Council

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Social and Economic Values Related to Wild Salmon – Status, Progress and Suggestions for Future Work

Presentation by the Sub-Group of the Socio-Economics Working Group

Cooperation and expertise for a sustainable future

Social and economic values related to wild salmon



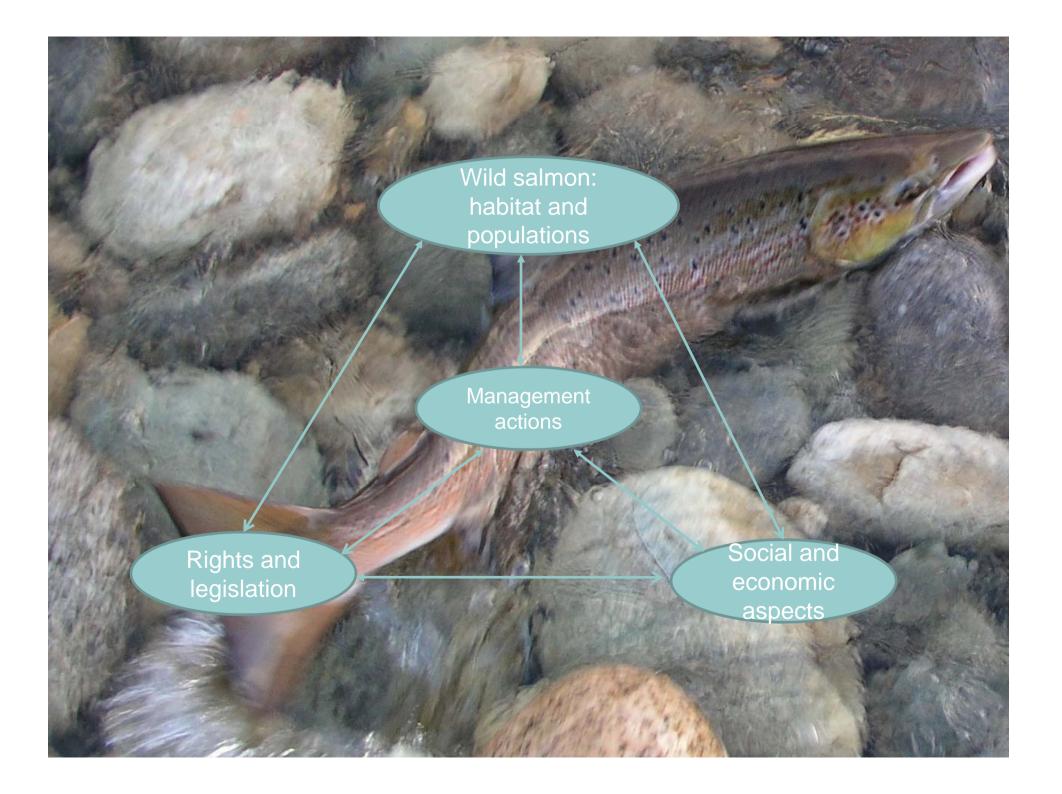
Status, progress and suggestions for future work Dr Øystein Aas, NINA, Norway & Dr Guy Mawle, EA, England and Wales



Why social and economic information is useful for NASCO and contracting parties

- We need to understand the different ways wild salmon are valuable to people
- To help managers make better decisions by considering these values when comparing management options using the Precautionary Approach





Recapitulation of workshop process

- Technical workshops held in 2003 and 2004 which:
 - Sought to identify values associated with salmon
 - Develop broad guidance and guidelines on the types of analyses to estimate the values
 - Develop guidelines for incorporating social and economic factors in decisions under the precautionary approach
- Last workshop Reykjavik, March 2008
- "Experts" encouraged to work intersessionally
 - Update and annotate a bibliography
 - "Test" bioeconomic model for Scotland or Norway
 - Compile and supplement country-wise "wish-list" information as possible contribution to "State of Salmon"

Why social and economic information

- We need to understand the different ways wild salmon are valuable to people
- To help managers make better decisions by considering these values when comparing management options using the Precautionary Approach
- Facilitate for more transparent decisions
- Social & economic information lags far behind scientific information on salmon stocks
- One of the priorities of the Strategic approach for NASCOs next steps
- To address concerns that socio-economic information is used as excuse to avoid management actions which is not consistent with the Precautionary Approach



Approaches to describe social and economic values

- Economic values and impacts
 - Total economic value (consumer surplus, economic rent, plus other welfare benefits not based in expenditures)
 - Economic impact (economic output, jobs, income)
- Social, psychological, health and cultural benefits
 - Might be captured in economic measures, but are often better understood applying other disciplinary approaches, or by combining approaches
 - Example: Difficult to express cultural and spiritual meanings of salmon fishing for indigenous groups in monetary terms
- Group concern: Don't compare apples to elephants (...and sometimes both are needed)



Net and trap fisheries ("commercial and subsistence fisheries")

Rough estimates:
~800 tonnes harvested
~200 000 salmon
~3500 fishers involved
Gross value 7 m Euros (acknowledging that not all fish were sold)
(Data for 2006 or 2007, including Greenland, Iceland, Ireland, England & Wales, Northern Ireland, Scotland, Russia and Norway; Irish/Northern Ireland data are 2007)

Reported rod fisheries

-550,000 fish caught (harvested or released)
>300,000 fishers
-2.5 million fishing days
>500 million Euros in Anglers' expenditures
Supports ~10,000 jobs (FTE)

(these are crude "estimates" with info from all major countries, some parties yet missing, and several minor inconsistencies included) Cooperation and expertise for a sustainable future

England and Wales – example on systematic, supplementary approaches

- Economic impact estimates for angling:
 - Regional or national
 - Jobs or income supported by anglers' expenditure
- Economic <u>value</u> estimates:
 - Total economic value (everyone's willingness-to-pay to protect salmon including use and non-use)
 - Other studies examine component values, such as:
 - Value of private fishing rights to fishery owners
 - Heritage value of traditional net & trap fisheries to **public**



England and Wales

Economic impact Salmon angling supports:

- 1200 FTE Jobs
- 36 Million Euros/year in household income



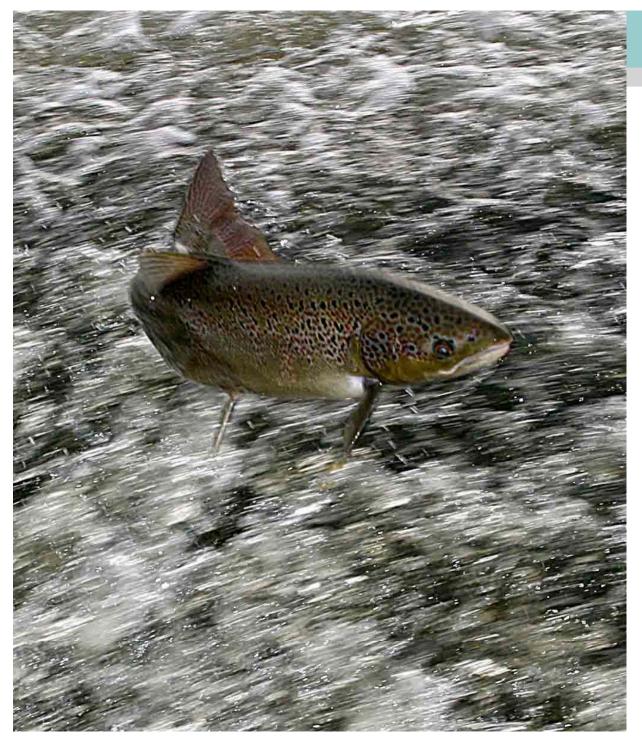


Evaluate change not just status quo

Example Economic Impact: In North East England:

- 1000 more days fished by visiting anglers
- Adds 50k Euros to local household income
- 2.2 extra local jobs





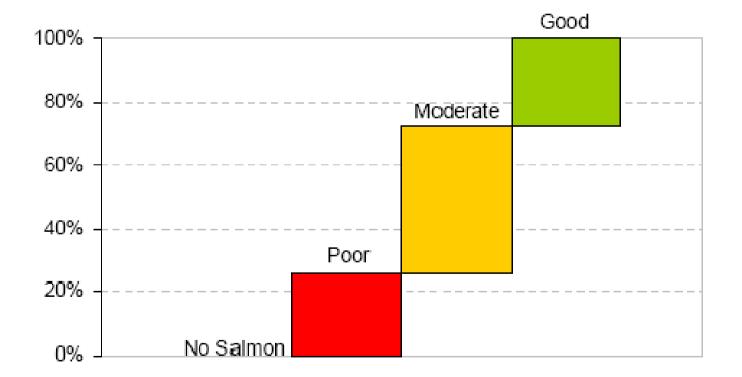
England and Wales

Total Economic Value: 440 million Euros/year

Capitalised to 11 000 million Euros



Change (%) in **Total Economic Value** for different levels of salmon stocks





Trends and changes in humans relation to wild salmon

- Net and trap fisheries strongly reduced
- Much remaining net and trap fishing upheld because of subsistence/cultural/indigenous people interests
- Rod fisheries stable or under slight decrease
- Rod fisheries under change from a catch and retain to a catch and release fishery
- Existence/conservation values >> recreational values >> commercial fishing values
- Cultural value?



Suggestions to increase progress

- More concrete work plan with step-by-step, annual milestones
- More work in smaller groups (4-6 people?) than the "Technical Workshop on social and economic aspect of wild salmon"
- Group less "voluntary"
- Take advantage of similar processes in other foras:
 - EIFAC methodological guidelines for valuation of inland fisheries
 - Baltic salmon management plan



Suggested further work 1

- Descriptive work for advocacy/legitimation:
 - Fill "holes" in "wish lists"
 - Standardise and improve quality of wish list information
 - Utilise possibility for "benefit transfer"
 - More focus on existence/conservation values is needed, as well as on cultural aspects
- Contributions to:
 - Exchange of information between parties
 - Concrete section to "State-of-salmon" report
 - New website
- Should be updated on a regular basis



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Suggested further work 2:

- Approaches/tools to support decision making
 - Cost/benefit analyses (cfr. NASCO guidelines 2004)
 - Bioeconomic models
 - Impact assessment approaches including multicriteria analysis
 - Expand existing decision structure (with input from above approaches)
- Approach(es) to be selected on the basis of what is <u>useful</u> and <u>realistic</u> in NASCO context and to NASCO Parties
 - Assist Parties on deciding which socio-economic information is needed, the use of it in decision-making and reporting under the PA



Possible progress plan

- Present report on values of wild Atlantic salmon (descriptive work) at the Annual meeting 2010
- Present report with suggestion on framework to assist decisions under the Precautionary Approach at the Annual meeting in 2011
- Instigate study of Total economic value (use and non-use) of wild salmon across North Atlantic by 2012?

