



# **Status of Coastal Aquaculture in Thailand**

**Coastal Fisheries Research and Development Bureau  
Department of Fisheries,  
Ministry of Agriculture and Cooperatives**



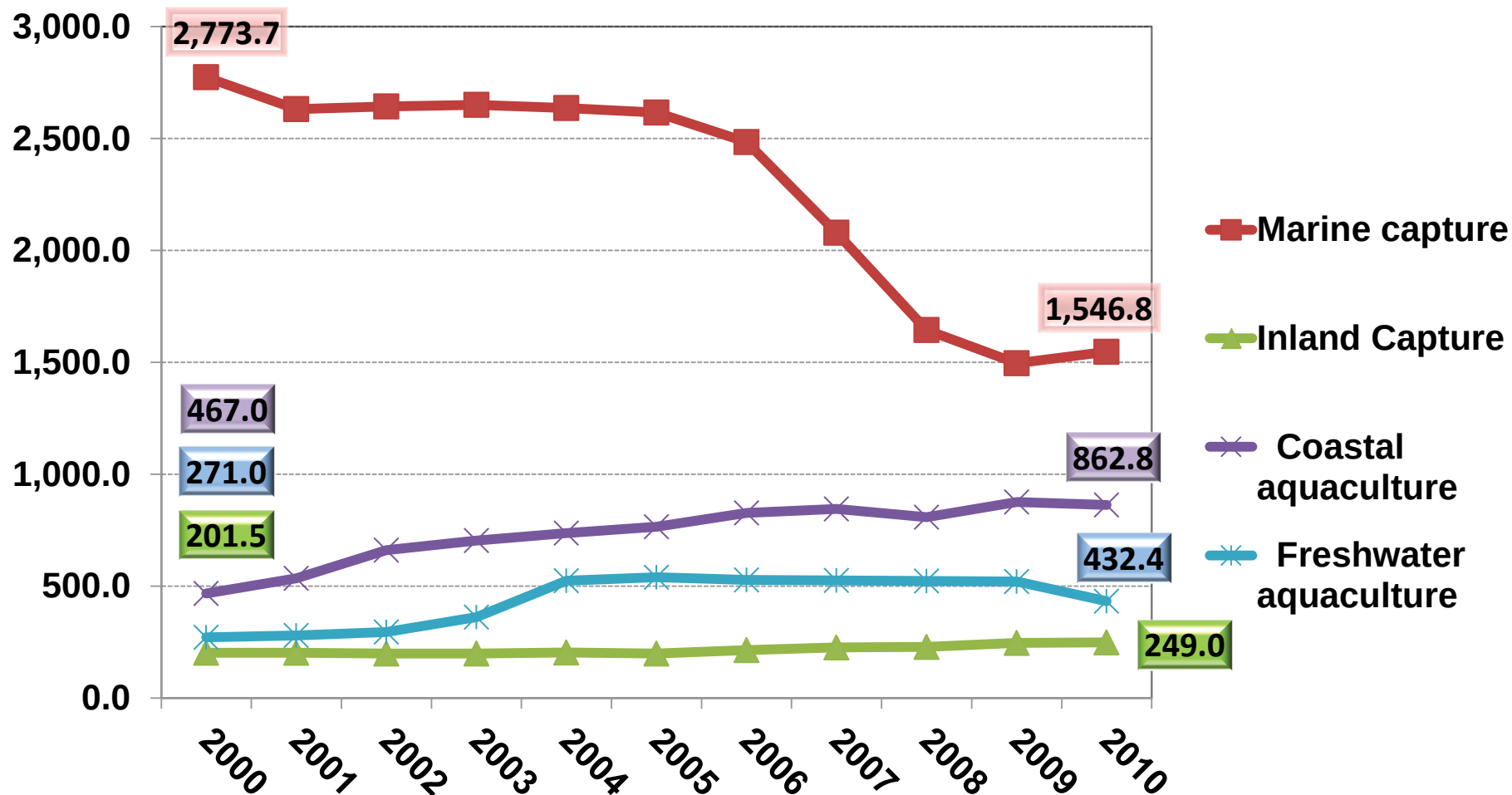


# Thailand is the top ten countries for fishery production

- **Existence**
- **Export fish and fishery products**
- **Kitchen of the world**

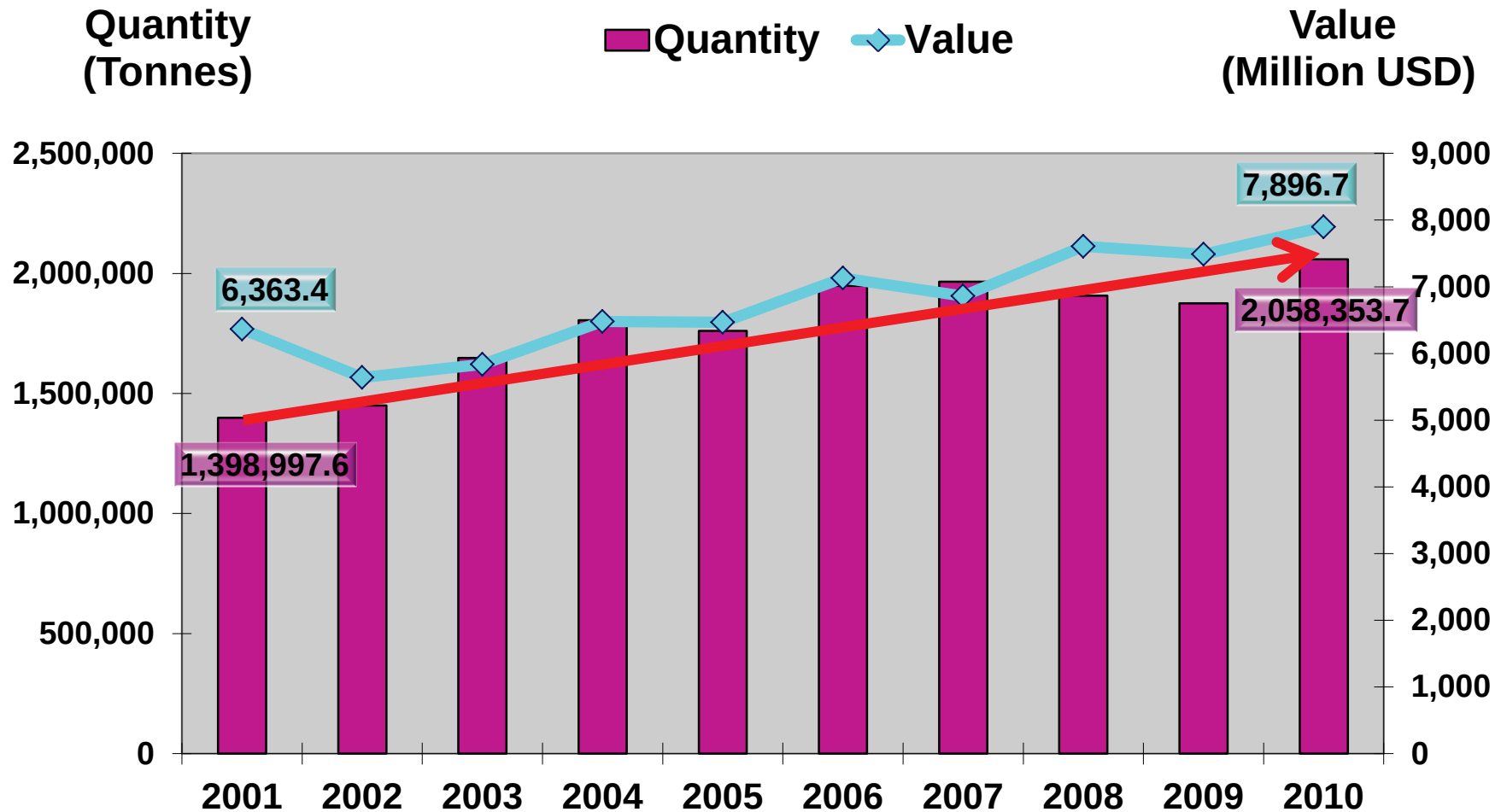
# Fishery and aquaculture production during 2000-2010

Quantity: 1,000 tonnes



Source: Thailand Department of Fisheries

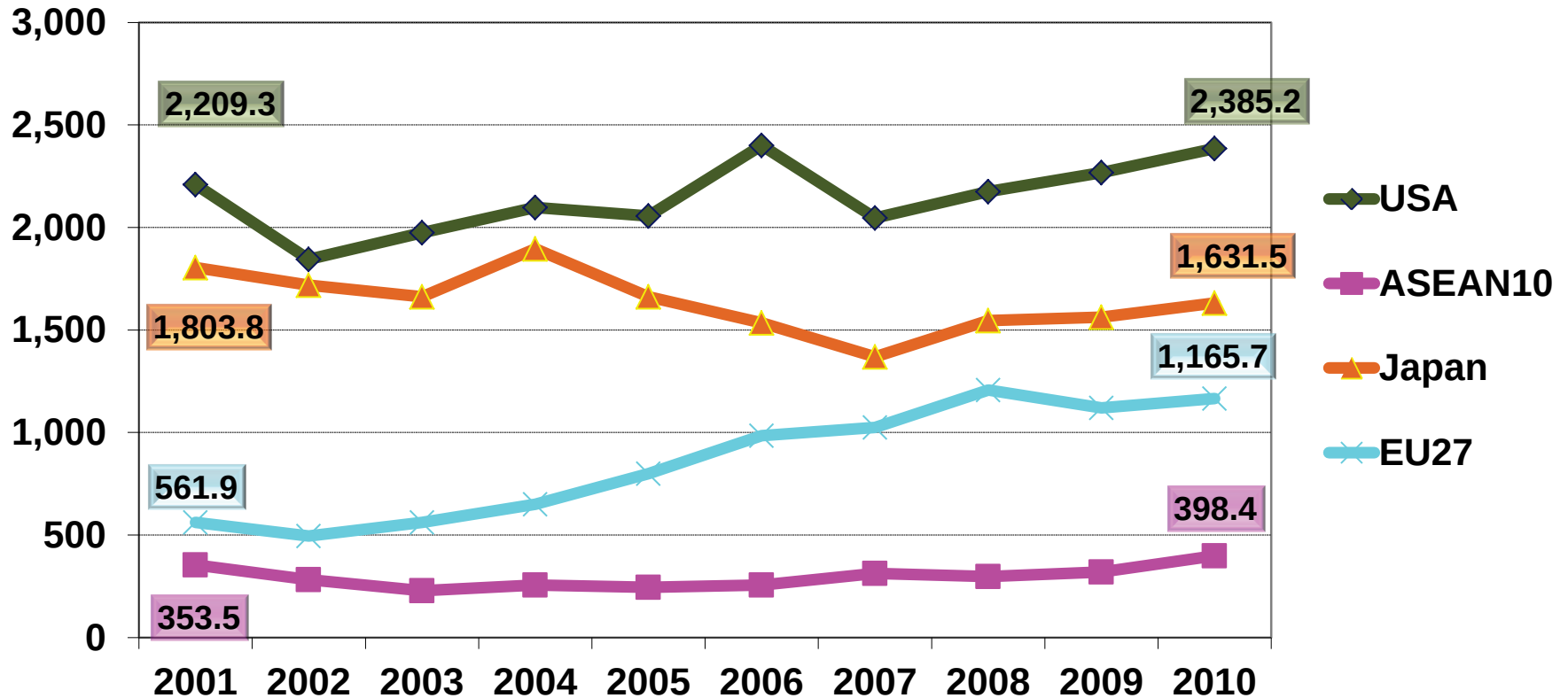
# Quantity and value of exported fishery products during 2001-2010



Source: Thailand Department of Fisheries

# Value of fishery products by main importing countries during 2001-2010

Value: Million USD



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 km<sup>2</sup>**  
                                  **(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

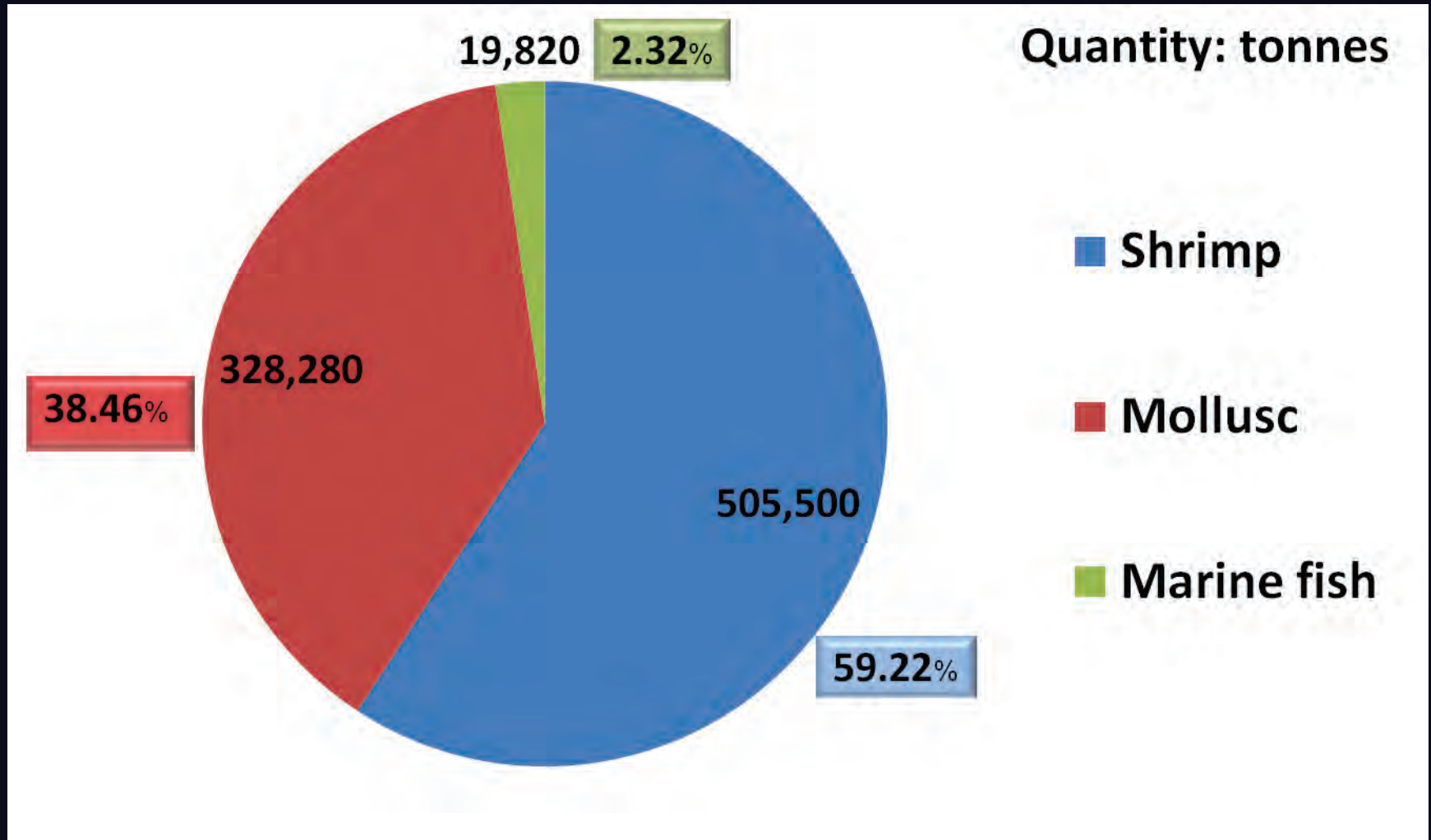
Mollusc - mussel, blood cockle,  
oyster

Crab - mud crab  
- blue swimming crab





# Coastal aquaculture production in 2010



Source: Thailand Department of Fisheries

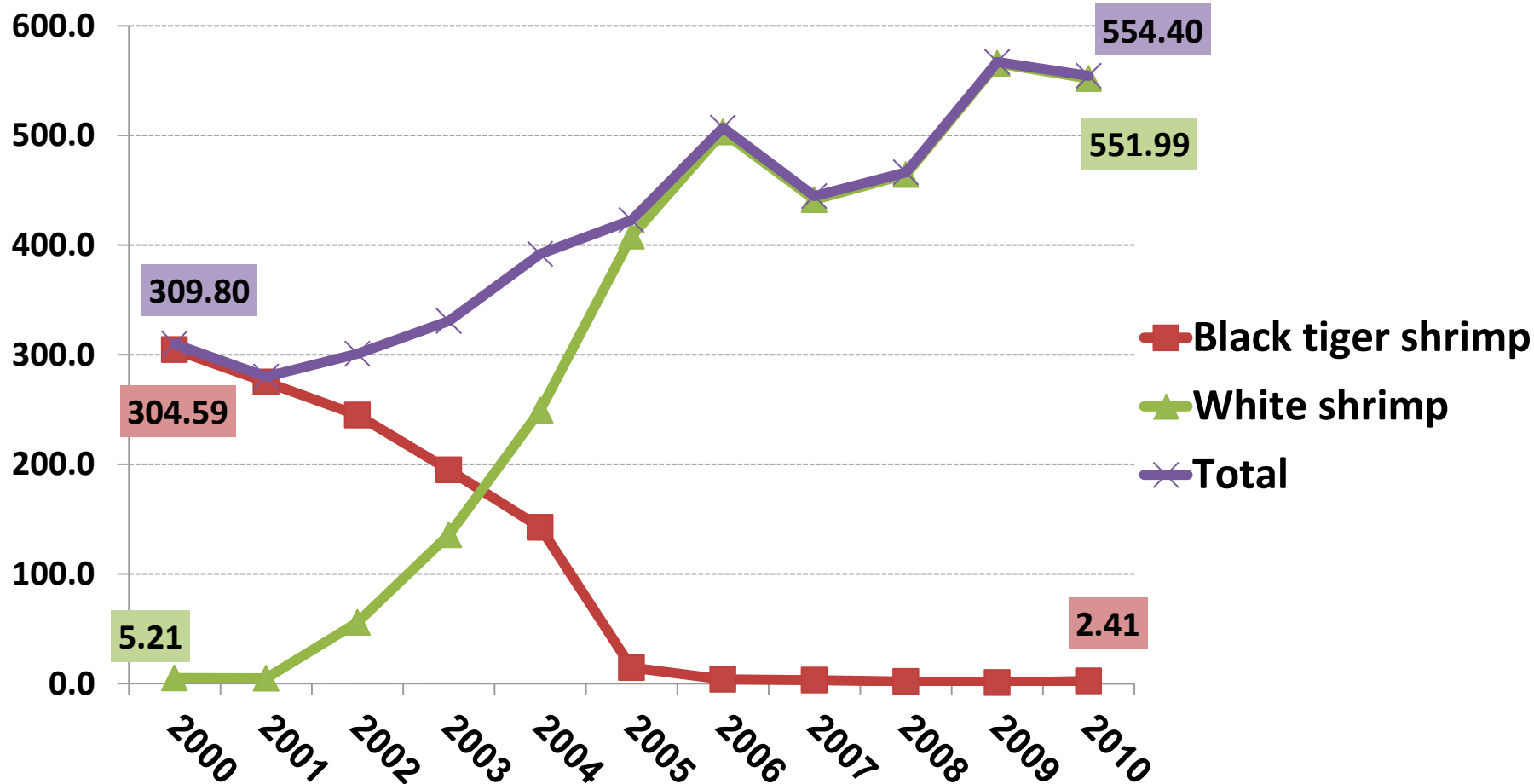
# Marine shrimp culture

- 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*)

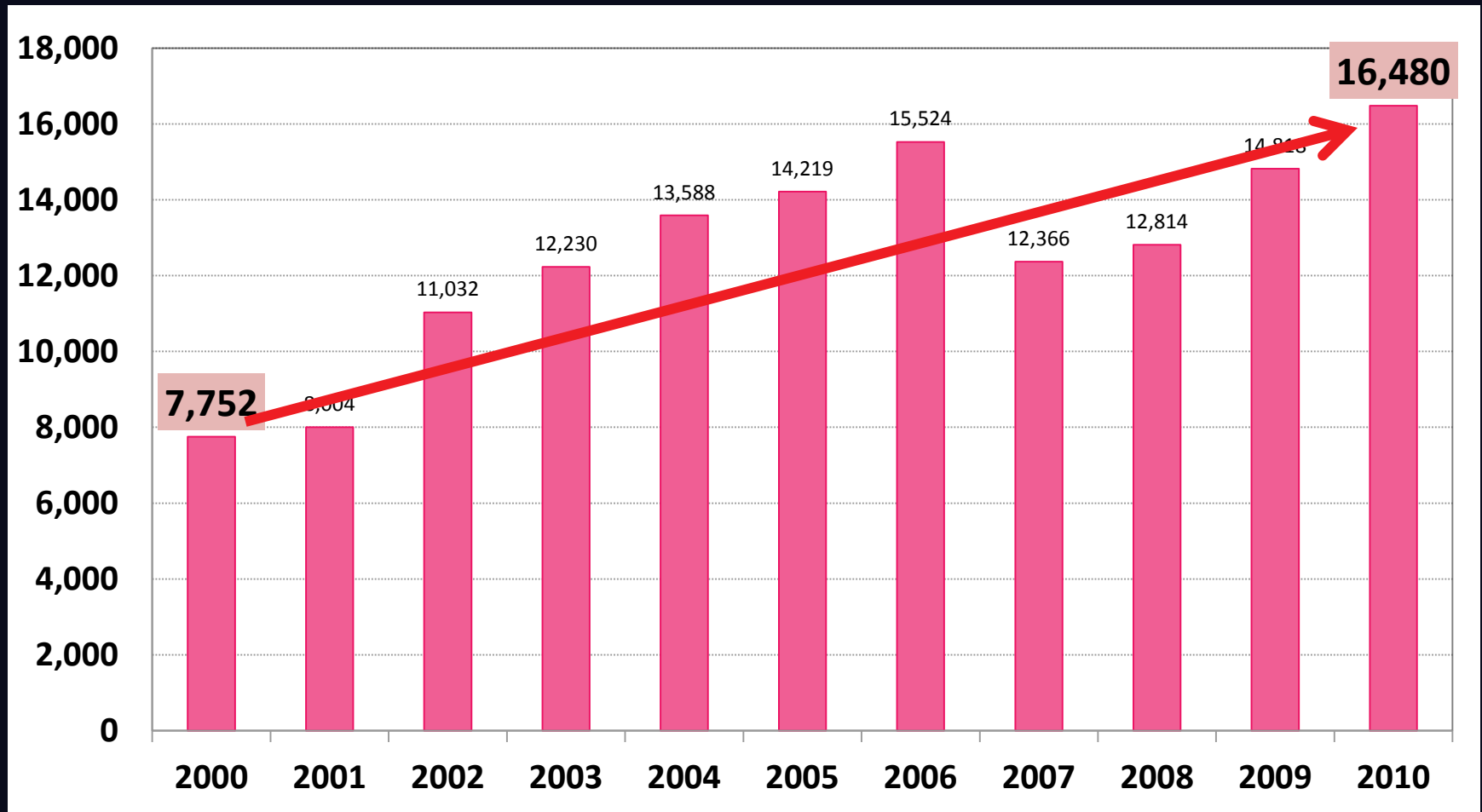
- 1973: First success breeding of sea bass at National Coastal Aquaculture Institute (NICA), DOF
- Easy to breed, hatch and nurse
- Easy to culture, can grow in various environment
- Earthen pond and cage culture





# 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)



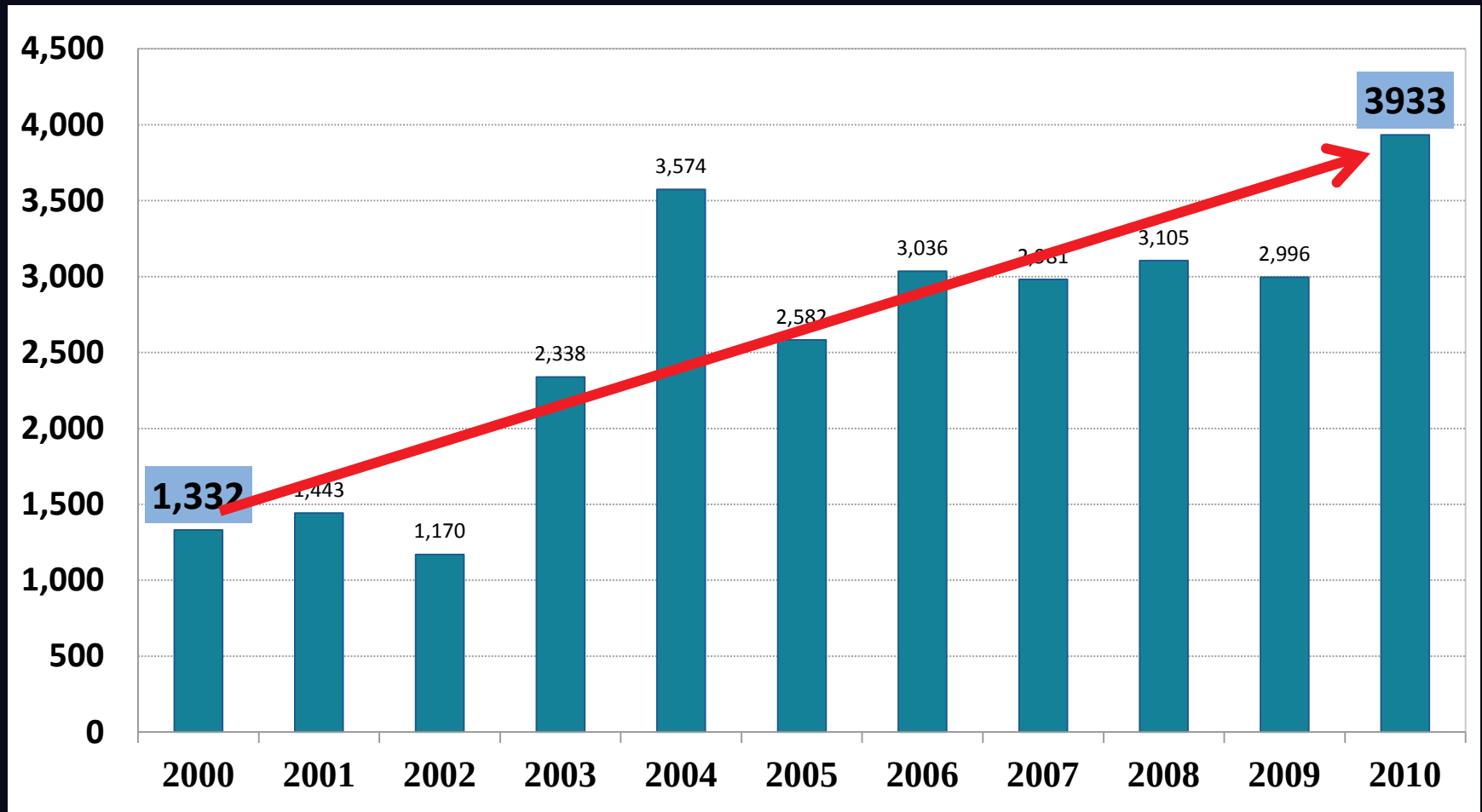
**Tiger grouper**  
*Epinephelus fuscoguttatus*



**Giant grouper**  
*Epinephelus lanceolatus*

# Grouper production during 2000-2010

Quantity: tonnes



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*

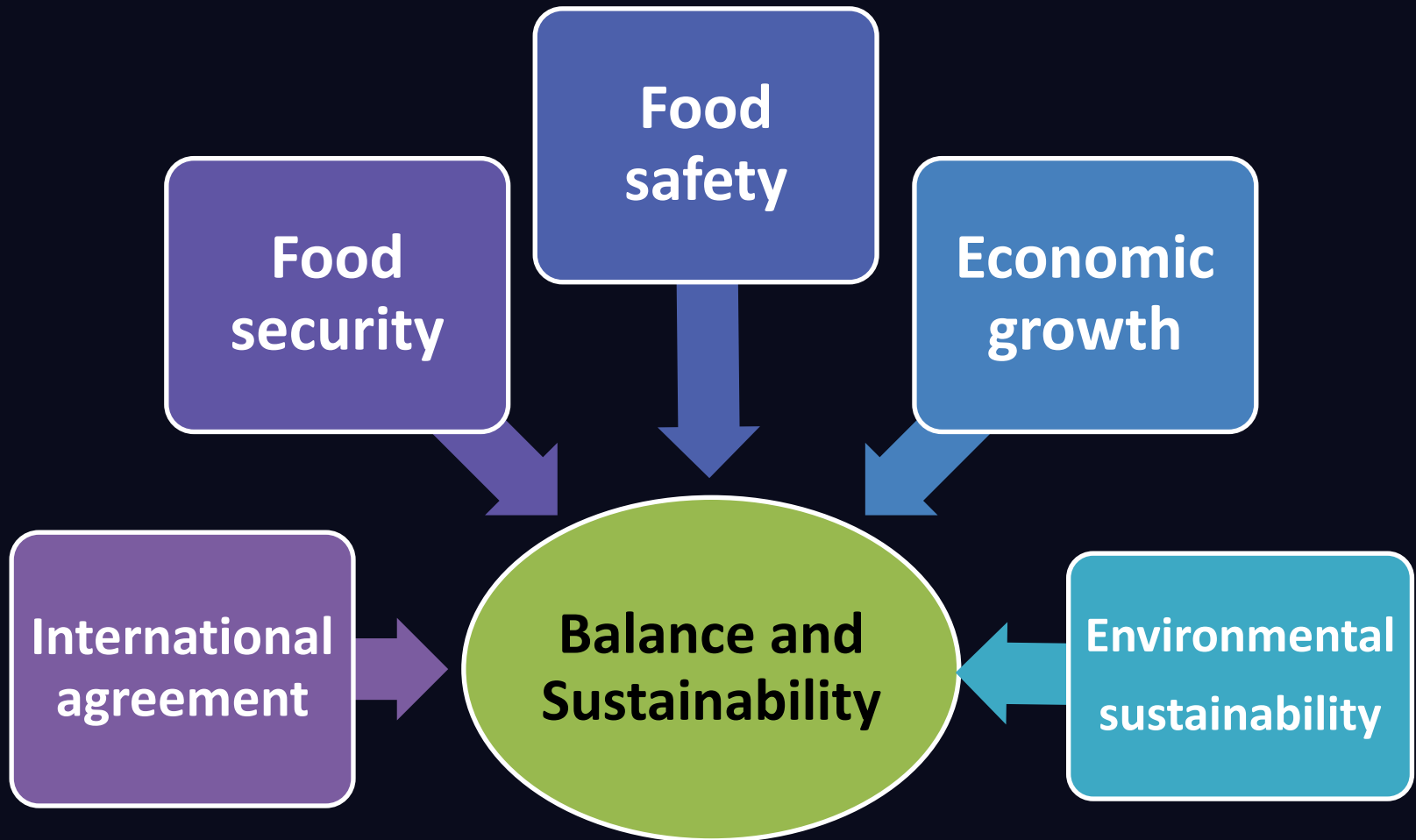
- **Mud crab**

*Scylla olivacea*

*Scylla paramamosain*



# Direction of Aquaculture Development







## Aquaculture carrying capacity

Environmental  
sustainability



- Fish cage culture
- Mollusc culture in coastal area

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

