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Per Capita Consumption of Seafood-Fish in the US 1970-2009

Source: USDOC/NOAA/NMFS
U.S. Top Ten Seafoods, per-capita consumption

<table>
<thead>
<tr>
<th>Year</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
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</thead>
<tbody>
<tr>
<td>2000</td>
<td>Tuna</td>
<td>Shrimp (3.50)</td>
<td>Pollock</td>
<td>Salmon</td>
<td>Catfish (0.996)</td>
<td>Cod</td>
<td>Clams</td>
<td>Crabs</td>
<td>Flatfish</td>
<td>Scallops</td>
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<td>2003</td>
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<td>Salmon</td>
<td>Pollock</td>
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<td>Catfish (0.969)</td>
<td>Crabs</td>
<td>Clams</td>
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<td>Pangasius (0.356)</td>
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<td>2009</td>
<td>Shrimp (4.10)</td>
<td>Tuna</td>
<td>Salmon</td>
<td>Pollock</td>
<td>Tilapia (1.208)</td>
<td>Catfish (0.849)</td>
<td>Crabs</td>
<td>Cod</td>
<td>Clams</td>
<td>Pangasius (0.356)</td>
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</tbody>
</table>
Imports
Quantity of US and Imported Frozen Fillets Sold in the US

<table>
<thead>
<tr>
<th>Year</th>
<th>US Processed Frozen Fillets</th>
<th>Imported Fillets Sold</th>
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</thead>
<tbody>
<tr>
<td>2005</td>
<td>80%</td>
<td>20%</td>
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<tr>
<td>2006</td>
<td>61%</td>
<td>39%</td>
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<tr>
<td>2007</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>2008</td>
<td>50%</td>
<td>50%</td>
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<tr>
<td>2009</td>
<td>43%</td>
<td>57%</td>
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<tr>
<td>2010</td>
<td>43%</td>
<td>57%</td>
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</table>
2010 Value of Imported and Domestic Catfish Products

- CATFISH (ICTALURUS SPP.) FILLET FROZEN: 290.2 million dollars
- CATFISH (PANGASIUS SPP.) FILLET FROZEN: 152.9 million dollars
- 2010 US Fresh Fillet: 135.8 million dollars
- 2010 US Frozen Fillet: 17.8 million dollars
U.S. Catfish Processing
470.6 million pounds processed in 2010
Total Quantity of Processed Catfish in 2010 was 232 million pounds
Total Value of Processed Catfish in 2010 was $580 million
US Processed Frozen Catfish Products
2000-2010

 Thousand Lbs.

Frozen Whole Quantity

Frozen Fillet Qty

Frozen Other Qty

U.S. Catfish Production
Catfish Production Acreage by State
Jan 1998 - Jan 2010

Acreage

Mississippi Alabama Louisiana Arkansas

Acreage
Live Catfish Prices Received by Producers
Catfish Feed Prices for 28% and 32% Crude Protein, Floating, Jan. 2006 - Jan. 2011

Feed Price, $/ton

- 32%
- 28%
Feed Delivered for Foodsize Fish

% Change from 2007 to 2010
AL -20%
AR -65%
LA -84%
MS -41%
East -36%
West 2%
US -39%
% Change from 2007 to 2010
AL  -20%
AR  -65%
LA  -84%
MS  -41%
East -36%
West 2%
US  -39%

32% Feed Price, $/ton
2007  289
2008  388
2009  367
2010  353
Feed Delivered for Fingerlings and Broodfish

![Graph showing the feed delivered for fingerlings and broodfish from 2004 to 2010. The graph includes lines for MS, AL, AR, LA, East, and West.]
Catfish Feed Prices
Memphis, Monthly High Protein Soymeal ($/ton) 2001-2011

Source: USDA-AMS, 2011.
Memphis, Monthly Cash Corn ($/bu.)
2001-2011

Source: USDA-AMS, 2011.
Memphis, Monthly Cash Soybeans ($/bu.)
2001-2011

Source: USDA-AMS, 2011.
How high will feed prices go in 2011?

- Corn and Soybean Outlook
  - Ending stocks declining
    - Lower yields & strong demand
  - Raised projection for US production of cotton & rice
    - Reduces acres for corn and soybeans
  - Soybean exports projected to be a record level
  - “Rationing Process” = higher price

- Follow the grain market and as opportunities present themselves book a portion of feed
In-Pond Catfish Inventories
In-Pond Foodsize Catfish Inventory
Large plus Small Catfish Stockers in Inventory, January
Catfish Fingerlings in Inventory (pounds), January
Catfish Fingerlings
in Inventory (Numbers) January

![Bar chart showing the numbers of catfish fingerlings in inventory from 2004 to 2011. The numbers peak around 2006 and decrease thereafter.](chart.png)
Fish Price Direction

- Inventories tell the story for future fish availability
  - Foodsize inventories down
  - Stockers inventories down
  - Fingerling inventories down
- Indication is for high price to producer to continue in 2011
  - Will the increased price allow US processors to sell these fish at a higher price?
  - Can Processors pay enough to cover producer cost of production?
COP Formula = (1) + (2) + ((3 x $0.0123646) + (4) = (5)

<table>
<thead>
<tr>
<th>Feed Price, $/ton</th>
<th>Only Variable Costs Excluding Feed Cost ($/lb)</th>
<th>Variable Feed Costs ($/lb)</th>
<th>Index Number with $250/ton as the Base $0</th>
<th>Fixed Costs ($/lb)</th>
<th>Fixed Plus Variable Costs OR Price PAID to Producer ($/lb)</th>
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<td>Feed Price, $/ton</td>
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Summary

- Long-term US fish consumption is going up
- Catfish fillet sales losing ground
  - To imported catfish and tilapia
  - Now, limited supply available to sell
Summary

- U.S. processing quantity increased slightly in 2010 vs. 2009
  - Import trend is continuing to increase

- Catfish feed cost continues to be rise

- Price to producer
  - Current fish price in $0.90 - $0.95/lb. range
  - Upward price force in 2011

- Future
  - Will increasing production costs show up in increased retail prices? Rising Price to Consumer? With the modest recovering economy, will consumer’s pay more?
Summary

- Development of Best Management Practices and Standard Operating Procedures to provide a consistent quality product to the consumer every time.

- LEAN manufacturing and continuous improvement are needed to gain efficiencies needed to survive and thrive.