AQUACULTURE INVESTMENT OPPORTUNITIES IN SE ASIA
SUSTAINABLE GROUPER FARMING IN THE PHILIPPINES

East Asian Seas Congress 2018
Filling the Pipeline: A Sustainable Ocean Investment Ecosystem for the Seas of East Asia
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Blueyou and IMPACT BLUE

Catalyzing the Transformation of the Seafood Sector

**Blueyou**

- Private sector group of companies focusing on sustainable seafood solutions
- Active in services, manufacturing, trading and distribution of seafood
- Engage with fisheries and aquaculture sector on transition towards sustainability
- Partnering with GO and NGO on private-sector-led programs and projects
- Strong focus on SE Asia and Latin America – and market presence in North America, Europe, SE Asia, China and Japan

**IMPACT BLUE**

- Consortium program with Catch Invest (US)
- Project development for sustainable fisheries and aquaculture
- Catalyzing philanthropic and public funds to unlock private sector capital
- Design holistic fisheries transition models for return-seeking capital
- Focus on community-based businesses with strong livelihood component
Global Challenges and Opportunities

- The seafood industry is the only food sector which still depends on wild resources
- Global stock levels are threatened (overexploitation, IUU, ineffective management)
- USD 80 Billion are lost due to mismanagement, overfishing and bad practices
- Huge potential to do much better: Global fishery reform has up-side of 90 Bio $/ Year
- Aquaculture offers more resource-efficiency than agriculture (on land)

Seafood Sector in SE Asia

- Asia is a global hot-spot of seafood production (fisheries and aquaculture)
- Marine resources are mostly overexploited and remain at critical levels
- Aquaculture has been the big engine for expansion of production
- Increasing demand for healthy / high protein diet will further drive demand
- Healthy coasts and oceans are vital for the future viability of SE Asia’s seafood sector
FINDING THE RIGHT BALANCE

POTENTIAL FOR POSITIVE IMPACT (ENVIRONMENT & SOCIAL)

POTENTIAL FOR ECONOMIC RETURNS
Return-Seeking Capital and Sustainable Aquaculture
Identify Investment Opportunities in SE Asia

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>CRITERIA</th>
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<tbody>
<tr>
<td>Environment</td>
<td>▪ No critical and detrimental impacts&lt;br&gt;▪ Potential for mitigation and improvement&lt;br&gt;▪ Biodiversity and aquatic environment&lt;br&gt;▪ Bio-security risk (disease)</td>
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<tr>
<td>Economic</td>
<td>▪ Return and up-side value potential&lt;br&gt;▪ Business and operation risks&lt;br&gt;▪ Market and value chain potential&lt;br&gt;▪ Food safety risk</td>
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<tr>
<td>Social</td>
<td>▪ Livelihood and employment opportunities&lt;br&gt;▪ Community engagement &amp; benefits</td>
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Identified Business and Investment Opportunity

Sustainably Farmed Grouper

Opportunity

- Wild capture origins in Asia overfished – species are threatened!
- Sustainability challenges of existing grouper farms
- Increasing market demand for certified sustainable seafood

Business Case

- Vertically integrated grouper farm with hatchery and nursery
- Design, set-up and operation of farm in line with strict, third-party environmental standards and good aquaculture practices (GAP)
- Direct distribution to strategic clients in the gastronomy sector in SE Asia
Certified Sustainable Grouper Farm

Key Parameters

Business Operation

- Species: Green grouper *Ephinephelus coioides*
- Total production capacity: 250 – 300 MT
- Certification Standard: Aquaculture Stewardship Council (ASC)
- Markets: High end gastronomy in Metro Manila, Hong Kong and Singapore

Key Financials

- Total Investment Volume: USD 4 Mio.
- Annual Sales Turnover: USD 2.2 – 2.5 Mio.
- Gross Margin: 50% | EBITDA: 35%
- 10 Year IRR: 17.4%
Certified Sustainable Grouper Farm

Environmental and Social Impact

ENVIRONMENTAL
• Hatchery based operation
• Minimized pollution
• Sustainable feed formula & ingredients
• Bio-security protocols
• Good aquaculture practices

SOCIOECONOMIC & COMMUNITIES
• Employment opportunity for 50 people
• Sustained economic activity
• Scaling-up potential for additional communities
• Supply of fingerlings for community-based fish farming models
Conclusions & Recommendations
Ocean Investments in SE Asia

FISHERIES
• Huge economic up-side potential
• Fisheries are complex to deal with from private sector capital perspective
• Investable models for fisheries transition should focus on fast reproducing, high value and locally constraint species

AQUACULTURE
• Proper spatial planning is essential for future growth of the sector
• Must include bio-security protocols for disease mitigation
• Sustainable feed ingredients are key
• Non feed-based systems and species have lowest impact