1. As a follow up of the twelfth SIPAM of the Committee on Aquaculture (CAQ) of the General Fisheries Commission for the Mediterranean (GFCM) held in St. George’s Bay, Malta from 23 to 25 November 2010, the seventh session of CAQ held in Rome (8-10 March 2011) approved the SIPAM workplan and agreed that the regional data collection scheme for aquaculture should be integrated with additional information on capture-based products and on production centres including information on marketing aspects. Consequently, 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 a set of data, through the SIPAM information system.

2. Furthermore, the Commission adopted the SIPAM workplan including the release of the new data-entry portal for the Production Centres and for the Market Data; release of the “Production Statistics - Production Centres Quick Start Guide for National Coordinators”; release of the SIPAM Aquaculture bulletin on an annual basis to be presented at the GFCM Annual Session; execution of a Training for national coordinators on the use of some components of the SIPAM system during the SIPAM 13th Session; the maintaining and improvement of the SIPAM aquaculture web portal in all its sections, in particular those related to WGSA-InDAM and WGSC-SHoCMed.

3. This document summarizes the most significant activities which have been carried out within the framework of SIPAM, since its twelfth session held in Malta.
SIPAM PRODUCTION STATISTICS AND PRODUCTION CENTERS

Production Statistics

4. Improvements have been made to the SIPAM Production Statistics data entry component following the requirements of Recommendation GFCM/35/2011/6 on reporting of aquaculture data and information.

5. Following the indications consolidated during the 12th session of the SIPAM meeting, the Production Statistics data submission facilities have been deeply improved in order to adhere to the requests expressed by National Coordinators (NCs) and the measures adopted in GFCM/35/2011/6. The activities undertaken are summarized as follows:

- The Production Statistics data entry platform has been extended to allow Members to report production data by Statistical Area.

- The National Summaries and Tailor-Made reports have been extended in order to accommodate the changes applied to the Production Statistics data table.

- The data submission workflow has been streamlined by the establishment of a PDF receipt submission system notifying via email both the Secretariat and the pertained National Coordinator upon any addition, modification and deletion applied to any Production Statistics data records.

- The set of species considered by the data submission system has been additionally revised taking into consideration the standard ASFIS list and reflecting the suggestions shared by the NC throughout the whole inter-sessional period.

- An innovative matrix-based data meta-analysis tool has been realized 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 task on the Production Centres and Capture Based Aquaculture data sets.

- A further extended version of the Production Statistics data submission facility has been realized to explicitly declare capture-based aquaculture production data

Registration and data submission progress

6. The Secretariat made additional efforts to finalize the registration process and ensure that data is submitted to the GFCM 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). We have to consider that the data submission for the reference year 2010 is at the beginning and we are still receiving data. 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.

7. A continuous technical support has been provided to the National Coordinators throughout the year in order to facilitate their data submission tasks in compliance with GFCM Recommendations.

Production Centres

8. The SIPAM Production Centres data entry component has been released according the requirements of Recommendation GFCM/35/2011/6 on reporting of aquaculture data and information.

9. The new SIPAM Production Centres data entry component has been released according the requirements expressed in Recommendation GFCM/35/2011/6 on reporting of aquaculture data and information. Details on the number of centres, structures volume, species farmed therein and their destination (ongrowing, consumption, restocking and ornamental) are collected and aggregated by Production Segment and Environment.

10. 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.

11. 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.

MAINTENANCE AND IMPROVEMENT OF THE SIPAM AQUACULTURE WEB PORTAL (CAQ WORKING GROUPS AND PROJECTS INCLUDED)

12. The SIPAM webportal (www.faosipam.org) has been improved by enhancing the organization of the information on topics concerning aquaculture issues for a faster and better consultation of the users.
13. In light of this enhancement, a new thematic page dedicated to the Coastal Lagoons has been released within the GFCM-CAQ Working Group and Projects section. All the related information is structured like the three other sub-sections (Indicators, Site Selection and Carrying Capacity, Marketing): home, events and reports, relevant links. In addition to that structure, a photo library based on the Google Picasa platform has been made available in this web page for free consultation.

14. It is now also possible to access, from the SIPAM homepage, a new online database through which information on Demographic data, within the framework of Market information, can be browsed. This web tool is composed by three parts, namely Population (size, growth rate and age structure), Income and Expenditure (GDP, GNI, HFCE) and Summary. Filtering facilities together with tables and charts are provided for a better consultation of the data.

*Improvement of the system’s architecture in order to allow the integration of tools for survey collection, management and analysis*

15. Following the previous year experience, the SIPAM portal implemented additional features aiming at collecting information through surveys. It is worth recalling the possibility to design and manage survey-based tasks with flexible and easy-to-use instruments. These features had been formerly utilised for the first time within the framework of the WGSC ShocMed project for a Delphi-driven decision making process and could be an interesting added value that shall be exploited by all the others CAQ subsidiary bodies, namely SIPAM, WGMA and WGSA.

16. Likewise, the SIPAM portal played the role of IT platform to host the logics developed by the GFCM Secretariat to allow the application of the method applied for the Delphi (Expert driven discussion group) in the framework of the InDAM and SHoCMed projects. This process led to the evaluation and ranking of 170 indicators for the sake of sustainable aquaculture activities.

**INDAM database**

17. The InDAM database on bibliographical references of sustainability indicators has been updated with the addition of over 300 records. A deep enhancement of the search engine with the support of the new technologies being used for the Aquaculture data submission hosted in SIPAM is being planned.
SIPAM Data exchange platform

18. Within the activities of the WGSC and SHoCMed, a data exchange platform has been realised by the GFCM Secretariat in order to allow experts to share and manipulate matrix-based data on aquaculture monitoring and environmental quality standards. In this current status, the system is being optimised by leveraging on a dataset pertaining to sediments samples.

SIPAM Email Alert system

19. The SIPAM Email Alert system has been defined in its new layout in order to be definitely used as GFCM aquaculture newsletter (news, events, documents, publications) among people involved in CAQ-SIPAM activities.

SIPAM Quick Start Guide for National Coordinators: Production Statistics and Production Center

20. The Operational User Guide of SIPAM (quick start guide), published for the first time at the end of 2009 to help the National Coordinators to comply with the first GFCM Recommendation on aquaculture, has been restructured taking into account the new Rec. GFCM/35/2011/6. The updated guide is now composed by two ad hoc sections aiming at guiding the NCs in performing the Production Statistics and Production Centres data submission process through the SIPAM information system.

SIPAM Aquaculture bulletin

21. A draft of Aquaculture Bulletin has been designed to obtain the main information related to the aquaculture production of each country. At this time, this draft Bulletin is conceived to be structured so to have for each country a first page that will contain a map with the location of aquaculture facilities, the total aquaculture production trend and the trend of freshwater and marine productions from 1990 to 2009 together with the percentage of these for the reference year 2009. Subsequently, for each type of environment, the aquaculture production by species will be examined with a graph showing the production data for the reference year 2009 and the quantity trend of the latest twenty years of the main species. In addition, for each environment (freshwater and marine) the aquaculture production by type of product and type of structure will be taken into consideration through the graphs related to the data for the reference year 2009 in percentage and with a production trend for the different species. With regards to the marketing data of the main species, such as European seabass, Gilthead seabream, European eel, Mediterranean mussel and others, graphs related to the latest years production trend in the import, export and domestic markets are taken into account. The production in percentage by different distribution channels for farmed fish and seafood and by product forms are shown as well. The final structure of the Aquaculture Bulletin will be discussed during the 13th annual session of SIPAM; every suggestion will be
taken into consideration to improve the Bulletin draft with the purpose of achieving the version containing the most useful information to give a clear picture of Aquaculture status for every country.

22. A review of the Production Statistics data prior to 2008 hosted in SIPAM is being carried out for the purpose of correcting mistyping affecting values and completing the SIPAM dataset with data from FishStat. This task is a key requirement for the preparation of an Aquaculture Statistical Bulletin which aims to provide an accurate picture of aquaculture production status for each country. At its current stage, the processed datasets allowed to elaborate a proof of concept pertaining to two countries and addressing aquaculture production trends for different species, also correlating such information with the type of product and structure of culture adopted. A complete overview for the aquaculture production in each country could be provided by integrating the above mentioned information with market data for the main economically relevant species.