

Coastal Communities in the 21st Century: challenges, opportunities

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What's the opportunity?

See coastal communities as:

- 1. *assets* to the management of fish and aquatic ecosystems**
- 2. *assets* in mitigating economic recession**

What's the challenge?

DFO's discussion document "The Future of Canada's Commercial Fisheries" posted at <http://www.dfo-mpo.gc.ca/fm-gp/future-avenir/index-eng.htm>) invites **comments by Wednesday**. It does not contain the word "community", "social", "food security", "adjacency", "artisanal", "owner-operator", or others from policy work done over last 2 decades which particularly affect coastal communities.

Narrow focus on "profitability" and "global competitiveness" without reference to history on this coast of shared decision-making.

...what's the challenge?

Narrow questions asked in DFO online consultation survey:

- 1. What current rules, policies or regulations, aside from those in place to conserve the resource, are preventing harvesters from competing on a global scale?**
- 2. Are there any rules you would consider obsolete given today's economy and current management approaches?**
- 3. Does the proposed *Policy Framework on Managing Bycatch and Discards* provide adequate guidance on how to address bycatch and discards in Canadian fisheries?**

What's missing?

- 1. Ideology of market rule** as way of dealing with declining government budgets and incomes from commercial fishery makes **fishing licenses leave coastal communities**.
- 2. Failure to recognize that artisanal fisheries, put money in coastal communities.** Doesn't seem like much in pure monetary terms, but makes all the difference in keeping communities self-supporting, in good health and off government assistance.

What's the opportunity? Recognize huge ongoing work to build sustainable fisheries

- Documenting **fisheries knowledge at local scales** that is not captured in regional-scale analyses
- Understanding the **value of local management systems** built into local institutions, equality, negotiations, producing legitimacy, high rates of compliance with rules.
- Co-management boards which harmonize aboriginal and non-aboriginal fisheries, **settle all kinds of conflict**: WCVI AMB and WCVI Clam Board, PNCIMA on north coast, central coast

Opportunity in ongoing partnered research: university/DFO/industry

NSERC-funded Canadian Capture Fisheries Network which includes social scientists who have worked for decades with coastal communities.

Developing **social indicators of sustainability** so that **transparent monitoring** is possible.
Public can ask “How are we doing?”

Opportunity for support for DFO from coastal community constituents

- Enbridge Northern Gateway proposal puts fish habitat at risk in multiple ways. Vigorous opposition from communities, and weak constraints from DFO.
- DFO needs to recognize that they desperately need this constituency when their scientists are being muzzled, as is now happening in such disputes as the impact of salmon farming on other marine resources.

What's missing if we leave coastal communities out of fisheries management?

People matter, because they are an integral part of the system because of **what they can do to either destroy or conserve** marine ecosystems.

Question: *when and how can* human communities keep marine resources from being destroyed?

When and how can they contribute to conservation and careful management for future generations?

International recognition of role of coastal communities in conservation

- 1992 United Nations Conference on the Environment and Development
- 1994 UN convention on the Law of the Sea
- 1995 UN FAO's Code of Conduct on Responsible Fisheries

“governments should take into account the **traditional knowledge and interests of coastal communities...in management programs**”

Under what conditions will coastal communities conserve resources?

Indicators of sustainability from cases around the world. Resources will be managed sustainably IF:

1. Communities have strong access rights to local marine resources

--poor will poach if can't benefit from

--if can benefit, will object to destructive devt

...Under what conditions will coastal communities conserve resources?

2. if *communities have the right to participate in management decisions*

--the Western Washington treaty tribes and the Boldt decision of 1974: gaining rights & taking management roles (lower, higher)

Type of management right Specific right

Lower order rights

data collection

data analysis

Higher order rights plan timing & location of fishery

rule-making re fishing methods

allocation of fishing

opportunity

among rights holders

enforcement of fishing rules

defining who has fishing rights

Broader rights affecting other actors and users of marine space

- rule-making about fish habitat protection
- enforcement of habitat-protection rules
- coordination of fishing & other competing uses of marine space
- returning optimum value to fishermen

Highest level rights

- fisheries policy development
- identification of key problems, issues
- creating a vision of what fishery is desired, goals of management

Outcome: collegial co-management relationship, greatly extending management capacity of government managers, more funding, greater prestige.

...Under what conditions will coastal communities conserve resources?

3. The nature of the resources lends itself well to co-management arrangements

--adjacency: closer is easier

--mobility: less is better

--size: smaller is more easily monitored

--boundary clarity: clear makes exclusion easier

--scarcity & value:

--visibility:

Etc.

...Under what conditions will coastal communities conserve resources?

4. The characteristics of the community lend themselves well to co-management

- not too large, or well organized representation
- clear membership rules
- shared norms of behaviour
- appropriate leadership
- high dependence on resource
- trust, etc.

...Under what conditions will coastal communities conserve resources?

5. Nature of community's relationship with outside groups & government is strong

- can articulate local knowledge
 - can identify local interests with public interests
 - access to sources of power and money
 - access to forums of debate, opinion expression
 - adequate scale of planning to address problem
- Etc.

what do social & economic theory say?

- Successful institutions are those which are **piggybacked onto existing systems of social control**
- Costs of monitoring & policing otherwise prohibitive
- Equity is as important as efficiency to communities: they seek balance between these 2 goals.

Benefits of involving communities in coastal management systems

1. Community monitoring of changes in resource status (global or local trends)

- Stolo salmon stock identification
- volunteers monitoring water quality in WA
- Broughton clam monitoring
- Kitimat oolichan taste test for pulp mill effluent to measure uptake of contaminants

...Benefits of involving communities in coastal management systems

2. Coastal communities are adaptable; can shift effort in response to change

--harvests small compared to industrial fleets

--harvest multiple resources and have some capacity to switch when one is low

--low capital investment

--central role of indigenous NRM in preserving bio-diversity and economic productivity

...Benefits of involving communities in coastal management systems

3. Food security: coastal communities can support themselves; do not depend on government welfare; have low health care costs.

--commercial boats used for multiple purposes: hunting, firewood gathering, transportation, multiple food gathering

-- different patterns of asset holding, e.g. one activity subsidizes another

-- small-scale fishermen report well-being far above that of more economically lucrative occupations.

...Benefits of involving communities in coastal management systems

4. Involvement in local management promotes greater health and well-being, especially among indigenous people.

- Australia: ***Campbell et al. (2011)***. Land management participants much less likely to have diabetes, renal disease, hypertension.
- Result: **Expected annual net savings in primary health care = \$4.08 million over 25 years just for chronic diseases**

...Benefits of involving communities in coastal management systems

5. High level of volunteer contributions to fish habitat restoration and stock enhancement

--10,000 volunteers in BC

--those who live closest perceive greatest urgency in rehabilitating resources and give most time

...Benefits of involving communities in coastal management systems

6. Local knowledge can inform regional policies so that they are not overly broad and inappropriate.

SARA listing of oolichan as endangered is true in Bella Coola but not Kingcome. Should not close fishery for entire central coast.

Massive documentation of local knowledge and management actions needed (c.60 submitted by Haida to JRP on Northern Gateway)

Summary: when & how communities contribute to good management

When?

**5 conditions which pre-dispose coastal
communities to conserve resources**

How?

**6 benefits of involving communities in coastal
management systems**

Role of social science/university

- Enables us to identify which communities are likely to be ready to contribute
- Enables us to take steps to increase readiness when specific conditions are absent

BUT

Each situation is unique and deserves careful attention to understand interaction of conditions.

Role of government

- Recognize that communities can be co-managing partners who can greatly and beneficially extend the reach of government if there is real power-sharing
- Recognize that place-based communities are the best stewards, the ones to sit at decision-making tables with senior governments.
- Recognize that such communities are best advocates for allocating funding to DFO when partnerships exist.

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