

# **EASY CREDIT ACCESS – THE KEY TO UNLOCKING THE POWER OF AQUACULTURE**

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PAFPI National President

# NATIONAL VISION

**Ambisyon Natin 2040:** “By 2040, the Philippines shall be a prosperous, predominantly middle-class society where no one is poor; our peoples shall live long and healthy lives, be smart and innovative, and shall live in a high-trust society.”

pafpi



**Philippine Alliance of  
Fisheries Producers Inc.**

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Is composed of players who are actively engaged in the aquaculture value chain, from **input providers, farm producer groups and associations, and those from the support services sectors**, i.e. cold chain, logistics, financial services and research and development (R&D).

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Is the umbrella organization of aquaculture commodity associations, like the **Philippine Milkfish Industry Group (PhilMig), High-Value Aquaculture of the Philippines (Hi-Vap) and Philippine Tilapia Stakeholders Association (PhilTilapia)**.

We are a **development partner of DA-BFAR** in aquaculture.

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Is the advocacy arm for the **unified and collaborative approach** to the opportunities and challenges of the aquaculture sector.

Most importantly, we actively participate in efforts to **ensure food security, while taking care of the environment and creating wealth**, specifically in the rural coastal communities where we operate in.

WE ENVISION A FUTURE FOR PHILIPPINE AQUACULTURE  
THAT IS **GLOBALLY COMPETITIVE, SUSTAINABLE,  
PRODUCTIVE, PROFITABLE, EQUITABLE AND PRO-  
POOR.**

VISION





The country is endowed with rich natural resources including water, which are essential for the country's economic development.

The Philippines is surrounded by:

**1,934,000 km<sup>2</sup>**  
Of oceans and seas

**266,000 km<sup>2</sup>**  
Bays and coastal waters

**36,289 km**  
Coastline

It also contains:

**72** Lakes with a total of  
1,830 km<sup>2</sup>

**412** River basin

**“The Fisheries industry is dependent of these water resources!”**

▲ **PHILIPPINE ARCHIPELAGO**



# 3

## THE PHILIPPINE FISHERY INDUSTRY STATUS



FISHERIES

Governed By:



**49%** Capture Fishing

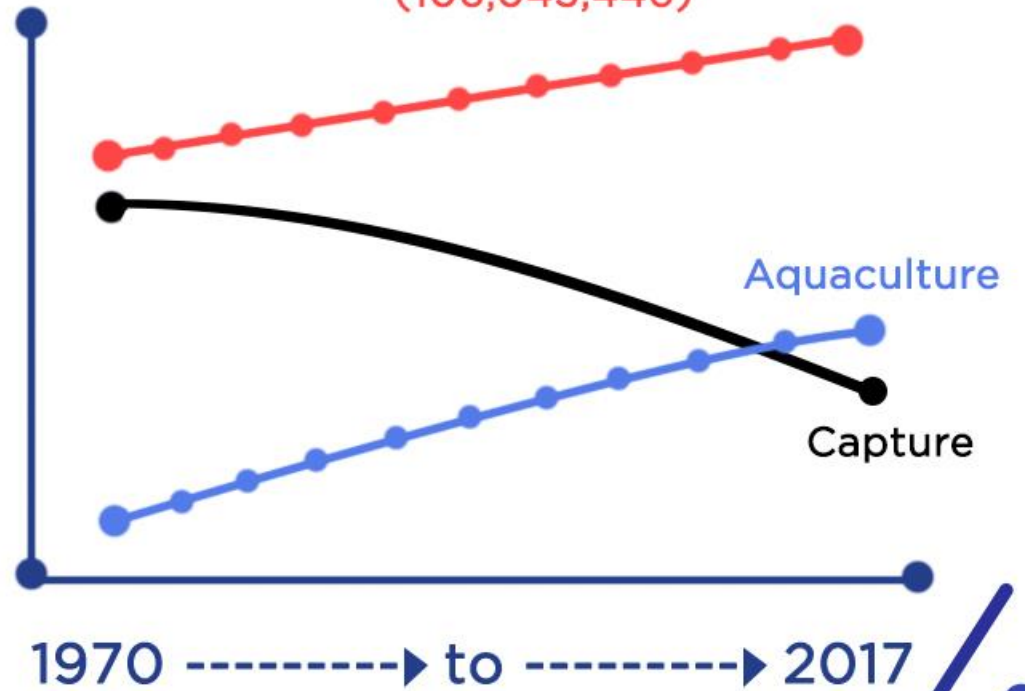
**51%** Aquaculture

Municipal - 1,029 Million MT  
Commercial - 1,107 Million MT  
Inland - 0.214 Million MT  
Total : 2,136,214 MT

Pond - Culture  
Fish Pen - Culture  
Cage - Culture  
Total : 2,186,072.78 MT

Bureau of Fisheries and Aquatic Resources (BFAR)

Philippine Population (106,043,446)







# Aquaculture Commodity Corridors



SEAWEEDS (Eucheuma, Kappaphycus)		National Production 1,404,519.23 MT
Province	Production (MT)	
1. Palawan	311,524.61	
2. Tawi-tawi	296,433.53	
3. Sulu	223,074.78	
4. Maguindanao	90,809.49	
5. Zamboanga Sibugay	90,322.49	
6. Bohol	81,319.37	
7. Antique	81,067.03	
8. Zamboanga City	42,821.46	
9. Zamboanga del Norte	42,370.43	
10. Lanao del Norte	31,537.35	



MILKFISH (Chanos chanos)		National Production 398,088.17 MT
Province	Production (MT)	
1. Pangasinan	136,713.44	
2. Quezon	33,580.41	
3. Capiz	31,064.30	
4. Bulacan	25,298.75	
5. Negros Occidental	24,181.28	
6. Pampanga	20,350.13	
7. Rizal	19,894.71	
8. Batangas	12,880.12	
9. Davao del Sur	12,825.36	
10. Aklan	11,203.19	



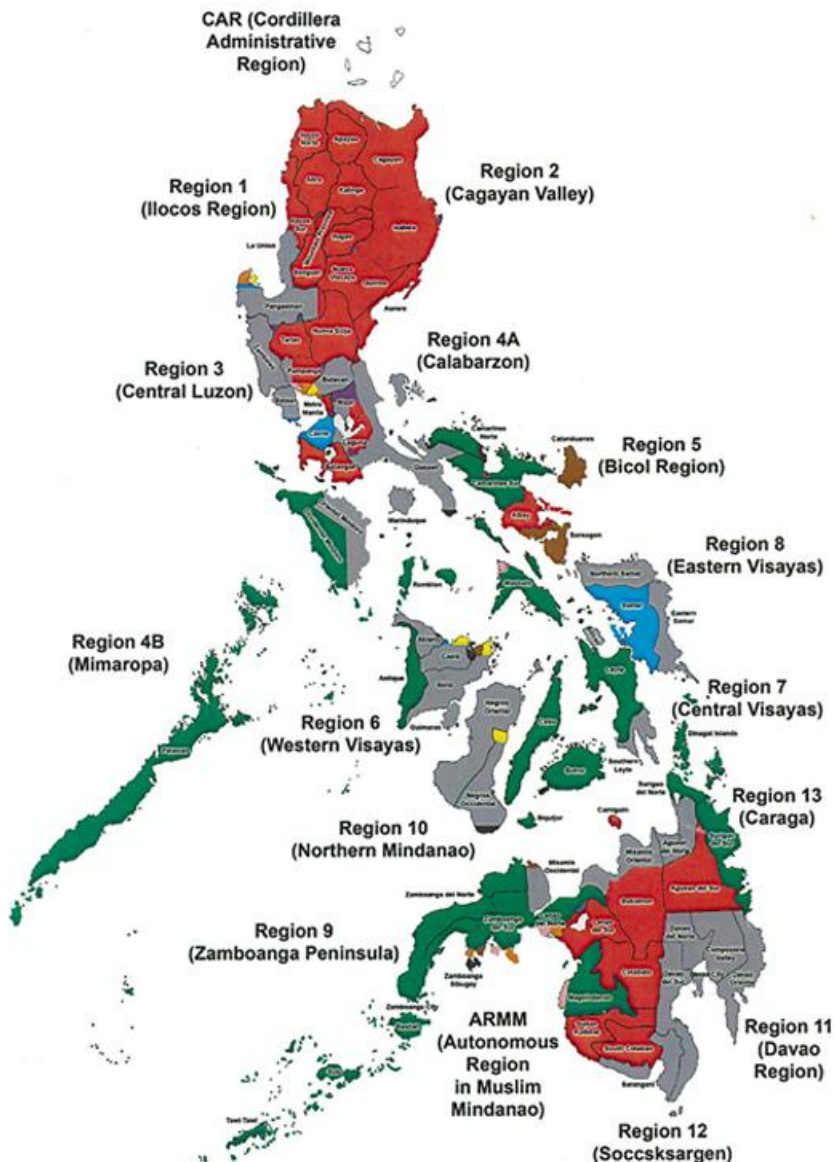
TILAPIA (Oreochromis niloticus)		National Production 259,045.55 MT
Province	Production (MT)	
1. Pampanga	107,138.53	
2. Batangas	63,887.47	
3. Rizal	10,486.66	
4. Pangasinan	10,450.74	
5. Laguna	7,728.84	
6. Maguindanao	6,158.52	
7. Tarlac	6,061.68	
8. Isabela	5,790.21	
9. Camarines Sur	5,521.22	
10. Nueva Ecija	5,248.01	



GROUPER (Epinephelus spp.)		National Production 172.64 MT
Province	Production (MT)	
1. Negros Occidental	86.77	
2. Zamboanga Sibugay	33.01	
3. Capiz	18.87	
4. Quezon	18.14	
5. Samar	3.94	
6. Aklan	3.86	
7. Camarines Sur	2.78	
8. Cagayan	1.82	
9. La Union	1.33	
10. Bohol	0.91	



CARPS (Carassius auratus, Anabas niloticus, etc.)		National Production 16,849.16 MT
Province	Production (MT)	
1. Rizal	15,293.08	
2. Laguna	1,148.1	
3. Tarlac	148.71	
4. Pampanga	91.27	
5. Lanao del Norte	87.27	
6. Metro Manila	49.58	
7. Camarines Sur	11.05	
8. Isabela	8.15	
9. Pangasinan	7.35	
10. Nueva Vizcaya	3.40	



OYSTER (Dreissena spp.)		National Production 20,260.80 MT
Province	Production (MT)	
1. Capiz	6,856.97	
2. Bulacan	4,323.08	
3. Iloilo	2,600.56	



MUSSEL (Perna spp.)		National Production 18,774.55 MT
Province	Production (MT)	
1. Capiz	7,573.13	
2. Samar	6,450.97	
3. Cavite	2,434.21	



MUDCRAB (Scylla spp.)		National Production 16,198.51 MT
Province	Production (MT)	
1. Lanao del Norte	7,269.04	
2. Pampanga	3,989.34	
3. Capiz	1,702.55	



WHITELEG SHRIMP (Litopenaeus vannamei)		National Production 1,673.69 MT
Province	Production (MT)	
1. Zamboanga del Sur	704.09	
2. Pampanga	335.09	
3. Masbate	157.04	



BLACK TIGER PRAWN (Penaeus monodon)		National Production 49,139.48 MT
Province	Production (MT)	
1. Pampanga	19,452.54	
2. Lanao del Norte	14,114.75	
3. Bulacan	3,914.01	



# DA-BFAR Established Mariculture Parks

**Legend**

DA	Declared Area
AD	Area Developed
Blue	BFAR Managed MPs
Green	LGU Managed MPs
Red	Non-Operating MPs

**Summary**

Total Declared Area	34,396.77 Ha.
Total Area Developed	1,342.31 Ha.
Total No. of BFAR Managed MPs	16
Total No. of LGU Managed MPs	27
Total No. of Non-Operating MPs	24
Total No. of Established MPs	67

**Region 1 (Ilocos Region)**

Batoc, Ilocos Norte (DA-100 Ha.)
Nanayan, Ilocos Sur (DA-10 Ha.)
Rosario, La Union (DA-81 Ha. AD-10 Ha.)
San Tomas, La Union (DA-100 Ha. AD-10 Ha.)
Sual, Pangasinan (DA-300 Ha. AD-300 Ha.)

**Region 3 (Central Luzon)**

Catagan, Aurora Province (DA-321.8 Ha.)
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**Region 4A (Calabarzon)**

Tagayasan, Cavite Province (DA-500 Ha.)
Palis Burgos, Quezon Province (DA-1,162.4 Ha. DA-500 Ha.)

**Region 4B (Mimaropa)**

Catapan City, Oriental Mindoro (DA-200 Ha.)
Sta. Cruz, Marinduque (DA-50 Ha.)
San Jose City, Occ. Mindoro (DA-200 Ha.)
Leoc, Romblon (DA-300 Ha. AD90 Ha.)
Coron, Palawan (DA-200 Ha.)
San Vicente, Palawan (DA-644 Ha.)
Puerto Princesa, Palawan (DA-200 Ha.)
Quinson, Palawan (545 Ha. PC-8, JG-40)
Norin, Palawan (DA-744 Ha.)

**Region 7 (Central Visayas)**

Tarzon, Bohol (DA-250.28 Ha. AD-25.02 Ha.)
Catapan, Bohol (DA-220 Ha. AD-22 Ha.)
Mariboon, Bohol (DA-100 Ha.)
Maton, Bohol (DA-144 Ha.)
Bak, Negros Oriental (DA-162 Ha. AD-10 Ha.)
Candjay, Bohol (DA-100.43 Ha. AD-10.04 Ha.)

**Region 9 (Zamboanga Peninsula)**

Marcosaga Rizal, Zambo del Norte (DA-200 Ha. AD-19.5 Ha.)
Dumalinao, Zambo del Sur (DA-248 Ha.)
Marganating, Zambo del Sur (DA-248 Ha.)
Tuguevan, Zambo Sibogay (DA-500 Ha.)

**ARMM (Autonomous Region in Muslim Mindanao)**

Panglima Tahil, Sulu (DA-1,000 Ha.)
Siasi, Sulu (DA-200 Ha.)
Languyon, Tawi-Tawi (DA-500 Ha.)
Panglima Sugala, Tawi-Tawi (DA-100 Ha.)

**Region 2 (Cagayan Valley)**

Sta. Ana, Cagayan (DA-100 Ha. AD-55 Ha.)
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**Region 5 (Bicol Region)**

Ragas, Camarines Sur (DA-108 Ha.)
Sangay, Camarines Sur (DA-500 Ha. AD-1 Ha.)
Magalanek, Sorsogon (DA-100 Ha.)
Bacon, Sorsogon City (DA-300 Ha.)
Masbate City, Masbate (DA-100 Ha. AD-1 Ha.)
Mahog, Sorsogon (DA-100 Ha. AD-1 Ha.)

**Region 8 (Eastern Visayas)**

San Jose, N. Samar (DA-300 Ha. AD-2 Ha.)
Calangit, N. Samar (DA-100 Ha. AD-5 Ha.)
Calbayog, Samar (DA-100 Ha. AD-5 Ha.)
Naval, Biliran (DA-100 Ha. AD-1 Ha.)
Biliran, Biliran (DA-100 Ha. AD-5 Ha.)
Leyte, Leyte (DA-100 Ha. AD-3 Ha.)
Sta. Rita, Samar (DA-1,000 Ha. AD-5 Ha.)
Cangara, Leyte (DA-400 Ha.)
Bakey, Samar (DA-400 Ha. AD-25 Ha.)
Balutogin, Leyte (DA-25 Ha. AD-5 Ha.)
Tacloban City, Leyte (DA-500 Ha. AD-2 Ha.)
Ormasi City, Leyte (825 Ha.)
Quimpondan, E. Samar (DA-800 Ha. AD-2 Ha.)
Wonda, Leyte (DA-100 Ha. AD-5 Ha.)
Liluan, Southern Leyte (DA-100 Ha.)

**Region 13 (Caraga)**

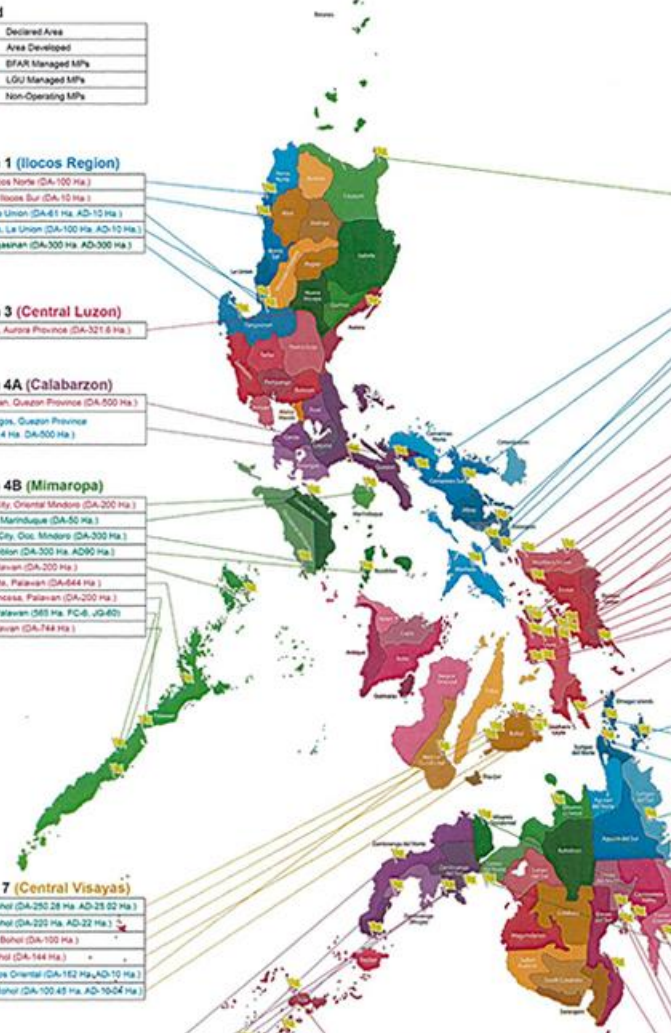
Dava, Davao Island, Surigao del Norte (DA-1,000 Ha. AD-1 Ha.)
Basakna, Davao Province (DA-341.21 Ha. AD-1 Ha.)
Surigao City, Surigao del Norte (DA-500 Ha. AD-1 Ha.)
Bakibo, Surigao del Sur (DA-165 Ha. AD-8 Ha.)

**Region 10 (Northern Mindanao)**

Balingasag, Misamis Oriental (DA-165.07 Ha. AD-19.5 Ha.)
Lopez Jaena, Misamis Occidental (DA-313.26 Ha. AD-343.26 Ha.)
Sultan Naga Dimaporo, Lanao del Norte (DA-1,372 Ha.)

**Region 11 (Davao Region)**

Matil, Davao Oriental (DA-343 Ha.)
Pantukan, Compostela Valley (DA-200 Ha. AD-1 Ha.)
Parabo City, Davao del Norte (DA-100 Ha.)
Languyon, Tawi-Tawi (DA-500 Ha.)
Samao Island, Davao del Norte (DA-224 Ha.)





# Institutionalize Strategic Marketing Across the Inclusive Value Chain

## Aquaculture



## Capture Fisheries



# KEY CHALLENGES

## In 2007 - 2015

1. The fragmentation of the aquaculture which had led to low investor confidence;
2. Strong control and manipulation of middlemen;
3. Limited post-harvest facilities;
4. Short-term approach to marketing rather than a strategic and harmonized country marketing and business development approach;
5. The high cost of inputs;
6. Lack of significant R&D efforts to impact the industry
7. **The absence of tailor-fit credit programs.**

## Status Today

1. Government recognition of the strategic importance of aquaculture. PAFPI now is an alliance and a development partner of government, i.e. DA-BFAR in aquaculture;
2. Middlemen continue to have strong control of market;
3. Save for CFLCs, post-harvest facilities, especially those that directly connect farmers to market, are either limited or absent;
4. Advances in marketing approach but strategic and harmonized approach is lacking;
5. Promising advances in R&D to lower cost of production, but they need to unify and harmonize researches, especially applied research;
6. **The absence of tailor-for credit programs.**



A 3D-style illustration of a grey asphalt road with white dashed lane markings, curving from the bottom left towards the top right. At the end of the road, a red flag on a wooden pole stands. Along the road, there are five colored circles: a red one at the flag, an orange one, a yellow one, a green one, and a cyan one. The text 'WHERE DO WE GO FROM HERE?' is written in bold black capital letters in the upper right area.

**WHERE DO WE GO  
FROM HERE?**

# KEY OBJECTIVES TO ATTAIN SUSTAINABLE PRODUCTION

1. Improved overall productivity and efficiency;
2. Improved access to markets (affordable aquaculture products);
- 3. Increased investment and financing;**
4. Appropriate policy, legal, and institutional support for aquaculture development and
5. Empowering the poor to participate in, and benefit from, aquaculture development.



# KEY STRATEGIES

## PRODUCTIVITY

DRIVE SUSTAINABLE  
PRODUCTION BY  
BRINGING BACK  
INVESTOR  
CONFIDENCE

## PROFITABILITY

REDUCE THE COST OF  
DOING BUSINESS

## MARKET ACCESS

INCREASE MARKET  
ACCESS THROUGH  
MORE EFFICIENT  
PHYSICAL AND  
VIRTUAL  
CONNECTIONS

## EXECUTION

DRIVE  
ACCOUNTABILITY  
AND TRANSPARENT  
MONITORING OF  
PROGRAMS


# KEY STRATEGY 1: *DRIVE SUSTAINABLE PRODUCTION BY BRINGING BACK INDUSTRY CONFIDENCE*

1. Harmonize the **right balance of sustainable production** in the expansion of farming areas:
  - a. Finish inventory of production areas, including mariculture parks and fishponds under FLAs, to determine potential production levels.
  - b. Set and align production targets as a harmonized KRA between industry and government.
  - c. Identify and develop support mechanism needed to achieve production targets.



# KEY STRATEGY 1: *DRIVE SUSTAINABLE PRODUCTION BY BRINGING BACK INDUSTRY CONFIDENCE*

2. Harmonize **access to credit**, as PAFPI and BFAR shall jointly push and facilitate the creation of tailor-fit programs and the availability of funds and gurarantees.
3. Harmonize **consolidation of R&D initiatives nationwide** to meet expected industry challenges including disease risks, climate change, with better biosecurity and health management for all farmed aquatic species and better availability of laboratory services in all production areas;



# POLICY ROADBLOCKS TO EASY CREDIT ACCESS

1. Despite the agri-agra law, most banks, including GFIs remain risk-averse to the fisheries and the aquaculture sector;
2. Farmers are discouraged because of the voluminous requirements;
3. Lack of Collateral – most SEA countries do not require collateral;
4. Social enterprise scheme for wealth creation in rural fishing communities is barely understood by the government financial sector;

# SUGGESTIONS TO EASY CREDIT ACCESS

1. Programs should be geared towards aquaculture rather than capture fisheries;
2. Include the use of trade associations in the program design and conduit for funds dispersion to the aquaculture sector
3. Develop similar set of criteria for both GFIs and the private sector, i.e. trade associations in assessing credit-worthiness of borrowers;
4. Implement a scheme wherein the pegging of interest rates are matched against risk factors, i.e. higher interest rates for high risk factors



# BANGUS IN PEN CULTURE 10 X 10

Investment Per Pen	₱120,000	
Cage Ammortization (P120K / 3 crop period)	₱ 40,000.00	
Caretaker's Incentive (5% of Net Income)	₱ 17,522.75	
<u>Production Costs</u>		%
Bangus Fry (@ 6/pc)	₱ 90,000.00	24%
Kitong Fry (@ 4/pc)	₱ 10,000.00	3%
Feeds (@ P30/kg)	₱ 229,162.50	62%
Caretaker (P200/day x 122 days)	₱ 24,400.00	7%
Night Duty Security for 5 cages (P150/night x 122 nights)	₱ 3,660.00	1%
Rice Allowance (P1200 x 4 months)	₱ 4,800.00	1%
Operational Expenses (P2/kg)	₱ 10,185.00	3%
Total Production Cost	₱ 372,207.50	100%
Caretaker's Total Fixed Income	₱ 24,400.00	
Caretaker's Total Incentives	₱ 17,522.75	
Caretaker's Total Take Home Pay per Crop Period	₱ 41,922.75	
Caretaker's Average Monthly Take Home Pay	₱ 10,480.69	
<u>Per Kilo</u>		
Kitong Farmgate Price	₱150.00	
Bangus Farmgate Price	₱ 120.00	
Production Cost	₱ 63.78	
Gross Income	₱ 56.22	
Other Costs	9.86	
Net Income	₱ 46.37	

Bangus Fingerlings	15,000
Target Survival	97%
Average Weight (g)	350
Biomass (kgs)	5,093
FCR	1.5
Feeds (kgs)	7,639
Feeds (bags)	382
Kitong Fingerlings	2,500
Average Weight (g)	350
Biomass (kgs)	744
<u>Total Biomass</u>	<u>5,836</u>

Gross Sales - Bangus	₱ 611,100.00
Gross Sales - Kitong	111,562.50
Total Gross Sales	₱ 722,662.50
Total Production Cost	₱ 372,207.50
Gross Income	₱ 350,455.00
Other Costs	₱ 57,522.75
Net Income	₱ 292,932.25
Culture Period / Year	3
Annual Net Income	₱ 878,796.75
Payback (Crop Period)	0.4

Investment Per Cage	₱700,000	
Cage Ammortization (3 years)	₱ 77,777.78	5%
Caretaker's Incentive (5% of Net Income)	₱ 59,742.50	4%
<u>Production Costs</u>		%
Bangus Fry (@ 6/pc)	₱ 360,000.00	21%
Kitong Fry (@ 4/pc)	₱ 40,000.00	2%
Feeds (@ P30/kg)	₱ 1,222,200.00	72%
Caretaker (P200/day x 122 days)	₱ 24,400.00	1%
Night Duty Security for 5 cages (P150/night x 122 nights)	₱ 3,660.00	0%
Rice Allowance (P1200 x 4 months)	₱ 4,800.00	0%
Operational Expenses (P2/kg)	₱ 40,740.00	2%
Total Production Cost	₱ 1,695,800.00	100%
Caretaker's Total Fixed Income	₱ 24,400.00	
Caretaker's Total Incentives	₱ 59,742.50	
Caretaker's Total Take Home Pay per Crop Period	₱ 84,142.50	
Caretaker's Average Monthly Take Home Pay	₱ 21,035.63	
<u>Per Kilo</u>		
Kitong Farmgate Price	₱150.00	
Bangus Farmgate Price	₱ 120.00	
Production Cost / kg.	₱ 72.64	
Gross Income	₱ 47.36	
Other Costs	5.89	
Net Income	₱ 41.47	

# BANGUS IN CAGE CULTURE

## 18M

Bangus Fingerlings	60,000
Target Survival	97%
Average Weight (g)	350
Biomass (kgs)	20,370
FCR	2
Feeds (kgs)	40,740
Feeds (bags)	2,037
Kitong Fingerlings	10,000
Average Weight (g)	350
Biomass (kgs)	2,975
<u>Total Biomass</u>	<u>23,345</u>

Gross Sales - Bangus	₱ 2,444,400.00
Gross Sales - Kitong	446,250.00
Total Gross Sales	₱ 2,890,650.00
Total Production Cost	₱ 1,695,800.00
Gross Income	₱ 1,194,850.00
Other Costs	₱ 137,520.28
Net Income	₱ 1,057,329.72
Culture Period / Year	3
Annual Net Income	₱ 3,171,989.17
Payback (Crop Period)	0.7

# BLUE ECONOMY DEVELOPMENT FRAMEWORK

## Components of Blue Economy

- Harvest of living resources
- Extraction of non-living resources
- Commerce and trade
- Response to environment health

## Products & Services

- Food
- Marine biotechnology
- Minerals
- Energy
- Transport & trade
- Tourism and recreation
- Coastal and Forest Protection
- Waste Disposal
- Policy Implementation and Law Enforcement

## Industry Promoted

- **Fisheries**
- **Aquaculture**
- Pharmaceuticals
- Shipping
- Seabed Mining
- Port services
- Tourism
- Habitat protection and restoration



## Sustainable Development Goals (SDGs) Achieved

# 1 End poverty in all forms everywhere

#2 End hunger, achieve food security

# 7 Ensure access to affordable energy

# 14 Conserve and sustainable use the oceans, seas, and marine resources



# BLUE ECONOMY MODEL

## SOCIAL SOLIDARITY ENTERPRISE FRAMEWORK

Environment and  
EcoSystem

Social Entrepreneurship

Governance &  
Empowerment

### CONVERGENCE

#### PARTNERS

BFAR  
DENR  
SEAFDEC  
DOST  
ACADEMIC INSTITUTIONS



#### PARTNERS

DOLE  
CDA  
DTI  
GFIs  
PRIVATE SECTOR  
(Local & Foreign)




#### PARTNERS

DILG  
TESDA  
DEP ED  
PROVINCE  
MUNICIPALITIES  
BARANGGAYS

Respect for Environment, Financial Efficiency & Social Impact

# NEAR FUTURE TRENDS FOR PHILIPPINE AQUACULTURE

1. **Value chain alliances** will continue to **grow**. Innovative partnership and cooperative schemes among the value chain players will continue to increase for economies of scale;
2. **Farm to fork is better connected**, physically and virtually (e-commerce);
3. **More fishing communities will engage in aquaculture** as an incremental, and then primary, source of livelihood;
4. **Industrialized farming through social enterprise** with industry players partnering more with their local communities;
5. Consolidated **farms that are centrally and professionally-managed**. May include mariculture parks with long-term lease arrangements with LGUs;
6. **Industries** will begin to **self-regulate** and the **BFAR balances its developmental and regulatory roles**.



# POSSIBLE CONTRIBUTION TO NATIONAL ECONOMY - 2030

The fishing industry's contribution to the country's Gross Domestic Products (GDP) were 1.5 % at current prices. This translates to some P195.7 billion for current prices of the country's GDP of P13,285 billion (current prices):

- **Basic Assumptions:**

- At 5% projected CAGR country GDP growth = Php 21,871 B
- Fisheries GDP increased to 3% of projected country GDP

- **Possible Fisheries contribution to GDP =  
Php 656.1 B!**



“

NO SOCIETY CAN PROSPER IF IT AIMS AT MAKING THINGS EASIER. INSTEAD IT SHOULD AIM AT MAKING PEOPLE STRONGER.

”

Ashoka

