COST & BENEFIT OF MARKET BASED CERTIFICATION IN INDONESIA

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(Indonesian Fishery Product Processing & Marketing Association)

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Indonesia Fisheries

- More than 17,500 islands along the equator (12 months growing season, tropical), 5.8 million km² of sea, National seawater +/- 3.1 mil km², ZEE +/- 3.0 mil km²
- Coastline: 95,181 km, Brackish water/tambak: 1.2 mil ha, Freshwater/kolam: 627,000 ha.
- Indonesia has the largest potential of fisheries production (65 million tons/year) in the world.
- Population 250 million (2014) --> 300 million (2025)
- Fish Consumption 35.4 kg/cap (2013) -> 38 kg (2015). Need additional of 1 million ton of fish within 2 years. Provides 65% of total animal protein intake to Indonesian diet.
- Long-term seafood market growth drivers:
  The rise of middle income class in Asia Pacific Countries
**FISH PRODUCTS & MARKET DESTINATION**

- **Live Fish**: Grouper, Lobster ➔ Hongkong, Singapore & China
- **Fresh Product**:
  - Important Economic Fish ➔ Singapore, Malaysia
  - Tuna (loin) ➔ Japan, EU, USA
- **Frozen Product ➔ All Importing Countries**
  - Shrimp/Prawn
  - Tuna
  - Cephalopode: sotong, gurita & squid
  - Fish: Tilapia, Snapper, Baramundi, Milkfish, Patin
  - Kekerangan; Soft shell crab
- **Canned Product (tuna, mackarel, sardine, shrimp, cephalopode, pasteurized crabmeat, baby clam)**
- **Dried Product**: Anchovy, salted fish & ell ➔ Japan
- **Value-added products ➔ USA, Japan, EU**
  - Breaded (tempura, fish ball, etc)
  - Fillet: tilapia, snapper, patin / pangasius,
  - Tuna loin, steak, sashimi, sushi.
- **Saeweed & Carragenan ➔ China, EU, Philipina**
## INDONESIA FISH EXPORT
### 2008 - 2012  (value – in US $ million)

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**Sources:** DJ P2HP - 2014 & BPS
Supply chain for fish products is long & complicated. It is important to have product standard, certification & traceable.

Fish/shrimp processing industry creates employment (1,000 people to process 2,000 ton fish/shrimp). Not including the employment on farm, traders, feed mill, hatchery also the fisherman.
BUILDING THE “FUTURE” FOR TRACEABILITY

Key International Standards:
- Codex Standards (CAC)
- ISO Standards (9000, 9001, 14000, 22000, 26000), SNI
- HACCP, GMP, GAP, GRASS, etc.

Key Legal Requirements:
- EU Food Law
- FDA Regulations
- JAPAN FOOD SANITATION LAW
- AUSTRALIA BIOSECURITY ACT

Key Commercial Standards:
- Global Food Safety Initiative (GFSI), BAP
- EUREP GAP, BRC, IFS
- SQF (FMI)
- NGO (MSC, ASC, Dolphin free)
Requirement Traceability From Farm / Sea to Retail

Capture Aquaculture
- GhdP
- GAP, GlobalGAP
- Organic Product Cert.

Primary Handling/Processing
- GMP
- Organic
- BRC
- Product Cert.

Manufacturing
- GMP
- BRC
- SQF 2000
- Product Cert.

Wholesale
- Non Spec

Retail
- Supply Chain Inspection

Table / Fork

HACCP / ISO 9001 / ISO 14001, Monitoring residue/contaminants, Ecolabel (MSC)

ISO 22000 (FSMS), Traceability (a buyers’ requirement)

EU Catch Certification

Interrelated support Traceability data
No matter how good a company organizes one element of a chain, if any other part of the chain doesn’t perform, the whole chain is contaminated.
REGISTERED EXPORTERS TO MAIN DESTINATION EXPORT COUNTRIES

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<th>NO</th>
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<td>EUROPE</td>
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<td>CANADA</td>
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</tr>
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<td>4</td>
<td>CHINA</td>
<td>335 UNIT</td>
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TOTAL SNI OF FISHERY PRODUCTS

There are 160 SNI related to fishery products (Decree of MMAF No.8/KEPMEN-KP/2014 on Implementation of SNI on Fisheries Products):

- 55 SNI on Method of Analysis
- 6 SNI on Packaging
- 99 SNI on Products

• There are 50 Standards on Capture fisheries and
• 130 Standards on Aquaculture/Marineculture
Two major sources of fish for use as food or feed:

- **Wild caught fish**, providing the world with food and feed.
  - Targeting wild fish stocks. Small to gigantic scale operations. Product comes as-it-is.

- **Farmed fish**, mainly providing the world with products for human consumption.
  - Fish farming uses small fish from the wild or hatched fish as stock for growing. Farmed fish is fed with fishmeal or agricultural products. Small to large scale operations. Farming practice has major influence on nutritional quality, food safety and fish size. Choice of species is based on market demand and technical considerations.

**Connection between fishing and aquaculture industry**

- Most farmed species eat products originating from fisheries, fish meal and fish oil.
Marine, Aquaculture & Seafood Chain

Sea Caught
- Fishing Vessel
- Fishing Gear
- Collecting & Handling
- Fishing Port

Aquaculture
- Breeding
- Hatchery
- Pond culture
- Harvesting

Processing
- Fresh Seafood
- Dried Seafood
- Canned Seafood
- Frozen Seafood

Sea Caught

Seaweed
Carrageenan

by products
- Fishmeal
- Fish Oil
- Food Supplements

Retail & Wholesale

Feed Mills
Certification for fisheries

Sea Caught :
• **MSC** (MARINE STEWARDSHIP COUNCIL)
• **FOS** (FRIEND OF THE SEA)

Aquaculture :
• **ASC** (AQUACULTURE STEWARDSHIP COUNCIL)
• **BAP** (BEST AQUACULTURE PRACTICE)
• **GLOBALGAP**
BEST AQUACULTURE PRACTICES (BAP)

• Certification coverage:
  – Processing Plants
  – Farms
  – Hatcheries
  – Feed Mills

• 1 Star (Only cover Processing plants)
• 2 Star (Processing plants + Farm)
• 3 Star (Processing plants + Farm + Hatchery)
• 4 Star (Processing plants + Farm + Hatchery + Feed Mill)
STANDAR RECOGNIZED by GFSI

- BRC GLOBAL STANDARDS
- Food Safety System Certification 22000
- Best Aquaculture Practices Certified
- Global Aquaculture Alliance
- CANADA GAP
- Food Safety for Fresh Fruits and Vegetables
- GRMS
- International Featured Standards
- SQF Institute
- GLOBAL G.A.P.
- The Global Partnership for Good Agricultural Practice
FSSC 22000:2013
Version-3

ISO 22000:2005

ISO/TS 22002-1:2009
(PAS 220:2008)

5 Additional Requirements
The Private Certificates in Indonesia

- The most popular certificates in Indonesia are **GlobalGAP, BAP** and **MSC**
- For Food Safety: **BRC-Food** (6th version), **SQF** and **GFSI (FSSC 22000)** are popular
- The 22000 is the most popular for food safety, but it was under ISO, we are not consider it as private standards.
- Private standards become more important in accessing new markets, but it depends on customer requirements (B to B).
- FSSC 22000, (GSFI) prerequisite more detail, from ISO 22000, only for MNCs suppliers.
The cost of private standard certification in Indonesia

• The cost of ISO 22000 certification around US$ 3,000; compared the cost of private standard certification (BRC) around US$ 6,000 – 7,000,-

• The cost of BAP: US$ 2,500- 4,000 (for farms & hatchery) & US$6,000 (Processing & Feed mill).

• The cost private certification for big companies is not a problem since they get high revenue from it.

• But for small & medium companies, the cost of certificate still considered as an obstacle. This also not cost effective & complicated.

• For farms, GOI prepared the IndoGAP(CBIB)
Indonesian fisheries company (processing plant) certified for Standar BAP & BRC

- PT. Winaros Kawula Bahari
- PT. Bancar Makmur Indah
- PT. Bahari Makmur Sejati
- PT. Bancar Makmur Indah
- PT. Suri Tani Pemuka (Ayu Bumi Sejati)
- PT. Panca Mitra Multi Perdana
- PT. Surya Alam Tunggal
- PT. Centralpertiwi Bahari Processing Plant 2
- PT. Centralpertiwi Bahari Processing Plant 1
- PT. Kelola Mina Laut – Shrimp Unit
- PT. Kelola Mina Laut – Fish Unit
- PT. Kelola Mina Laut – Crab Unit Gresik
- PT. Kelola Mina Laut – Crab Unit Cikande
- PT. Mega Marine Pride

- PT. Sekar Bumi
- PT. Indokom Samudera Persada
- PT Bumi Menara Internusa - Lampung
- PT. Bumi Menara Internusa - Surabaya Plant
- PT. Bumi Menara Internusa - Dampit Plant
- PT. Makmur Jaya Sejahtera
- PT. Sinar Sejahtera Sentosa
- PT. Intimas Surya
- PT. Hatindo
- PT. Satu Enam Delapan
- PT. Toba Surimi Industries
- PT. Dempo Andalas Samudera
- PT. Khom Foods
- PT. Java Peppers Industries
- PT. Marindo Makmur Usaha Jaya
Indonesia aquaculture and hatchery certified for standard: MSC/ASC-COC; FOS; BAP FARM & HATCHERY

- PT. Suri Tani Pemuka Medan (Ayu Bumi Sejati)
- PT. Artha Lautan Mulia (Suri Tani Pemuka – Tilapia Farm)
- PT. Panca Mitra Multi Perdana – West Kalimantan Site
- PT. Empang Kuningan – Shrimp Farm
- PT. Centralpertiwi Bahari – Shrimp Farm
- PT. Central Proteina Prima – Shrimp Hatchery
GAP CERTIFICATION in INDONESIA

1. GlobalGAP
2. Aquaculture Stewardship Council – Shrimp
   Aquaculture Dialogue (ASC-ShAD)
3. Aquaculture Certification Council (ACC)
4. Naturland (Organic Shrimp)
5. IndoGAP (CBIB) → Official Control
**PRINCIPLES in IndoGAP**

- **Biosecurity**: practices to minimize the disease risk contaminating facilities and to prevent spreading from one zone to another (free-zone)

- **Food safety**: prevent contamination of biological, chemical or physical substances which are harmful for human health, from air, soil, water, seed, feed, fertilizer, and other source, in all process (pre-production, production, harvesting, handling and transportation/distribution)

- **Environmental Friendly**: minimize the impact of development and operation of aquaculture farm to the environment
LEGAL BASED FOR INDOGAP CERTIFICATION

1. Regulation of MMAF No. PER/19/MEN/2010 Regarding Quality Assurance System and Safety on Fishery Product


## INDONESIA GAP Certified Fish Farms 2004 – 2013 (units)

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<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013 *)</th>
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<td>Individual</td>
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<td>992</td>
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<td>88</td>
<td>163</td>
<td>179</td>
<td>454</td>
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<tr>
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<td>25</td>
<td>35</td>
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<td><strong>90</strong></td>
<td><strong>256</strong></td>
<td><strong>1,190</strong></td>
<td><strong>1,536</strong></td>
<td><strong>2,794</strong></td>
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*) up to December 2013  
**) Cumulative up to December 2013  
<table>
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<tr>
<th>No</th>
<th>Type of Farm</th>
<th>2004 - 2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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<th>Total **)</th>
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*) up to December 2013  
**) Cumulative up to December 2013  
Sources: DJPB MOMAF – 2014.
## Registered Fish Feed, 2006-2012

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<td><strong>36</strong></td>
<td><strong>57</strong></td>
<td><strong>64</strong></td>
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<td><strong>155</strong></td>
<td><strong>200</strong></td>
<td><strong>44</strong></td>
<td><strong>805</strong></td>
</tr>
</tbody>
</table>

*) up to May2013
WE CAN

BECOME MAIN PLAYER OF FISHERIES IN THE WORLD

THANK YOU