

FRESHWATER TROUT  
AQUACULTURE  
IN THE EU

# Trout aquaculture - basics

## I. 1. Freshwater FTS (flow through systems) trout farms



Chomic Fish Farm, Poland



Fish Farm, Tykskov, Denmark

# Trout aquaculture - basics

- **Recirculation systems (partial or full)**



# Trout aquaculture - basics

- Not often: cage system in freshwater



# Trout aquaculture - basics

## I. 2. Trout marine aquaculture



# Trout aquaculture - basics

## II. 2. Portion Rainbow Trout



# Trout aquaculture - basics

## II. 2. Large Rainbow Trout

with heads and gills on, gutted, weighing more than 1,2 kg

with heads off, gilled and gutted, weighing more than 1 kg each

fillets weighing more than 400 g



# Total rainbow trout production

- **World: 770 000 tons**
- **EU: 179 000 tons / 507 mil. EUR**

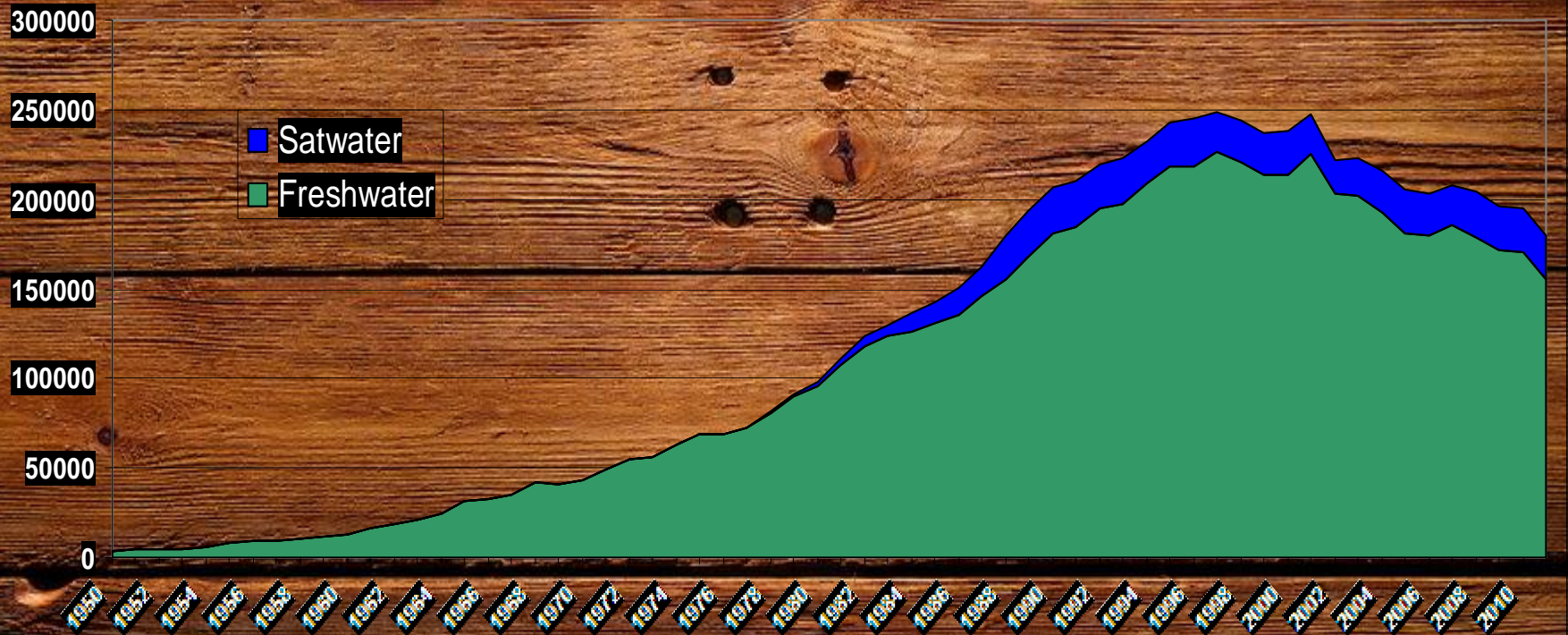
**EU supply 23% of total  
world production**

# Why trout is important in the EU?

- Valuable, healthy and environment-friendly source of animal protein and fat with high content of omega-3 PUFA
- Consumed mostly locally, fresh
- Low CO2 imprint
- Trout production reduces seafood deficit in the EU
- Farmed fish, commonly accepted and with high development potential

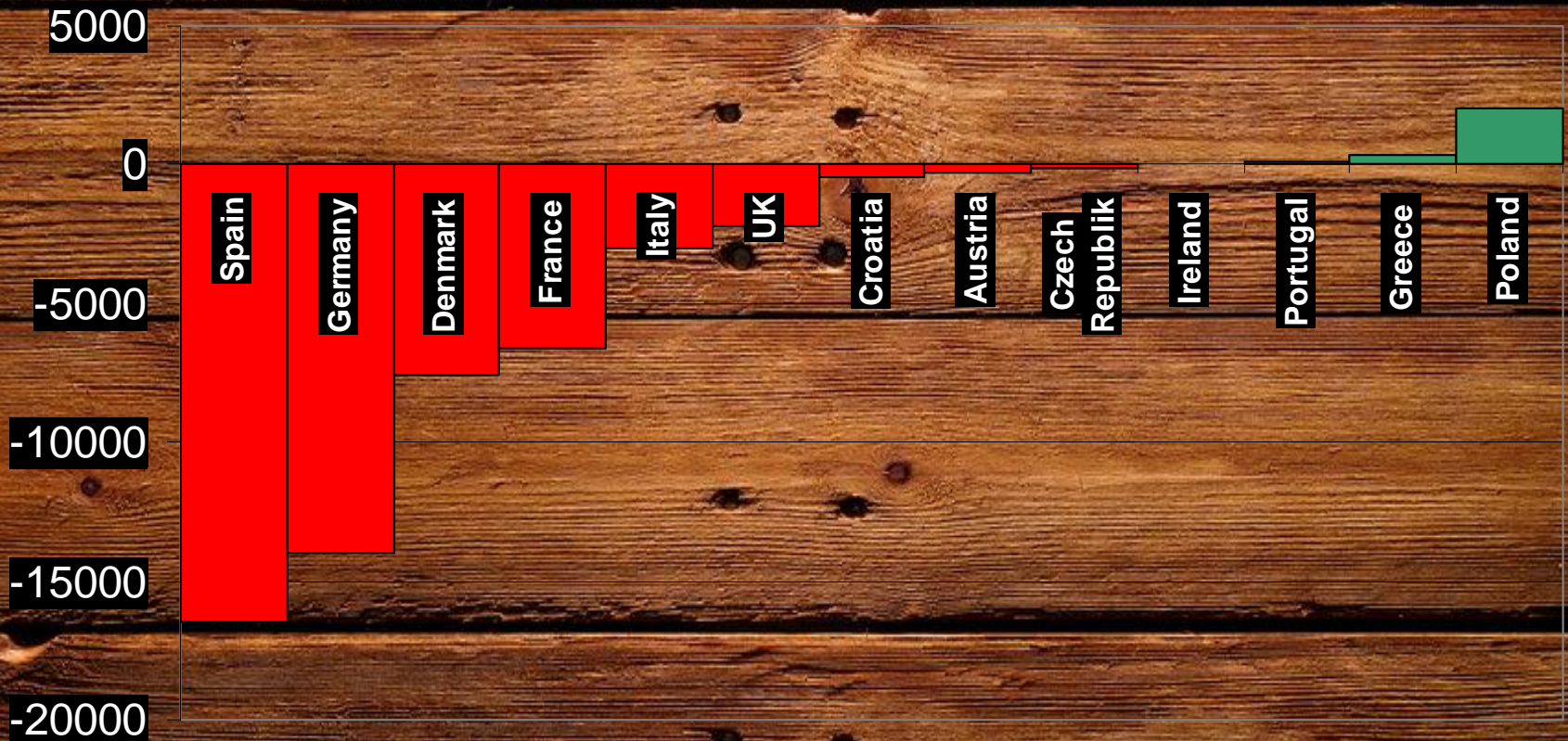
# Total rainbow trout production

Trout production in the EU (1950-2011), FAO data



# Change in trout production

Change in trout production between 2004 and 2013



# Change in trout production

Change in trout production between 2004 and 2013



# Freshwater trout production by countries (FEAP)

Main producers of freshwater trout in the UE:

1. **Italy** - 36 000 tons (portion)
2. **Denmark** – 21 415 tons (portion) + 10 500 tons (large), incl. 9500 marine
3. **France** – 20 870 tons (portion) + 11 130 tons (large)
4. **Poland** – 16 000 tons (mostly portion)
5. **Spain** – 15 000 tons (portion)
6. **UK** – 10 000 tons (portion) + 2600 tons (large)
7. **Germany** – 9 000 tons (portion) + 1500 tons (large)

---

Main marine water trout producers in the UE:

1. **Finland** – 12 100



# ITALY

**Production and no. of farms**

**1984: 20 000 tons / 600 farms**

**1997: 51 000 tons**

**2006: 40 200 tons / 359**

**2013: 36 000 (stable)**

**/ 179 important farms**

**Veneto: 78 farms / 10 300 tons,  
Friuli Venezia Giulia, Trentino,  
Lombardy, Tuscany, Piedmont**

**Trout consumption:**

**ca 31-37 000 tons**

**ca 0.6 kg per capita**





# DENMARK



**31 000 tons (freshwater)**

**+ 9 000 tons (saltwater)**

**900 mil. DKK (40% fishery production). EBIT: 9 mil. EUR**

**131 farms (decrease)**

**Development strategy: 115 000 tons of farmed fish (60 000 tons – FREA)**

**Environmental Target Act 2003**

**Water flow  $\frac{1}{2}$  Q mm(20 y.)**

**New problem: RUSSIA BAN**

**Consumption > 2 kg per person**

**Market > 13 000 tons**





# FRANCE

**321 FTS trout farms**

**Ca. 36 100 tons**

**120 mil. EUR / 1261 employeee**

**100 tons organic**

**EBIT 6 mil. EUR**

**[FranceAgriMer]**

**Consumption > 0.5 kg per person**

**Market 29-33 000 tons**

**Penetration: 20%**

**Fresh trout market: 5 900 tons  
(retail)**

**– fresh salmon: 28 000 tons**





# POLAND



16 700 tons (2013)

1200 employee (incl. owners families)

34% farms with water re-circulation

120 important farms (incl. 16-20 with production above 250 tons/farm ?). Highly developed processing

„Now Trout” campaign – market increase. Consumption: 0.55 kg per capita (2013). Market: 21 000 tons LWE

Import: Turkey, Spain, Italy, Croatia. Export: Germany





# SPAIN

**88 trout farms (644 employee)**

**Ca. 16 500 tons**

**EBIT 9 mil. EUR**

**Consumption: 0.4 kg per person**

**Market 18 000 tons**

**Production decrease:**

- growing cost
- financial crisis and consumption decrease
- other species competition
- new problem: RUSSIAN FED. BAN IN FOOD IMPORT





# GERMANY



Retail market – pression of  
Turkish and Danish fresh trout

Smoked trout from Poland  
(re-location)

Local production – direct sale

Production 9000 tons (portion) +  
1500 tons (large)

-29 mil EUR

The biggest trout market in the  
UE (37 000 - ? 60 000 tons)

Per capita consumption  
0.7 kg per person



# Trout is important in the EU.

## Why production do not increase?

### Market issues:

- Stable sale price & growing production cost (feed, energy, amortisation etc.)
- Moderate demand on most markets
- Competition with other farmed fish, incl. Salmon
- Unfair competition of Turkish trout

### Administrative and legal issues:

- Lack of an integrated approach to aquaculture
- EU aquaculture is over-regulated
- High costs of adapting to environmental requirements



***Thank you!***

***Tomasz Kulikowski***

***Fish Industry Magazine***

***[mprfish@gmail.com](mailto:mprfish@gmail.com)***

***mob. 501 623 816***