

Policy Implications of Climate Change in fisheries

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Outline

What is a policy implication?

The institutional context

Potential implications

The Arctic Climate Impact Assessment Fisheries

A comprehensive review of the climate –
fisheries issue in the Arctic (2004, 2005)

Conclusion: good resource management
regimes essential to the climate challenge

Capacity reduction the single most important
contribution from fisheries

Climate change as an issue

One of the most pressing issues of our time

Fisheries: FAO, UNGA, EU

Increasing attention to economic, political, and social implications

Uncertainty: Tentative nature of policy debate

Post-Kyoto regime?

What is a policy implication?

Policy = objective(s) + means to achieve it

The three elements of good regimes

Scientific knowledge

Regulations

Enforcement

Policy context

The **context** of fisheries management:

Multilevel governance

Global: treaties and processes

Regional: RFMOs and other arrangements

Domestic: sector ministries/agencies

Fisheries increasingly regarded an

environmental issue

Global principles

The power of consumers

The fisheries management toolbox

1 generation

Access restrictions

Catch limits

Technical: restrictions on when, where and how

2 generation

Precautionary approach: level of risk

Ecosystems based management:

Interaction fisheries – environment (including climate)

Integration of different types of knowledge and concerns

Policy implications and climate - general

The **two** major issues

Mitigation: how fisheries affect climate

Adaptation: how climate affect fisheries

The Kyoto Protocol: **mitigation**

Emission targets

Clean Development Mechanisms

Joint Implementation

Emissions quota trading

Mitigation in fisheries: reduction of emissions

Fisheries and emissions

1.2% of global oil consumption

2% of global shipping

Measures

CO² tax (and other climate gases)

Energy friendly fishing methods (now: 640 ltr/tn)

Purchase of CO² quotas

Capacity reduction - reduced emissions

A level playing field?

Adaptation domestic: adjusting the industry to changing circumstances

Adjusting to change: an area of expertise for the fishing industry and managers

Policy measures – the toolbox

Good management essential: effort and mortality reduction (ACIA 2005, Eide 2007)

Warming brings increased uncertainty – **risk** management

Climate Change - more **integrated** approaches to knowledge and regulation

A win-win situation?

Good fisheries management = reduction of
effort

Good climate policy means = less fuel
consumption

Good fisheries policy = good climate policy

Adaptation international: Distributional issues

Fish move, fleets move

What is new – EEZs, distributional arrangements

- Spatial definition of rights, mobile resources
- Principles for distribution

Zonal attachment

History

Other

Handling changing geographical distribution

Can be done – experiences (herring, mackerel)

Critical factors: scale, time, trend

RFMO/As and other arrangements

New initiatives justified by climate change

An opportunity for political attention

US Congress Arctic Ocean initiative

Australia climate and whales

What are the problems that cannot be resolved with existing institutions?

The market

Increasing role of market in environmental management – supplement to gvt regulation

Cultivation of image of fish as an environmentally friendly food

Voluntary reduction of emissions

Harvest methods and technology

Logistics and transportation

Ecolabelling

Nonlinearities

Socioeconomic development

The factor 32

BRIC economic growth

Per capita consumption growth

Tipping points

A number of potential nonlinearities

Massive and abrupt changes - history has no lessons

Can current political systems handle that?

Summary

Good management the critical issue

Existing institutions the basis for policy action

Distributional issues may become more tricky

Opportunity to develop “green” fisheries

Non-linearities: challenge for current political systems

Thank you for your attention

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