

Open session

Transition from ICES Strategic Initiative on Stock Assessment Methods to a more global expert group

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The ICES Strategic Initiative for Stock Assessment Methods (SISAM) was designed to assure that scientists can apply the best stock assessment methods when developing management advice for fisheries. It was instigated because it was perceived at the time that ICES was not using the state of the art assessment methods, and there was a need for more innovation in stock assessment methods across the ICES network. Although this situation has greatly improved, SISAM highlighted additional challenges (e.g., data-limited methods, performance of relatively advanced models, lack of resources for developing necessary new approaches).



Whilst there is a fusion between the roles of national and regional groups on stock assessment methods and there is no global initiative. Different groups are carrying out a range of roles. The groups are run by RFMOs, national institutes and organisations like ICES. The roles required for a robust stock assessment community include coordination of research on new methods, global communication forum (website), translation of new methods into operational protocols, good practices guide, training to improve skills of mid-level practitioners, training to develop skills in new potential practitioners, development of global standards, (e.g. file formats, naming conventions, databases) with assessment results, global symposia, software package development and maintenance, and access to software packages (toolbox).

The first stage of SISAM culminated in a report on categorising stock assessment methods, a simulation-based workshop to evaluate performance of stock assessment methods and the World Conference on Stock Assessment Methods (WCSAM), in 2013 in Boston, USA. The second stage of SISAM involves continued coordination with Regional Fishery Management Organizations and national agencies, the development of "good practice" guidelines, and transition to a Global Assessment Methods Expert group (GAME).

In preparation for the open session, the need for a global initiative for stock assessments was discussed by SCICOM and ACOM immediately prior to the 2017 ASC. Broad support and clarification of the issues was provided by both committees to the ideas presented at the open session.

The open session at the 2017 ASC informed the audience of approximately 45 people (mostly from the developed world) on SISAM objectives, progress and plans. Three presentations were given (Cadrin on the history of SISAM, Maunder on topical workshops such as CAPAM and Dickey-Collas on future options). A dynamic and frank discussion followed on the need and potential routes for transition to GAME.



¹ Note: CAPAM is the recipient of the 2017 Outstanding Group Achievement Award of the American Institute of Fishery Research Biologists, AIFRB.

After the discussion there was broad consensus that there was a need for a global initiative but the roles and responsibilities needed to be better defined. The structure of the organisation should be light, but secure enough to be trusted by other international and regional bodies. GAME should be prepared to accept resources from other organisations and should probably be housed in an existing organisation. It should ensure that membership from the developing world was possible. It should also enhance, not compete with regional groups.

A suggested route forward is:

- 1) With ICES, NOAA and CAPAM support, build a transition team to construct clear objectives and clarify the general approach
- 2) Draft a letter from the transition team and their organisations to invite fishery organizations and research institutes to join GAME. The letter should include:
 - i. problem statement (common global problems, regional differences in methods, quality assurance, stakeholder buy-in, problems sustaining regional methods groups),
 - ii. objectives (identification of alternative methods, evaluation appropriate use of methods, development of good practices, training),
 - iii. initial terms of reference (updated catalog of regional methods and metadata to analyze regional and global trends, 2018 workshop, session at 2020 WFC, development of global training program),
 - iv. proposed governance structure, and
 - v. membership criteria and commitment required (costs, staff, facilities, ...).
- 3) Once there is a critical mass, there will be a call and election for officers, an agreement of its governance and an acceptance of a roadmap for development of good practices, workshops, symposia and training.
- 4) There will be continuing review (linked to 4 year cycle) of the role of GAME and its ability to add value to regional efforts. The following areas will be considered from global and regional groups: coordination of research on new methods, global communication forum (website), translation of new methods into operational protocols, good practices guide, training to improve skills of mid-level practitioners, training to develop skills in new potential practitioners, development of global standards, (e.g. file formats, naming conventions, databases) with assessment results, global symposia, software package development and maintenance, and access to software packages (toolbox).