



# World Aquaculture: Feed, Equipment & Chemicals

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Industry Study with Forecasts for **2017 & 2022**

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Study #2999 | March 2013 | \$6100 | 384 pages

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*The ongoing transition from extensive and semi-extensive to intensive aquaculture production will support greater feed demand, and rising feed costs will drive advances in market value.*

## World demand to rise 7.4% annually through 2017

After several decades of rapid expansion, world demand for aquaculture supplies and equipment is expected to grow 7.4 percent per year to \$63.6 billion in 2017 at the farm gate level. The ongoing transition from extensive and semi-extensive to intensive aquaculture production will support greater feed demand, and rising feed costs will drive advances in market value as fish meal and fish oil prices continue to grow rapidly. However, higher fish prices, due in large part to increasing feed costs, will result in slower growth in global per capita fish consumption.

## Africa/Mideast to exhibit the most rapid gains

Asia was the largest and one of the fastest growing aquaculture producing regions from 2002 to 2012, with China alone accounting for 61 percent of global aquaculture production and 51 percent of supplies and equipment demand in 2012. While advances in Chinese demand for aquaculture inputs will moderate to a more sustainable pace after several decades of rapid growth and intensification, demand increases in the rest of the Asia/Pacific region will remain robust, with only the Africa/Mideast region exhibiting faster gains. South America is expected to expand its presence in the global aquaculture industry as production increases throughout the region and as Chile recovers from the impact of a recent

## World Aquaculture Supplies & Equipment Demand, 2017 (\$63.6 billion)



infectious salmon anemia outbreak. The more developed markets of Europe and North America are expected to show healthy growth in line with the modest expansions expected in aquaculture production from these regions.

## Aquafeeds to remain largest, fastest growing segment

Aquafeeds dominate demand for aquaculture supplies and equipment, and an increasing share of farmers have turned to commercial feeds over farm-made products or natural food sources. The impact of higher fish meal and fish oil prices will be partially mitigated by the increasing use of lower cost vegetable fats and proteins, and by declining feed conversion ratios as higher quality feeds

allow farmers to use them in smaller volumes. More intensive aquaculture requires the use of a greater variety of equipment, including pumps, filters, feeders, water quality monitors, and water treatment equipment. Water containing dense populations of fish can quickly foul, promoting increased demand for water treatment chemicals. As stocking densities rise, leading to increased problems with disease and growth inhibition, demand for feed supplements and pharmaceuticals will benefit. Although an increasing number of farmers are using commercial aquafeeds instead of natural food sources, chemical inorganic fertilizer demand is expected to grow in developing countries.

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## Sample Text, Table & Chart

### ASIA/PACIFIC

#### China: Aquaculture Supplies & Equipment

Chinese demand for aquaculture supplies and equipment to grow 7 billion in 2017. Reflecting the increasing number of farm-raised fish, China's demand for aquaculture supplies and equipment is projected to reach 7 billion in 2012. However, because of the focus on tilapia, China spends more on tilapia fish produced than almost any other country.

**SAMPLE  
 TEXT**

For 2012, the total expenses for Chinese aquaculture production are projected to be over half of total aquaculture production and equipment for aquafeeds is projected to reach 7 billion in 2017, as a result of continued gradual intensification in Chinese aquaculture. Despite being the world's largest producer of industrially compounded aquafeeds, demand exceeds its production capacity. Aquafeed demand is met by domestic production is met through imports, mainly from the United States and countries in Central and South America, or through farm-made feeds containing feedstuffs such as rice bran, rapeseed meal, peanut meal, soybean meal, and silkworm pupae, either singly or in combination with organic and inorganic fertilizers. Farm-made feeds therefore play an important role in Chinese aquaculture. Besides importing manufactured feeds, China is also an importer of fish meal needed for manufacturing commercial aquafeeds.

The composition of Chinese aquafeeds has undergone significant changes since 2002, when fish meal and fish oil accounted for 40 percent of aquafeed demand in dollar terms, and 15 percent in volume. However, as global demand for fish meal and fish oil has put increasing strain on world fisheries, the price of fish-based feeds has steadily increased. Improvements in aquafeed formulation to

123

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TABLE V-5

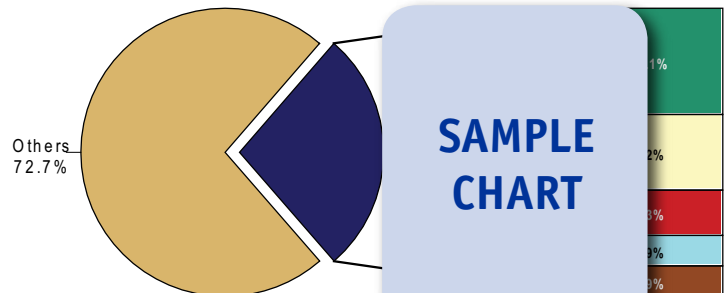
CHINA: AQUACULTURE PRODUCTION  
 (thousand metric tons)

| Item                                   | 2002 | 2007 | 2012 | 2017 | 2022 |
|--|------|------|------|------|------|
| Fisheries Production                   | 37   | 37   | 37   | 37   | 37   |
| % aquaculture                          |      |      |      |      |      |
| Aquaculture Production                 |      |      |      |      |      |
| Finfish:                               |      |      |      |      |      |
| Carp                                   |      |      |      |      |      |
| Tilapia                                |      |      |      |      |      |
| Catfish                                |      |      |      |      |      |
| Salmon & Trout                         |      |      |      |      |      |
| Other Finfish                          |      |      |      |      |      |
| Shellfish:                             |      |      |      |      |      |
| Clams                                  |      |      |      |      |      |
| Oysters                                |      |      |      |      |      |
| Shrimp & Prawns                        |      |      |      |      |      |
| Other Shellfish                        |      |      |      |      |      |
| \$/kg                                  |      |      |      |      |      |
| Aquaculture Production (mil \$)        |      |      |      |      |      |
| % China                                |      |      |      |      |      |
| Asia/Pacific Aquaculture Prdn (mil \$) |      |      |      |      |      |

**SAMPLE  
 TABLE**

CHART VII-2

WORLD AQUACULTURE OTHER NONFEED  
 CONSUMABLES MARKET SHARE  
 (\$3.3 billion, 2012)

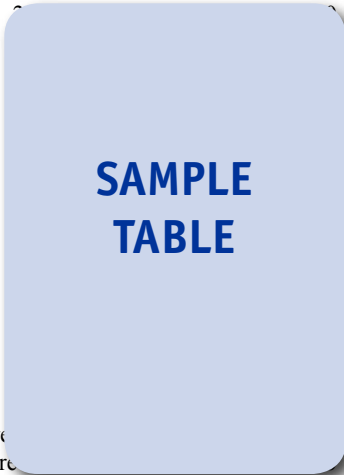


**SAMPLE  
 CHART**

## Sample Profile, Table & Forecast

**TABLE V-6**  
**CHINA: AQUACULTURE SUPPLIES & EQUIPMENT DEMAND**  
 (million dollars)

| Item                               | 2002 | 2007 | 2012 | 2017 | 2022 |
|------------------------------------|------|------|------|------|------|
| Aquaculture Prdn (000 metric tons) |      |      |      |      |      |
| \$ supplies & equip/kg aquaculture |      |      |      |      |      |
| Aquaculture Supplies & Equipment   |      |      |      |      |      |
| By Type:                           |      |      |      |      |      |
| Feed:                              |      |      |      |      |      |
| Fish Meal & Oil                    |      |      |      |      |      |
| Other                              |      |      |      |      |      |
| Equipment                          |      |      |      |      |      |
| Water Treatment                    |      |      |      |      |      |
| Feed Supplements                   |      |      |      |      |      |
| Pharmaceuticals                    |      |      |      |      |      |
| Fertilizers                        |      |      |      |      |      |
| By Market:                         |      |      |      |      |      |
| Hatcheries                         |      |      |      |      |      |
| Intensive Grow-Out Aquaculture     |      |      |      |      |      |
| Extensive Grow-Out Aquaculture     |      |      |      |      |      |



**COMPANY PROFILES**

**Thai Luxe Enterprises Public Company Limited**  
 69/5 Moo Rama II Road, Bangkhantaek, Muang Samutsongkram 75000  
 Thailand  
 66-3477-  
 http://wv

Sales: \$  
 Employr

Key Pro

**SAMPLE PROFILE**

Thai Luxe is among the leading fish and shrimp feed producers in Thailand. The Company also makes crab feed. Thai Luxe distributes its aquafeed in Thailand and overseas.

The Company is involved in the world aquaculture supplies and equipment industry through the production of aquafeed for shrimp, fish, and crab. Many of these products are supplied in grades specially formulated for postlarval, subadult, adult, and other growth stages. Shrimp feed from Thai Luxe includes types for black tiger shrimp, vannamei shrimp, and giant prawns. For black tiger shrimp, Thai Luxe makes feed mainly sold under the THAI LUXE, SPEED, LUCKY, and DELUXE brand names. Vannamei shrimp feed is marketed under the VANNA brand name, while giant prawn feed is sold as part of the THAI LUXE line. In addition, the Company manufactures economy shrimp feed under the THAI LUX, LUCKY, and PROCHOICE brand names. Fish feed made by Thai Luxe includes THAI LUXE and LUCKY catfish and vegetarian fish feed, and SPEED tilapia fish feed. The Company makes crab feed under the BIG CRAB brand name.

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“Demand for water treatment chemicals in China is forecast to increase 6.6 percent per year to \$2.3 billion in 2017. Gains will be promoted by limited water availability, increased concerns about water pollution from aquaculture, and higher stocking rates in ponds and tanks. In its major aquaculture producing regions, China is suffering from very poor water quality as a result of poor management of wastewater from large fish farms. As a result, clean water ...”  
 --Section V, pg. 124





**OTHER STUDIES**

**Filters**

US filter demand will rise 3.6 percent annually to \$14.8 billion in 2018. Motor vehicles will remain the largest market, but will be outpaced by the industrial and manufacturing, consumer and utilities markets. Likewise, air and fluid filters will grow faster than internal combustion engine filters. The filter aftermarket will be aided by newer, more expensive products. This study analyzes the \$12.4 billion US filter industry, with forecasts for 2018 and 2023 by filter medium, product and market. The study also evaluates company market share and profiles industry players.

#3125 ..... March 2014..... \$5300

**World Amines**

World demand for amines will rise 3.8 percent annually to 7.0 million metric tons in 2017. Advances will be led by China and other developing economies throughout Asia, the Africa/Mideast region and South America. Based on their versatility, low cost and widespread use, ethanolamines will remain the largest product category. This study analyzes the 5.8 million metric ton world amines industry, with forecasts for 2017 and 2022 by product, market, world region, and for 15 countries. The study also evaluates company market share and profiles industry players.

#3100 ..... February 2014..... \$6100

**Activated Carbon**

US demand for activated carbon will rise 11.2 percent per year to 1.3 billion pounds in 2017, driven by the EPA's new mercury removal standards. Industrial air purification will be the fastest growing application, surpassing water treatment as the largest use by volume. Motor vehicle applications will lead gains among smaller uses. This study analyzes the 758 million pound US activated carbon industry, with forecasts for 2017 and 2022 by type, application, and US region. The study also evaluates company market share and profiles industry players.

#3018 ..... May 2013..... \$5300

**Corrosion Inhibitors**

US demand for corrosion inhibitors will rise 4.1 percent annually to \$2.5 billion in 2017. The oil and gas industry's continued expansion of horizontal drilling and hydrofracturing well stimulation in shale formations will drive advances in demand. Concrete and cement additives will grow the fastest due to a rebound in construction spending. This study analyzes the \$2 billion US corrosion inhibitors industry, with forecasts for 2017 and 2022 by application, market and product. The study also evaluates company market share and profiles industry competitors.

#2994 ..... March 2013..... \$5100

**Amines**

US demand for amines will rise 2.4 percent annually to 3.1 billion pounds in 2016, valued at \$4.3 billion. Healthy demand for alkylamines and ethanolamines as intermediates in pesticide active ingredient production will drive above average increases in the agricultural chemical market. Ethanolamines will be the largest and second fastest growing type. This study analyzes the \$2.8 billion US amines industry, with forecasts for 2016 and 2021 by product and market. The study also evaluates company market share and capacity share, and profiles industry players.

#2962 ..... December 2012 ..... \$4900

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