The World Shrimp Journey

Funded by:

- America
- America

**The SHRIMP JOURNEY**

Global Shrimp Production

- 4,800,000 Tons - 2018
- USD 26.7 Billion Global Export Sales

**Top 5 World Producing Countries**

<table>
<thead>
<tr>
<th>Country</th>
<th>Production MT</th>
<th>% Global Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>619,000</td>
<td>28.8%</td>
</tr>
<tr>
<td>China</td>
<td>421,000</td>
<td>14.6%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>216,000</td>
<td>10.7%</td>
</tr>
<tr>
<td>Ecuador</td>
<td>212,000</td>
<td>8.3%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>180,000</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

**Historical Data**

- **Source:** Global Aquaculture Alliance, Environmental & Social Responsibility: Estimating Global Shrimp Pond Area, Claude E. Boyd, Ph.D., 2018

**Overview of Global Shrimp Trade**

- **Farmed Shrimp:** 4,800,000 Tons - 2018
- **Captured Shrimp:** 3,596,393 Tons - 2017

**Crop Year 2015**

- **GAA/BAP**
  - 62.9% 672
- **ASC**
  - 33.0% 352
- **GLOBALG.A.P.**
  - 4.1% 44

**Top Sustainability Shrimp Standards**

- **Portion of Global Market (%)**
  - GAA/BAP: 62.9%
  - ASC: 33.0%
  - GLOBALG.A.P.: 4.1%

**Crop Year 2015**

- **Total Certified Farms**
  - 672

**Crop Year 2017**

- **% of Imports**
  - EU: 36%
  - US: 34%
  - Japan: 10%
  - South Korea: 3%
  - Canada: 3%

- **% of Global Farmed Volume**
  - EU: 11%
  - US: 11%
  - Japan: 4%
  - South Korea: 1%
  - Canada: 1%

**Top 10 World Producing Countries**

- **Production Area (Ha)**
  - 421,000
  - 212,000
  - 216,000
  - 180,000
  - 619,000

**Shrimp Production**

- Shrimp is grown in brackish or saltwater ponds, where it takes approximately three to six months to reach market size.

**Hatchery Phase**

- Postlarvae (PL) Production
  - PLs are produced in hatcheries (labs) in about 28 to 35 days under stringent production protocols, salt water, aeration, and temperature are key factors for healthy PL production.

**Nursery Phase**

- 7 to 21 days
  - Nurseries are used to grow shrimp from about 0.35 g to greater than 1.0 g before stocking in grow-out ponds/pools.

**Grow-out Phase**

- 90 to 120 days
  - This phase produces marketable shrimp of various sizes. Ponds are stocked with shrimp from nurseries and fed formulated feed for nutrition.

**Processing and Packing Phase**

- Shrimp is washed with fresh water upon arrival at the processing and packing plant. Then, it is immersed in cold water and ice is added to maintain a low temperature.

**Classification**

- Shrimp is sanitized and then mechanically sorted by size.

**Packaging and Weighing**

- Non-complying shrimp and foreign matter are manually separated from the bulk.

**Harvesting**

- Pre-harvest sampling to identify size distribution, quality, and amount of shrimp to be harvested.

**Cold Storage**

- After a final inspection, final product is stored in a freezing room, where it stays at -15°C to -25°C, until it is sent to the port.

**Shrimp Production Year 2018**

- **Vietnam:** 1,380,000
- **China:** 700,000
- **Bangladesh:** 690,000
- **Ecuador:** 515,000
- **Indonesia:** 400,000
- **Thailand:** 300,000
- **Mexico:** 150,000
- **Brazil:** 80,000
- **Malaysia:** 37,000
- **Honduras:** 31,000

**Overview of Global Shrimp Trade**

- **Farmed Shrimp:** 4,800,000 Tons - 2018
- **Captured Shrimp:** 3,596,393 Tons - 2017

**Source:** Food and Agriculture Organization (FAO), UC Davis, and International Trade Centre, 2017

**Source:** Global Aquaculture Alliance, Environmental & Social Responsibility: Estimating Global Shrimp Pond Area, Claude E. Boyd, Ph.D., 2018

**Source:** GOAL 2019: Global Shrimp Production Review by James L. Anderson, Ph.D., Diego Valderrama, Ph.D. and Darryl E. Jory, Ph.D., 2019

**Crop Year 2015**

- **Total Certified Farms**
  - 672

**Crop Year 2017**

- **% of Imports**
  - EU: 36%
  - US: 34%
  - Japan: 10%
  - South Korea: 3%
  - Canada: 3%

- **% of Global Farmed Volume**
  - EU: 11%
  - US: 11%
  - Japan: 4%
  - South Korea: 1%
  - Canada: 1%
About us: The eco.business Fund aims to promote business and consumption practices that contribute to biodiversity conservation, to the sustainable use of natural resources, and to mitigate climate change and adapt to its impacts. By providing financing for business practices that conserve nature and foster biodiversity, the fund seeks investments with both environmental and financial returns. The fund mainly provides loans to qualified financial institutions that on-lend the money to eligible borrowers, which include holders of recognized certifications or those making improvements in line with conservation and biodiversity goals. The fund supports sustainable operations in the sectors of agriculture, fishery (including aquaculture), forestry and tourism.

Neither the eco.business Fund Development Facility nor the Fund nor Finance in Motion nor any of its shareholders, directors, officers, employees, service providers, advisors, or agents makes any representation or warranty or gives any undertaking of any kind, express or implied, or, to the extent permitted by applicable law, assumes any liability of any kind whatsoever, as to the timeliness, adequacy, correctness, completeness or suitability for any investor of any opinions, forecasts, projections, assumptions and any other information contained in, or otherwise in relation to, this document or assumes any undertaking to supplement any such information as further information becomes available or in light of changing circumstances. The content of this information is subject to change without prior notice.

Pre-Harvest

- Protection and restoration of mangrove forest
- Restriction of placing farms in protected areas
- Conservation and protection of coastal barrier between the farm and the coastline
- Increase of buffer zones to protect estuaries and watersheds

Harvest

- Use of healthy postlarvae and broodstock for pond stocking
- Implementation of automated feeders to reduce food loss
- Use of feed ingredients from sustainable sources and fish processing by-products to reduce wild catch of fish
- Periodic monitoring of electroconductivity of aquifers and surrounding agricultural soils to prevent salinization
- Construction of nursery ponds, raceways, and/or Multiphase Inventory Management System (MIMS) to increase survival rate and productivity
- Use of probiotic products as an effective alternative to chemicals and antibiotics to foster disease resilience

Post-Harvest

- Reduction of water exchange rate within the grow-out ponds to less than 10%
- Deployment of waste water treatment
- Provision of on-site treatment of the effluent from the shrimp grow-out ponds

Ecosystem Conservation
- Increase in water-use efficiency and reduction of water exchange by recycling grow-out pond water
- Reduction of waste water and nutrients deposited into natural water bodies by building sedimentation ponds

Water Conservation
- Ensuring that no sludge or sediments in any form are discharged directly into receiving waters or natural ecosystems
- Use of healthy postlarvae and broodstock for pond stocking
- Implementation of automated feeders to reduce food loss
- Use of feed ingredients from sustainable sources and fish processing by-products to reduce wild catch of fish
- Periodic monitoring of electroconductivity of aquifers and surrounding agricultural soils to prevent salinization
- Construction of nursery ponds, raceways, and/or Multiphase Inventory Management System (MIMS) to increase survival rate and productivity
- Use of probiotic products as an effective alternative to chemicals and antibiotics to foster disease resilience

Social and Labor Management
- Prohibition of child labor or any form of forced labor
- Safe farms, decent wages, and regulated working hours
- Consultation and engagement with local communities to ensure they provide access to vital resources and appropriately deal with complaints or conflicts

Water Quality
- Increase in water-use efficiency and reduction of water exchange by recycling grow-out pond water
- Reduction of waste water and nutrients deposited into natural water bodies by building sedimentation ponds

Soil Conservation
- Ensuring that no sludge or sediments in any form are discharged directly into receiving waters or natural ecosystems
- Use of healthy postlarvae and broodstock for pond stocking
- Implementation of automated feeders to reduce food loss
- Use of feed ingredients from sustainable sources and fish processing by-products to reduce wild catch of fish
- Periodic monitoring of electroconductivity of aquifers and surrounding agricultural soils to prevent salinization
- Construction of nursery ponds, raceways, and/or Multiphase Inventory Management System (MIMS) to increase survival rate and productivity
- Use of probiotic products as an effective alternative to chemicals and antibiotics to foster disease resilience

Waste Management
- Prohibition of child labor or any form of forced labor
- Safe farms, decent wages, and regulated working hours
- Consultation and engagement with local communities to ensure they provide access to vital resources and appropriately deal with complaints or conflicts

Contact us:
- www.ecobusiness.fund
- info@ecobusiness.fund
- eco.business Fund S.A, SICAV-SIF
- 31 Z.A. Bourmicht
- 8070 Bertrange, Luxembourg
- Carl-von-Noorden-Platz 5
- 60596 Frankfurt a. M, Germany
- © eco.business Fund 2020. All rights reserved