



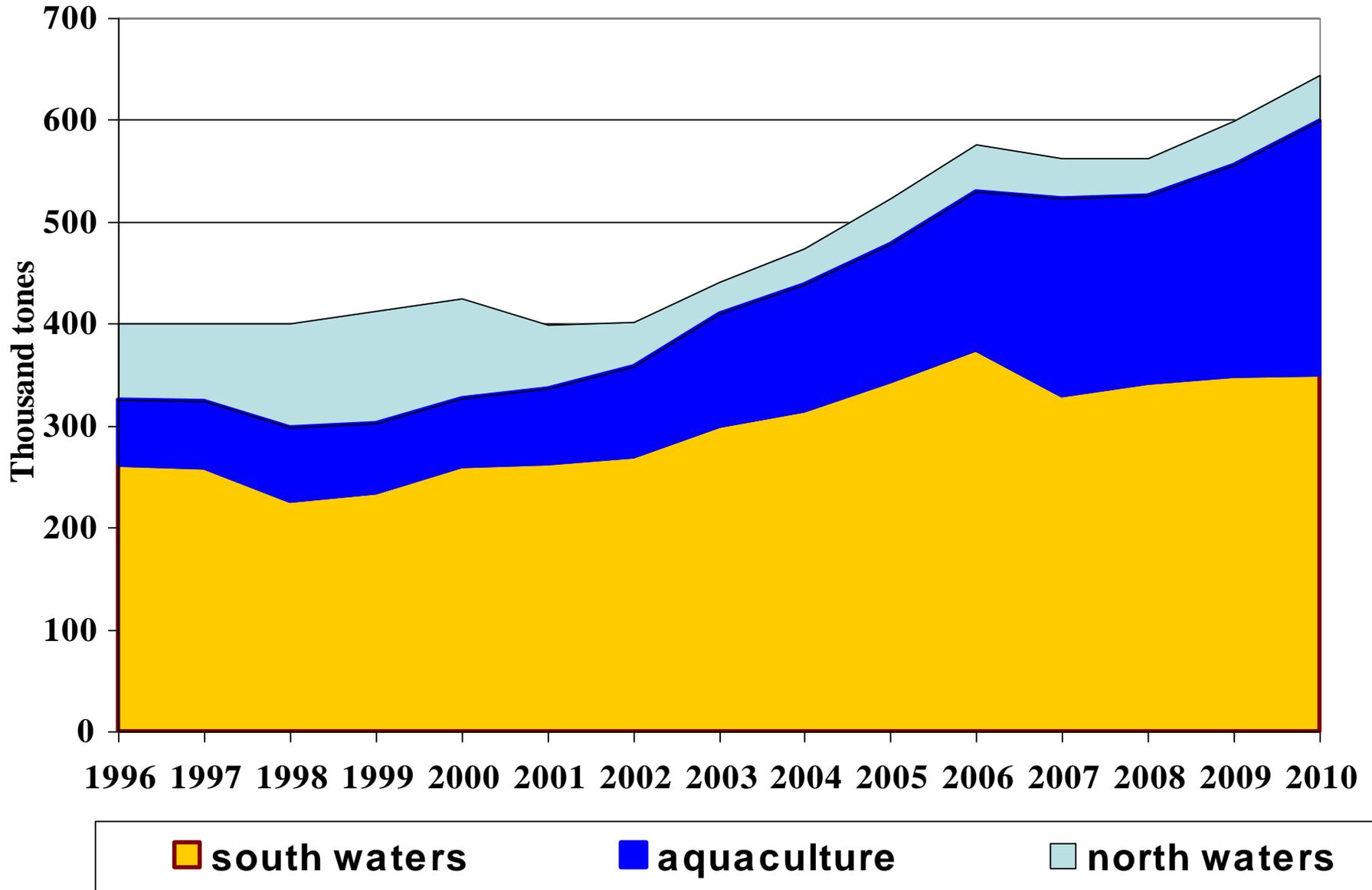
In the name of God
The Merciful, The Compassionate



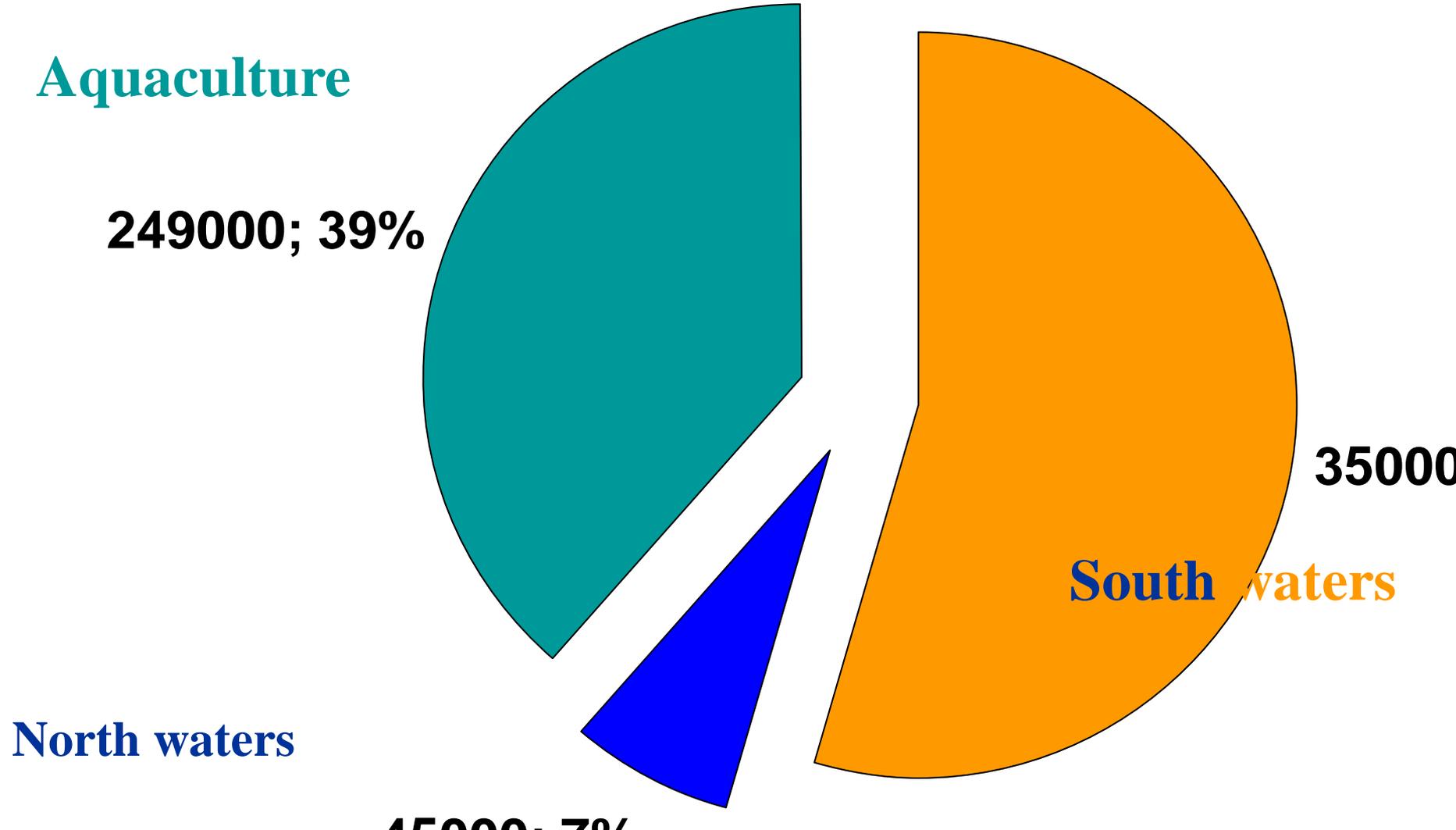
Status of Fisheries in I.R.Iran

**Report of Iran Fisheries Organization
to D-8 WG on Marine Affairs and Fisheries
15 May 2011, Tehran, Iran**

National fish production in I.R.Iran



Contribution of capture and aquaculture to National fish production in 2010

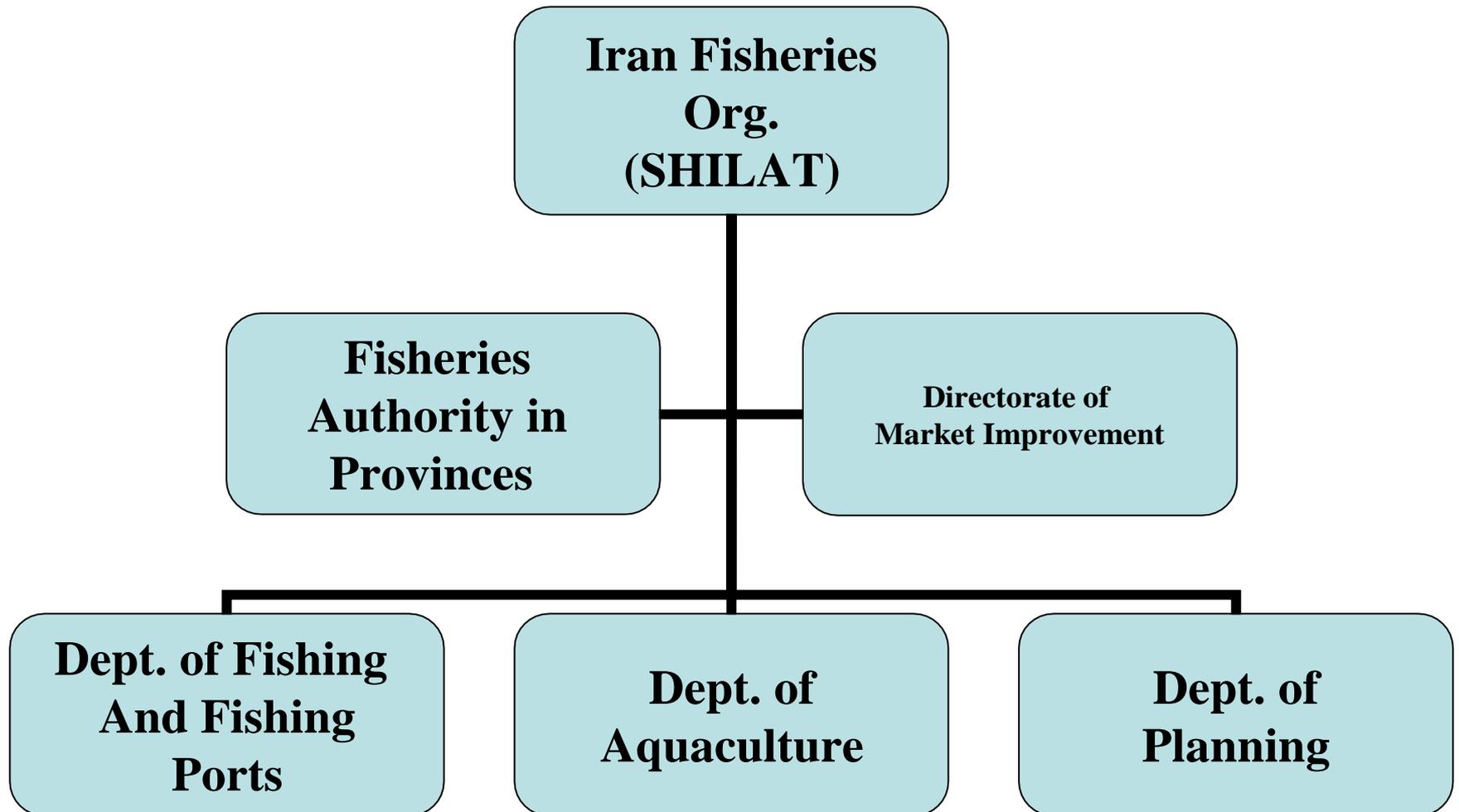


Fisheries Sector

*2009

- Total number of employee :181381 person
 - *No. of employee in Aquaculture sub-sector: 38000*
 - *No. of employee in Fishing sub-sector: 143000*
- No. of fishing vessels: 12000
- No of fish farms in production: 10000

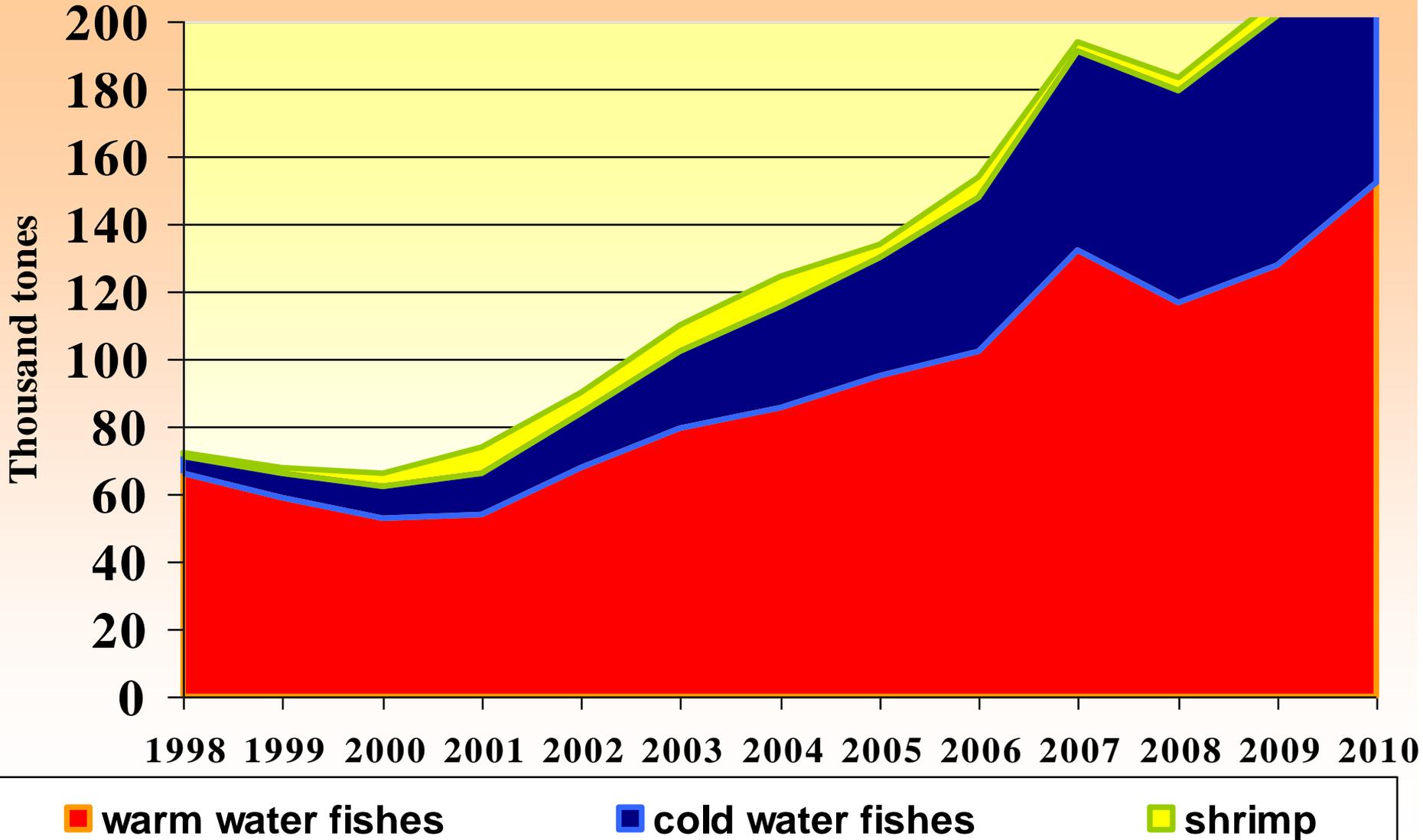
Ministry of Jihad –e- Agriculture Iran Fisheries Org. (SHILAT)



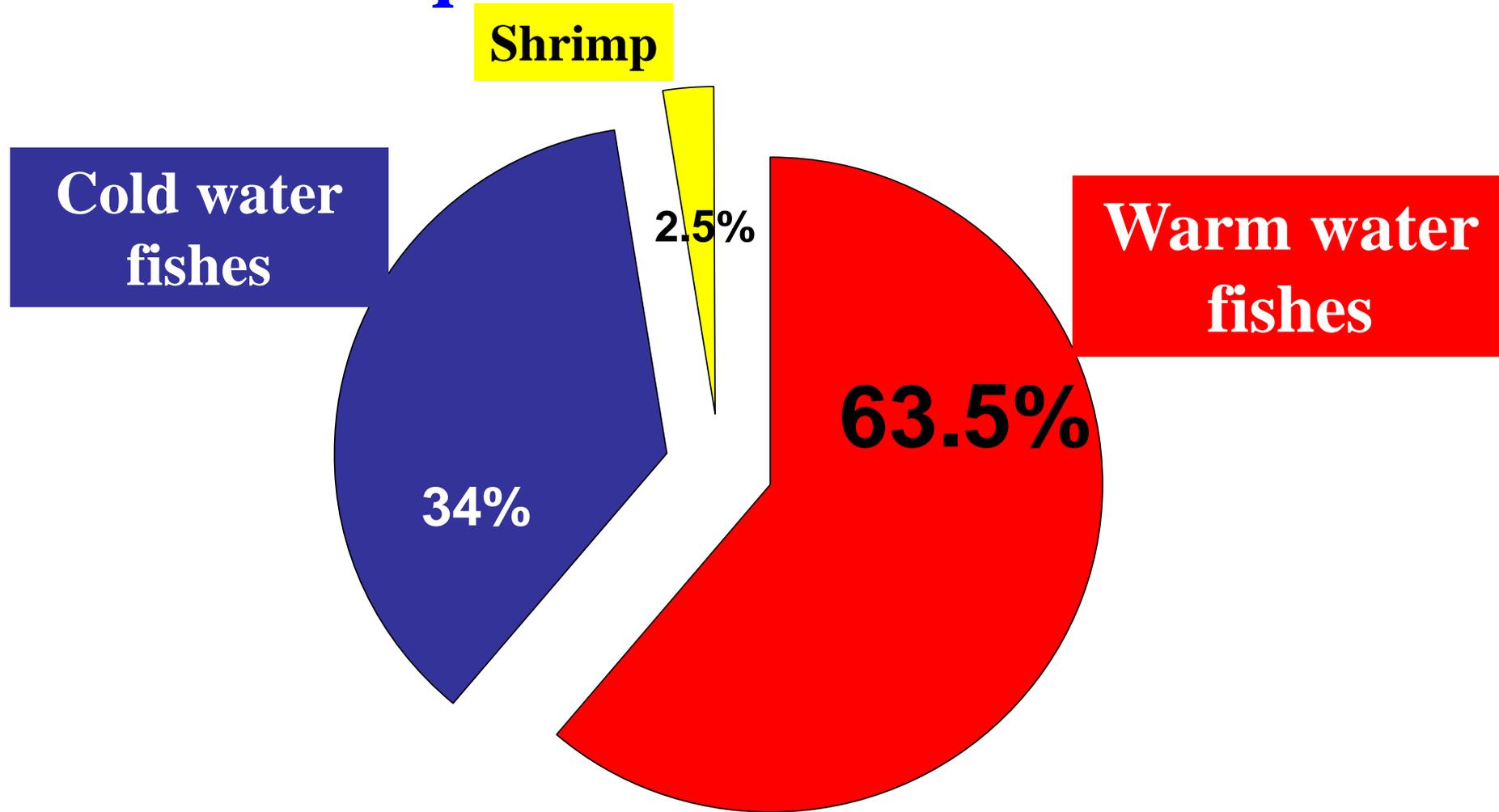
Aquaculture Activities in Iran

- Stock rehabilitation
- Freshwater culture
- Marine culture

Production of major groups of farmed species in I.R. Iran



Share of Major Farmed Species Group in National Aquaculture Production in 2010



1. Stock enhancement

Sturgeon fish

There are six species of Sturgeon fish in Caspian sea and its leading rivers .They provide 90% of world's Caviar.

Bony Fish

Sustainable yield of some certain fishes definitely depends on restocking program

Marine Shrimp



Sturgeon Fish



Huso huso



Acipenser persicus



Acipenser stellatus



Acipenser nudiventris



Acipenser gueldenstaedtii

Bony Fish



Salmo trutta caspius



Aspius aspius



Vimba vimba



Chalcalburnus chalcoides



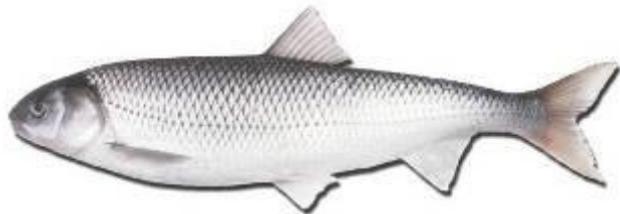
Rutilus rutilus



Cyprinus carpio



Tinca tinca



Rutilus frisii kutum



Sander lucioperca



orientalis Abramis brama

Release of fish fingerlings to the Caspian Sea and Southern waters (million Pcs.) in 2010

• Sturgeons	3.7
• Bony Fishes	385
• Marin fishes	0.5
• Shrimp PL	13

2. Fresh Water Aquaculture

- Warm water : 7920 farm /32000 ha.
- Cold water: 1100 farm/ 157 ha.
- Culture based Fisheries (Warm and cold water) 283 / 455700 ha.

Warm water Aquaculture

Major species are:

- Silver Carp (*Hypophthalmichthys molitrix*)
- Common Carp (*Cyprinus carpio*)
- Bighead Carp (*Hypophthalmichthys nobilis*)
- Grass Carp (*Ctenopharyngodon idella*)
- **Sturgeon** (*Huso huso*)



Warm water Aquaculture

Minor species / new species:

- **Fresh water prawn** (*Macrobracum rosenbergii*)
- **Caspian White fish** (*Rutilus rutilus friisicutum*)
- **Pike Perch** (*Stizostedion lucioperca*)
- **Barbus** (*Barbus sharpeyi*, *Barbus xanthopterus*)
- **Schizothorax** (*Schizothorax zarudnyi*)



Cold water Aquaculture

Major species are:

- Rainbow Trout (*Oncorhynchus mykiss*)

Minor species / new species:

- Caspian salmon (*Salmo trutta caspius*)



3. Marine Aquaculture

- Shrimp culture: 219 farm/2481 ha.
- Fish(cage) culture: 2 pilot farm

3. marine Aquaculture

- Major species:

Indian Shrimp (*Penaeus indicus*)

White leg Shrimp (*Penaeus vannamei*)

- Minor species (in pilot scale):

Seaweed

pearloyster

Farming system

- Individual farms
- Farms' complex
- Farming in paddy
- Farming in natural and semi natural reservoirs
- Farming in irrigation canals and tanks

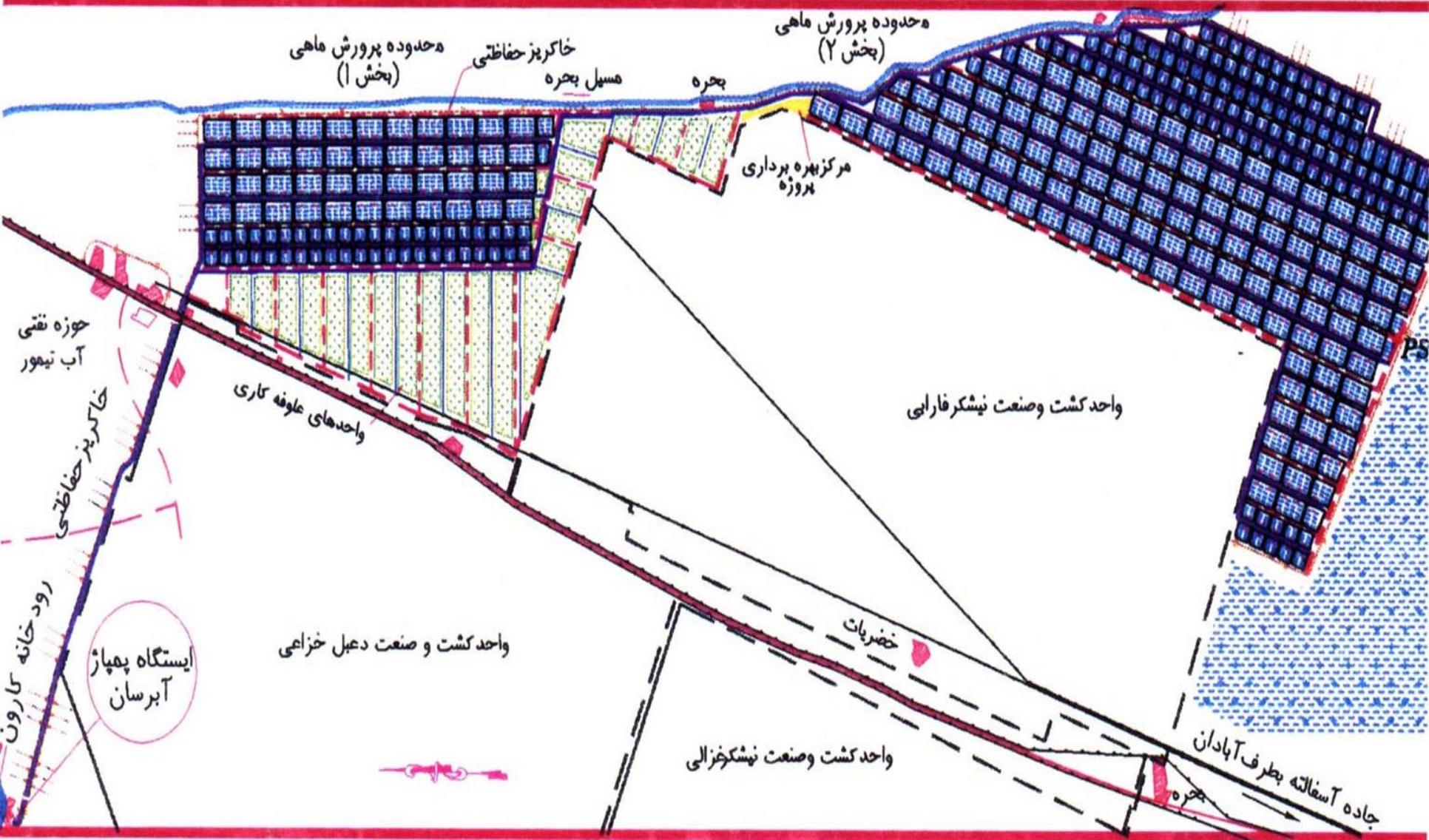


Individual fish farm



Azadegan Fish Culture Site

Production: 70000ton , Area: 12500





Fish Culture in paddy



Fish culture using well water of agriculture irrigation



Fish culture in natural lake and reservoirs

100000
Tones

Warm water Fishes Production

(trend)

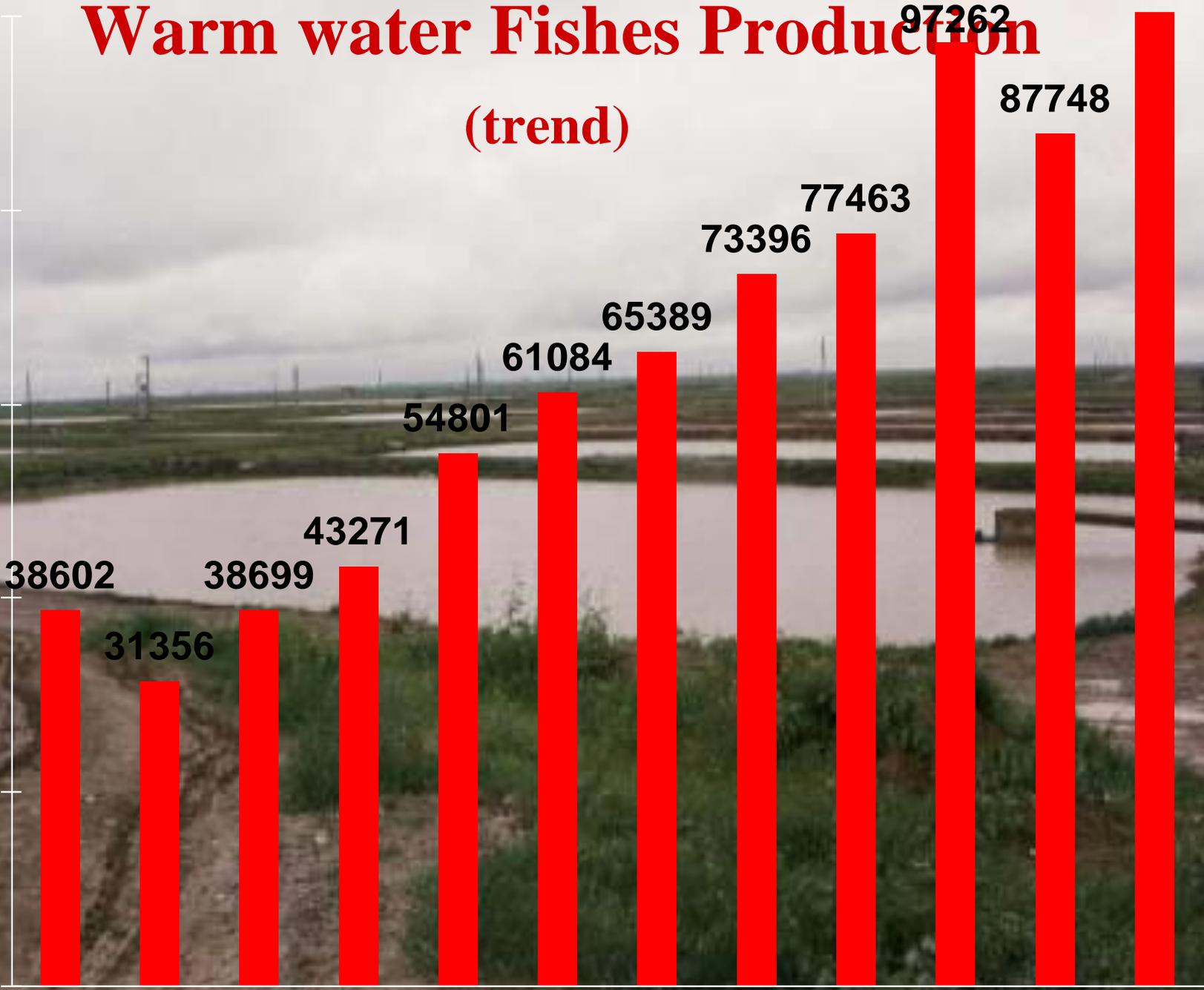
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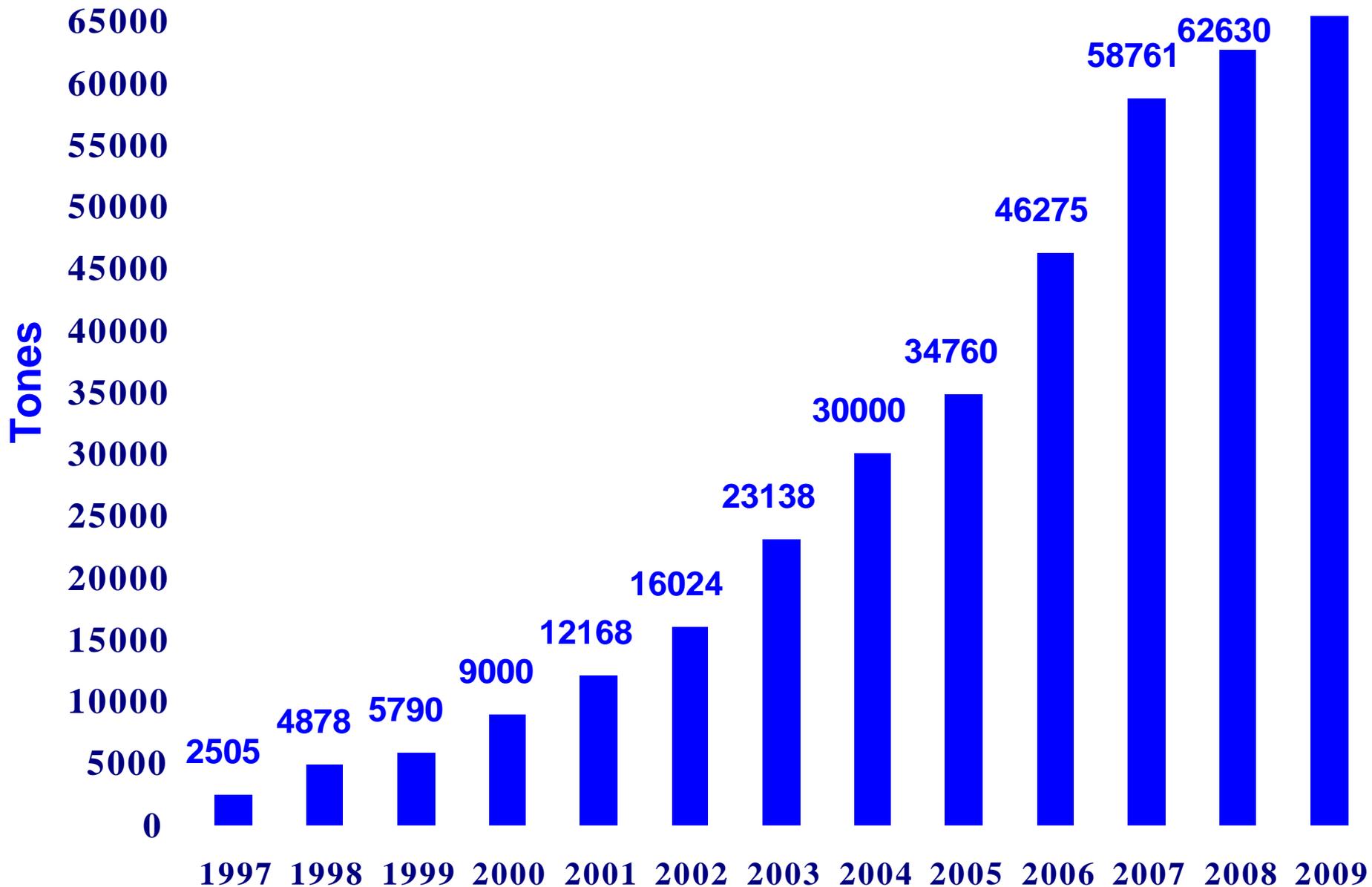
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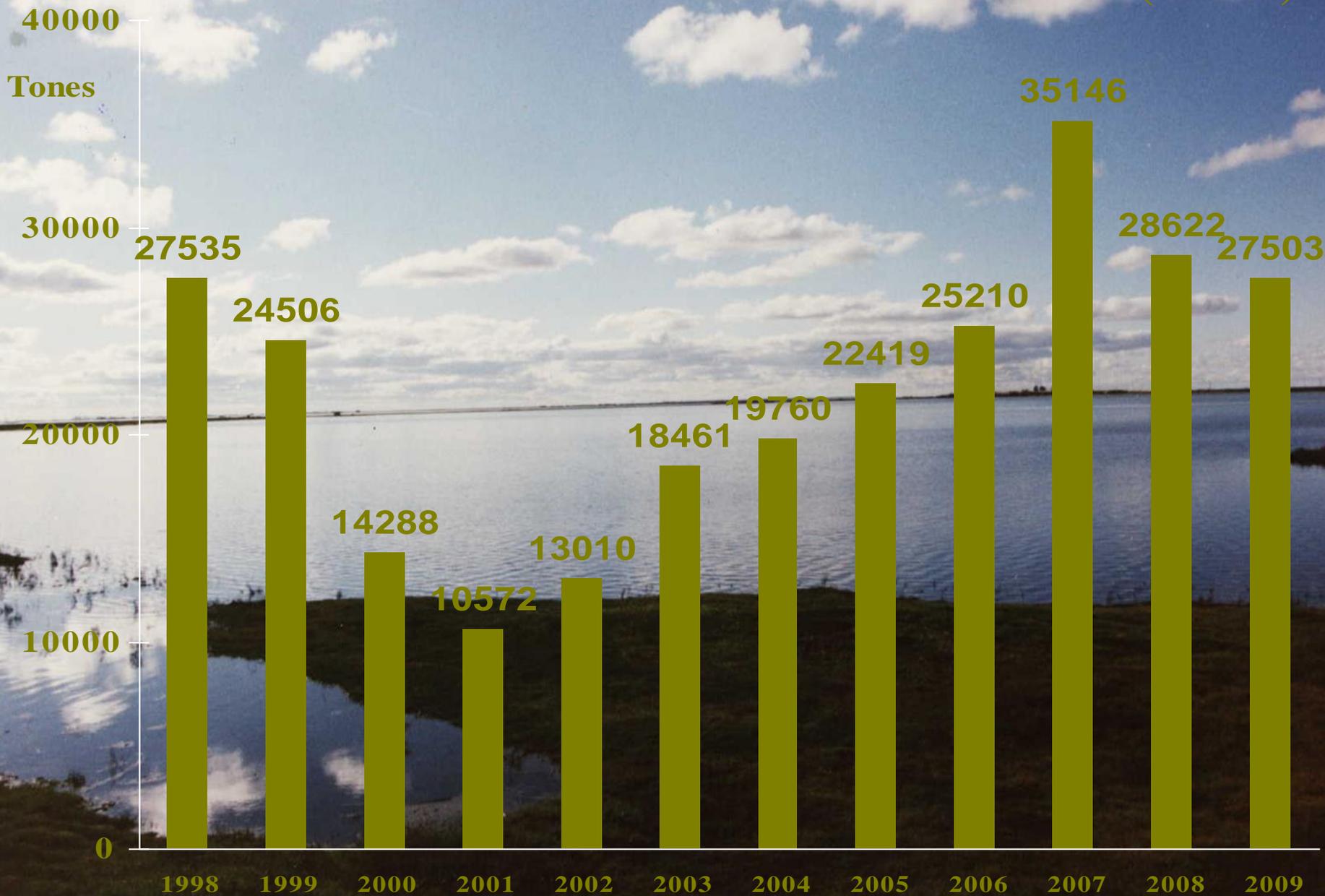
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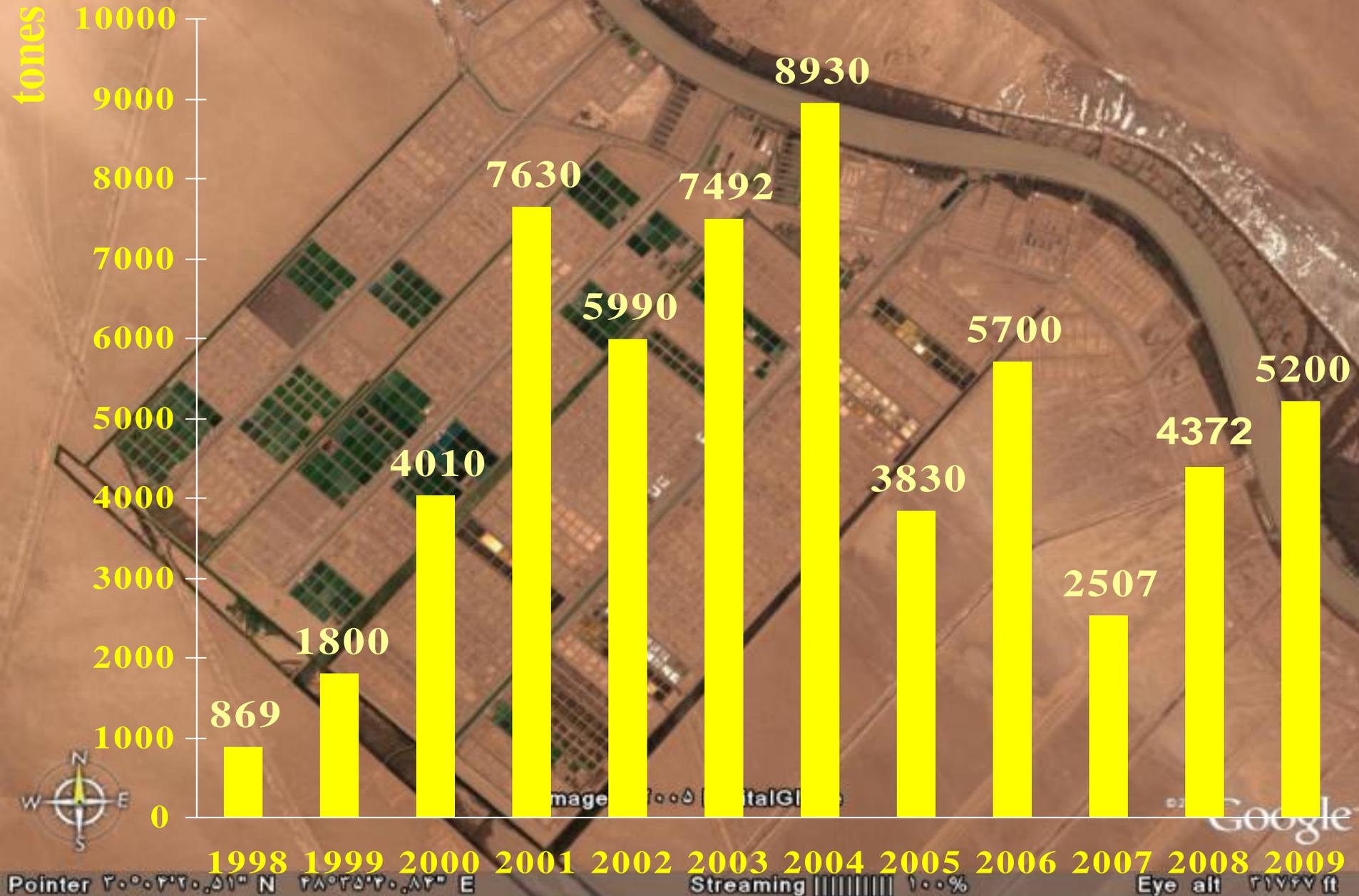
Cold water Fishes Production (trend)



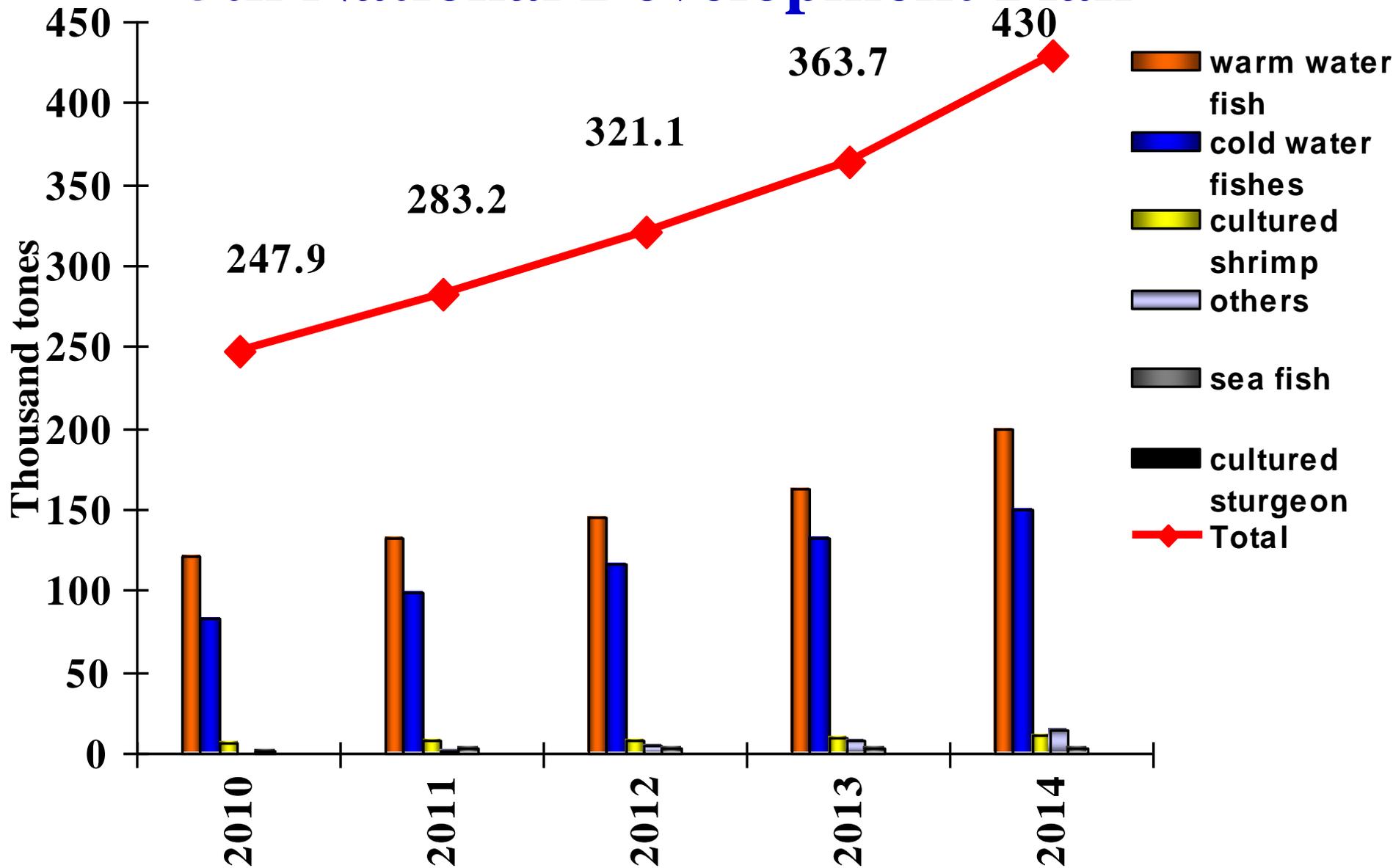
Fishes Production in Water Bodies (trend)



Cultured Shrimp Production (trend)

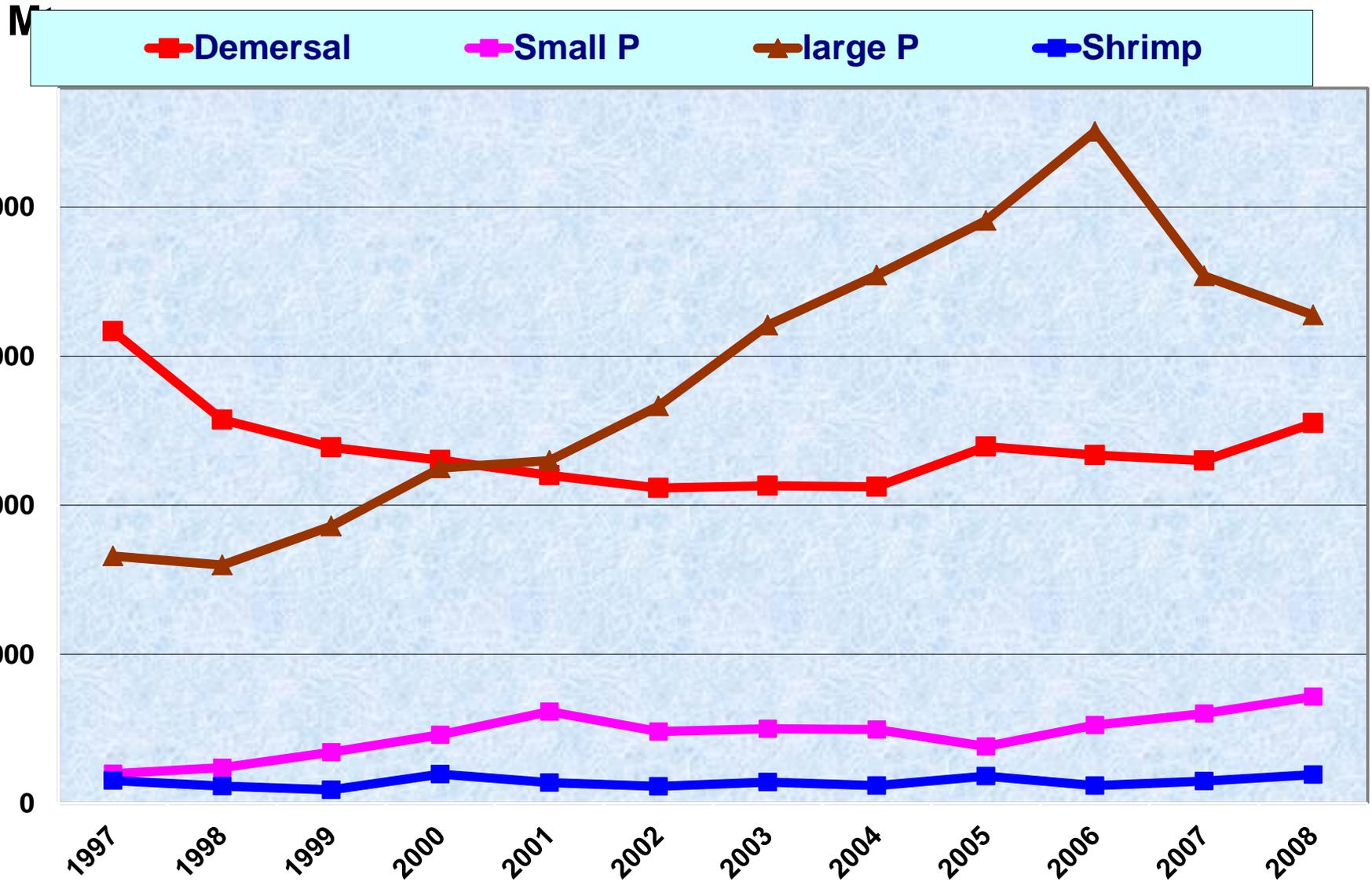


Provision of Aquaculture in the 5th National Development Plan



Capture Fisheries

Capture Fisheries in Southern water

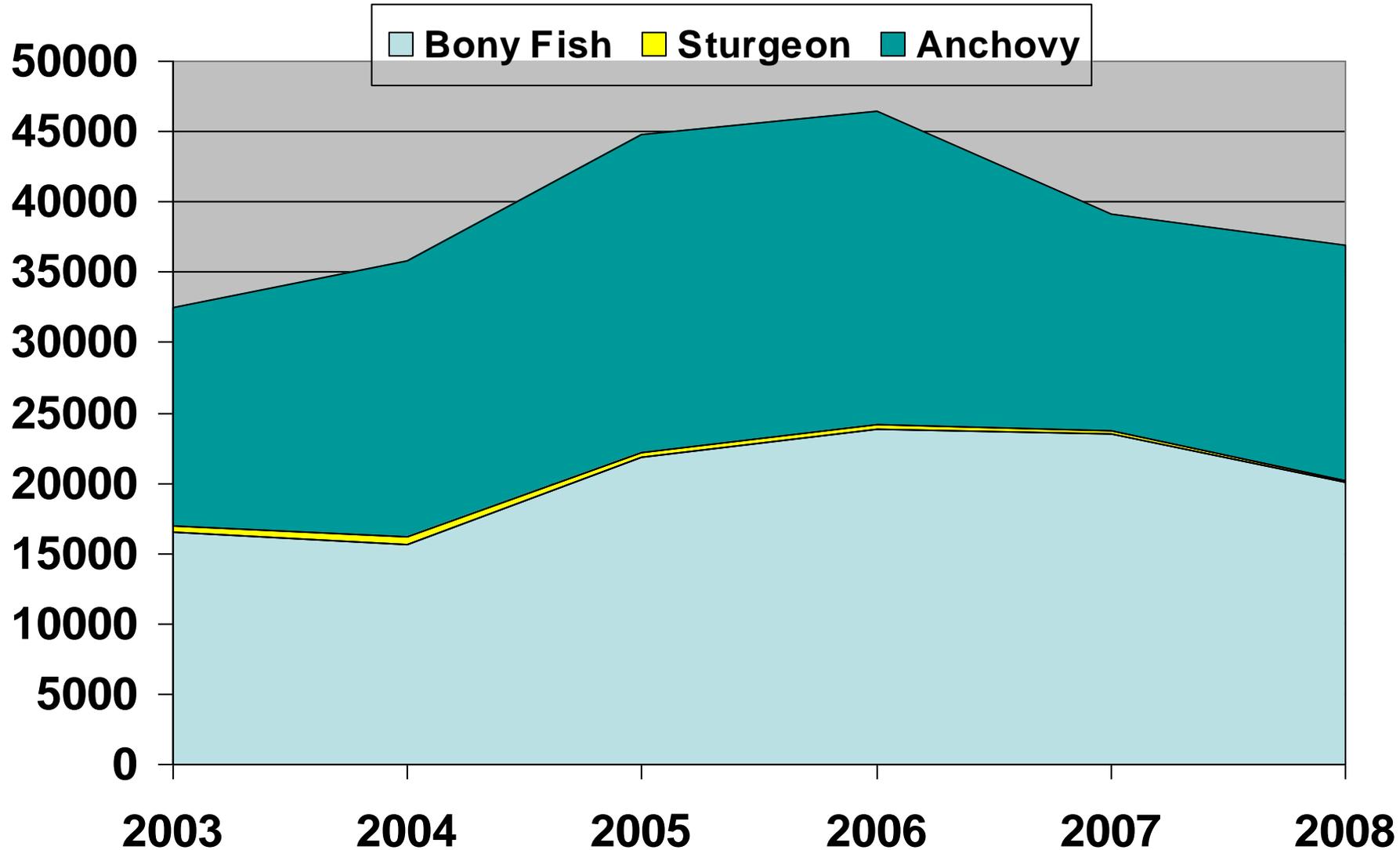


Main Species in southern catch

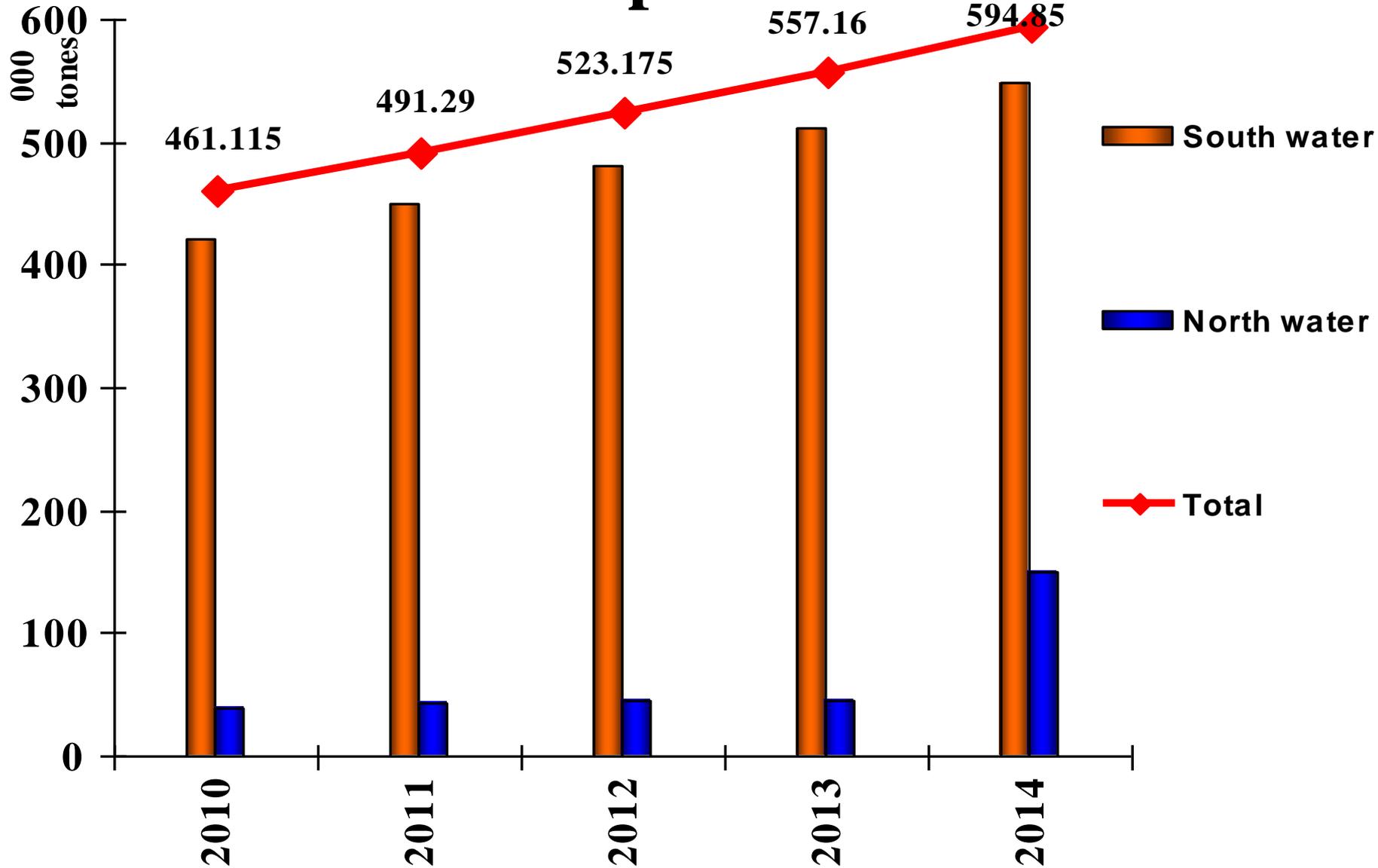
Common name	Family name	Sceintific name
silver pomfret	stromateidae	<i>pampus argenteus</i>
black pomfret	carangidae	<i>parastromateus niger</i>
snapper	lutjanidae	<i>lutjanus johnii</i>
grunter	haemulidae	<i>pomadasys kaakan</i>
seabreams	sparidae	<i>acanthopagrus latus</i>
tigertooth croaker	sciaenidae	<i>otolithes ruber</i>
cuttlefish		<i>Sepi pharaonis</i>
hairtail/ribbon	trichiuridae	<i>trichiuruslepturus</i>
narrow-barred spanish mackerel	scombridae	<i>scomberomorus commerson</i>
hilsa shad/indian shad	clupeidae	<i>tenualosa ilisha</i>
indo-pacific king mackerel	scombridae	<i>scomberomorus guttatus</i>
yellowfin tuna	scombridae	<i>thunnus albacares</i>
sardine	clupeidae	<i>sardinella longiceps</i>
shrimp	Penaeidae	<i>penaeus merguensis</i>

The catch amount is recorded on the basis of 51 species

Capture Fisheries in Caspian sea



Capture Fisheries Target Production in the 5th Development Plan



Fishery Industries

Tuan Processing Industries

- Tuna Canneries: 134 units
569 million cans/year
- Iran is among 5 top canned tuna producer and consumer



Fish and Shrimp Processing

- Totally almost 113 unites are active in Fish and shrimp processing and produce around 116000 Tones various seafood products per year.
- Value added and novel production have been sharply raised during last 10 years among them : Fish paste products and ready to eat meals are considerable
- More than 40 processing plants, Fishing vessels and Caviar processing facilities have gained EEC code and are able to export seafood products to EU countries.



Other Industries and Infrastructures

- Fish Meal plants: 36 units 921 tones/day
- Coastal Cold Storages: 113 units 116 thousand
tone
- Ice-Making Facilities: 129 units 2067 tones/day

Import – Export value of fisheries products (2008)

- **Total export from Iran:** **\$ 60136200**

-

- **To D-8:** Egypt \$ 1439051

Pakistan \$ 33177

Turkey \$ 10782

Malaysia \$ 276

- **From D-8:** **Malaysia** **\$ 1050436**

Indonesia \$ 954150

Pakistan \$ 299117

Turkey \$ 151328

Egypt \$ 2878

Cooperation in D8

- **Strengthening the cooperation among member country through establishment of technical cooperation body**
- **Preparation of action plan and required projects like: rainbow trout genetic improvement, marine fish cage culture, marine fish breeding, ...**
- **Capacity building of aquatic production elements like: technology transfer of marine cage construction, SPF and or SPR hatchery design, fish feed production technology, ...**
- **Exchange of technical information, statistics and experts**
- **Dispatch of experts to attend training courses (ex. Marine fish cage culture, advanced shrimp and aquatic plant production technology, advanced rainbow trout production technology, principles of PMP for fresh as well as brackish water, new species like tilapia,...) and exchange of experts for technical workshop on aquaculture**

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Cooperation in D8

- **Facilitate in establishing commercial enterprises with common investment (ex. Joints or holdings) of members to boost export quantities hence each single member country provided by the potentials of marketing of other members to import it's products**
- **Development of technical cooperation in the field of producing aquatic products with added value**
- **Establishing preferential tariff system for aquatic trade among the member states**
- **Conducting training courses in the field of processed products**
- **Providing needed facilities in trade, based on available and required products for import or export, among member countries**

Islamic Republic of Iran



Jihad e Agriculture Ministry

**Iranian Fisheries Research Organization
(IFRO)**

Research and Consulting Potentials

The background of the slide is a photograph of a coastal landscape. In the foreground, there is a body of water with a brownish tint. In the middle ground, there are white, layered cliffs or rock formations. The sky is blue with scattered white clouds. The text is overlaid on this image.

Iranian Fisheries Research Organization (IFRO)

Fisheries research and studies activities of the I.R. of Iran in territorial waters of north, south and inland waters, goes back to 80 years ago.

These activities were further expanded after the victory of the Islamic Revolution in 1978.

In 2003, following changes in the organizational set up and approval of the Higher Education Board, they were affiliated to the **Agricultural Research and Education Organization of the Jihad-e-Agriculture Ministry.**

Aims and Goals of IFRO

The main objectives and aims of IFRO are following:

- **To develop and expand research in different fields of fisheries sciences.**
- **To develop applied research in aquaculture.**
- **To conduct scientific and applied research on aquatic habitats in order to conserve and restore stocks and for the sustainable yield of aquatic bio-resources.**
- **To improve and enhance quality and variety of fisheries products.**
- **To apply biotechnological techniques to produce biological products and improve their quality and quantity in terms of health and diseases**
- **Identification, conservation and rehabilitation of fisheries stocks**

Laboratory Equipments, Instruments, Researchers and Scientific Staffs

Specialists and scientists have been employed in IFRO which some of them are **Member of Scientific Staff**.

Totally, qualified human resources in IFRO and depended research centers and institutions to include:

85 Ph.D, 179 M.Sc, 238. B.Sc

IFRO has more than **80** specialized and well-equipped laboratories with a total area of about **7500 m²**

which are located in **14** affiliated research centers and institutions



- Laboratory area: **2700 (m²)**
- Hatchery area: **15500(m²)**
- Research ponds: **174000 (m²)**
- Research and Administrative area: **215000 (m²)**
- Residential (Housing, Guest house) area: **10700 (m²)**



Research Vessels



The IFRO possesses several research vessels that are used by research centers in marine coastal regions.

The Research Vessels (R/V) including Gilan, Ferdows (Oceanic Vessel), Akhtar (Fiberglass), Sisara (Fiberglass), Tajalli (Wooden), and 30 boats

Scientific and Departments of IFRO

The IFRO operates through 6 research and scientific departments and provides scientific and technical support in the fisheries activities, which as followed:

- **Aquaculture**
 - **Ecology of Aquatic Resources**
 - **Biology and Stock Assessment**
 - **Biotechnology and Aquatics Products Processing**
 - **Aquatics Health and Diseases**
 - **Socio-Economics Studies**
- 
- An aerial photograph showing a large, rectangular floating fish farm or aquaculture system in a body of water. The structure is made of metal frames and is supported by numerous blue floats. Several people are visible on the platform. The water is a deep blue, and the horizon is visible in the distance under a clear sky.

Research Centers, Institutions and and Stations

Northern Part (Caspian Sea coastal provinces)

- International Sturgeon Research Institute - Rasht, Gilan province
- Inland Water Aquaculture Research Center - Bandar Anzali, Gilan Province
- Aquatics Processing Research Center (UNIDO) - Bandar Anzali, Gilan Province
- Cold Water Fishes Research Center (NACA) - Tonekabon, Mazandaran Province
- Caspian Sea Ecology Research Center - Sari, Mazandaran Province
- Inland Water Aquatics Stocks Research Center - Gorgan, Golestan Province

Southern Part (Persian Gulf and Oman Sea coastal provinces)

- South Aquaculture Research Center – Ahwaz, Khuzestan Province
- Shrimp Research Center – Bushehr, Bushehr Province
- Persian Gulf and Oman Sea Ecology Research Center – Bandar Abbas, Hormozgan Province
- Offshore Fisheries Research Center – Chabahar, Sistan & Baluchestan Province

Inland provinces

- Artemia Reference Center for West / Central Asia – Urmia, West Azerbaijan Province
- Cold Water Fishes Genetic and Breeding Research Center - Yasoj, Chaharmahal Bakhtiari Province
- Inland Saline Waters Research Center – Bafgh, Yazd Province

THANK YOU