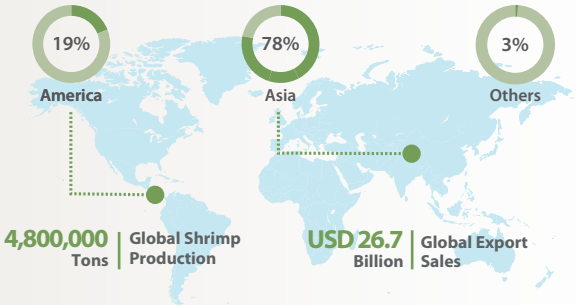
World Whiteleg Shrimp Production

% of Shrimp Produced

Based on volume in Metric Tons - 2018



Sources: Shrimp Aquaculture Production in Major Farming Nations in Latin America, and Food and Agriculture Organization (FAO), 2019 and GOAL surveys, 2011-2018

Top 10 World Shrimp Producing Countries

Metric Tons

Production Year 2018

	Production MT	% Global Contribution
China	1,380,000	28.8%
India	700,000	14.6%
Vietnam	690,000	14.4%
Ecuador	515,000	10.7%
Indonesia	400,000	8.3%
Thailand	300,000	6.3%
Mexico	150,000	3.1%
Brazil	80,000	1.7%
Malaysia	37,000	0.8%
Honduras	31,000	0.6%

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

Overview of Global Shrimp Trade

Metric Tons

Production Year 2018

Farmed Shrimp	4,800,000	57%
Captured Shrimp	3,596,393	43%

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

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Top 5 World Producing Countries

Production Area (Ha)

Whiteleg Shrimp

Vietnam	China	Bangladesh	Ecuador	Indonesia
619,000	421,000	216,000	212,000	180,000

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

Top 5 Shrimp Importing Regions

Production Year 2017

	2017	% of Imports	% of Global Farmed Volume
EU	540,724	36%	11%
US	514,776	34%	11%
Japan	156,807	10%	4%
South Korea	50,439	3%	1%
Canada	39,606	3%	1%

Source: Trade analysis: Where Did All the Shrimp Go? Undercurrentnews: By Louis Harkell, 2018

Top Sustainability Shrimp Standards

Portion of Global Market (%)

Crop Year 2015

		Total Certified Farms
GAA/BAP*	62.9%	672
ASC**	33.0%	352
GLOBALG.A.P. Aquaculture	4.1%	44

** Includes BAP-certified farms, hatcheries, feed mills, processing plants and repacking plants*
*** Includes shrimp farms only*
Sources: Best Aquaculture Practices, ASC, and GLOBALG.A.P. websites, 2019

THE SHRIMP JOURNEY

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. Good water quality in the production process is a must to maintain optimum growth conditions for the shrimp.

Harvesting

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

Processing and Packing Phase

Reception and Analysis of Quality

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.

Pre-selection

Non-complying shrimp and foreign matter are manually separated from the bulk. Compliant product is placed on transporting belts and delivered to the classification zone.

Classification

Shrimp is sanitized and then mechanically sorted by size.

Packing and Weighing

Shrimp is packed by size and weighed in 5 kg waterproof boxes and palletized.

Freezing

Pallets, arranged by product size, are sent to freezers where shrimp is stored for 4 to 12 hours at - 15°C to - 25°C.

-15°

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

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Sustainable Shrimp

Ecosystem Conservation

- 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

Water Conservation

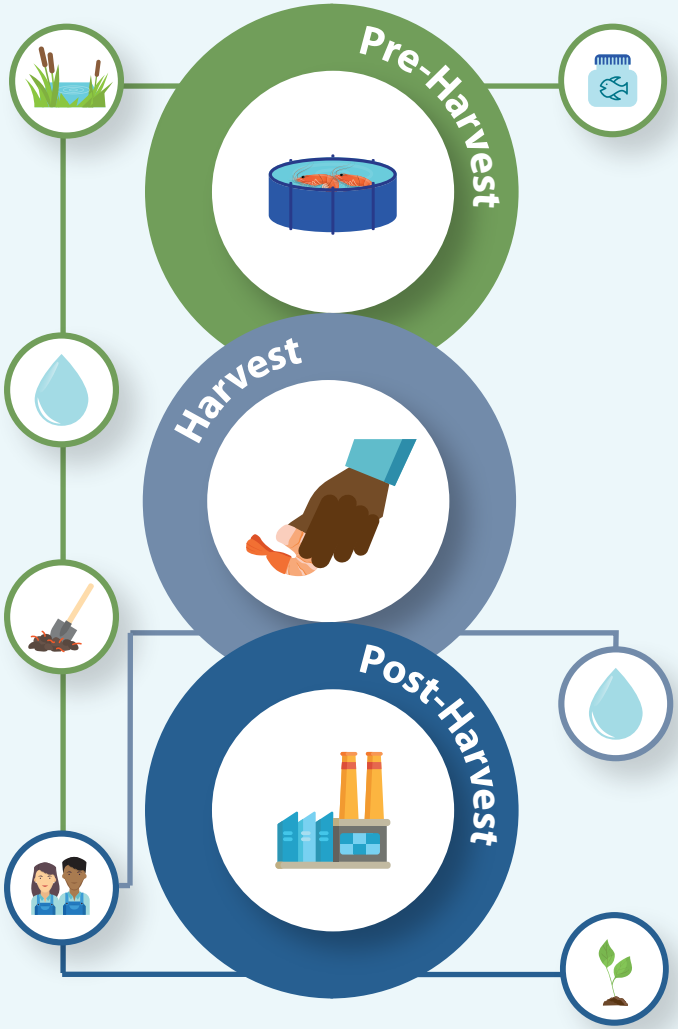
- Increase in water-use efficiency and reduction of water exchange by recycling grow-out pond water
- Reduction of waste water and nutrients deposited into natural water bodies by building sedimentation ponds

Waste Management

- Ensuring that no sludge or sediments in any form are discharged directly into receiving waters or natural ecosystems

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



Practices and Benefits

Integrated Farm Management

- 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

Water Quality

- 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

Soil Conservation

- Implementation of plant covers next to canals and water bodies to prevent erosion
- Pond design improvements for proper level layout

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.

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Contact us:

www.ecobusiness.fund
info@ecobusiness.fund
Finance in Motion (Fund Advisor)
Carl-von-Noorden-Platz 5
60596 Frankfurt a. M., Germany

eco.business Fund S.A, SICAV-SIF
31 Z.A. Bourmicht
8070 Bertrange, Luxembourg