



AQUACULTURE IN TURKEY



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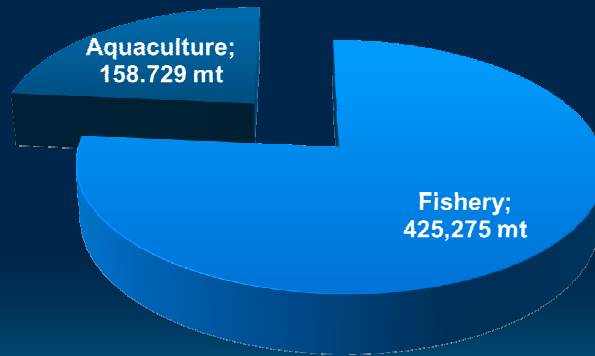
AQUACULTURE POTENTIAL OF TURKEY

Resources	Numbers	Area (ha)
Natural Lakes	200	906.118
Dam Lakes	206	342.377
Man-made Lakes	952	27.032
Seas (total surface)	4	24.607.200
TOTAL	1.362	26.000.000

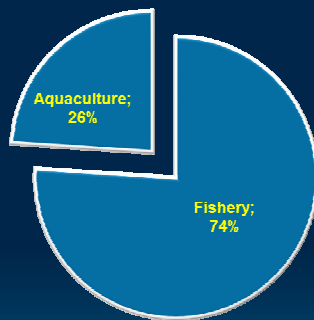
Additional, 33 rivers 177.000 km in length and coastal line 8.333 km
Turkey has 2nd longest coast line in the Mediterranean

FISHERIES PRODUCTION IN 2009

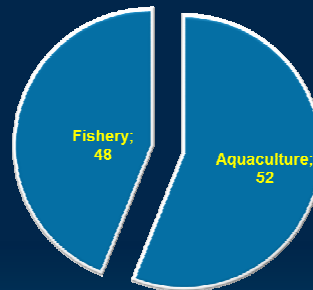
(623,191 mt)



CONTRIBUTION OF AQUACULTURE IN FISHERIES IN 2009



Volume

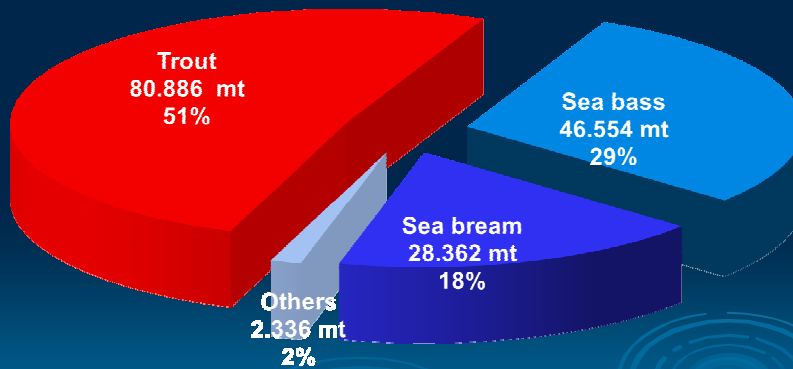


Value

AQUACULTURE PRODUCTION BY SUB-SECTORS IN 2009

Inland Aquaculture	66.557 mt
Trout	65.657
Carp	591
Marine Aquaculture	85.629 mt
Trout	5.229
Sea bream	28.362
Sea bass	46.554
Mussels	89
Other	2.247
TOTAL	158.729 mt

AQUACULTURE PRODUCTION BY SPECIES IN 2009

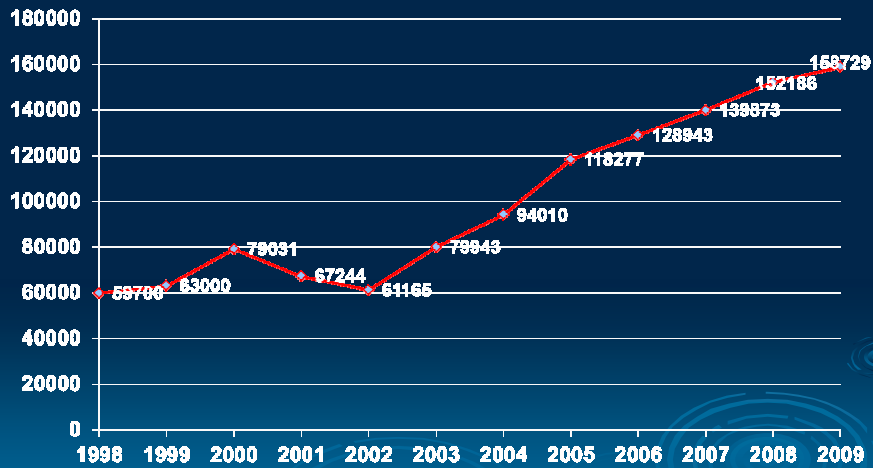


FISH FARM NUMBERS AND CAPACITIES IN 2009

Farm type	Number	Capacity (tons/year)
Inland fish farms	1.499	104.629
Marine fish farms	356	134.121
TOTAL	1.855	238.750



AQUACULTURE GROWTH TREND IN THE PAST DECADE



AQUACULTURE MANAGEMENT

According to Article 13 of the Law, the procedures and principles related to aquaculture are set by the Aquaculture Regulation, which was issued in 2004 and amended in 2005, 2007 and 2009.

The Regulation covers and sets out rules for the following issues:

- ✓ Site selection for inland and marine fish farms
- ✓ Application and evaluation procedures for aquafarming licenses
- ✓ Approving the projects and issuing licenses
- ✓ Improving production capacity, species etc, cancellation site changes and sales
- ✓ Importing brood fish, egg and fry,
- ✓ Compulsory technical staff employment,
- ✓ Fish health management
- ✓ Environmental impacts and protection
- ✓ Monitoring and control of farming activities
- ✓ Fish welfare

INSTITUTIONS INVOLVED IN THE AQUACULTURE SECTOR

The other public institutions related with aquaculture which support MARA are:

- ✓ Ministry of Environment and Forestry (EIA & DG of State Water Works)
- ✓ Ministry of Culture and Tourism
- ✓ Ministry of Finance (DG Incomes)
- ✓ Ministry of Interior Affairs (Coastguard and Gendarmerie)
- ✓ Ministry of Health (hygiene and the sanitary of fish and fish products)
- ✓ Ministry of Public Works and Settlement (Shore Law)
- ✓ State Planning Organization (DPT)
- ✓ Under-Secretariat of Foreign Trade
- ✓ Under-Secretariat of Customs
- ✓ Under-Secretariat of Maritime (Maritime navigation)
- ✓ Turkish Statistical Institute (TURKSTAT)
- ✓ Turkish Standards Institute (TSE)
- ✓ Municipalities (Quality control & conservation in the local open markets)
- ✓ Agricultural Bank (Credits)

ACTIVITIES FOR SUSTAINABLE DEVELOPMENT

✓ Effective participation of international organisations and activities

- FAO
- OECD
- ICCAT
- EIFAC
- JICA
- EUROFISH
- GFCM

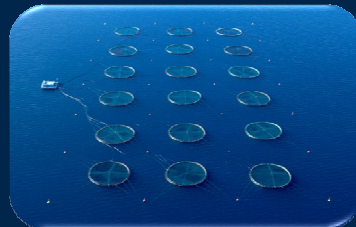


✓ Carrying out projects as a national, regional and international level

- Development Project of Balkans and Central Asian Countries (FAO SEC)
- The Project on Culture and Stock and Enhancement of Sturgeon (TCP – FAO)
- Flatfish Culture Project (JICA)
- **Developing a Roadmap for Turkish Marine Aquaculture Site Selection and Zoning Using an Ecosystem Approach to Management (FAO – TCP)**
- **National Project on Determination of Environmental Impacts of Fish Farm to the Marine Ecosystem**

DATA COLLECTING AND DISSEMINATION IN TURKEY

- Ministry of Agriculture and Rural Affairs (MARA) is main responsible authority for aquaculture activities.
- MARA Aquaculture Department is collecting, evaluating, publishing the aquacultural and fisheries data and also sharing these data with national and international institutions such as FAO, OECD, GFCM and SIPAM.
- MARA has Aquaculture Registration System (ARS) and all fish farm have registered this system. They can't get license and financial support without registering this system.
- Turkish Statistical Institute (TUIK) is responsible for collecting and publishing data for all sectors including aquaculture and fisheries.



ACHIEVEMENTS

Although it is very young, there have been showed very important improvements in aquaculture sector:

- ✓ In 2002-2008, the increase on aquaculture production, as a volume was 149%.
- ✓ Turkey now has a 25 % share of the European sea bream and sea bass market.
- ✓ Turkey is the 3rd fastest growing country in the World in the aquaculture.
- ✓ Turkey has occupied first place in trout production among European countries.
- ✓ Approximately 25.000 people are employed in the sector.
- ✓ Latest developments in the aquaculture sector place Turkey in an important position both in the Mediterranean basin and among the EU countries



Trout farm



Trout farm



Trout processing factory



Land based sea bass and bream



Hatchery (sea bass & sea bream)



Vaccination (sea bass & sea bream)



Offshore sea farming (sea bass & sea bream)



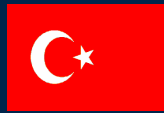
Barge system in offshore sea farm



Feeding in offshore sea farm



Management and monitoring of offshore sea farm



THANKS FOR YOUR ATTENTIONS