General Principles, Best Practices and Choices

for Fishing Industry Sustainability and Economic Growth

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I will focus on <u>capture fisheries</u>

because the next session will discuss aquaculture.

Seven general principles

for thinking about fishing industry sustainability and economic growth

The fishing industry is extremely varied and complex. Opportunities, challenges and "best practices" may vary widely between different fisheries and countries.

- Fish species vary widely!
 - Abundance
 - Locations
 - Fish characteristics
- Fisheries vary widely!
 - Numbers of boats and fishermen
 - Types of boats and gear
 - Technology
 - Products and markets
 - History and traditions
 - Management

- Countries vary widely!
 - Fishery resources
 - Economies
 - Infrastructure
 - Education
 - Food tastes
 - Culture
 - Fishery management capacity
 - Political and economic goals

2. The global seafood industry is changing profoundly and rapidly. Expect and prepare for new challenges and new opportunities.

Drivers of change:

- Nature: changing climate and environment
- Innovation: at every stage of the supply chain
- Economics: Growing world population and incomes
- Aquaculture: An ever-growing share of world seafood supply

New challenges

- Changing resource conditions
- Increasing global competition
- Growing market demands for sustainability and quality

New opportunities:

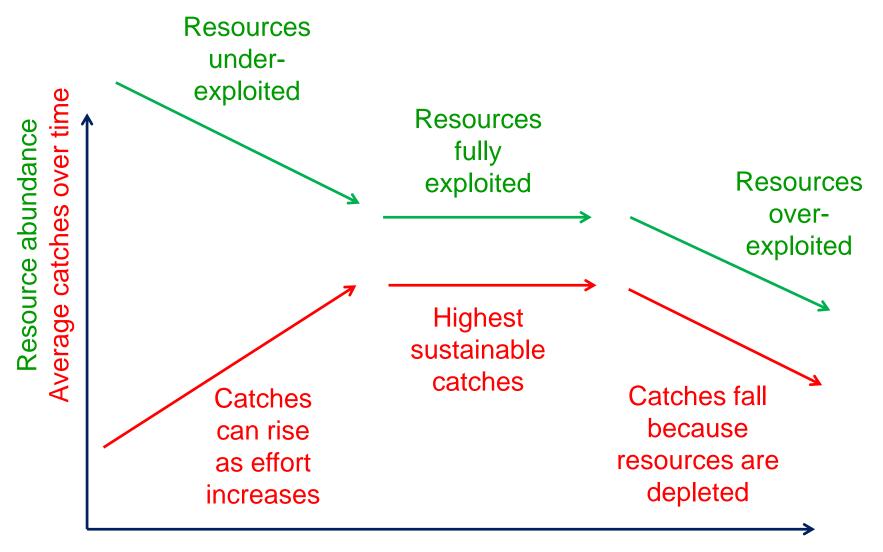
- Growing global markets
- New technologies to improve products and lower costs

- 3. To achieve sustainability and economic growth, fishing industries may need to change significantly.
- Fishing is a very old industry.
- Many fishing practices developed in very different times.
- They may need to change to face new challenges and opportunities.
- Changes may be difficult.

4. Sustainable fish catches are limited by nature.

- If resources are not fully exploited, countries can increase catches by <u>increasing effort</u>:
 - More and bigger boats
 - Bigger engines
 - Better fishing gear
 - Electronics
- But increasing effort can increase catches only up to the point at which natural growth can replace the harvests
- Over time, it is impossible to catch more fish than nature can grow.

Three stages of resources and catches as fishing effort increases. . .



Fishing effort (boats, gear, labor, technology)

5. When fisheries are fully exploited, the challenges change dramatically.

THE CHALLENGE IS NO LONGER:

How to catch more fish

THE NEW CHALLENGES ARE:

How not to catch too many fish How to increase the economic benefits of catches 6. The fishing industry is more than fishing.

It is also fish processing, transportation and distribution—the entire supply chain from fisherman to consumer.

Every part of the supply chain matters for economic growth.

7. The most important and effective things governments can to advance economic growth in fisheries don't cost a lot of money.

They involve providing incentives and opportunities.

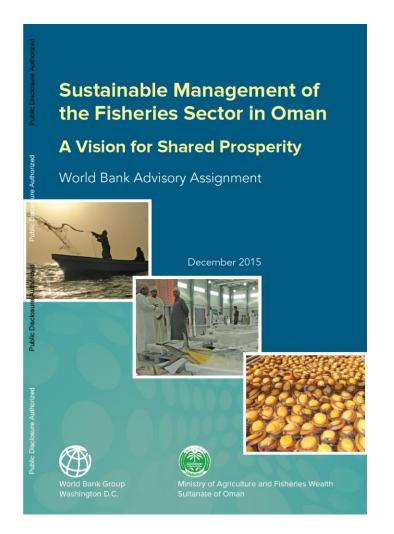
- FOR FISHERMEN to:
 - limit catches to sustainable levels
 - reduce fishing costs
 - improve fish handling and quality
 - sell fish for higher prices
- FOR PROCESSING AND DISTRIBUTION BUSINESSES to:
 - reduce costs
 - develop new products and markets
 - innovate

Six "Best Practices"

for achieving fishing industry sustainability and economic growth

1. Countries should aspire for their fishing sectors to be:

profitable ecologically sustainable net contributors to their economies



The Goal of Vision 2040 is to create a profitable worldclass sector that is ecologically sustainable and a net contributor to Oman's economy.

2. Involve fishermen and other stakeholders in fishery decisions

- Stakeholders have important insights into fishery challenges and opportunities.
- Policies will be more successful if stakeholders support them

- 3. <u>Know what is happening</u> with fisheries resources, catches, fishing effort, fish processing and markets.
- To make good policies for the fishing industry, you need to know what is happening:
 - Collect information
 - Analyze it
 - Share it
 - Discuss it
 - Make decisions based on evidence
- The more fish you are catching, the more important it is to know how many fish you are catching.

- 4. Limit total fish catches to sustainable levels.
- As fishing effort rises, it becomes increasingly important to limit catches
 - to avoid over-fishing
 - to allow over-exploited stocks to rebuild
- Effectively limiting catches requires
 - knowing what catch levels are sustainable
 - implementing ways of limiting catches
 - enforcing them
 - gaining trust of fishermen that limits
 - are needed
 - will benefit them

5. Don't encourage more fishing effort than needed for sustainable catches.

- If more effort doesn't increase total catches, it only
 - Adds to costs
 - Reduces profitability
 - Makes it harder to enforce sustainable catches

- 6. Encourage economic development of fish processing and distribution:
 - Manage fisheries so that fishermen can sustainably supply high quality fish
 - Allow competition
 - Avoid unnecessary restrictions on how fish may be used or sold
 - Engage stakeholders in planning for infrastructure
 - Educate young people for business skills and new technologies

Three choices countries face

in achieving fishing industry sustainability and economic growth

1. Traditions vs. change

 Achieving sustainability and economic growth in fisheries may require changes to long-established traditions

2. Fishing employment vs. fishing profitability

 The more people who try to make their living from a limited resource, the less they can catch and earn on average

3. Higher value exports vs. cheaper fish for consumers

 What's best for economic growth of the fishing industry may not necessarily be best for consumers