# Tilapia Production, Market Report

# Production, Consumption Increase Despite Economic Downturn



The increased adoption of tilapia by restaurants and fast food chains could lead to a doubling of global demand.

## **Summary:**

Global production and consumption of tilapia continues to rise. In 2008, China remained the major producer, with gains by its Asian neighbors and parts of Latin America. The global economic downturn and rising production costs hurt some smaller producers. China consumed half its huge production and showed a trend toward greater consumption of value-added tilapia. In U.S. retail stores, tilapia is now the second best-selling fish. The tilapia industry is working to bring "greener" tilapia products with improved quality control to market.

Worldwide tilapia production should reach 3 mmt in 2010, as demand for various tilapia products continues to grow. A strong rebound of production in China late in 2008, along with significant increases from the Philippines, Indonesia, Vietnam and parts of Latin America, more than equaled the huge losses that resulted from the winter storms in China in early 2008.

Despite problems with cold weather that hampered production at the start of the year, China remained the major producer of tilapia in 2008, accounting for almost half the year's production. However, that share of the market may have peaked, and the country may not be able to keep up with the rapid growth of its Asian neighbors.

#### China

China's tilapia exports increased

### Kevin Fitzsimmons, Ph.D.

Associate Director of International Programs Professor and Extension Specialist

Department of Soil, Water and Environmental Science College of Agriculture and Life Sciences University of Arizona 2601 East Airport Drive Tucson, Arizona 85706 USA kevfitz@ag.arizona.edu

**Dr. Khalid Alghanim** King Saud University Riyadh, Saudi Arabia

**Dr. Sidrotun Naim** Institut Teknologi Bandung Bandung, Jawa Barat, Indonesia

about 4% from 215,400 mt in 2007 to 224,360 mt in 2008 (Table 1). While the United States and some European destinations were slightly down for the year, the increased sales to African markets were especially notable.

The value of exported tilapia products increased almost 50% from U.S. \$491 million to \$734 million for 2008. Some of this increase was from higher wholesale values, but a significant portion also came from value-added products. Prices for fresh and frozen fillets have dropped back from mid-2008 peaks as Chinese and global production increased in the later months of 2008, but value-added forms have retained higher values.

The China Aquatic Products Processing and Marketing Association reported that production costs were up 20% in 2008, and double-digit increases should be expected for the next few years. Also, in December 2008, China reported plans for a ban on carbon monoxide treatments for all fish and meat products, and a final decision is expected in late 2009. Carbon

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Table I. Tilapia exports from China, 2007 and 2008.

	2008	2007
Importing Country	Export Quantity (mt)	<b>Export Quantity (mt)</b>
United States	118,559	122,073
Mexico	36,542	39,306
Russia	17,117	19,378
Nigeria	9,185	168
Ivory Coast (Cote d'Ivoire)	5,279	1,404
Israel	4,167	4,073
Poland	3,734	2,502
Netherlands	2,757	2,860
Equatorial Guinea	2,418	1,535
Belgium	2,282	1,753
Ukraine	1,752	1,091
Germany	1,708	1,996
Puerto Rico	1,698	1,270
France	1,623	1,838
Benin	1,603	338
Angola	1,589	979
United Arab Emirates	1,573	1,534
Ghana	1,327	815
Zambia	1,319	1,023
Namibia	994	70
Others	7,135	8,994
Total	224,360	215,000

monoxide was one of about 20 compounds banned from the food industry as the Chinese government responded to several food safety problems.

#### Other Asian Countries

Indonesia and Thailand both increased production and exports during 2008, taking advantage of tight markets and higher prices. The Philippines also increased production significantly, but virtually all of these sales were to domestic markets.

Bangladesh is another Asian country

that rapidly increased production, reaching 67,000 mt in 2008. Most of this production was achieved in polyculture in existing carp and shrimp ponds. The vast majority of the fish produced in Bangladesh is sold in local markets.

### Latin America, Caribbean

Production increased in most of the Latin American countries in 2008. Brazil and Mexico continue to be the largest producers with annual harvests approaching 100,000 mt. But in both cases, domestic demand is sufficient to absorb

Consumers' increasingly urbanized lifestyles are supporting rising sales of new valueadded tilapia products.

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Ecuador, Honduras and Costa Rica are the major exporters. Colombia and Cuba produce significant amounts, but export little. Jamaica, Panama, Nicaragua and Peru each have some export trade as well as significant domestic demand. Venezuela, Guyana and Guatemala each have small numbers of farms, but significant potential to become major producers if investments in production and infrastructure can be achieved.

During the financial crisis in late 2008, smaller producers and processors in Central and South America who didn't have long-term contracts with the larger institutional buyers of tilapia were especially hard hit. Bigger, more vertically integrated operations with long-term contracts to supply bigger grocery and restaurant chains did fine because their finances were set up for longer periods. For the most part, they were able to survive the financial situation.

The big farms in Nicaragua, Ecuador, Honduras and Costa Rica were doing well, while small operations in Ecuador and other locations were having problems with buyers unable to get the lines of credit they needed to make purchases.

#### Demand

China continued to be the world's biggest market for tilapia products. More than 50% of the 1.11 mmt it produced was consumed domestically. One interesting trend is the rapid increase in demand for value-added tilapia products in the Chinese domestic markets.

Increases in the number of both married and single women in the workplace have driven the demand for easy-to-prepare fish products with minimal waste and decreased the demand for live fish in grocery markets. Rapid urbanization, high-rise apartment living and Westernstyle grocery store purchases are certain to reinforce these changes in demand.

The restaurant tradition of holding live fish in tanks continues, however. Improvements in tank appearance with better construction and maintenance provide a synergy with tilapia and their hardiness in crowded conditions that can further improve the role of tilapia in Chinese cuisine.

Demand for tilapia continues to grow in the United States, where shrimp, with 1.86 kg annual per-capita consumption, was the most popular seafood in 2008. Per-capita consumption of tilapia was 0.54 kg, making tilapia the fifth most popular fish for Americans, just behind

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pollock. This consumption is the equivalent of 453,264 mt of live-weight fish.

In U.S. retail stores, tilapia is now the second best-selling fish behind salmon. Total import and farm gate sales for 2008 were U.S. \$784.5 million. Domestic growers received about \$50 million of that total, while the balance went for tilapia grown outside the United States.

During the recession, experts expected to see a decrease in tilapia consumption. In 2008 and early 2009, a shift in consumption patterns with some decrease in fresh and frozen fillet sales to restaurants was noted, but at the same time, there was an increase in grocery store sales, especially frozen, value-added product forms. Some reports have noted similar situations in the European Union. Basically, consumers ate tilapia less in restaurants, but prepared more at home.

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#### **Trends**

Farmers and processors everywhere were hearing demands to make their products and operations more environmentally friendly, as the clamor for "green" products continues to grow. The Aquaculture Certification Council, World Wildlife Fund, Whole Foods and others have led the efforts to certify farms and processors and bring "greener" tilapia products to market. An associated effort is for improved quality control for products sold in major consuming regions such as the United States and European Union.

The adoption of tilapia by some of the fast food chains is a very positive step for the tilapia industry. Long John Silver's, part of Yum Brands, has used tilapia in chainwide promotional campaigns. This very positive development could lead to eventual distribution to other chains and a doubling of global demand.

Another major trend in the tilapia industry is that more value-added products are coming to market. More specialty-type products, such as center-cut loins, stuffed and crusted tilapia prepared meals or ready-to-cook meals, are processed and packaged in the producing countries. Others are prepared in the U.S. and Europe from imported product.

Innovative packaging such as resealable bags that contain 2 or 3 kg of frozen fillets that allow consumers to take what they need for each meal are popular in the U.S. and E.U. Multicolor, modified-atmosphere and other high-tech packages with recipes and nutritional information are quickly becoming the norm for retail packages in grocery stores, club stores and hypermarkets.

# Perspectives

Tilapia farming, processing and consumption had to negotiate severe problems in 2008, with a global financial crisis and winter storms in the largest production region. But global production and consumption both increased, and prices improved for farmers and processors for at least part of the year.

These trends will likely continue through 2009 and into 2010. As economies come out of the recession, the tilapia industry appears poised to accelerate its growth.

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