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# Global Aquaculture growth & Institutional Quality

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# Factors affecting aquaculture production

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**Aquaculture:** “Art of rearing aquatic organisms under either controlled or semi-controlled condition for human needs”.

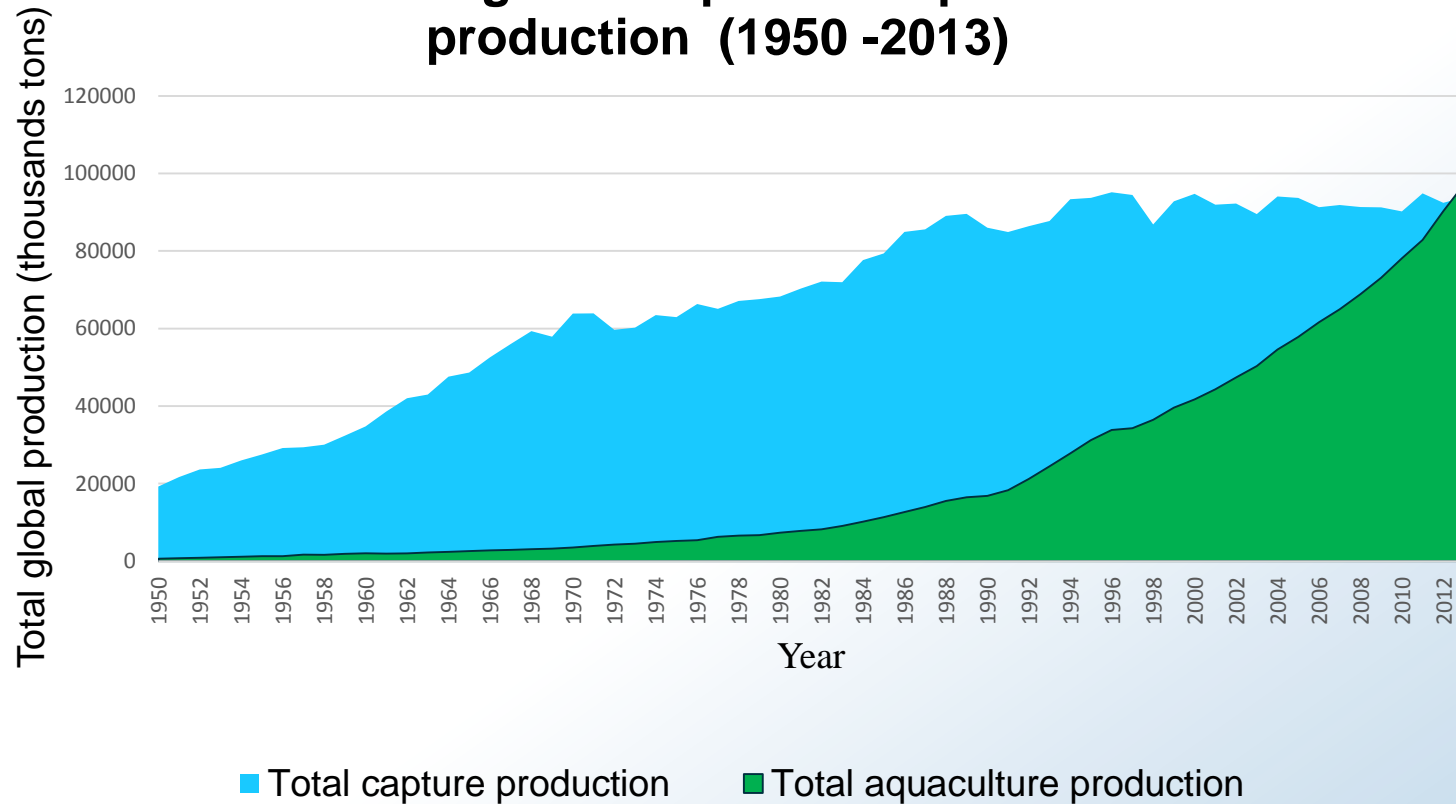
1. Farming area
2. Market and cost
3. Management practices & technology
4. Climatic factors
5. Institutions
6. Social environment

# Aquaculture: Global status and Trends

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- Sector contributed 42.2% to the total global seafood production in 2012 (25.7% in 2000).
- Total aquaculture production was **97.2 million tons**, worth **157.2 billion US\$** in 2013 (FAO, 2015).
- Total aquaculture production **continues to grow** but at a **slower growth rate**.
- Aquaculture development varies globally & its production distribution is uneven.
- Aquaculture production,
  - **continues to increase** in some countries,
  - while, it **has fallen** in some countries in recent years.
- Asia dominates the global aquaculture sector (88.4% by volume in 2012).

## The total global capture & aquaculture production (1950 -2013)



# Research questions

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- How and to what extent is aquaculture performance influenced by national institutions?
- Is the aquaculture sector more special than other natural resource-based industries and requires special institutional arrangement for sustainability?
- Do the countries performing well in the aquaculture sector use any standard procedures (ecolabel certification)?

# Institutions

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Institutions form incentive structure of a society, can be both formal rules (constitutions, law & property rights) and informal constraints (customs, traditions or sanctions).

Political & economic institutions, in consequence, are the underlying determinants of economic performance.

Institutions are key components in overall management of natural resource industries; guide the people to do their task in production and marketing.

They help to enhance allocation as well as the feasibility of engaging in long-term economic activities such as the sustainable use of natural resources and the improvement of economic quality.

# Discussion

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- Effective institutions limit the quantity of aquaculture production.
- But, may help
  1. To reduce negative impacts caused by aquaculture,
  2. Conserve marine resources,
  3. Sustain the contribution to global seafood production in the long term.
- Aquaculture is a special case compared to other natural resource industries- “aquaculture paradox.”
- The quality of institutions potentially has an indirect positive influence on the development of the aquaculture sector.

**Thank you for your attention**