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Legal Challenges of Applying Precautionary and Ecosystem Approach in the Arctic Fishery Governance

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Major Challenges of Arctic Fisheries under Climate Change

- **Lack of scientific information :**
 - Change of marine environment: temperature, salinity, acidity etc.
 - Shift of migration patterns and new habitats - changes in fishery distribution
 - Appearance of new emerging fisheries
- **Legal gaps :**
 - Traditional single species & single sector approach
 - Reactive rather than proactive
 - Weak obligation for flag states fishing on the high seas

Precautionary Approach and its relevance to Arctic fisheries

- Originate: Europe's effort to protect North Sea under global climate change in the 1970s
- Develop: Antarctic Treaty System (ATS)
- The most commonly cited definition:
- “In order to protect the environment the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, **lack of full scientific certainty** shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”

---- Rio Declaration

Precautionary Approach and its triggering threshold of different levels

- “...where there are **threats of serious or irreversible damage**...”----- Rio Declaration 1992
- “...when an activity raises **threats of harm** to human health or the environment...”----- US Wingspread Statement 1998
- “preventive measures are to be taken when there are **reasonable grounds for concern** [...] even when there is no conclusive evidence of a causal relationship between the inputs and the effects”----- OSPAR Convention
- Threshold elements: degree of uncertainty, causal link between threat and outcome, and seriousness of potential consequences
- In the case of Arctic fisheries

Ecosystem Approach

and its relation to precautionary approach

- Contracting of ATS, especially 1980 Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR)
- Incorporated in UNCLOS, Fish Stocks Agreement and various legal documents
- A holistic approach to environmental protection and living resource conservation, in applying which one should bear in mind the interaction between dependent or associated species belonging to the same ecosystem, and takes into consideration of the interaction of related ecosystems .
- Core value of both approaches: minimize possible risk on the basis of best available scientific information

Precautionary and Ecosystem Approach and their application in Arctic fisheries

- strong relevance to marine resources conservation and management
- “69% of the world's marine [fish] stocks ... are either fully or heavily exploited, overexploited, or depleted.”
- --- FAO calls for urgent conservation and management measures
- Changes in fisheries systems are only slowly reversible, difficult to control, not well understood, and subject to changing environment and human values.
- Precaution in fishery conservation – actions before it is necessary

Current Legal Regime of Arctic Fisheries Management and Conservation

- Global level: 1982 UN Convention on Law of the Sea (UNCLOS); 1995 Fish Stocks Agreement
- Regional Fishery Management Organizations/Agreements: Northwest Atlantic Fisheries Organization (NAFO); North East Atlantic fisheries Commission (NEAFC)
- Multilateral & Bilateral: Russian-Norwegian; Russian-US;
- Coastal states domestic legislation within EEZs
- Species specific agreements
- UN Resolutions; FAO Guidelines ; other recommendations and declarations
- The role of Arctic Council?

Precautionary and Ecosystem Approach and their application in Arctic fisheries

- **Global level:**
- **UNCLOS** : best scientific evidence available (Art.119.1(a)); species associated with or dependent upon harvested species (Art.119.1(b))
- **Fish Stocks Agreement:**
- best scientific evidence available (Art.5(b)(c), 6.3(a)(b)); uncertainties relating both on stocks conditions and reference points (Art.6.3(c) & Annex II); precautionary actions on new emerging fisheries (Art.6.6)
- species belonging to the same ecosystem or associated with or dependent upon the target stocks (Art.5(d)(e)); non-target, by-catch, , socio-economic conditions and oceanic and environmental conditions (Art.6(c)(d))

Precautionary and Ecosystem Approach and their application in Arctic fisheries

- **Global level:**
- UN Resolution 61/105:
- “urgent need for action at all levels to ensure the long-term sustainable use and management of fisheries resources through the wide application of the precautionary approach”(Preamble)
- FAO Code of Conduct 1995 (Art.6.7)
- FAO, jointly with Iceland and Norway – Reykjavík Declaration on Responsible Fisheries (advance the scientific basis for incorporating ecosystem considerations; balanced and holistic ecosystem-approach)
- 1996 FAO Technical Guidelines (precautionary-approach) ; 2003 FAO Technical Guidelines (ecosystem-approach)

Precautionary and Ecosystem Approach and their application in Arctic fisheries

- **Regional level (RFMO/As):**
- **NAFO:**
- NAFO Party States are “committed to apply an ecosystem approach to fisheries management in the Northwest Atlantic [...] minimizing the risk of long term or irreversible adverse effects of fishing activities[...]” – implementation slow to occur due to lack of reference points and/or related harvest control rules
- **NEAFC:**
- Precautionary and ecosystem approach introduced in 1998 and 2005
- does not exercise its full competence with regard to the Loophole (Norway-Russian Loophole Agreement)

Precautionary and Ecosystem Approach and their application in Arctic fisheries

- **Arctic Council working groups:**
- PAME : addressed fisheries as emerging challenge to Arctic ecosystem in work plan 2011–2013
- CAFF: mentioned the pressure to marine ecosystem from fish harvest in its Arctic Biodiversity Monitoring Plan (CBMP)
- CAFF and CBD joint resolution on cooperation: impacts of climate change and overall balance of Arctic ecosystems
- Not directly dealing with fisheries and lack of mandate to do so

Precautionary and Ecosystem Approach and their application in Arctic fisheries

- **Bilateral and Sub-regional Level:**
- An extensive framework of direct cooperation between Arctic states concerning fisheries management
- Norway-Russian Federation Fisheries Commission and the Loophole Agreement and Protocols;
- US-Russia Intergovernmental Consultative Committee (ICC);
- Norway-Iceland Agreement on Fishery and Continental Shelf;
- "northern agreements" of EU (joint with Norway, Iceland and the Faeroe Islands),
- etc
- However, except for the Norway-Russian fisheries framework, the rest of the bilateral fisheries agreements are to apply single-species approach or have no explicit reference to precautionary & ecosystem approaches

Precautionary and Ecosystem Approach and their application in Arctic fisheries

- **National level:**
- **Russia:** successful example of cooperation with Norway in shared stocks; ecosystem based ocean management has just started; a slow increase of attention to this matter
- **US:** concept of ecosystem approach has been evolving for a couple of decades; National Oceanic and Atmospheric Administration's (NOAA) adoption and application; enclosed the area north of Bering Strait for fisheries as a proactive move
- **Canada:** various recent development in ecosystem approach including Marine Protected Areas (MPAs); the first Oceans Act; Government of Canada/Inuvialuit Fisheries Joint Management Committee (FJMC)

Precautionary and Ecosystem Approach and their application in Arctic fisheries

- **National level:**
- Norway: successful joint management with neighboring states; particular concern between different sectors (fishery & petroleum); area-based management (MPAs); EIA in its domestic law system
- Iceland: a clear and responsible long-term policy - Fisheries Management Act from 1990; strict implementation of catch limit system; active collaboration with international scientific organizations & stakeholders; an extensive system of enclosed marine areas
- Greenland: predominantly management by single species or single activities with elements of stakeholder involvement; elements of ecosystem-based approach have been introduced but not yet integrated ; EIA not applicable to fisheries

Conclusion: Remaining Challenges **in applying precautionary and ecosystem approaches** **in Arctic fisheries**

- The Arctic LMEs are not entirely covered by binding legal system that addresses precautionary and ecosystem approach
- The Arctic Council's lack of mandate to focus on fisheries conservation and management
- National domestic legal system of Arctic states have different performance in applying the approaches; the standard and level of implementation varies greatly
- Even though Arctic coastal states have been involved in active cooperation, there is little or no interaction with user (flag) states from outside of the Arctic region
- None or little clear state responsibility in international law to conduct scientific research before new emerging fishery on high seas

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“Under current regime of the changing Arctic, nothing is certain but uncertainty.”

THANK YOU FOR YOUR ATTENTION

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