

# TRENDS AND UPDATES ON THE SAFETY OF PHILIPPINE AQUACULTURE PRODUCTS



**CONSUELO C. BALTAZAR**  
OIC, Fisheries Post Harvest Division  
Bureau of Fisheries and Aquatic Resources  
PCA Bldg. Annex, Diliman,  
Quezon City, Philippines  
(454-1083) ccb\_aspcu@yahoo.com

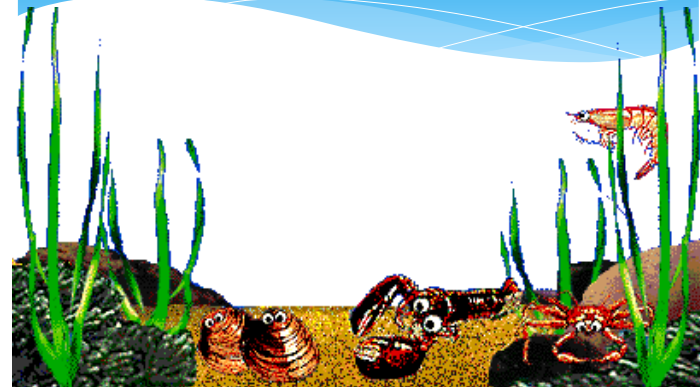
Philippine Food Safety Conference  
October 27, 2015  
Crowne Plaza Hotel

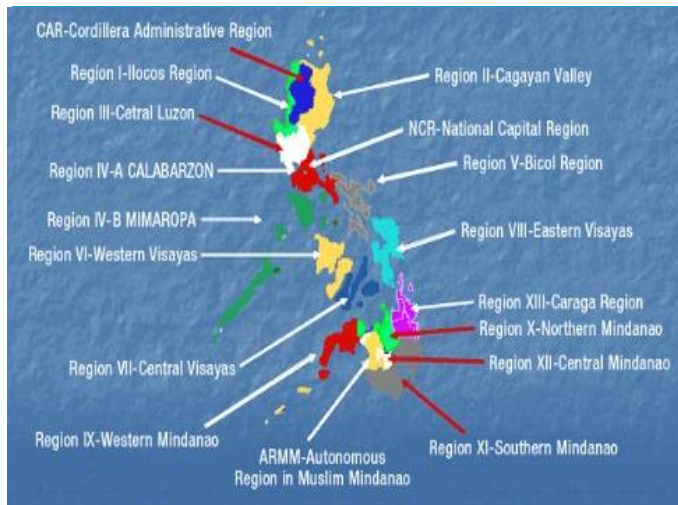
## OUTLINE

- I. Introduction
- II. Legal Framework
- III. BFAR Food Safety and Quality Assurance Program for Aquaculture Products
- IV. Food Safety Issues and Product Standards

- V. Product Testing and Laboratory Support Services
- VI. Certification of Aquafarms and Processing Establishments
- VII. Philippine Aquaculture Product Forms
- VIII. Traceability
- IX. Sanctions on Non-conformances

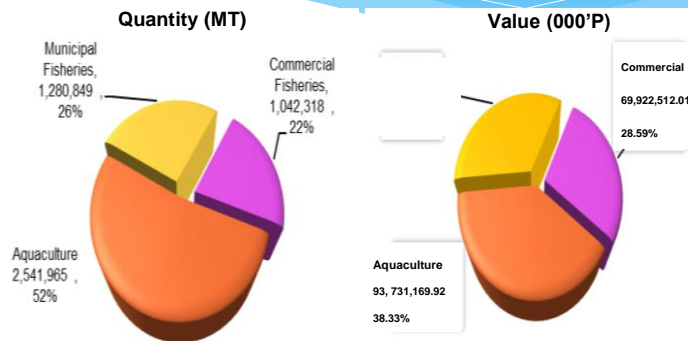
## I. Introduction





Total fish production		
	2012	2013
VOLUME (MT)	4, 865, 132. 30 MT	4, 705, 413.30 MT
VALUE ('000 P)	P 237, 711, 473.99	244, 551, 675.07

## Production Quantity and Value by Sector, 2013



## II. The Legal Framework

- \* Philippine Rules and Regulations
- \* WTO-GATT agreement on SPS
- \* International regulations (EU, US, Japan, Australia, Vietnam, People's Republic of China, Canada)
- \* Codex Alimentarius Commission Guidelines (CAC/GL)
- \* UN-FAO Code of Conduct for Responsible Fisheries

### **III. BFAR Food Safety and Quality Assurance Program for Aquaculture Products**

#### **1. Registration of Aquafarms**



#### **2. Inspection and Monitoring of Aquafarms**



#### **3. National Residue Monitoring and Control Program**



## 4. Registration of feed millers



## 5. Fish Health Management and Disease Diagnostics Surveillance Program



## IV. Food safety issues related to Aquaculture

### Banned /prohibited antibiotics

- \* Nitrofurans
- \* Chloramphenicol
- \* Tetracycline
- \* Malachite green
- \* Pesticide residues



## Food Safety Standards and Requirements for Aquaculture Products

## Chemical Standards

Parameters	Standards	Reference
Lead	0.5 0.3	FAO 210 series of 2001  Codex 2006, EC 1881 /2006 CAC
Cadmium	0.5	FAO 210 series of 2001
Mercury	0.5	FAO 210 series of 2001 FAO Circular 825, 1989 EC 1881 / 2006
Poly-aromatic hydrocarbons (PAH) for smoked products	5.0 ppb	USFDA & EPA safety levels in Regulations and Guidance CAC EC directives

## Microbiological Standards

Parameter	Standards	Reference
Aerobic Plate Count ( APC)	500,000 cfu/g	-FAO No. 210 Section 2 Series of 2001
Salmonella Shigella	Absent in 25 grams Absent in 25 grams	-EC No. 852 / 2004  - International Committee on Microbiological Specifications for Foods (ICMSF, 1986)
E. coli	11 MPN/g	- FDA Microbiological Requirement for fish & fishery Products (FDA Circular 2013 – 010; Feb. 27, 2013)
Staphylococcus	1000 cfu/g	
V. cholera	Absent in 25 grams	

## Physical/Sensory Properties

Physical attributes	Standards for shrimps ( <i>P. monodon</i> , <i>P. vannamei</i> , <i>Macrobrachium rosenbergii</i> )	Standards for finfish Milkfish, Tilapia, eel
appearance	shiny	Bright
odor	Characteristics of the species, no foreign obnoxious odor	Fresh characteristic of the Species
texture	firm	Firm
taste	Sweetish fresh taste	Neutral
Color of meat/ flesh	Normal characteristics of product; free from any discoloration	Normal characteristic of the species; free from any discoloration

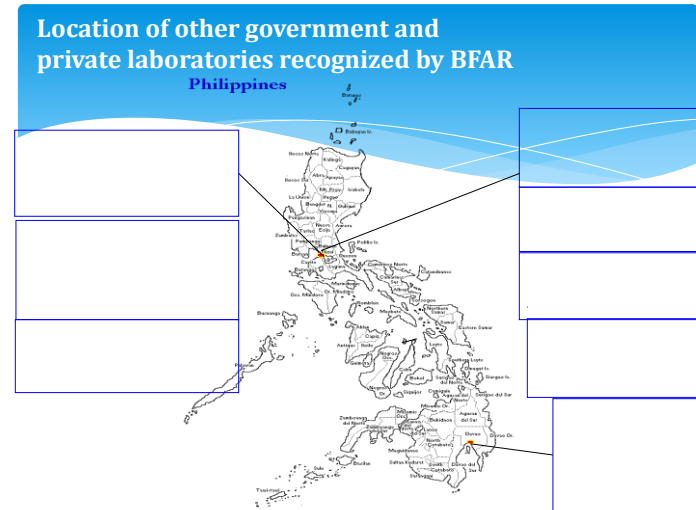
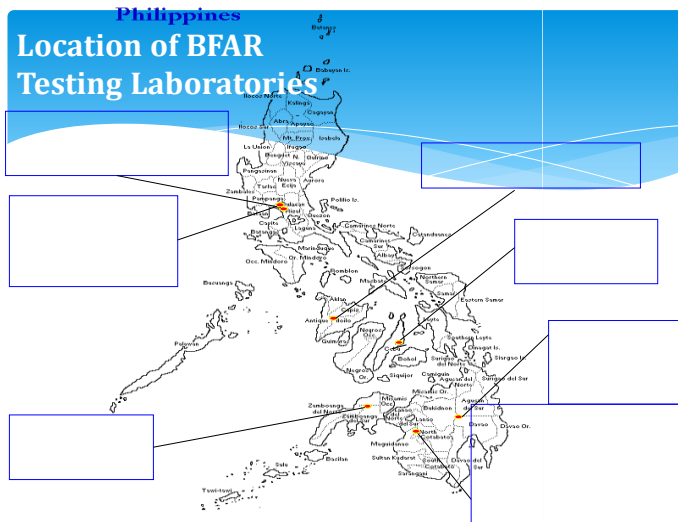
## V. Product Testing and Laboratory Support Services

- \* BFAR Testing Laboratories
- Fish Health Management and Quality Assurance Section
- Fisheries Product Testing Laboratory



Note:

\*ISO 17025 certified by PAO



## VI. Certification of Aquafarms and Processing Establishments

**Number of Sanitary Health Certificates for the Export of Fish and Fishery / Aquatic Products Produced by HACCP-Certified Processing Establishments for Human Consumption**

BFAR Regional Fisheries Offices	Y E A R				TOTAL
	2011	2012	2013	2014	
BFAR-Central Office Diliman, Quezon City	3,370	3,539	4,199	4,436	15,544
I San Fernando City, La Union	4	10	6	4	24
III San Fernando, Pampanga	2	4	4	3	13
IV-A Diliman, Quezon City	1,213	1,243	848	842	4,146
VII Arellano Blvd., Cebu City	63	71	183	144	461
IX Zamboanga City	433	309	189	271	1,202
XI Davao City	30	29	-	-	59
XII Koronadal City	3,318	3,546	3,915	3,630	14,409
<b>TOTAL</b>	<b>8,433</b>	<b>8,751</b>	<b>9,344</b>	<b>9,330</b>	<b>35,858</b>



### 1. Certificate of Registration for aqua farms and hatcheries



### 2. Certificate of Implementation of GHP - ice plants and cold storage facility



### 3. Certificate of Recognition for the Implementation of HACCP System – issued to fish processing plant operators and or owners



### 4. The Certificate of Recognition of GMP and SSOP Implementation – issued to processing plants, pre-processing plants, buying stations, fish landing ports and auctions markets



## 5. The Certificate of Approval – issued to processing plants exporting to EU



Facilities	Requirements
A. Aquafarms	Conformance to Good Aquaculture Practices
B. Processing plants/establishments	Compliance to GMP-SSOP and HACCP
c. Aquaculture holding facilities	Compliance to biosecurity/SSOP

EU-Rapid Alert System for Food and Feed (RASFF) Notifications		
Year	No. of RASFF Notifications	Reasons
2008	5	Histamine content in canned tuna exceeded the regulatory limit
2009	1	Presence of Cadmium in canned sardines
2010	0	
2011	0	

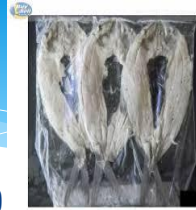
Year	No. of RASFF Notifications	Reasons
2012	1	E210 not declared on label of pasteurized shrimp paste
2013	0	
2014	0	
2015	0	



## VII. Philippine Aquaculture Product Forms

### 1. Milkfish

- whole milkfish
- boneless
- smoked
- choice cuts (belly, chunks, flakes)



### 2. Shrimp

- whole
- IQF
- peeled and deveined
- headless



### 3. Value added products

- fish ball
- fish nuggets
- fish hotdog
- fish quekiam



## VIII. Traceability

- \* Raw materials sourced from registered farms (list of registered farms available on file)
- \* Products processed in approved premises/processing plants
- \* Products properly coded and labeled
- \* Product recall procedures documented
- \* List of buyers

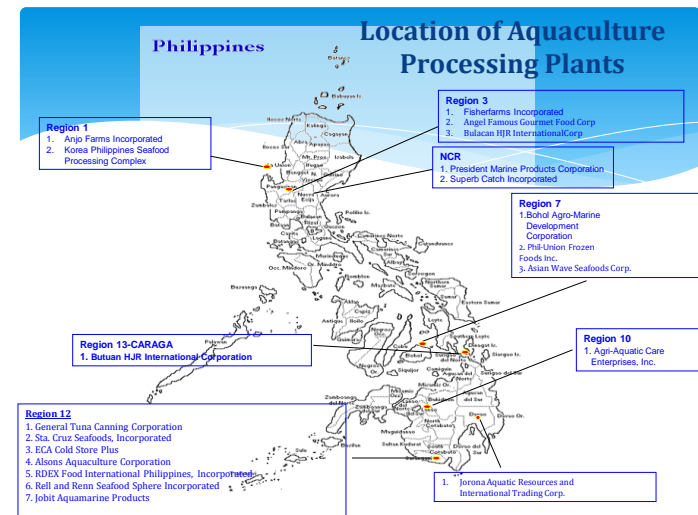
## Details required for traceability :

- ✓ Origin of raw materials (approved, registered & compliant aqua-farms, fishing/freezer vessels, pre-processing plant, auction market, and fish port/landings)
- ✓ Ingredients and suppliers details



## Product Identification

- ✓ Identify production/batch/lot code in relevant record in every stages of production and labels
- ✓ Identify details as to whom and where the product is destined to in the distribution or shipment records





## IX. Sanctions on Non-conformances

- \* Fines
- \* Imprisonment
- \* Both fines and imprisonment
- \* Non-issuance of sanitary certificates
- \* Confiscation of non-conforming products
- \* Delisting from approved list

Thank you!