Thailand is the top ten countries for fishery production

- Existence
- Export fish and fishery products
- Kitchen of the world
Fishery and aquaculture production during 2000-2010

Quantity: 1,000 tonnes

Source: Thailand Department of Fisheries
Quantity and value of exported fishery products during 2001-2010

Source: Thailand Department of Fisheries
Value of fishery products by main importing countries during 2001-2010

Source: Thailand Department of Fisheries
Key success for Thailand aquaculture development

- Suitable location
- Diversity of species cultured
- Several knowledge based on coastal aquaculture
- Appropriate cultured practices
- Competence of farmers in breeding, nursing, culturing and technology adaption
- Competence of government and private sector in aquaculture management to meet international standard
Coast of Thailand

Thailand is bounded by
the Gulf of Thailand on the east coast
the Andaman Sea on the western coast

Total coastline 2,815 km
Eastern coastline 544 km
South-eastern coastline 1,334 km
South-western coastline 937 km

Coastal area 32,866.88 km²
(3,286,690 ha)
23 provinces along coastline
Coastal aquaculture

Major commercial species:
- Shrimp - white shrimp
  - black tiger shrimp
- Fish - sea bass
  - grouper

Other commercial species:
- Fish - milkfish, cobia
- Mollusc - mussel, blood cockle, oyster
- Crab - mud crab
  - blue swimming crab
Coastal aquaculture production in 2010

Quantity: tonnes

- Shrimp: 505,500 (59.22%)
- Mollusc: 328,280 (38.46%)
- Marine fish: 19,820 (2.32%)

Source: Thailand Department of Fisheries
Marine shrimp culture

1972 : First breeding success of *Penaeus monodon* by Phuket Coastal Aquaculture Station, DOF

1985 : Marine shrimp culture grown steadily

2002 : Expansion of white shrimp industry *(Penaeus vannamei)*

2006 until present : 97% of shrimp production is white shrimp
Shrimp production during 2000-2010

Quantity: 1,000 tonnes

Source: Thailand Department of Fisheries
Sea bass culture (*Lates calcarifer*)

- 1973: First success breeding of sea bass at National Coastal Aquaculture Institute (NICA), DOF
- Easy to breed, hatch and nurse
- Easy to culture, can grow in various environment
- Earthen pond and cage culture
Sea bass production during 2000-2010

Quantity: tonnes

Source: Thailand Department of Fisheries
Grouper culture

Epinephelus coioides, Epinephelus malabaricus,
Cromileptes altivalis, Epinephelus lanceolatus
Epinephelus fuscoguttatus, Plectropomus leopardus

• Difficult to breed, low survival rate
• Easy to culture and mostly culture in cages
• Good taste, good price for live fish
Potential commercially high value groupers

- **Leopard grouper**
  *Plectropomus leopardus* (Bloch)

- **Tiger grouper**
  *Epinephelus fuscoguttatus*

- **Giant grouper**
  *Epinephelus lanceolatus*
Grouper production during 2000-2010

Source: Thailand Department of Fisheries

Quantity: tonnes

<table>
<thead>
<tr>
<th>Year</th>
<th>Grouper Production (tonnes)</th>
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<tr>
<td>2000</td>
<td>1,332</td>
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<tr>
<td>2001</td>
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<td>1,170</td>
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<td>2009</td>
<td>2,996</td>
</tr>
<tr>
<td>2010</td>
<td>3,933</td>
</tr>
</tbody>
</table>

Source: Thailand Department of Fisheries
Other commercial marine finfish

Cobia
*Rachycentron canadum* (Linnaeus)

Milkfish
*Chanos chanos*

Spotted scat
*Scatophagus argus*

Atlantic Tripletail
*Lobotes surinamensis*

Short-bodied mackerel
*Rastrelliger brachysoma*
Other commercial species

- **Mollusc:**
  - Blood cockle (*Anadara granosa*)
  - Oyster (*Crassostrea belcheri*)
  - Mussel (*Perna viridis*)
  - Abalone (*Haliotis asinina*)
  - Spotted babylon (*Babylonia areolata*)
Other commercial species

- Blue swimming crab
  *Portunus pelagicus*

- Mud crab
  *Scylla olivacea*
  *Scylla paramamosain*
Direction of Aquaculture Development

- Food security
- Food safety
- Economic growth
- Environmental sustainability
- International agreement

Balance and Sustainability
Aquaculture carrying capacity can be used to guide future aquaculture management and policy formulation in Thailand.

Aquaculture carrying capacity

- Fish cage culture
- Mollusc culture in coastal area

Environmental sustainability