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Méditerranée

Scientific Advisory Committee (SAC)

Subcommittee on Economic and Social Sciences (SCESS)

Fifteenth session

GFCM headquarters, 4-5 February 2015

Report

EXECUTIVE SUMMARY

The fifteenth session of the Subcommittee on Economic and Social Sciences (SCESS) of the GFCM Scientific Advisory Committee (SAC) addressed the following topics: i) socioeconomic assessments in selected case studies; ii) estimation and submission of selected variables under Task V (socioeconomics) of the Data Collection Reference Framework (DCRF); iii) developments on small-scale fisheries; and iv) activities undertaken in working towards a common methodology for socioeconomic analysis. The SCESS agreed on the need to regularly assess socioeconomic indicators at the regional level and the importance of devising a mechanism for reporting the results obtained from bioeconomic models to the SAC. The Subcommittee elaborated on the definition of key socioeconomic indicators within the DCRF and on the process for reporting them. For the upcoming regional conference on small-scale fisheries, the session agreed on the importance of having case studies that are geographically representative of the GFCM region. In line with this, the SCESS encouraged submissions of proposals for case studies. Finally, the importance of having guidelines that establish a common methodology for socioeconomic assessments was highlighted during this session

TRANSVERSAL SESSION ON THE IMPLEMENTATION OF THE GFCM DATA COLLECTION REFERENCE FRAMEWORK (DCRF)

1. Mr Miguel Bernal, GFCM Secretariat, welcomed participants on his behalf and on behalf of the GFCM Executive Secretary. This session was shared between the Subcommittee on Stock Assessment (SCSA) and the Subcommittee on Economic and Social Sciences (SCESS). The opening statement introduced GFCM Secretariat staff and provided logistical information.
2. Mr Federico De Rossi, GFCM Secretariat, introduced the topics of this session related to the new GFCM data collection reference framework (DCRF) and briefly recapped the meetings held to date in order to discuss the new DCRF with Member countries.

Review of the conclusions and recommendations from the workshop on DCRF implementation (Spain, December 2014)

3. Mr Paolo Carpentieri, GFCM Secretariat, introduced the DCRF as the regional system for collecting fisheries data in all Mediterranean and Black Sea countries, that is aimed at supporting

the Scientific Advisory Committee (SAC) in providing advice and facilitating the overall GFCM decision-making process. He summarized the primary components of the DCRF, highlighting its main characteristics, timeframes and deadlines, its modular and submodular (i.e., tasks) structure, compulsory and optional fields, etc. Particular emphasis was placed on the technical suggestions for improving two sections of the DCRF document: 1) structure of the data collection; and 2) common practices for data collection provided by national experts on the occasion of the workshop on DCRF implementation (Madrid, Spain, 15–16 December 2014,).

4. A roadmap for the implementation of the DCRF was also presented to the meeting. The roadmap envisaged the following: i) a testing phase in 2015 to finalize the development of the online data submission tools; ii) a first phase of submission of fleet data only starting from 2016 and a late phase (November 2016) for the submission of other data; and iii) final implementation of the DCRF by 2017.

Identification of relevant issues to be discussed by the SCSA and the SCESS and discussion on follow-up steps

5. The two subcommittees were invited to discuss the potential merging of fleet segments, taking into account biological and socioeconomic perspectives. In addition, the SCSA was asked to provide criteria to assist the SAC and Member countries in selecting the stocks to be assessed each year.
6. Some participants raised concerns about the purpose, and the consequent possible duplication, of submitting biological information both through the stock assessment forms (SAFs) and through Task VI. It was explained that data collected through Task VI relate to basic parameters on length that are designed to allow the monitoring of all commercial species (even those that are not regularly assessed), whereas SAFs apply to species for which a stock assessment should be carried out, and the information requested is specific to the requirements of the stock assessment models used for each stock.

OPENING AND ARRANGEMENTS OF THE SCESS

7. The fifteenth session of the SCESS was held at GFCM headquarters, Rome, Italy on 4–5 February 2015. The meeting was attended by experts from Albania, Algeria, Croatia, France, Italy, Lebanon, Malta, Montenegro, Morocco, Slovenia, Spain and Tunisia, along with representatives from the European Union (EU), the FAO regional projects and the GFCM Secretariat. The full list of participants is provided in Appendix B.

8. Mr Scander Ben Salem, SCESS coordinator, opened the meeting by welcoming participants and expressing his appreciation for the large extent of expert participation at this meeting.

9. The GFCM Secretariat thanked Mr Ben Salem for his work as Subcommittee coordinator over the past two years; in particular for his careful selection of agenda items and for his encouragement of expert attendance at SCESS meetings.

10. The agenda was introduced and adopted with minor modifications as reproduced under Appendix A.

11. Ms Anna Carlson, GFCM Secretariat, was appointed rapporteur of the meeting.

ASSESSMENT OF SOCIOECONOMIC ISSUES IN SELECTED CASE STUDIES

Socioeconomic indicators at the Mediterranean and Black Sea level

12. Ms Carlson presented a series of region-level socioeconomic indicators developed by the Secretariat. These were developed primarily from landing value and employment data that were

submitted by GFCM Members in compliance with the recommendation of DCRF Task I. The objectives of the presentation were: (i) to present the first global analysis of the official socioeconomic data reported to the GFCM Secretariat with the ultimate aim of developing indicators that can be used to describe the main socioeconomic characteristics of fisheries in the GFCM area; and ii) to highlight shortcomings of the socioeconomic data that the GFCM Secretariat receives in order to inform Members of these issues and to improve the quality of information received.

13. Participants were informed that, in the future, the Secretariat plans to provide this socioeconomic overview on a regular basis. The Secretariat also plans to contribute this information to the planned biennial report on the status of fisheries in the Mediterranean and the Black Sea and to communicate with Member countries regarding shortcomings identified in their submission of socioeconomic data. Members were asked to provide feedback to the Secretariat regarding the indicators against which they would like to be considered within the context of the biennial report.

14. Participants were appreciative of these efforts; they acknowledged the importance of the Secretariat producing an overview of socioeconomic information and communicating with countries to improve the quality of the data received.

15. Mr Dario Pinello, FAO EastMed regional project, provided suggestions for improving the comparison of data between countries, including the use of index numbers (for employment data in particular).

16. Mr Othman Jarboui, SAC Chairperson, recalled the importance of the National Focal Points in ensuring the accurate and complete submission of data to the GFCM Secretariat.

17. Ms Nicoletta Milone, FAO AdriaMed regional project, shared the outcomes of the socioeconomic surveys carried out in Albania and Montenegro between May-June 2014 within the remit of the AdriaMed project. These surveys were in response to the request formulated by the Ministry of Agriculture and Rural Development of Montenegro as well as by the Ministry of Agriculture, Rural Development and Water Administration of Albania. The main aim of the surveys was to contribute to efforts in: (a) providing the national authorities with the information required to formulate strategies for fisheries management in line with the FAO Code of Conduct for Responsible Fisheries (CCRF); (b) supporting the Adriatic riparian States in complying with the requirements of regional and subregional bodies (e.g., the GFCM) pertaining to monitoring, management and conservation of fisheries resources; and (c) providing data to the European Commission's SEDAF Project (under Mediterranean Halieutic Resources Evaluation and Advice - MAREA). The aim of the SEDAF project is to provide a baseline description of the main socioeconomic elements associated with the various fisheries in the region (undertaken by the Adriatic countries). The meeting noted that these surveys adopted the same methodology that was applied in countries under the EastMed project so as to apply a common methodology throughout the region.

18. Mr Imad Lahoud, Lebanese Ministry of Agriculture, presented his country's experience in conducting socioeconomic surveys, carried out with the support of EastMed. The survey took place in 2012, using 2011 data and followed the methodology of a similar study carried out by EastMed in Egypt. This study concluded that Lebanese fishers' incomes are low and that few young people are entering the fisheries sector. The study recommends investigating the possibility of exploiting new fishing grounds and recommends further examination of the value chain. As a result of this study, the Lebanese Government is encouraging young people to join the fishing profession through efforts such as the provision of vocational schools. Research into the development of new fishing grounds, new boat designs, and the improvement of fisheries laws is also being conducted. Mr Lahoud explained that the Lebanese roadmap for fishing and aquaculture allows for different sets of studies to be carried out regularly. However, due to the limited availability of funds, the annual collection of socioeconomic data is not possible.

Adriatic Sea small pelagic fisheries

19. Mr Giuseppe Lembo, COISPA, presented the results of a study conducted under the EC-SEDAF Project (MAREA), that evaluated management scenarios for small pelagic fisheries in the Adriatic Sea (GSA 17) using a bioeconomic integrated model (BEMTOOL). He highlighted that the data used in this analysis should be considered preliminary since the work is still ongoing and it is possible that the results will be adjusted in the future. The analysis tested the scenarios whereby fishing mortality for anchovy (*Engraulis encrasicolus*) and sardine (*Sardina pilchardus*) is reduced to the level of current reference points by 2018 and 2020, respectively. The results revealed an apparent improvement in the economic indicators for all scenarios tested.

20. In commenting on the presentation, the Secretariat remarked that these analyses should be used to inform national decision-making authorities and the GFCM. This would, however, require a reporting system that lends itself to presenting the results of these models in a way that is directly useful to decision-makers.

21. Participants agreed on a three-step roadmap for reporting results to the SAC (and consequently to the Commission). This system involves: (i) defining scenarios to be tested, taking into consideration existing management measures; (ii) holding an expert meeting to run the models, decide on assumptions and obtain results; and (iii) presenting the results to the SAC. Participants pointed out that the first step should ideally involve a number of stakeholders (administration, fishers, scientists, etc.). Additionally, participants suggested that the SAC should further discuss on the proposed three-step system.

Strait of Sicily demersal fisheries

22. Mr Luca Ceriola, FAO AdriaMed/MedSudMed regional projects, provided an update on the efforts underway to analyze demersal fisheries in the Strait of Sicily. MedSudMed foresees the establishment of a medium-term programme for the collection and use of socioeconomic data for bottom-trawl fisheries in Tunisia. The aim of this would be to support the multi-disciplinary evaluation of fisheries, in line with the CCRF and the Ecosystem Approach to Fisheries (EAF). Taking into account the GFCM case study for the development of a multi-annual management plan, the MedSudMed programme will focus on the deep water rose shrimp (*Parapenaeus longirostris*) and hake (*Merluccius merluccius*) fisheries in the south-central Mediterranean. It is foreseen that the program will consist of three components: (i) developing national capacities in data collection and analysis; (ii) collecting and processing data for the estimation of baseline variables and/or for estimating indicators according to the common methodology indicated by the SCESS in 2013; and (iii) merging biological and socioeconomic data from countries participating in MedSudMed in order to use existing tools (e.g., SMART, BEMTOOL). These tools allow for the provision of advice on the likely consequences of different management scenarios in the *P. longirostris* and *M. merluccius* fisheries in the south-central Mediterranean.

23. The SCESS coordinator contributed to this discussion by clarifying that socioeconomic data need to be collected and analyzed in Tunisia before a bioeconomic analysis can be conducted for the entire Strait of Sicily region. He added that the starting point for data collection would not be specific to the two targeted species (*P. longirostris* and *M. merluccius*) and that methodological issues will need to be resolved in relation to the disaggregation of economic data by the species or métier¹ in question.

¹ Definition taken from the European Commission - Data Collection Framework (DCF): “a *métier* is a group of fishing operations targeting a specific assemblage of species, using a specific gear, during a precise period of the year and/or within the specific area”.

Other relevant work

24. Mr Pinello presented an analysis of the technical efficiency of Egyptian fisheries using the data envelopment analysis (DEA) methodology. This case study focused on two fleet segments: trawlers and small-scale vessels. An input-oriented DEA was selected since managerial schemes in place in Egypt are based on input control; a cost-minimization DEA was used for this analysis. The results of this study indicated that small-scale vessels performed better than trawlers in terms of technical efficiency and scale efficiency. This study also revealed that, based on the definition of economic capacity used in this case, both fleet segments are operating at under-capacity. Participants were informed that only one year of data was used in this analysis and more data would be needed in order to draw reliable conclusions.

25. The SCESS noted that, although it may be premature to apply this methodology as a common methodology throughout the GFCM area of competence, its potential use should be further investigated.

26. Ms Claire Macher, Ifremer, presented the “impact assessment bioeconomic model for fisheries” (IAM), based on a case study of the European hake (*Merluccius merluccius*) fishery in the Gulf of Lion. The model tested two scenarios: (1) a one-month cessation of fishing for French trawlers (a reduction of 8% of fishing effort for trawlers); and (2) a transition to maximum sustainable yield (MSY) for hake by gradually reducing fishing mortality for all fleets by 5%, 10% or 15% per year from 2012 to 2015 (by reducing the number of days at sea by vessel by fleet or by reducing the number of vessels by fleet). Ms Macher mentioned that in the case of the second scenario, from a biological standpoint, the two variables produce the same outcome; however, from a socioeconomic standpoint, they can have very different impacts. This model highlights the socioeconomic risks of transitioning to MSY and the trade-offs between options for achieving MSY from the perspective of employment, wages, fleets and rents. It also highlights the interaction between small-scale fisheries and trawl-fleet segments.

27. It was noted that a stronger methodology for allocating costs by *métier* is needed.

ESTIMATION AND SUBMISSION OF SELECTED VARIABLES FOR DCRF TASK V (SOCIOECONOMICS)

Fleet segmentation and definition of polyvalent group

28. The SCESS has been asked by the *Workshop on the implementation of the DCRF in the Mediterranean and the Black Sea* (WKDCRF) (Spain, December 2014) to better define the “polyvalent group” within the DCRF fleet segmentation and provide suggestions on how to merge fleet segments. Mr Pinello suggested better clarifying the definition of “predominance” by instead offering a more precise description. It was proposed and agreed to add “using passive gears” to the definitions of small-scale vessels (with and without engines) and to change the definition of “polyvalent vessels” to: “All the vessels using more than one gear, with a combination of passive and/or active gears, none of which exceed more than 50 percent of the time at sea during a year.”

29. With regard to the issue of merging fleet segments, the GFCM Secretariat recalled that the fleet segments identified in the DCRF include all possible segments identified by the SAC, and that it is important to collect information at the level of fleet segment so as to efficiently understand and manage fisheries in the GFCM area. However, where there are technical justifications at the national level (e.g., when the exploitation pattern of two different segments is the same; see the report of the sixteenth session of the SCSA) for aggregating some of the proposed segments in a single group, countries can provide the SAC with a proposal for an aggregated fleet segment that adequately represents the reality of their fleet. If the SAC approves the proposal, then following the roadmap for the implementation of the DCRF as proposed by the WKDCRF, countries can collect and submit their data using the agreed aggregated fleet segments. However, the SCESS proposed that the maximum

level of aggregation that could be accepted by the SAC should be the one that was previously proposed in Task I (and included in Appendix C of this report). The EU representative indicate that it should be necessary to prevent that heterogeneity on the data aggregation may hamper the comparative analysis between CPCs, when necessary to adopt management measures to certain fisheries and/or species.

Estimation of capital costs, fuel consumption and price

30. The DCRF workshop also asked the SCESS to improve the definition of fuel consumption and fuel price. Since there had been confusion over the type of fuel used, it was suggested to add “regardless of fuel type” to the definition.

31. Mr Pinello suggested further clarifying the concept of price since such a variable can be quite dynamic. It was suggested to include a “total fuel cost” variable in this section of the DCRF, in addition to price and consumption. Since the three variables are related, this would facilitate the “cross-checking” of information. Moreover, given that some countries may not have information on one of the three variables, if at least two of them are available, they can be used to estimate the third.

32. Additionally, it was requested to the Subcommittee to provide guidelines on how to calculate depreciation and opportunity costs in a way which takes into account the differences in data availability between GFCM Member countries.

33. The SCESS coordinator recalled the five methods for calculating the “investment capital” indicator (as listed in *Feasibility assessment for a database on socio-economic indicators for Mediterranean fisheries*²) and underlined that the assessment of the “current price assigned to the vessel and the vessel’s tackle by the owner, in case he had to sell it or purchase it in the same condition”, proposed in the reference cited above seems to be the most suitable for the majority of countries in the region.

34. Mr Pinello mentioned the existence of several methods for calculating these variables, one such method being the “perpetual inventory method” (PIM). He remarked that no single method is correct.

35. The Secretariat recalled that the various methods are specified in the socioeconomic section of the second section of the DCRF document.

36. Participants agreed to add references to Chapter 5 of the DCRF document that would point users/readers to sources containing detailed descriptions of the methodologies for calculating capital cost³.

37. Participants pointed out that a number of countries could face difficulties in estimating some of the variables as well as in complying with the future data-reporting requirements of the DCRF. However, they also pointed out that problems that are encountered will serve to “flag up” national needs for assistance (e.g., training).

Review of the calendar for the submission of socioeconomic data

38. The DCRF workshop urged the SCESS to review both the frequency of, and the deadlines for, submitting socioeconomic data. As it stands, there are four tables of information to be reported in

² Franquesa, R., Malouli, I.M., and Alarcón, J.A. 2001. *Feasibility assessment for a database on socio-economic indicators for Mediterranean fisheries*. Studies and Reviews. General Fisheries Commission for the Mediterranean. No. 71. FAO, Rome, 2001. 55p.

³ For example: *The workshop on calculating capital value using PIM and definition of DCF Variables*, IREPA, Onlus, 2011.

November; a completed table V.1 is to be reported annually, while completed tables V.2, V.3, and V.4 are to be reported biennially. The DCRF workshop proposed moving the reporting of tables V.2, V.3, and V.4 to March for the reference year n-2.

39. The SCESS coordinator noted that a March deadline would not give the GFCM Secretariat sufficient time to analyze the data prior to the annual session of the SAC.

40. Participants agreed to move the deadline for V.2, V.3, and V.4 data submission to May (for the reference year n-2) so as to keep with the current Task I submission calendar and to give countries more time to report data.

DEVELOPMENTS RELATED TO SMALL-SCALE FISHERIES

SCESS inputs towards the preparation of the upcoming Regional Conference on small-scale fisheries

41. Mr Nicola Ferri, GFCM Secretariat, presented information regarding the upcoming regional conference on small-scale fisheries to be held in Algeria in December 2015. It will be a follow-up to the *First Regional Symposium on Sustainable Small-scale Fisheries* held in November 2013 in Malta. The goals will be: i) to present the results of case studies encompassing the five thematic areas presented in the 2013 symposium; ii) to provide a forum for discussions regarding practical recommendations for the consideration of decision-makers; and iii) to ultimately produce a declaration that adapts the FAO *Voluntary Guidelines for Securing Sustainable Small-scale Fisheries* to the GFCM area.

42. In response to questions posed by participants regarding the selection and geographical representation of case studies to be presented at the conference the Secretariat confirmed that the case studies that are currently scheduled to be presented at the conference are those that have been received through national focal points. Subsequently, participants were reminded that, due to the decision to postpone the conference to December, there is still time to propose additional case studies; according to the agreed procedure, such proposals should be submitted by the national focal points.

43. The SCESS coordinator underlined the need to offer a selection of case studies that are geographically representative of the GFCM region.

Proposals for new case studies to be developed in view of the Regional Conference

44. Mr Fabio Grati, ISMAR-CNR, shared with the group, the case study on small-scale fisheries for the Adriatic Sea that has been agreed upon by the AdriaMed Working Group on Small-Scale Fisheries (AdriaMed WGSSF). At the last meeting of the group (December 2014), the experts of six Adriatic Sea riparian States devised a comparative approach for analyzing the seasonality of the three main gears in use in this area (gillnets, trammel nets and traps). This approach can also be used to analyze the eco-ethology of the target species through the use of indicators. The AdriaMed WGSFF will define indicators (that also cover socioeconomic aspects) for monitoring the impact of gillnets, trammel nets and traps on the fishing communities and on the fish resources of the Adriatic Sea. The main indicators defined for set gears will be useful for comparison between the selected gears and active gears (i.e., trawl nets).

45. Mr Yassine Zahri, Institut National de Recherche Halieutique (INRH) of Morocco, presented two data collection projects for small-scale fisheries in Morocco: 1) a national monitoring programme for small-scale fisheries throughout the entire Moroccan coast, including the Mediterranean; and 2) a system of community-based monitoring of artisanal fishing activity in Al Hoceima National Park, carried out in partnership with the FAO, the INRH, the National Park of Al Hoceima, and MedPartnership. The objective of this project is to promote a system for monitoring small-scale fisheries and to support the sustainable management of fish resources in Al Hoceima through the

effective contribution of the fishing community. A pilot study for this project was conducted at the Badès site and the system was then extended to the Cala Iris and Inouaren sites. The next steps in this project are to extend monitoring to all of Al Hoceima, to analyze the collected data, and to collect feedback from the fishing stakeholders. Mechanisms to ensure the continuity of this data collection process into the future will be put in place. Mr Zahri explained that the results of this work could be presented to the Conference of Small Scale Fisheries, planned in December 2015.

FOLLOW-UP ON THE WORK CARRIED OUT TOWARDS A COMMON METHODOLOGY FOR SOCIO-ECONOMIC ANALYSIS

46. The SCESS coordinator recalled the recommendations emanating from the fourteenth session of the SCESS, to develop a common methodology for carrying out the collection of socioeconomic data.

47. Ms Milone explained that work had begun on this common methodology; however, further aspects that were not initially considered had to be incorporated into this project (which they now are) and therefore, the guidelines were not yet available.

48. The SCESS agreed that the guidelines should be produced and should be discussed at the next SCESS session. Upon completion of the common methodology guidelines, the SCESS recommended arranging training sessions on these guidelines.

49. The Executive Secretary reminded participants that Subcommittee recommendations should be explicit regarding their objectives and regarding who would complete such objectives.

PROGRAMME OF WORK

50. In light of the above recommendations, the SCESS proposed the following work-plan, while leaving the decisions on dates and venues of meetings to the thirty-ninth session of the Commission:

- Expert meeting, with the participation of both stock assessment and socioeconomic experts:
 - to validate the assumptions of the bioeconomic simulation and forecast models;
 - to run the bioeconomic models; and
 - to decide on an adequate reporting format for submitting the conclusions to the SAC and the Commission.
- Regional Conference on small-scale fisheries in the Mediterranean and the Black Sea.
- Sixteenth session of the SCESS.

GENERAL RECOMMENDATIONS

51. The following recommendations were drawn up by the SCESS:

- Recognizing the importance of regular submission of exhaustive data by countries to the GFCM, and in order to give value to the collected information, the Subcommittee suggests that a comprehensive biennial analysis of socioeconomic indicators should be carried out by the Secretariat in preparation for the Subcommittee sessions.
- Acknowledging the importance of bioeconomic models for the analysis of data, the Subcommittee agreed on the importance of integrating the outcomes of simulation models, when available, into the advice provided by the SAC to the Commission. The SCESS suggests that this process should be done according to the following three steps:
 1. Definition of potential management measures to be simulated in agreement with stakeholders;

2. Organization of an expert meeting, including both stock assessment and socioeconomic experts, in order to validate the assumptions of the bioeconomic simulation and forecast models, run the bioeconomic models, and decide on an adequate reporting format for submitting the conclusions to the SAC and the Commission; and
3. Assessments of the results in the SAC and the Commission.

The draft terms of reference for this activity are reproduced in Appendix D.

- In light of the outcomes of the *Workshop on the implementation of the DCRF in the Mediterranean and the Black Sea* (Madrid, December 2014), the SCESS agreed on the following points:
 - DCRF fleet segmentation:
 - Changing the vessel group name of “small-scale vessels without engine” to “small-scale vessels without engine using passive gears”.
 - Changing the vessel group name of “small-scale vessels with engine” to “small-scale vessels with engine using passive gears”.
 - Defining polyvalent vessels as: “all vessels using more than one gear, with a combination of passive and/or active gears, none of which exceed more than 50 percent of the time at sea during a year”.
 - If countries need to merge the different fleet segments for the sake of data-reporting, the aggregation of the fleet segmentation as used in the Task I (Annex 1 of Recommendation GFCM/33/2009/3) is proposed as a maximum level of aggregation.
 - Table V.2 “Socio-economics: other operating costs”:
 - Definition of “fuel consumption” as “consumption in litres of fuel (regardless of fuel type)”.
 - Definition of “fuel price” as “average price of fuel over the reference year (regardless of fuel type) in local currency per litre”.
 - Addition of the “total fuel cost” data field defined as “total amount paid for fuel in local currency” which should be submitted if data for either “fuel consumption” or “fuel price” is unavailable.
 - Capital cost:
 - Encourage the use of the perpetual inventory method (PIM) for the calculation of depreciation and opportunity cost and providing training to countries on this methodology, as appropriate.
 - DCRF calendar:
 - Postponing the reporting deadline from November to May for tables V.2, V.3, and V.4 of Task V (Socioeconomics) and referring to the reference year n-2 instead of n-1.
- The SCESS encourages the submission of proposals for case studies on small-scale fisheries through the appropriate channels to the seventeenth session of the SAC for consideration and possible inclusion in the Regional Conference on small-scale fisheries, scheduled to take place in December 2015.
- The SCESS reiterated the importance of having guidelines on a common methodology for socioeconomic analysis prepared by the FAO regional projects, in coordination with the GFCM, prior to the next Subcommittee session.

ANY OTHER MATTER

52. Mr Lembo provided information on the DISCATCH project; the aim of this project is to identify factors that determine the catches of unwanted species and undersized specimens in trawl fisheries with a view to reducing unwanted catches and eliminating discards. A large stakeholder event will be held in May/June (date TBD) to assess, through the use of MCDA techniques, multi-stakeholder experiences and perceptions on key issues for economic and environmental sustainability. Such key issues include: avoiding bycatches and reducing discards; improving ecosystem state and yield in the long-term; facing possible losses in the short-term; changes of gears and economic impacts; changes to/loss of local seafood traditions/habits, etc. Participation at the stakeholder event from both the SCESS and SCSA is welcomed.

53. Mr Juan Camiñas, Instituto Español de Oceanografía, pointed out his country's preference for aggregating socioeconomic data at the level of *métier* rather than at the level of fleet segment.

54. After the Secretariat reminded participants that the decision taken by the DCRF workshop to use the GFCM fleet segmentation allows information to be converted from fleet segment to *métier* but not from *métier* to fleet segment, the SCESS agreed to uphold the workshop's decision.

ELECTION OF SCESS COORDINATOR

55. The GFCM Secretariat informed participants that the SAC was in the process of being reorganized and that it was uncertain if the subcommittees would continue to operate in their current form. In light of these potential changes, the SCESS was asked to postpone the election of its Coordinator until the beginning of its next session, pending the decision of the SAC and the Commission on the future reorganization of the SAC.

56. Participants noted the uncertainties implied by the ongoing reorganization of the SAC. However, both the Subcommittee and the Secretariat unanimously recognized the work of the SCESS under the guidance of Mr Ben Salem and suggested his continuation as SCESS Coordinator, should the SAC decide to continue the operation of the Subcommittee. Mr Ben Salem thanked participants and expressed his willingness to be coordinator should the SCESS continue to operate within the new SAC structure.

CLOSURE OF THE MEETING

57. Mr Ben Salem closed the meeting. He thanked the FAO regional projects for their work on standardizing methodology and for their work in supporting the participation of experts from diverse geographical regions. He also expressed much gratitude to the GFCM Secretariat for its strong support.

Agenda

- 1. Transversal session on the implementation of the GFCM Data Collection Reference Framework (DCRF)**
 - Review of the conclusions and recommendations of the Workshop on the implementation of the DCRF (Spain, 15-16 December 2014)
 - Identification of relevant issues to be discussed by SCSA and SCESS and discussion of follow up steps.
- 2. Introduction of participants and adoption of SCESS agenda**
- 3. Assessment of socioeconomic issues in selected case studies**
 - Socioeconomic indicators at the Mediterranean and Black Sea level
 - Adriatic small pelagic fisheries
 - Strait of Sicily demersal fisheries
 - Other relevant work
 - Determination of the technical efficiency of Egyptian fisheries using Data Envelopment Analysis (DEA)
 - Support to the fisheries monitoring systems in the Adriatic countries: the socio-economic surveys in Albania and Montenegro in 2014
 - Example of bio-economic impact assessment of scenarios : the case of the hake fishery in the gulf of Lion
- 4. Estimation and submission of selected variables of DCRF Task V (socioeconomics)**
 - Fleet segmentation and definition of polyvalent group
 - Estimation of capital costs, fuel consumption and price
 - Review of the calendar for the submission of socioeconomic data
- 5. Developments related to small-scale fisheries**
 - SCESS inputs towards the preparation of the Regional Conference on small-scale fisheries
 - Proposals for new case studies to be developed in view of the Regional Conference
- 6. Follow-up on the work carried out towards a common methodology for socioeconomic analysis**
- 7. SCESS work plan for 2015-2016**
- 8. General conclusions and recommendations**
- 9. Election of the SCESS coordinator**
- 10. Any other matter**
- 11. Date and venue of next session**
- 12. Closure of the meeting**

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**Maximum level of fleet segmentation aggregation
(as proposed in Recommendation GFCM/33/2009/3 - Task 1)**

Groups	<6 metres	6-12 metres	12-24 metres	More than 24 metres
1. Polyvalent Small-scale vessels without engine	A			
2. Polyvalent small-scale vessels with engine	B	C		
3. Trawlers		D	E	F
4. Purse Seiners		G	H	
5. Long liners		I		
6. Pelagic Trawlers		J		
7. Tuna Seiners			K	
8. Dredgers		L		
9. Polyvalent vessels			M	

Description of segments

- A Polyvalent small-scale vessels without engine. All vessels less than 12 metres in length (LOA) without an engine (wind or propulsion).
- B Polyvalent small-scale vessels with engine less than 6 m. All vessels under 6 metres in length (LOA) with engine.
- C Polyvalent small-scale vessels with engine between 6 and 12 metres. All vessels between 6 and 12 metres in length (LOA) with engine, that use different gears during the year without clear predominance of one of them or that use a gear not considered in this classification.
- D Trawlers less than 12 m. All vessels less than 12 metres in length (LOA) allocating more than 50 percent of their effort operating with a demersal trawl.
- E Trawlers between 12 and 24 m. All vessels, between 12 and 24 metres in length (LOA) allocating more than 50 percent of their effort operating with a demersal trawl.
- F Trawlers longer than 24 m. All vessels over 24 metres in length (LOA), allocating more than 50 percent of their effort operating with a demersal trawl.
- G Purse Seiners between 6 and 12 m. All vessels between 6 and 12 m in length (LOA), allocating more than 50 percent of their effort operating with a purse seine.
- H Purse Seiners longer than 12 m. All vessels over 12 m in length (LOA), allocating more than 50 percent of their effort operating with a purse seine, excluding those using a tuna seine during any time of the year.
- I Long liners longer than 6 m. All vessels over 6 m in length (LOA), allocating more than 50 percent of their effort operating with a long line.
- J Pelagic Trawlers longer than 6 m. All vessels over 6 m in length (LOA), allocating more than 50 percent of their effort operating with a pelagic trawl.
- K Tuna Seiners. All vessels operating with a Tuna Seine for any length of time during the year.
- L Dredgers longer than 6 m. All vessels over 6 m in length (LOA), allocating more than 50 percent of their effort operating with a dredge.
- M Polyvalent vessels longer than 12 m. All vessels over 12 metres in length (LOA), that use different gears during the year without clear predominance of one of them or that use a gear not considered in this classification.

Note: All the cells are open for collecting information. The cells left blank in the above table are considered as unlikely to have a significant population. However, if necessary, it is advisable to merge the information of a “blank cell” with the most appropriate neighbouring “blue cell”.

Terms of references for the expert meeting on bioeconomic analysis of Mediterranean fisheries

This SCESS meeting agreed on the need for a multidisciplinary approach to fisheries management and stressed the importance of a bioeconomic analysis for fisheries management strategy evaluation in the Mediterranean. The meeting also agreed on the importance of integrating the outcomes of bioeconomic models, where available, into the advice provided to the Commission by the SAC.

The SCESS suggested that this process should be carried out in three steps:

1. Definition of potential management measures to be simulated in agreement with stakeholders;
2. Organization of an expert meeting, including both stock assessment and socioeconomic experts, to validate the assumptions of the simulation and forecast models, run the models and decide on a reporting format which is appropriate for sending the conclusions to the SAC and the Commission.
3. Assessment of the results by the SAC and the Commission.

The following terms of references are related to point 2:

1. Simulation and forecast bioeconomic models developed for fisheries: data needed, methodologies, and expected results.
2. Review of the characteristics and the assumptions related to the different components of these models (e.g., biological, pressure and socioeconomic).
3. Assessment of the potential effects of the implementation of new management measures on stocks and fleets: identify specific case studies for the application of the simulation and forecast bioeconomic models:
 - a) Identify biological, stock assessment, pressure and socioeconomic data (time series) and parameters needed to run the model;
 - b) Identify components for a sensitivity analysis coherent with the model assumptions;
 - c) Definition of biological and economic reference points;
 - d) Run the scenarios according to the management measures defined in agreement with stakeholders (refer to step 1) using the simulation and forecast model; and
 - e) Carry out an in-depth analysis of the results, evaluating if, and how, these meet the expected behaviour and wrap-up model outputs.
4. Decide on a reporting format which is adequate for submitting the conclusions to the SAC and the Commission.

The meeting should be attended by stock assessment experts working on both small pelagic and demersal fish resources and socioeconomic experts.