



Food and Agriculture
Organization of the
United Nations



Cefas

VIRTUAL REGIONAL WORKSHOP ON BIVALVE MOLLUSCS SANITATION

9, 10, 11 December 2020

Indonesia

Ministry of Marine Affairs and Fisheries

Helwijaya Marpaung

Indonesia Fisheries Potential

Facts and Figures

Large of Indonesian Water.....	6.4 million km ²
Number of islands.....	17,504
Long coastline.....	108,000 km
Capture Fisheries Production (2019)*	7.5 million tons
Aquaculture Fisheries Production (2019)**	16.3 million tons
Fisheries Export Value (2019)*	4.94 billion USD
Fisheries Import Value (2019)*	477 million USD

Note: * Preliminary figure

** Preliminary figure: including seaweed production

Source: MMAF

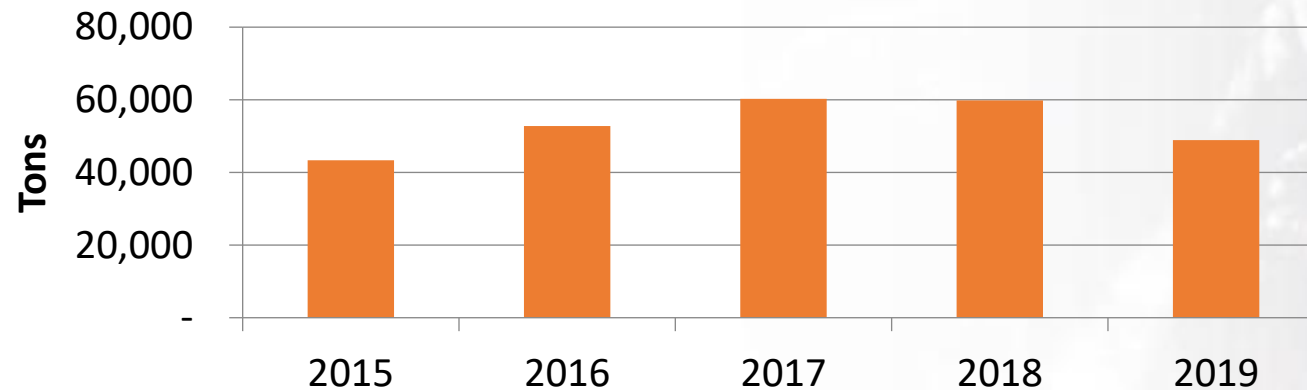


Production of Bivalve Molluscs

- **Species produced:**

- Baby Clam (*Meretrix meretrix*)
- Green Mussel (*Perna viridis*)
- Bamboo clam (*Ensis leei*)
- Corbicula Javanica Mousson*
- Cockles (*Anadara granosa* and *Anadara antiquata*)
- Hiatula chinensis*
- Scallops

- **The second biggest marine cultured commodity after seaweed**



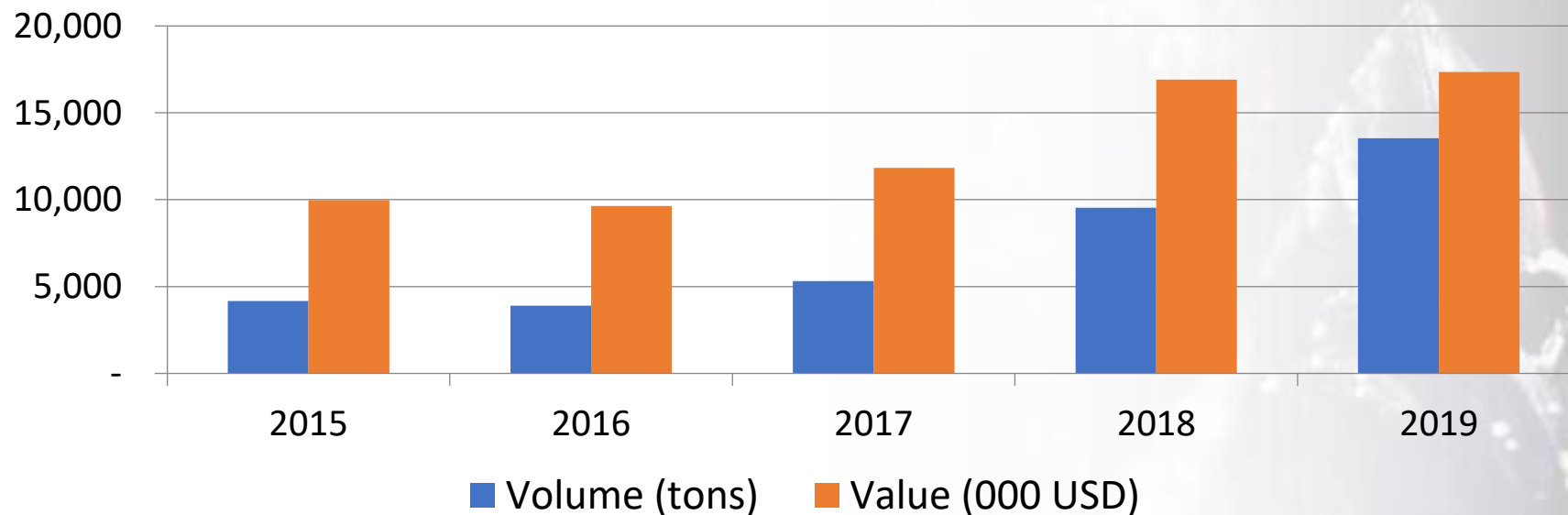
Source: MMAF, 2020

- **Marine culture locations: concentrated in Sumatera and Java islands**



Market of Bivalve Molluscs

- Majority of the production are for domestic consumption
- Bivalve molluscs export: approximately 27.66% of the total production



Source: BPS-Statistics Indonesia 2020, processed by MMAF

- Main export destinations: Malaysia, Thailand, United States, etc.

Competent Authority on Bivalve Molluscs Monitoring

- Competent Authority: **Fish Quarantine and Inspection Agency, Ministry of Marine Affairs and Fisheries (FQIA)**
- Implementing Agency: **Technical Implementing Units under FQIA**
- Monitoring activity:
 1. Bivalve molluscs
 - a. **Microbiology: *E. coli* and *Salmonella***
 - b. **Heavy metals: Hg, Pb, Cd**
 - c. **Marine biotoxin: Ciguatoxin, Azapiracid, Diarrhetic Shellfish Poisoning (DSP), Paralytic Shellfish Poisoning (PSP) and Amnesic Shellfish Poisoning (ASP)**
 2. **Water quality: temperature, salinity, pH, alkalinity, nitrates, sulfites, phosphates and plankton**

Official Laboratories

No	Province	Name of Laboratories	Laboratory Testing		
			Microbiology	Chemistry	Organoleptic
1	North Sumatera	BKIPM Medan I	√	√	-
		BKIPM Medan II	√	√	√
		BKIPM Tanjung Balai Asahan	√	-	-
2	DKI Jakarta	BKIPM Jakarta I	√	√	-
		Buski PM Jakarta Timur (lab reference)	√	√	√
3	Banten	BKIPM Merak	√	-	-
		LP2IL Serang	√	√	-
4	Central Java	BKIPM Semarang	√	√	√
5	East Java	BKIPM Surabaya II	√	√	-
6	North Kalimantan	BKIPM Tarakan	√	-	-
		BKIPM Nunukan	√	-	-

Source: MMAF, 2020

Food Poisoning Cases

- **Consumption of Shellfish *Meretrix meretrix*** was also reported to causing death in Makassar, South Sulawesi Province (1987) and Sebatik Islands, East Kalimantan Province (1988)
- **Death after consumption of 'bia manis' (*Hiatula chinensis*)** was reported in Ambon Province (July 1994). Sample taken shows availability of *Pyrodinium bahamense* var. *compressum* (Pbc)
- **30 people hospitalized** after consuming clams and fish in Teluk Lasongko, Bau-Bau - Sulawesi (June – September 2010), and another case in Teluk Lampung (July 2010)
- **32 people hospitalized** after consuming green mussels in Cirebon (December 2016) due to paralytic shellfish poisoning (PSP), and plankton found were *Pyrodinium bahamense*, *Pseudonitzschia* sp and *Prorocentrum*



Thank You