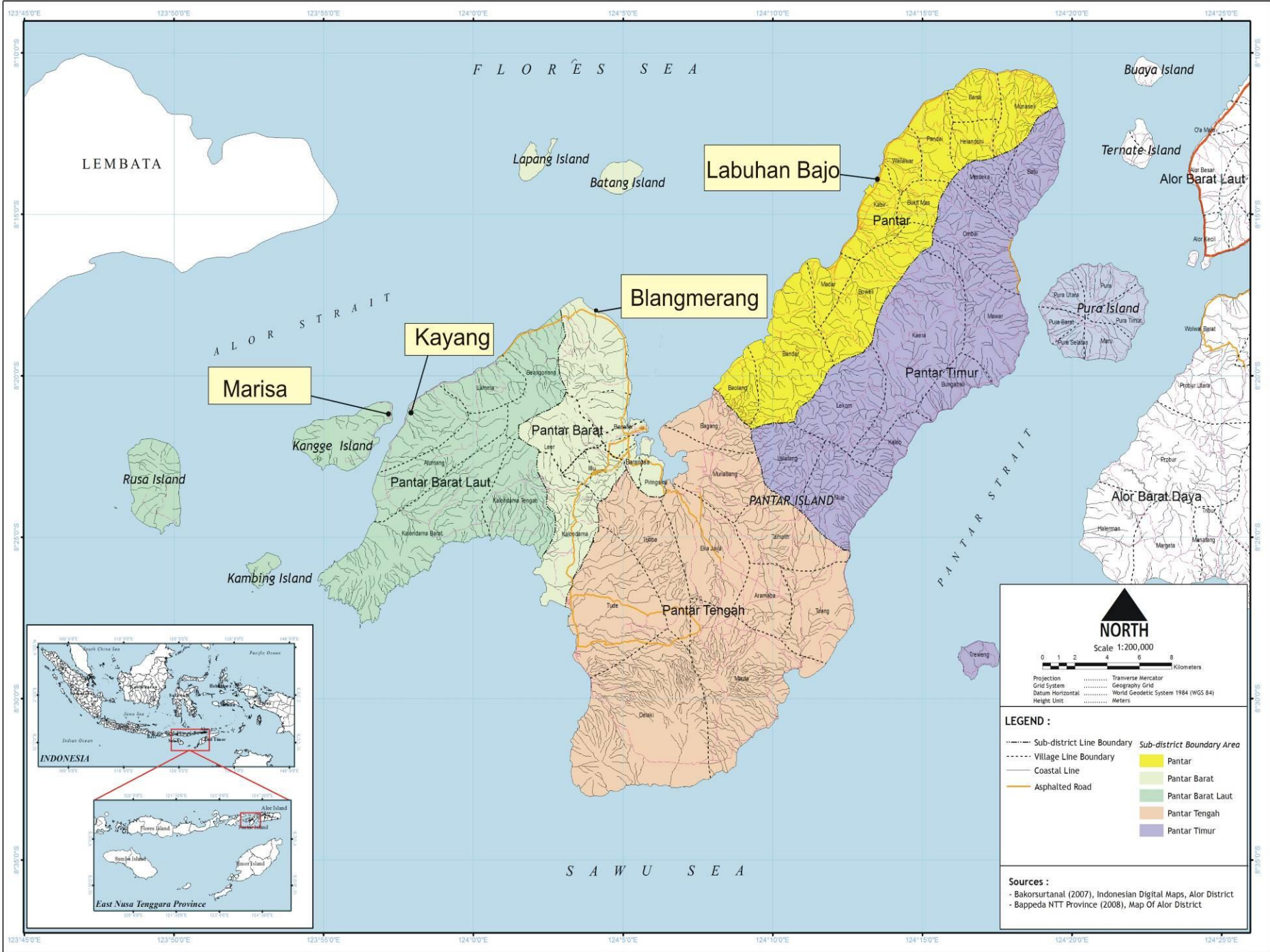
- Participatory Rural Appraisal (PRA)
- Focus Group Discussion (FGD)
- Interviews with key informants
- Observation

Period of data collection:

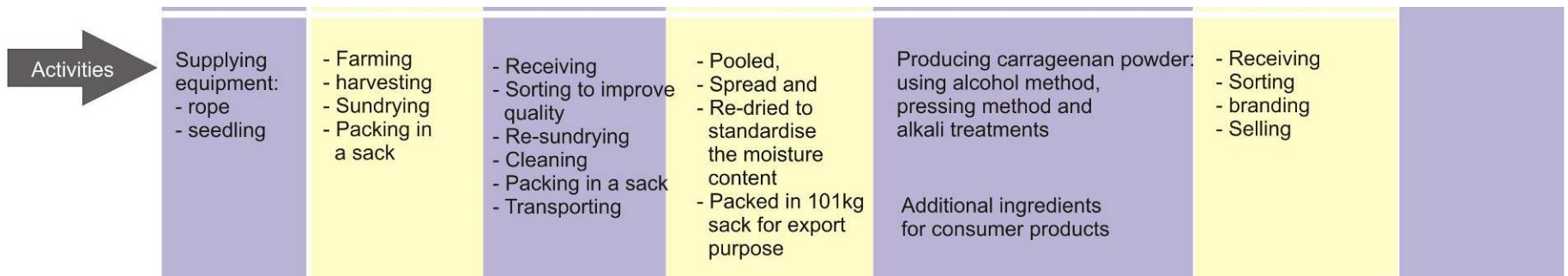
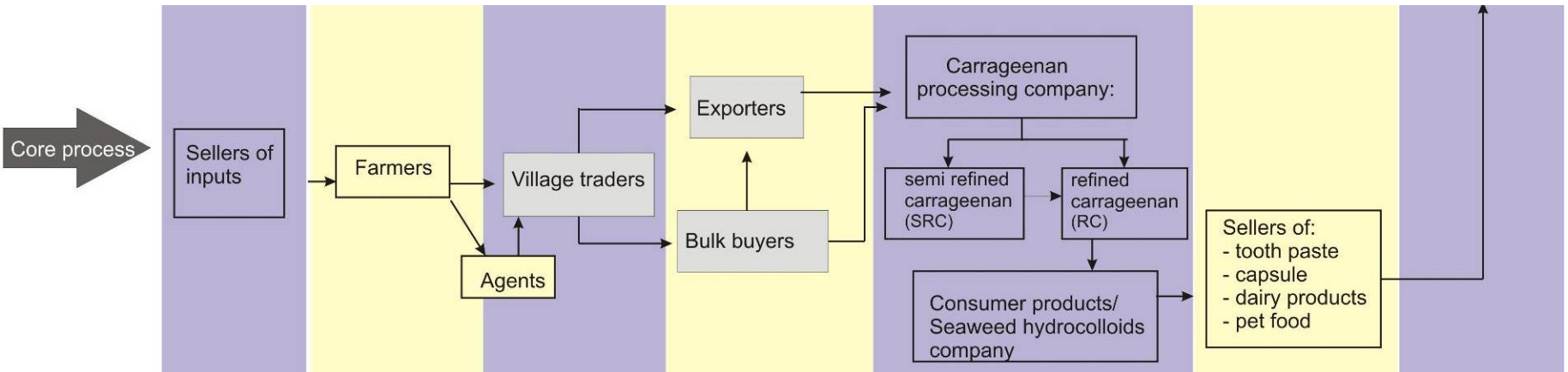
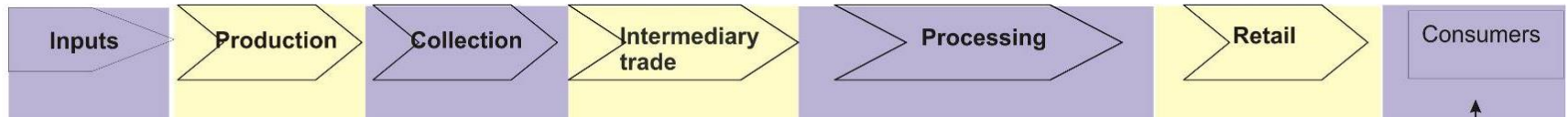
- June and August 2008,
- November 2009 to January 2010,
- June and September 2010.







# Value chain of seaweed



# The activities

## Producers



## Collectors



## Traders



**Exporter**



Women diving to  
collect seaweed  
dislodged from ropes

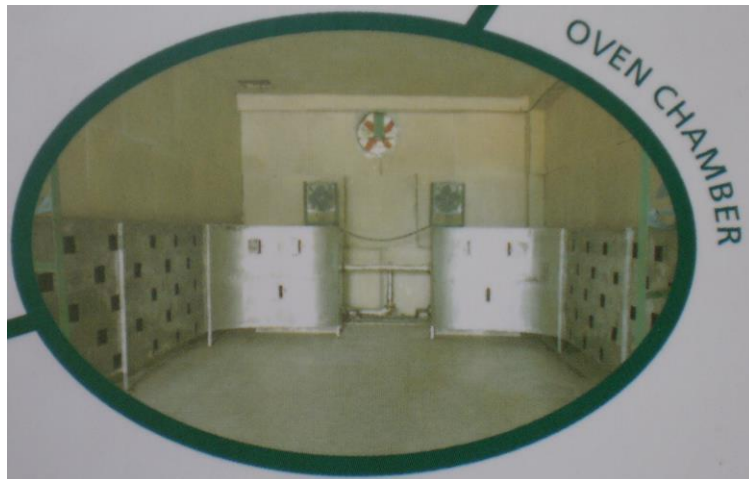
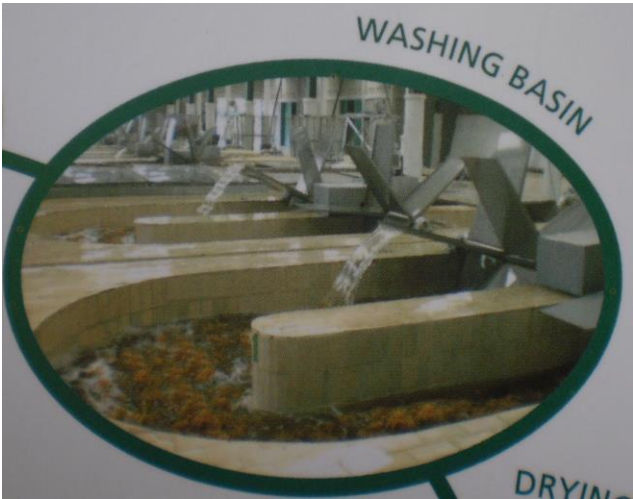


# Exporter





# Processing company



**Processing company**



**Utilities**

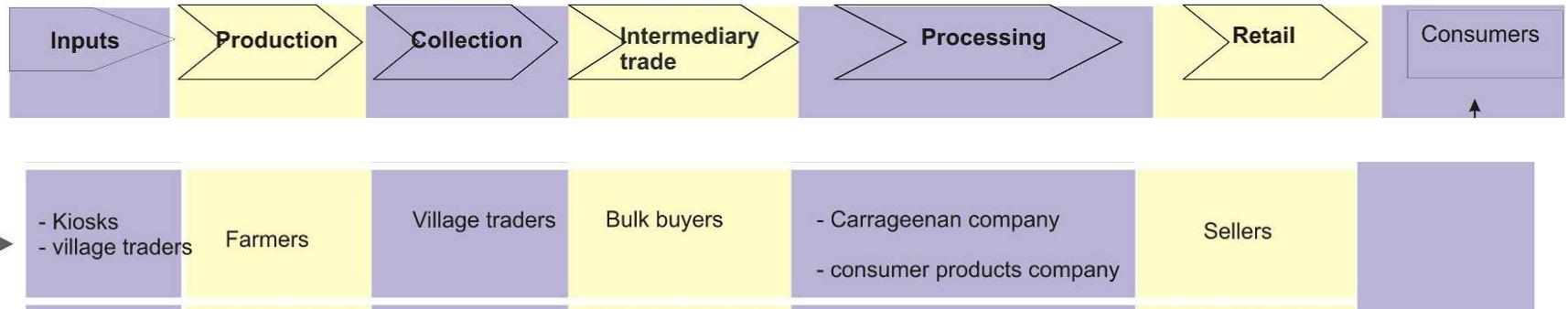


**Retailers**



**Consumers**

# Key actors

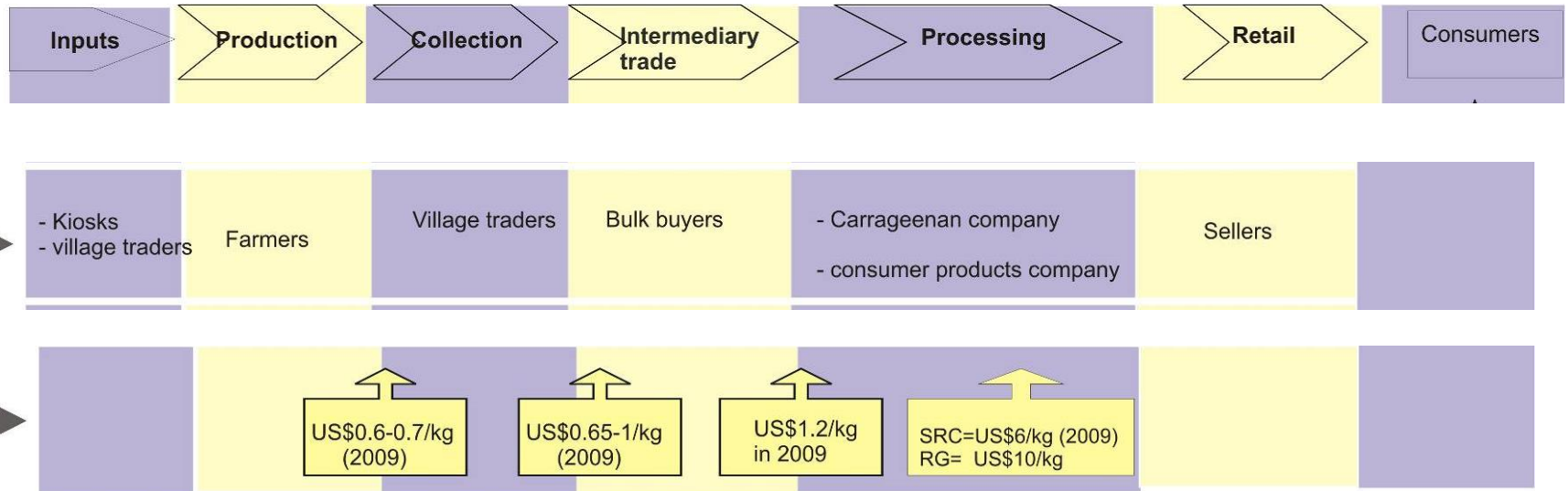




# Relationship among actors

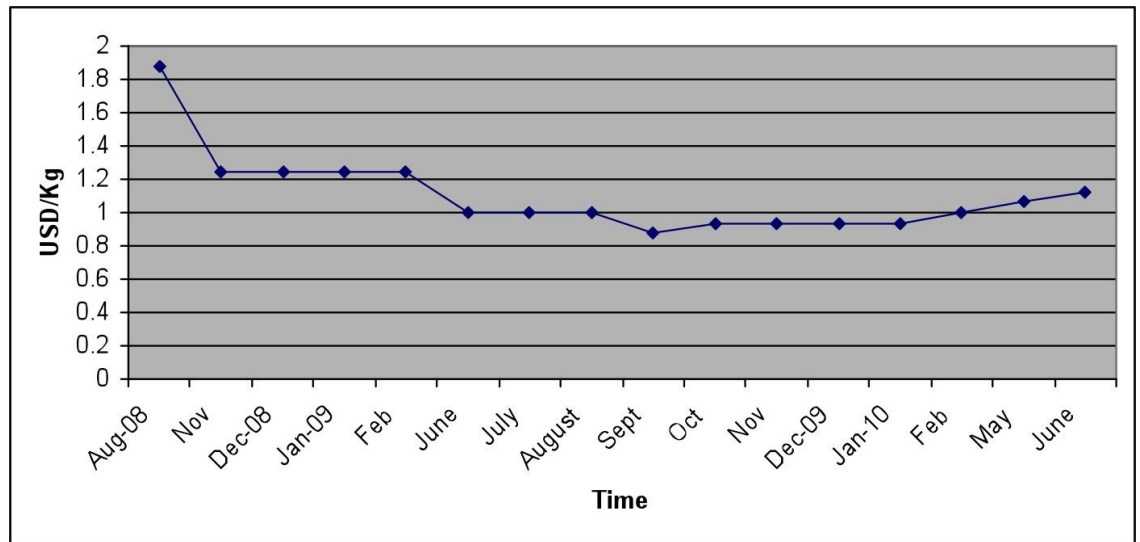
- business relationships
- personal connections
- Village traders play key role

# Price



# Price setting

- The price is set by processors in China and Philippines
- Collectors in Pantar set the price based on communication with traders and exporters



Seaweed price at farmer level

# Benefits

- Producers gained a higher benefit per kilogram than the village trader, bulk buyer or exporter
- However, as the quantity traded by farmers was smaller than the quantity traded by the bulk buyer or exporter, the total benefit received by the seaweed farmers was smaller than for the other actors.

## 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	Hard to find	- hard to find - lack of skills to identify the location	Hard to find	- lack of skills to identify the location
Village trader	- needs further processing for better quality - lack of information about demand required by buyer - low and irregular production for transporting to other places (not economically viable to transport)	- irregular and low production (not economically viable to transport) - needs further processing for better quality	- low quality	- low quality



## Potential strategies for upgrading the product

- Improve the quality:
  - harvested in 45 days to get a better gel strength
  - a moisture content level of over 35%
  - Improve method in farming and post harvesting
  - 3% purity
- Add value
  - produce food and other products
  - process seaweed carrageenan  
(carefully study about other inputs)
- Other interventions:
  - strengthening the capacity in a group

# Better method of farming



# Add value (1)



# Add value (2)

## Seaweed body creams, spa scrubs



Seaweed Body Cream



Bee wax as ingredient



Seaweed Scrub



Seaweed Massage oils





# Conclusions

- The seaweed value chain was linked to and influenced by the international market.
- The value chain of the seaweed production was complex at the collection and intermediary trade stages as it involved many actors.
- Village traders played a key role in this value chain.



Thank you

