Prospects for aquaculture by 2030

Verona, 16 May 2019

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Total aquaculture production 2017

Total aquaculture production - 2017
(tonnes)

NOTE: Final boundary between the Sudan and South Sudan has not yet been determined.
Aquaculture production by main ISSCAAP groups - 2017

- **Carps, barbels, other cyprinids**: 35% Volume, 26% Value
- **Miscellaneous freshwater fishes**: 13% Volume, 11% Value
- **Tilapias, other cichlids**: 7% Volume, 5% Value
- **Oysters**: 7% Volume, 5% Value
- **Clams, cockles, arkshells**: 7% Volume, 4% Value
- **Shrimps, prawns**: 7% Volume, 4% Value
- **Salmons, trouts, smelts**: 7% Volume, 3% Value
- **Freshwater crustaceans**: 7% Volume, 3% Value
- **Other**: 4% Volume, 3% Value

Bar graph showing the volume and value percentages for each category.
OECD-FAO Agricultural Outlook

• Joint OECD-FAO report (14th)
• Country collaborators
• Aglink-COSIMO, partial equilibrium model
• 10 year horizon
• Global coverage
• Special theme: Middle East and North Africa

http://www.agri-outlook.org/
Projection Highlights

• Total production to increase by 13%, but slowdown in growth rates
• Most of the growth from aquaculture
• Fish food consumption is projected to grow by 23 Mt
• Consumption to increase in all continents, except Africa
• Decline for Africa: alarm for food security
Aquaculture main driver for global production growth

Million tonnes (live weight)


Total Capture  Total Aquaculture
The status of marine fishery resources

- Continues to show worrying trends:
  - Overfished stocks increased from 10% in 1974 to 33% in 2015
  - Stocks fished within biologically sustainable levels decreased from 90% in 1974 to 67% in 2015
  - The global picture masks signs of recovery in the developed world, but not in developing countries
  - This regional sustainability divide constitutes a major challenge to achieving SDG14.4 (By 2020 all stocks at MSY level)
Growth rates in aquaculture production to slow down

Aquaculture production - Average annual growth rates (%)

- 1980s: 12% (1990s)
- 1990s: 10% (2000s)
- 2000s: 6% (2010s est.)
- 2010s est.: 4% (2020s est.)
Increased aquaculture production volumes by decade

Increased production volumes – Million Tonnes

- 1980s
- 1990s
- 2000s
- 2010s est.
- 2020s est.
Asia main contributor to aquaculture production growth by 2030

Change in aquaculture production (2030 – 2018-20) - Million tonnes (live weight)
Freshwater species main contributors to aquaculture production growth

Million tonnes (live weight)
Fish consumption per capita to increase in all continents except in Africa

Fish consumption per capita (kg/person/year)

Asia  America  Europe  Africa  Oceania  World

2018-20  2030
Fish contribution to human nutrition

2013 data

- **Africa**
  - Per capita fish consumption (kg): 10
  - Share of fish in total animal proteins (%): 15

- **Americas**
  - Per capita fish consumption (kg): 13
  - Share of fish in total animal proteins (%): 8

- **Asia**
  - Per capita fish consumption (kg): 23
  - Share of fish in total animal proteins (%): 20

- **Europe**
  - Per capita fish consumption (kg): 21
  - Share of fish in total animal proteins (%): 18

- **Oceania**
  - Per capita fish consumption (kg): 25
  - Share of fish in total animal proteins (%): 16

- **World**
  - Per capita fish consumption (kg): 19
  - Share of fish in total animal proteins (%): 17

Legend:
- Blue: Per capita fish consumption (kg)
- Purple: Share of fish in total animal proteins (%)
Increasing role of aquaculture in global fish consumption

Share of fish originating from capture and aquaculture in total fish for human consumption by decades – (%)

- 1990s
- 2000s
- 2010s est.
- 2020s est.

From aquaculture
From capture
Asia to drive fish food consumption growth

Fish food consumption - Million tonnes (live weight)
Asia will continue to be the main exporting continent

Net trade – Million tons (live weight)
More fishmeal produced from residues

Million tonnes (product weight)

- From whole fish
- From fish residues

El Niño
Fishmeal, fish oil and vegetable oil prices

Nominal prices - USD/t

El niño

Fish oil
Fishmeal
Vegetable oil
Share of fishmeal in feed ratio

Salmons and trouts

World average

Shrimps and prawns

World average

- Fishmeal
- Oilseed meal
Uncertainties

• Aquaculture:
  • Availability of sites and water resources
  • Diseases
  • Technology, financial resources, regulations
  • Climate change
  • Genetic improvement

• Trade and consumption
  • Trade policies, market access, trade agreements
  • Food safety and traceability
New OECD-FAO Agricultural Outlook

• To be released in July 2019

• Special chapter on Latin America and Caribbean
Thank you for your attention

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