



GENERAL FISHERIES COMMISSION FOR
THE MEDITERRANEAN
COMMISSION GÉNÉRALE DES PÊCHES
POUR LA MÉDITERRANÉE



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COMMITTEE ON AQUACULTURE (CAQ)

**Report of the 13th session of the Information System for
the Promotion of Aquaculture in the Mediterranean (SIPAM)**

Salerno, Italy, 1-3 February 2012

OPENING OF THE MEETING

1. The Thirteenth Session of the Information System for the Promotion of Aquaculture in the Mediterranean (SIPAM) of the General Fisheries Commission for the Mediterranean (GFCM) Committee on Aquaculture (CAQ) was held in Salerno, Italy from 1 to 3 February 2012. The meeting was attended by the SIPAM National Coordinators of Albania, Algeria, Bulgaria, Croatia, Cyprus, Egypt, France, Italy, Malta, Montenegro, Morocco, Romania, Spain, Tunisia, Turkey, the SIPAM Coordinator, the Officers from GFCM Secretariat and from FAO Aquaculture Service (FAO-FIRA) and FAO Statistics and Information Service (FAO-FIPS), a representative of the Italian Ministry of Agricultural, Food and Forestry Policies (MIPAAF). The list of participants is attached as Appendix B.

2. Mr Mohamed Hadj Ali Salem, SIPAM Coordinator welcomed the participants and opened the Meeting by recalling the importance of SIPAM for the aquaculture sector in the Mediterranean and Black Sea area and underling the relevant progress made in the recent years. He addressed the meeting and thanked the Italian authorities for their kind hospitality and for the excellent organisation of the meeting. Mr Fabio Massa, GFCM Aquaculture Officer, also addressed the meeting and thanked MIPAAF and IREPA (Institute for Economic Research on Fisheries and Aquaculture) as being the meeting organisers.

ADOPTION OF AGENDA AND ARRANGEMENT OF THE MEETING

3. The Agenda of the meeting was introduced and adopted with some minor changes. The adopted Agenda is attached in the Appendix A.

REPORT OF THE SIPAM ACTIVITIES CARRIED OUT SINCE THE 12TH SESSION

4. Mr Massa from the GFCM Secretariat informed the participants on the most significant activities carried out within the framework of SIPAM, since its twelfth annual meeting held in St. George's Bay, Malta, from 23 to 25 November 2010. His presentation mainly focused on the general overview of SIPAM as subsidiary body of the GFCM Committee on Aquaculture (CAQ) with all its recent activities and related outputs, since several participants were attending the meeting for the first time. Among the others, he

recalled that as a follow up of the last CAQ session held in Rome (8-10 March 2011), the thirty-fifth session the Commission adopted the recommendation GFCM/35/2011/6 on reporting of aquaculture data and information, amending recommendation GFCM/33/2009/4 related to the mandatory submission and annual reporting of aquaculture production data, through the SIPAM information system. He also mentioned the work carried out by the GFCM Task Force aims at modernizing the Commission and its agreement and the related Programme Framework. He finally informed that the organization of a Mediterranean aquaculture conference is envisaged.

Production Statistics and Capture Based Production

5. Mr Roberto Emma (GFCM Secretariat) provided participants with a presentation to show the improvements of SIPAM Production Statistics component in relation with the requirements of the recommendation GFCM/35/2011/6. The data entry platform was extended to allow Members to report production data by Statistical Area and the SIPAM reports, namely National Summaries and Tailor-Made reports, was redefined in order to accommodate the changes applied to the Production Statistics data table. The data submission workflow was streamlined by the establishment of a PDF receipt submission system notifying via email both the Secretariat and the pertained National Coordinator of any additions, modifications and deletions applied to any Production Statistics data records.

6. The set of species considered by the data submission system was additionally revised to take the standard ASFIS list into consideration and reflect the suggestions shared by the NCs throughout the whole intersessional period. A further extended version of the Production Statistics data submission facility was constructed to explicitly declare capture-based aquaculture production data. An innovative matrix-based data meta-analysis tool was built to allow easy and flexible data manipulation. In this first beta version, recently released, the system operates on the Production Statistics data set and will be soon adapted to address such tasks on the Production Centres and Capture Based Aquaculture data sets.

7. Participants welcomed the IT (Information Technology) improvements of SIPAM and they were invited by the Secretariat to attend the training session in order to get familiar with the revised system. It was underlined that such enhancement of the system would have a positive effect on the accuracy of the collected data.

Production Centres

8. Participants were also introduced to the SIPAM Production Centres data entry component which has been recently released according the requirements of recommendation GFCM/35/2011/6. Thanks to this new data entry component, details on the number of centres, structures volume, species farmed therein and their destination (food for human consumption, restocking and ornamental) are collected and aggregated by Production Segment and Environment. It was highlighted that a graphical feedback is generated as charts in real time as soon as the user inputs the required information, thus providing an extra instrument for the National Coordinator to prevent and identify data entry errors. Upon submission, modification or deletion of each record, the new data entry system generates a PDF submission receipt which is immediately dispatched via e-mail to the GFCM Secretariat and the National Coordinator address provided during the registration process.

9. This new data-entry modules were discussed by participants as well as the level of aggregation in relation with the GFCM recommendation on Aquaculture Data Submission. In the ensuing discussions about Production Centres, it was stressed the importance to finalize such system and a debate raised on the data frequency transmission.

Marketing data schema and data collection for Mediterranean aquaculture

10. Mr Federico De Rossi from the GFCM Secretariat recalled the recommendation GFCM/35/2011/6, in particular referring to the aspect related to market data schema for the collection of information on “Feed, Fishmeal and Fish Oil” and “Trade and Consumption” categories. It was underlined that this required information would be included in an ad hoc data entry module to be released on the SIPAM system. Some participants suggested collecting the information costs by production segment instead of by species.

11. As one of the follow ups of the SIPAM market data & information scheme proposed at the 12th SIPAM session (November 2010) by the CAQ Working Group on Marketing of Aquaculture products (WGMA), the Secretariat released an online demographic database as an elaboration of the World Bank data. The web tool, composed by three parts, namely Population, Income and Expenditure, Summary has filtering facilities for data consultation through tables and dynamic charts.

12. A proposal for data collection of market prices for the main cultured species was also made. The discussion was raised on the nature of the subsequent commitment for National Coordinators (voluntary or mandatory), the type of price to be collected (ex-farm or selling), the problem of data availability and the frequency of the data submission. Particularly, it was noted that the ex-farm prices are indirectly available in the SIPAM Production Statistics module (in which NCs input both Volume and Value) and therefore the attention was focussed on the selling prices.

SIPAM web portal

13. Participants were also informed about the improvement of SIPAM, due to its current role as a dissemination tool of aquaculture information. In addition to the three *ad hoc* web-pages for Indicators, Site Selection and Carrying Capacity, Marketing already in place, the Coastal Lagoons section was released and a dedicated photo library was also included. Furthermore, the InDAM database on bibliographical references of sustainability indicators has been updated with the addition of over 300 records.

14. Additional features aiming at collecting information through survey-based tasks with flexible and easy-to-use instruments were implemented in SIPAM and formerly utilized for the first time within the framework of the WGSC SHoCMed project. Likewise, the SIPAM portal played the role of IT platform to host the logics developed by the Secretariat to allow an expert-driven process leveraging on the Delphi method (Expert-driven discussion group) in the framework of the InDAM and SHoCMed projects.

SUBMISSION OF AQUACULTURE DATA AND INFORMATION

15. Additional efforts were made in order to finalize the registration process and ensure that data were submitted to the Secretariat through the SIPAM information system. To date, 258 records from fourteen countries have been submitted and published for the reference year 2008 (Albania, Algeria, Croatia, Cyprus, Egypt, Greece, Italy, Malta, Montenegro, Morocco, Slovenia, Spain, Tunisia and Turkey) whilst for the reference year 2009, 277 records from fourteen countries have been submitted and published (Albania, Algeria, Croatia, Cyprus, Egypt, France, Italy, Malta, Montenegro, Morocco, Slovenia, Spain, Tunisia and Turkey). Moreover, for the reference year 2010, 151 records from eight countries have been submitted and published (Albania, Croatia, Cyprus, Malta, Slovenia, Spain, Tunisia and Turkey). It was reminded that the data submission for the reference year 2010 is still in progress. The data have been submitted in line with recommendation GFCM/33/2009/4. All the related data and reporting charts are available to the registered users for consultation through the SIPAM reporting features. An additional effort was made to fill up some of the gaps in the SIPAM database for the period 1990 to 2007. The Secretariat also underlined that continuous technical support was provided to the National Coordinators throughout the year in order to facilitate their data submission tasks in compliance with GFCM recommendations.

16. Participants from Bulgaria and Romania informed that their National Coordinators will be registered on the SIPAM system shortly.

17. Expert from Croatia expressed their need to have two NCs, one for marine water and one for freshwater. All the data on Production Statistics for 2010 has been submitted.

18. The Italian NC thanked the Secretariat for the support provided during the submission procedure. She took the opportunity to inform that production data for the reference year 2010 would be processed shortly.

19. NC of Bulgaria stated that they are ready to enter the 2010 data in SIPAM by utilising the dataset already submitted to EUROSTAT.

20. NC from Egypt confirmed that 2010 data submission would be submitted.

21. Tunisian NC confirmed that 2010 data has been successfully submitted in SIPAM.

22. NC of Morocco stated that 2010 data has not been submitted yet since he was recently appointed and he is in the process of resuming the data submission process.

23. NC of Algeria informed that 2010 data has been submitted in SIPAM.

24. Maltese NC confirmed that 2010 data has been published in SIPAM. Moreover, he informed that data publication is under the responsibility of the National Statistics Office.

25. NC of Turkey also confirmed that 2010 data has been uploaded into the system.

26. Albanian NC stated that although 2010 data has been published in SIPAM, some amendments were requested in order to include ciprinides polyculture besides carps.

27. NC of France informed that 2010 data would be submitted shortly.
28. Expert from Spain confirmed that 2010 data have been submitted.
29. NC of Montenegro informed that data will be submitted to the system following the SIPAM training session.
30. Expert from Cyprus confirmed that 2010 data has been submitted.

AQUACULTURE STATISTICS SHARING BETWEEN SIPAM AND FAO-FIPIS

31. From the Statistics and Information Service, FAO Fisheries and Aquaculture Department, Mr. Xiaowei Zhou, who is responsible for aquaculture statistics, made a presentation, starting with the introduction on the existing scope of the worldwide aquaculture data collection and dissemination carried out by FAO, and the status of 2010 national data reporting to FAO with special reference to GFCM countries. He also introduced the ASFIS List of “species items” and the ISSCAAP classification system, used by FAO, and welcomed the contribution from SIPAM National Coordinators to update and improve these standards.

32. The second part of the presentation regarding important issues to be addressed was delivered with interactive discussions with participants, covering data confidentiality treatment, captured-based aquaculture data (especially Atlantic bluefin tuna and European eel) and the need for harmonised deadlines for data reporting requirement by different international organizations. The participants were informed that the methodologies used for the treatment of the cultured tuna reported by some GFCM countries to FAO are currently being reviewed by FAO and ICCAT. The review result, and the historic data adjustment, if any, will be communicated to the national reporting offices as well as SIPAM National Coordinators prior to the next release of the FAO Global Aquaculture Statistics Dataset scheduled for the end of February 2012.

SIPAM AQUACULTURE BULLETIN

33. As follow up of the programme of work for the Committee on Aquaculture as approved at the 35th GFCM Session (May 2011), Ms Simona Sirago from the GFCM Secretariat delivered a presentation on a proposal for the GFCM-SIPAM Aquaculture Bulletin aiming at providing the main information related to the aquaculture production of each member country in the Mediterranean and Black Sea area. The preparatory work for this bulletin was represented by the review of the Production Statistics data prior to 2008 hosted in SIPAM for the purpose of correcting mistyping affecting values and completing the SIPAM dataset with data from FAO FishStat. Information on aquaculture production trends for different species correlated with the type of product and structure of culture adopted was proposed to be part of the bulletin together with market data for the main economically relevant species. It was underlined that, as much as possible, graphs and figures to be presented in the bulletin should be automatically generated by SIPAM.

34. Participants welcomed the idea of the bulletin and congratulated the Secretariat for this practical proposal.. They were invited to discuss it and provide inputs for the improvement of its structure. For this propose, an *ad hoc* session was organized.

COOPERATION WITH FAO-FIRA AND RECENT ACTIVITIES RELATED TO MEDITERRANEAN AQUACULTURE (BY GFCM SECRETARIAT/FIRA).

35. Mr Valerio Crespi, from FIRA Aquaculture Service, delivered a presentation on the main outcomes of the global synthesis on the status and trend of aquaculture and six regional reviews produced by FAO in the occasion of the Global Aquaculture Conference held in Phuket, Thailand in 2010, highlighting in particular, recent developments in the Mediterranean Region. The Mediterranean region and Black Sea are covered by two FAO regional reviews: Europe and Near East and North Africa. However, he noticed that the new initiative discussed during this meeting on the establishment of a SIPAM aquaculture bulletin covering both national and regional aquaculture in the Mediterranean and the Black Sea would certainly add value to the SIPAM data as well as contribute to the future drafting of FAO regional reviews. Therefore, he presented the status of National Aquaculture Sector Overview (NASO) emphasizing the effective collaboration established between FIRA and SIPAM National Coordinators to complete this task. He also encouraged those countries which have not yet submitted the updated version of their NASO to do so as soon as possible.

ANY OTHER MATTERS

36. NC of Malta made a short presentation on the Maltese Government's efforts to promote an Aquaculture Strategy for Malta. He explained that the Strategy, which is in its final draft version, will show a clear pathway for a sustainable aquaculture development in Malta. This strategy optimizes Malta's strengths and will focus research and development on species diversification through the development of a large-scale marine hatchery that will result in an increased production of closed cycle species such as the greater amberjack (*Seriola dumerili*), in specified approved aquaculture zones.

37. National Coordinator of Turkey pointed out the results of the GFCM "First meeting of the *ad hoc* Working Group on the Black Sea" carried out in Constanta, Romania, from 16th to 18th January 2012 and also reminded the participants that part of this meeting was also dedicated to the aspects of aquaculture in the Black Sea. Furthermore, he noted the growing interest of the GFCM in the Black Sea area, and suggested the promotion and stimulation of the participation of non GFCM members of this region in SIPAM sessions.

38. National Coordinator of Tunisia suggested publishing the list of suppliers, national institutes and research programs on the SIPAM web-portal. In this respect, the Secretariat reminded the participants that such databanks had already been built, but were frozen to mainly focus effort on the production data collection. It was agreed to re-opened these lists and make them available in SIPAM for free consultation.

CONCLUSIONS

39. The main topics and issues discussed by the participants are hereunder summarized.

40. In the ensuing discussion, participants acknowledged the effort and results made, in improving the SIPAM data entry and data reporting functions, as well as the SIPAM IT platform. Participants also noted that there is now an evident increase in data submission volume from Members, this thanks also to the new format and the existence of a specific GFCM recommendation on aquaculture data submission.

41. The Secretariat stressed the importance of the online SIPAM data-entry system as a tool to facilitate Members' compliance for aquaculture data submission (recommendation GFCM/35/2011/6).
42. The SIPAM NCs also stressed that an easier use of the SIPAM IT platform was possible due to the prompt technical support provided by GFCM Secretariat whenever inquiries are raised and problems are encountered in using the SIPAM system.
43. The need to share the aquaculture data available in the SIPAM system was stressed by participants who requested the possibility for National Coordinators to be entitled to access aquaculture data production pertaining to all the GFCM Countries besides their own; such data sharing will permit the increase and fostering of cooperation between Countries and formulate more accurate analyses when assessing aquaculture production at different levels.
44. Participants noted that at the moment, there is no specific policy or procedure defined by the Commission on data confidentiality for the data addressed by the current recommendation on aquaculture data submission. As a result, access to such information data is now limited to the GFCM Secretariat and to the National Coordinators.
45. The discussion unfolded on the confidentiality levels regarding data hosted in the SIPAM data banks. Participants suggested that Production Statistics data, due to the certification by the SIPAM National Coordinator, do not represent any particular concern in terms of sensitivity and that such information could also be accessible by third parties. Participants agreed that data should be considered sensitive or confidential when details are provided at farm level or when some parameters unequivocally identify producers or farmers.
46. The meeting also suggested that Production Statistics data validated by National Coordinators should also be accessible by third parties such as farmers or any other interested stakeholders upon registration into the SIPAM system.
47. SIPAM National Coordinators also highlighted that every country has at the least more than one statistical area of competence in addition to that of the GFCM (Area 37) and underlined that the data reporting process should enforce distinctions between statistical areas, especially when the culture of a given species takes place in more than one of them (an example was provided for molluscs produced in area 37 and area 27; and for European sea bass and gilthead sea bream produced in the area 37 and area 5).
48. Considerations were made about the deadlines on aquaculture data submission for the different institutions (30 June for GFCM; 31 August for FISHSTAT; and 31 December for EUROSTAT). These different timings can generate an excessive overload for some SIPAM National Coordinators and a narrower timeframe could therefore be suggested.. Specifically, 30 September was deemed appropriate as new deadline for GFCM aquaculture data submissions.
49. Despite the improvement of aquaculture data collection, the presence of production underestimations for some countries still applies, especially for those areas affected by

notable misreporting; furthermore, data on unreported aquaculture production should be addressed.

50. Further considerations were raised on the Production Statistics database and Production Centers. With reference to the latter, a testing period should be granted and eventually improve the definition of the “production segments” data field as well as regarding the information related to the “destination of product”. A 1 year time frame for performing tests with raw data for Production Centers could be appropriate. This exercise could be supported by the establishment of an *ad hoc* online workspace.

51. Participants agreed that, due to the moderate amount of changes that could occur for several countries in the information provided through the Production Centers data submission, the communication process is not necessarily required every year unless upon notable information updates.

52. The structure of the GFCM Aquaculture Statistical Bulletin was presented by the Secretariat and discussed among participants. The information provided for the bulletin would be prepared according the information provided by countries hosted in SIPAM and eventual additional data sources. According to the discussions made, the GFCM SIPAM Aquaculture Bulletin is intended to be organized in two sections. The first section is dedicated to an overview on the Mediterranean and Black Sea over the last twenty years, providing general information on total aquaculture production as well as on the production of the main farmed species, whereas the second section shall aim at giving an accurate picture on aquaculture production for each country, along with the main characteristics of the country (such as economic, demographic and marketing data) and the aquaculture production by environment and structure of culture for the reference year 2010 and the trends over the last twenty years regarding the main farmed species. The National Coordinators were also called to cooperate in the finalisation of this bulletin. It was also agreed that the first GFCM-SIPAM Aquaculture Bulletin, to be drafted by the next GFCM session (May 2012), would be based on 2010 production data, should the Secretariat receive the related information in due course.

53. The importance of having reliable information on the ongoing aquaculture research activities as well as on the Mediterranean and Black Sea research institutions on aquaculture was stressed by the participants. It was also recalled that having information on scientific research is fundamental for the future development of the sector and that the existing inventory of the Research Institution in the SIPAM Information System should be updated and the concerned data bank put again at disposal of the stakeholders. Cooperation with the AquaMed Project on the database on research and development was also warmly advised.

54. The Terms of Reference for the SIPAM National Coordinators were discussed and updated, thus including: SIPAM NCs are responsible to:

- a) ensure the statistical data submission to the GFCM through the SIPAM information system and according to the recommendation GFCM/35/2011/6 on reporting of aquaculture data and information, amending recommendation GFCM/33/2009/4;
- b) facilitate data flow of aquaculture information;
- c) represent the SIPAM network at national level and during the relevant GFCM meetings on aquaculture;
- d) cooperate with the GFCM Secretariat to exchange aquaculture data among countries.

55. Referring to the Black Sea area, the Secretariat was invited to establish contact with experts from non GFCM Member countries to establish cooperation on aquaculture statistical issues. This cooperation is advisable in order to have a clear picture of aquaculture development and potential in the region, thus enhancing cooperation within the GFCM area.

56. Data on marketing still remains a priority for assessing the status and trend of the sector; consequently, the new Market data submission system would be helpful, although it was considered that additional information on the prices for the main species would give further useful information. It was agreed to proceed with a voluntary submission of information about national selling market prices of the main cultured species, which are already available for free consultation at country level.

57. The legal aspects on site selection, as well as on licensing procedures, were noted as one of the main constraints for the development of the sector in the Mediterranean, and the work carried out during 2008 by the Commission through the SHoCMed project with the support of the National Coordinators in collecting information on the national legal aspects for this topic was also mentioned. Considering the relevance of this topic for the development of aquaculture, it was deemed appropriate to update the related information at national level.

58. Furthermore, the meeting identified the following issues to be particularly considered at CMWG and CAQ levels:

- additional formal effort to finalize the registration of all SIPAM National Coordinators and ensure the data submission to the GFCM through SIPAM;
- additional effort should be made to guarantee regular data submission according to the technical requirements as specified in recommendation GFCM/35/2011/6;
- compliance issue of aquaculture data and information need to be strengthened and it should be forwarded to the Compliance Committee (CoC) for further consideration.

SIPAM PROGRAMME OF WORK FOR 2012 AND BEYOND

59. On the basis of the priorities identified, the 13th Session of SIPAM established the hereunder reported activities for 2012:

- Carry out further progress in the activities dealing with the consistency checking and validation of the Production Statistics data available in SIPAM;
- Historical revision of the data sets;
- Optimize the work made on the new portal for the Production Centre in accordance with the experience gathered during the established testing period;
- Finalize the new portal for Market Data submission according to recommendation GFCM/35/2011/6 and extend the data structure in order to optionally host information on selling market price per main species and size whenever available;
- Activate the SIPAM online workspace, with particular focus on the Production Centre and Production Statistics data submissions;
- Release the Zero draft of the GFCM SIPAM Aquaculture Bulletin;
- Integration of SIPAM activities on aquaculture data statistics with the new established GFCM Working Group on Black Sea;

- Reactivate the “Research and Development Programmes” databank in the SIPAM Information System strengthen cooperation with the AquaMed Project for this purpose;
- Update the available information on aquaculture activities legal aspects;
- Maintain and improve the SIPAM aquaculture web portal in all its sections, including the sub-portals of the CAQ Working Groups and related projects;
- Continue cooperation with FAO-FIRA for the finalization of NASOs and with FAO - FIPS for statistical issues;
- Consider a “testing period” of one year for the finalization and assessment data submission on Production Centers.

DESIGNATION OF THE SIPAM COORDINATOR FOR THE NEXT 2 YEAR TERM

60. Participants unanimously agreed to extend the mandate of SIPAM Coordinator to Mr Mohamed Hadj Ali Salem from Tunisia for other two years.

DATE AND PLACE OF THE 14th SESSION

61. The Meeting took note of the offer made by the SIPAM National Coordinator of Egypt to host the 14th session of the SIPAM at Hurghada (Egypt) which will be held approximately in November 2012.

62. The participants acknowledged the support given by the Italian Government through the Italian Ministry of Agricultural, Food and Forestry Policies (MIPAAF) for the organisation and the success of the 13th Session of SIPAM.

63. The report was adopted on 3 February 2012.

APPENDIX A**Agenda**

1. Opening and arrangements of the meeting
2. Adoption of the agenda
3. Report of the SIPAM activities carried out since the 12th Session
4. Submission of aquaculture data and information (Rec. GFCM/35/2011/6)
5. WGMA - Marketing data scheme and data collection for Mediterranean aquaculture
6. Production Centre
7. Aquaculture statistics sharing between SIPAM and FAO-FIPIS
8. SIPAM Aquaculture bulletin
9. Cooperation with FAO-FIRA and recent activities related to Mediterranean Aquaculture
10. SIPAM Programme of work for 2012 and beyond
11. Designation of the SIPAM Coordinator for the next 2 year term
12. Any other matters
13. Conclusions
14. Training Session
15. Adoption of the report

APPENDIX B

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