

ICES WGSOCIAL REPORT 2018

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Interim Report of the Working Group on SOCIAL indicators (WGSOCIAL)

25-29 June 2018

ICES Headquarters, Denmark



ICES

International Council for
the Exploration of the Sea

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Executive summary

The first meeting of the Working Group on Social Indicators (WGSOCIAL), chaired by Lisa L. Colburn (USA) and Amber Himes-Cornell (USA), was held at the ICES Secretariat in Copenhagen, Denmark, on 25–29 June 2018. The meeting was attended in-person by 14 participants from eight countries with an additional six participants from four countries attending via webinar. The overarching objective of WGSOCIAL is to improve the integration of social sciences in ICES Ecosystem Overviews and Integrated Ecosystem Assessments (IEAs) through the development of culturally relevant social indicators.

This report reviews WGSOCIAL first meeting since the formation of the group in March 2018. The primary focus and outcome of the June 2018 meeting was the development of a work plan for the current 3-year ToRs period that maps out expected work products to be completed and tasks to be accomplished between annual meetings.

WGSOCIAL will be focusing on a number of specific tasks to be accomplished prior to the next meeting in 2019, including:

1. Establish identity as WGSOCIAL;
2. Map the current social science work in ICES and identify future needs for social science in ICES (in discussion with other ICES groups);
3. Map best practices and current work of relevance for the scope of the WGSOCIAL. A preliminary assessment of peer-reviewed literature on social indicators has been carried out. The results will be updated throughout the 3-year ToRs period.
4. Assess the available data and information regarding culturally relevant social indicators and community data for selected ICES Member Countries (UK, France, Italy, Spain) and draft a procedure that could be followed to collect data from other countries;
5. Start identifying methodological frameworks and tools to develop indicators from qualitative data;
6. Gather theoretical and empirical information on approaches and methods for integration of culturally important, economic and ecological dimensions in fisheries management;
7. Conduct a preliminary review of the contributions of social sciences to fisheries management or ecosystem-based fisheries management;
8. Determine social research and data needs to support the implementation of the EU Common Fisheries Policy and the institutional objectives of ICES;
9. Identify and map other networks/organizations dealing with marine social science working on integration of human dimensions in IEAs;
10. Link with other relevant ICES expert groups and identify the role of WGSOCIAL within the proposed implementation of IEA Cycle for ICES and actors.

1 Administrative details

Working Group name

ICES Working Group on Social Indicators (WGSOCIAL)

Year of Appointment within the current cycle

2018

Reporting year within the current cycle

1

Chairs

Lisa L. Colburn, USA

Amber Himes-Cornell, USA

Meeting venue

Copenhagen, Denmark

Meeting dates

25–29 June 2018

2 Terms of Reference

ToR	Description	Background	Science Plan Topics addressed	Duration	Expected Deliverables
a	To map the current work and identify future needs for social science in ICES, giving consideration to useful connections to international marine/ fisheries social science organizations such as the Society for Applied Anthropology.	This is primarily a scoping exercise within ICES, but also ensures coordination of activities with other international bodies and links to the wider scoping work in the Strategic Initiative for the Human Dimension (SIHD).	8, 17, 19	Years 1, 2	Annual reporting, workshop reports
b	To identify and report on culturally relevant social indicators and community data gaps that point to priorities for data collection, research, institutional needs, and training in all ICES Member Countries; and where possible propose systems to collect missing data.	To aid prioritization of data collection to enable qualitative and quantitative analyses of social issues for ecosystem overviews and integrated ecosystem assessments and future advice requests. The ToR also links to ICES Data Centre.	25, 27	Years 1, 2	Annual reporting
c	To define and report on the information flow needed to provide trade-off analysis of fishing impacts on communities and stakeholder groups.	To develop a system to support potential future advice requests and development of ecosystem overviews and integrated ecosystem assessments.	14	Years 2, 3	Annual reporting
d	To assess and report on the social and cultural significance of commercial fishing for selected coastal regions in the ICES area	To support future potential advice requests and development of ecosystem overviews and integrated ecosystem assessments.	8	Years 2, 3	Annual reporting, potentially also scientific manuscript
e	To coordinate the provision of culturally relevant social indicators, and analysis with economic and ecological information.	Contribution to the development of a framework for collective reporting of social, economic and ecological data and information.	18, 20	Years 1-3	Annual reporting

3 Summary of work plan

- Year 1** Start mapping the current work and identify future needs for social science and community impact assessment in ICES (ToR a) and identifying social data gaps (ToR b).
Briefly brainstorm and discuss ideas on how to address and organize work under the remaining ToRs in year 2.
Establish close connections with other relevant groups within and outside ICES (ToRs a and e).
Produce Interim Report.
-
- Year 2** Work towards completion of ToR a and ToR b. Start work on defining the information flow needed to provide trade-off analysis (ToR c) and assessing the social and cultural significance of commercial fishing (ToR d).
Work with other relevant groups within and outside ICES (ToR e).
Produce Interim Report.
-
- Year 3** Finalize ToR c, d, and e, including the manuscript. Discuss and plan strategies and concrete steps for future work.
Produce Final Report.
Establish next set of 3-year ToRs.
-

4 List of Outcomes and Achievements of the WG in this delivery period

- Oriented WGSOCIAL meeting participants to the overarching ICES structure and processes;
- Reviewed the WGSOCIAL ToRs;
- Discussed the context of the social dimension of fishing in various ICES Member Countries and other interested parties;
- Shared experiences on the use of social indicators in the US and select European countries;
- Discussed the context and use of social and economic indicators being used in ecosystem-based fisheries management;
- Reviewed existing data collection frameworks that could be used by WGSOCIAL;
- Deliberated on four key questions aimed at helping frame the future work of WGSOCIAL:
 1. What are the key social issues in your “place?”
 2. What is important to measure?
 3. What is a fishing community?
 4. What does WGSOCIAL mean to you?
- Developed collaborative relationship with the Working Group on Economics (WGECON; including a joint session proposal for the 2019 ASC) with plans to reach out to other working groups;
- Developed an initial work plan for fulfilling the ToRs.

5 Progress report on ToRs and workplan

The 2018 meeting kicked off the first WGSOCIAL 3-year work cycle. Given that WGSOCIAL was only formed in March 2018, this first meeting focused on developing its identity as an expert group and creating a work plan for the remainder of 2018 and into 2019. Below is a brief overview of the ToRs, as used in the subsequent sub headers, followed by detailed descriptions of WGSOCIAL work on each ToR at this first meeting and plans for work over Year 1 of the current ToRs.

ToR	Description	Year
a	Identify current social science work and future needs while making connections to relevant international social science organizations.	1, 2
b	Identify culturally relevant social indicators, data gaps, data collection needs and research, including institutional needs and training.	1, 2
c	Information needed for trade-off analyses of fishing impacts on communities and stakeholders.	2, 3
d	Social and cultural significance of commercial fishing for select regions	2, 3
e	Integrate culturally relevant social indicators and analysis with economic and ecological information.	1 - 3

Throughout Year 1, WGSOCIAL will identify and assess existing social data for selected ICES Member Countries and how those data can contribute to the implementation of, and compliance with, the Common Fisheries Policy and ICES science plan. In addition, a pilot data request will be made for the United Kingdom, France, Spain, and Italy to help assess what social and fisheries data are specifically available for these countries. The data requests will be developed based on discussions held at the first WGSOCIAL meeting that focused on:

1. the important concepts to measure that are relevant in ICES member country fisheries;
2. the key social questions in individual group members' places of focus; and
3. WGSOCIAL's collective definition of what a fishing community is. The section on ToR b summarizes how WGSOCIAL explored the first of these: 'important concepts to measure'. Key social questions and definition of fishery communities are discussed in ToR d.

5.1 ToR a - Identify current social science work and future needs while making connections to relevant international social science organizations

A 12-month work plan for Year 1 of this ToR was established. The group will begin to map best practices and current work including literature reviews, case studies, and projects of relevance in the first year. WGSOCIAL will develop a proposal for what social sciences research could contribute to ICES overall work and objectives. To accomplish this, WGSOCIAL will draft a short review synthesis on how social sciences research can contribute to fisheries management and governance based on the published literature.

Identification of future needs for social sciences within ICES will be done in consultation with other ICES working groups. WGSOCIAL members attending the ICES ASC 2018 will meet with the chairs of other working groups and SIHD.

WGSOCIAL will identify and map other networks and organizations dealing with marine social science and working on the integration of human dimensions in integrated assessments. In the first WGSOCIAL meeting, the group developed a preliminary list of relevant organizations for which members have already established relationships. These include, for example, MARE, IPBES, SfAA, PICES and #marsocsci. Members will continue to add to the list. See below for more in-depth information on these organizations.

- **The Centre for Maritime Research (MARE)** is an interdisciplinary social science organization interested in the use and management of marine resources. The principal objective of MARE is to provide a stimulus for social scientists working on coastal and marine academic and policy-oriented research as well to facilitate collaboration between social scientists and other disciplines including law, history, economics, political science, public administration, anthropology, and geography.
- **The Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES)** is an independent intergovernmental body which was established to provide policymakers with scientific information about the current state of global biodiversity, ecosystem services, and how they benefit people. IPBES is an international forum supported by 94 countries to assist with international efforts to sustainably use biodiversity and the services they provide.
- **The Society for Applied Anthropology (SfAA)** is a professional organization that promotes the integration of social and behavioral sciences for better understanding human behavior and current social issues.
- **The North Pacific Marine Science Organization (PICES)** is an intergovernmental scientific organization that helps to promote and coordinate marine research in the northern North Pacific Ocean and adjacent maritime areas. The organization focuses on facilitating the collection and exchange of scientific information for a variety of ocean issues, including the human dimensions of ocean management.
- **#marsocsci** is a social media outlet for those interested in marine social science to share information, stories and events with a broad community.

5.2 ToR b - Identify culturally relevant social indicators, data gaps, data collection needs and research including institutional needs and training

A first step to the successful development of culturally relevant social indicators is the identification of what concepts are important to measure. An initial identification of these social and fisheries concepts is driven by the social research questions identified in ToR d. Meeting participants noted that the process of identifying culturally relevant social indicators should remain flexible and open to modification to accommodate available data and indicators that might be most relevant to the affected communities and relevant to ICES science advice.

WGSOCIAL meeting participants identified key concepts important to the fisheries and fishing communities that meeting participants regularly work with. These concepts were then grouped by topic and evaluated based on their institutional, economic, social, or cultural context (Table 5.1). This led to natural groupings indicated by color in the table. *Well-being*, *Livelihoods* and *Capabilities* had all three dimensions, but do not tend to be represented in institutional contexts. *Knowledge* and *Place* are not explicitly economic and lack institutional context. *Social dynamics*, *Cohesion*, *Geography* and *Demographics* are explicitly social dimensions. *Fairness*, *Adaptive capacity*, and *Impacts* are social dimensions that may have economic or institutional contexts. *Engagement* and *Governance* (including legitimacy, transparency, fairness and inclusiveness) are explicitly institutional dimensions.

In addition to the concepts listed in Table 5.1, WGSOCIAL participants agreed that, on some level, the purpose of WGSOCIAL is to learn from each other and develop new ideas for what is important to measure. All agreed that care needs to be taken so that information that cannot be translated into a quantitative format is not lost. WGSOCIAL will develop a qualitative data policy on how to access, use, and share this type of information.

Table 5.1. Important concepts to measure.

Topic	Important concepts to measure	Dimension			
		Social	Cultural	Economic	Institutional
Fleet behavior	Interactions between fleets / fleet dynamics	✓	✓	✓	✓
Well-being	Well-being at the local community or fishing community level	✓	✓	✓	
Livelihoods	Attachment to the fishing profession; availability of alternative livelihoods, personal flexibility, community dependence on fishing	✓	✓	✓	
Capabilities	Social capital, entrepreneurship, the influence of the social and economic circumstances of fishing households, community capacity to adapt to multiple stressors	✓	✓	✓	
Knowledge	Knowledge transfer and survival	✓	✓		
Place	Attachment of fishers and family members to a place, culturally important spaces and physical markers	✓	✓		
Social dynamics	Interactions, linkages, ongoing/existing processes & trade-offs	✓			
Cohesion	Social cohesion	✓			
Demographic	Baseline historic social information, such as age, education and training, job availability, gender	✓			
Geography	Isolation of a community	✓			
Fairness	Inequality and well-being; distribution and concentration of quota and vessel ownership	✓		✓	✓
Adaptive capacity	autonomous and facilitated responses to coastal and marine change	✓			✓
Impacts	Impact of management decisions on social and economic activities	✓		✓	
Engagement	Empowerment of fishers to make decisions, participation in management, degree of societal involvement in decision making processes				✓
Governance	Resource access				✓

Meeting participants also considered how varying organizational objectives could affect the development of social indicators in fisheries management. For example, in addition to the ICES framework, the Food and Agriculture Organization of the United Nations (FAO) is focused on food security, poverty alleviation, sustaining livelihoods and securing access to resources and advocates for social inclusion in fisheries. Other organizations will have their own requirements, needs and interests. The objective of the European Union's (EU) Common Fisheries Policy (CFP) is to promote ecologically, economically and socially sustainable fisheries. To do this it has developed a Data Collection Framework, which on its last update has included additional social variables such as gender, age, nationality or educational level. The social variables will likely be collected every three years starting in 2018. The EU has also commissioned some social studies of the fisheries sector, including the social dimension of the CFP reform and

geographical studies on social and regional dimensions. Some other studies looked at the role of women in the fisheries sector and the nonlocal labor in the fisheries sector. One of the key outcomes of WGSOCIAL will be to take steps towards the creation of social indicators that can be used in different contexts and serve the needs of ICES and other organizations.

5.3 ToR c - Information needed for trade-off analysis of fishing impacts on communities and stakeholders

Work on ToR c will begin in Year 2. However, the WGSOCIAL members raised concern about the intent of this ToR and whether the current membership has the expertise to address it. For example, members questioned whether this ToR is intended to assess trade-offs under different management approaches? Trade-offs of different fishing intensities/impact *between* communities and stakeholders? Is the focus only on trade-offs between these two groups? Is the focus only on fishing impacts or is it the trade-off between fishing and other marine activities and uses? The group will decide whether to modify this ToR at the beginning of Year 2.

5.4 ToR d - Social and cultural significance of commercial fishing for select regions

Although work on ToR d will officially begin in Year 2, some group members will begin work on proposals for indicator work in select ICES Member Countries. Consideration is currently being given to case studies in the Wadden Sea area (Netherlands, Germany, and Denmark), the Orkney and Shetland Islands (UK), the Azores (Portugal), and Galicia (Spain). Final decisions on which case studies to focus on will be made in Year 2.

As described below, the working group began identifying key social research questions and defining the meaning of community as precursors to begin the work of assessing the social and cultural significance of commercial fishing for selected coastal regions in the ICES area.

What are key social research questions in your “place”?

Identifying key social research questions across the range of countries represented in the working group was an important first step. The working group will take these perspectives and social research questions into account in the development of any social indicators or methodologies to understand fishing community well-being across multiple ICES Member Countries.

Each participant of the group took time individually to describe the key research questions in their ‘place.’ The responses were grouped into general topics. These topics were then evaluated based on their connection to the social, cultural, economic or institutional context of place. Topic groupings are indicated by color in Table 5.2. *Behavior*, *Consumer perceptions*, *Food security* and *What matters to fishers* crossed all dimensions. *The Importance of fishing*, *Knowledge production*, and *Livelihood* are all connected to ‘ways of life’. *Fairness and equity*, *Access to resources*, *Co-management and stakeholders* and *Values* are all related to management decisions with a social dimension. *Community cohesion* and *Health and well-being* are community oriented. *Fisher businesses*, *Labor force stability in fishing industry*, *Succession and Distribution* are explicitly economic with some social dimensions. *Compensation/subsidy/mitigation* and *Impact of policy* are management issues with additional dimensions while *Policy* and *Scientific advice* are explicitly institutional. As additional members are added to WGSOCIAL, Table 5.2 will be updated to include information relevant to countries that were not represented at the first meeting of

WGSOCIAL. The identified research questions will help frame the concepts to measure in ToR b.

Table 5.2. Key social research questions.

Topic	Questions	Dimension			
		Social	Cultural	Economic	Institutional
Behavior	Who fishes where for what and how? Including fleet behavior, displacement, and time during the year spent fishing	✓	✓	✓	✓
Consumer perceptions	How do consumers perceive fish? Is the governance system perceived as fair? Do consumers even know what the governance system is?	✓	✓	✓	✓
Food security	How are fisheries contributing to food security?	✓	✓	✓	✓
What matters to fishers	Which problems do fishermen and other local actors (co-users in same coastal area) face?	✓	✓	✓	✓
Importance of fishing	How important is the fishery in small (isolated) areas? What is the importance of fishing to a place?	✓	✓	✓	
Knowledge production	Are all types of knowledge considered in policy making? How can we make fisheries governance more based on practice?	✓	✓		✓
Livelihood	Are 'ways of life' respected?	✓	✓		
Fairness and equity	Are fishing quota shares fairly distributed? Is the allocation process fair?	✓		✓	✓
Access to resources	Stability and accessibility of resources	✓		✓	✓
Co-management and stakeholders	How to promote consensus and engage local actors in solution-setting processes? Do fishers think that they are able to improve the current situation? How can stakeholders have a voice in the policy arena? How can management allow room for conflicting stakeholder views? Are decisions taken in a process that includes stakeholders? If so, does that process include stakeholders effectively? How to include all representatives of society in policy development and implementation? How can we include their concerns? What are the mechanisms to prevent conflicts or resolve them?	✓	✓		✓
Values	How should values be taken into account in management?	✓	✓		✓
Community cohesion	How is community cohesion affected by management?	✓			
Health/well-being	What is the physical and mental health of individuals in the community?	✓			
Fisher businesses	Are family fishing businesses maintained?	✓		✓	
Labor force stability in fishing industry	What is the availability of the labor force?	✓		✓	
Succession	How can we improve succession of fishers?	✓		✓	
Distribution	What is the distribution of income from fisheries?			✓	
Compensation/subsidy/mitigation	How can and should management compensate fishing communities if loss is experienced?			✓	✓
Impact of policy	What is the social impact of marine policy?	✓			✓
Policy	Is there a conflict between stated objectives (protecting coastal communities and fishermen) and policies?				✓
Scientific advice	What scientific recommendations and advice are being produced to support decision making? What bodies are they produced by?				✓

In addition to these topics, meeting participants discussed the need to understand how to manage and access fisheries resources in an integrated way, across disciplines and sectors. Participants noted that this issue is fundamental across all of their contexts. In future, WG members would like to assess other science tools used in coastal management to support ocean health that have possible benefits to fishing communities. For example, protected areas that could be perceived as interfering with resource access until it can be shown how such closures benefit harvest and the risk and adaptation of ports and harbours to climate change that may alter access in some places.

Developing and implementing fishing community indices that link resource and harvest sustainability, fisheries dependence, and social well-being will be an important step in accomplishing sustainable management of coastal areas and fisheries in particular.

What is a fishing community?

Identification of the importance of fishing to a geographic place, whether it be a community or larger geography, such as a region, is central to ToRs c and d. Therefore, meeting participants deemed it critical to identify what constitutes a fishing community in their place. The results of this exercise are summarized in Figure 5.1. As a first step in that process, several factors were considered; a community can be defined as both a physical place as well as a group of people with shared cultural, social and/or economic interests. The relationship between the importance of fishing to a physical place vs. a group of people with shared interests is complex and multifaceted. Clay and Olson (2007) suggest several themes that must be considered: 1) the connection of the fishing industry to a place (boats, gear, fishing-related businesses) and other infrastructure essential to a viable working waterfront; 2) connections between fishing dependent activities on land and at sea; 3) the current and historical importance of kinship to the labor process; 4) multiple household and generational ties to fishing; and 5) persistence of a sense of cultural connection to fishing “through changes from small-boat to large-boat, family to industrial, commercial to recreational fishing and even to fishing-related tourism that involves little actual fishing activity”¹. In this context fishing communities refer to both the place and the people that occupy that place whether it be on land or at sea. The significance of fishing to a place may, as suggested in number five above, persist due to its current economic contribution to a place and/or its historical and cultural importance even if the activity is no longer a central economic feature.

¹ Clay, P. M., and Olson, J. (2007). Defining fishing communities: Issues in theory and practice. *Napa Bulletin*, 28(1), 27-42

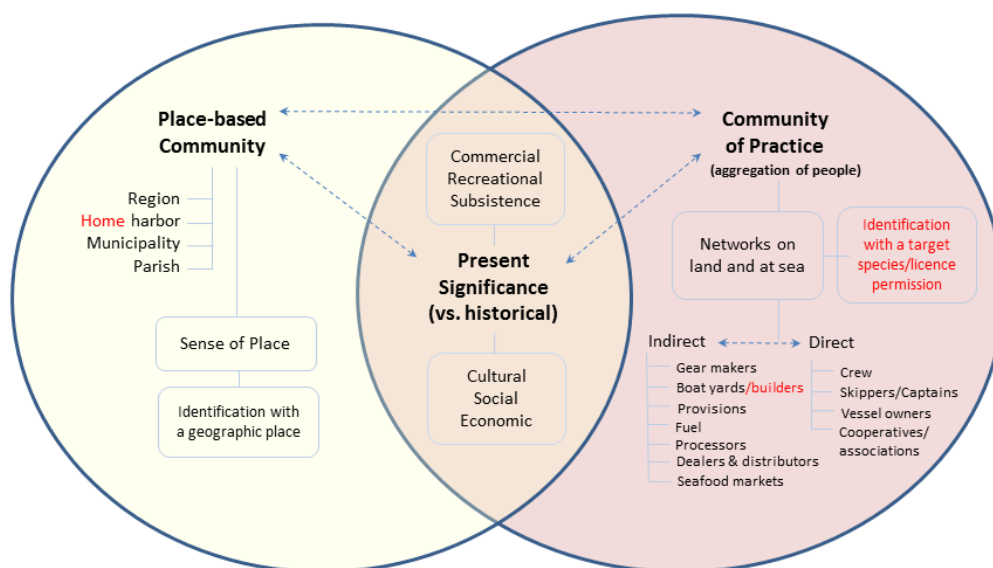


Figure 5.1. Fishing community conceptual model: Dimensions of the social landscape of fishing communities.

5.5 ToR e - Integrate culturally relevant social indicators and analysis with economic and ecological information

A first step toward achieving ToR e is to establish our identity as an expert group within ICES SCICOM. Meeting participants worked together to develop a shared vision of WGSOCIAL by answering the question, “What does WGSOCIAL mean to you?” Meeting participants agreed that WGSOCIAL is an interdisciplinary community of practice within ICES that works on both a general and a place/space specific understanding of the social aspects, concerns and knowledge of marine resource use and governance. WGSOCIAL aims to help integrate social science knowledge in the current management and advice system by contributing to and improving the ongoing processes (understanding, approaches and methods) at ICES i.e. the IEA’s and fisheries overviews. WGSOCIAL will share knowledge, methods, indicators, concepts, provide support, and link with other expert groups within ICES (e.g. WGECON, WGMARS², WGSEDA³, WGHIST⁴) and outside ICES.

In principle, ICES aims to improve its advice on fisheries management. WGSOCIAL is therefore a small piece of the puzzle in improving fisheries management in ICES Member Countries. As a group, WGSOCIAL participants discussed the role that the group will have in our individual work, as well as ICES work. Ultimately, WGSOCIAL falls under the science arm of ICES and is not part of an advice giving body. The role of WGSOCIAL overall will be to provide evidence, such as IEAs and fisheries overviews, that informs ICES advice. Although WGSOCIAL will principally focus on fisheries activities, we recognize the interaction between, and effect of, all maritime activities (including cumulative impacts) on local communities where these activities occur. WGSOCIAL is composed of individuals with experience in multiple social science disciplines as well as other disciplines outside the social sciences. The collective experi-

² Working Group on Maritime Systems (WGMARS)

³ Working Group on Social and Economic Dimensions of Aquaculture (WGSEDA)

⁴ Working Group on the History of Fish and Fisheries (WGHIST)

ence of WGSOCIAL members will help the group to better understand how social behavior is driving change in the marine environment and vice versa, i.e. how change in the marine environment is affecting the social landscape.

The overarching objectives of WGSOCIAL will be to:

- Review what has already been done in the realm of social indicators in fisheries and evaluate how it can be more broadly applied;
- Provide assistance to the development of the technical aspects of social indicators in the E.U.;
- Act as a knowledge-sharing platform and support system across ICES Member Countries in both the theoretical and applied aspects of the social side of fisheries;
- Highlight social issues that are not usually addressed in fisheries management;
- Develop a way of integrating social aspects, concerns, and knowledge of fisheries into the current management and advice system;
- Address the salience of social issues and targets among scientists and policymakers in order to find ways of providing targets that are actionable and attainable; and
- Develop a community of practice within which successes, methods, and challenges can be shared such that we collectively move toward a better understanding and implementation of social indicators for marine governance.

Last, WGSOCIAL will work to articulate the roll of social science within the ICES framework. Inclusion of relevant social science content in ICES IEA visual models would be a natural progression. Meeting participants recognized that the current **Proposed Implementation of IEA Cycle for ICES and Actors** visual model indicates that “identify/develop indicators” is a step in the implementation process but it is not clear what types of indicators are necessary. We propose a slight modification to this model that will clarify the essential components of IEA. In the adapted model, we propose that “identify/develop indicators” be replaced with “identify/develop biological, economic and social indicators” (Figure 5.2).

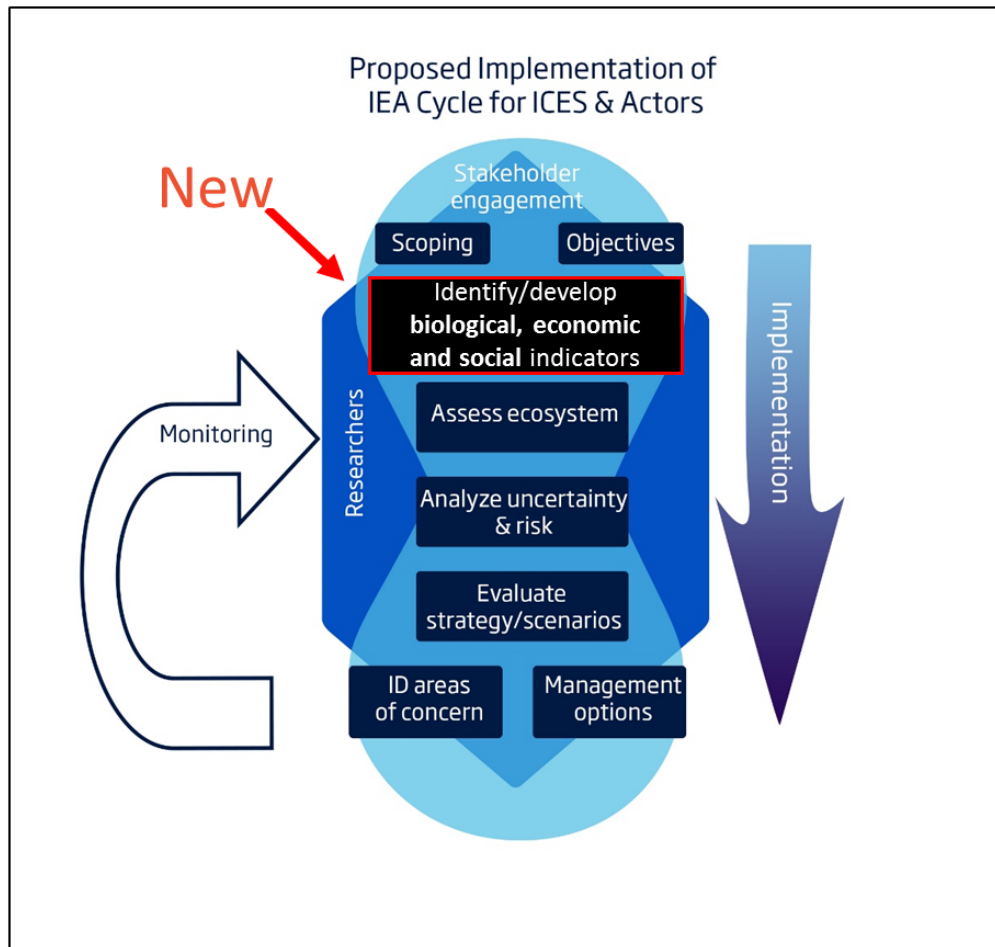


Figure 5.2. Adapted model of the proposed implementation of IEA cycle for ICES and actors with clarification on the *types of indicators* that need to be identified/developed.

*Model adapted from presentation on 26 June 2018 by Mette Skern-Mauritzen (Chair of ICES IEA Steering Group) at the annual meeting of the ICES Working Group on Social Indicators (WGSOCIAL).

6 Revisions to the work plan and justification

No revisions deemed necessary.

7 Next meeting

To be determined.

Effort will be made to schedule the next meeting in conjunction with WGECON.

Annex 1: List of participants

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Annex 2: Recommendations

RECOMMENDATION	ADRESSED TO
1. Assist WGSOCIAL members in submitting formal data requests to select ICES Member Countries for social and fisheries data.	ICES Secretariat
2. Develop relationships with other ICES working groups (WGECON, WGHIST, WGSEDA, WGMARS).	(self-recommendation)