



REGIONAL COMMISSION FOR FISHERIES

Ninth Meeting of the Working Group on Fisheries Management

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Integration of current RECOFI regional data set into RAIS: Action plan and requirements

Executive Summary

This document provides a summary of the activities carried out in the Region, by the RECOFI Working Group of Fishery Management (WGFM), in further strengthening the RECOFI Recommendation RECOFI/6/2011/1 on minimum data reporting in the RECOFI area. The Commission requested to investigate the possibility to host and disseminate fishery related data and information within the already established Regional Aquaculture Information System (RAIS). The document presents possible options along with recommended follow-up actions for the development of an efficient information system and data workflow responding to the implementation of RECOFI's minimum data requirements for fisheries and aquaculture.

The WGFM is invited to:

- Agree on the alternative name of RAIS;
- Decide on the general features of a new website for disseminating fishery information (scope and functionality);
- Agree on a roadmap including milestones to identify, among the options presented above, the solution for a suitable working system for supporting implementation of RECOFI's minimum data requirements for fisheries and aquaculture;
- Discuss and agree on future formats of data submissions, i.e. the same as current, or establish new standard formats; and
- Agree on the standard classifications to be utilized (in order to establish the database)

Background

1. At the eighth session of the Regional Commission for Fisheries (RECOFI-VIII) held in Muscat, Sultanate of Oman, from 12-14 May 2015, the Commission decided that RAIS would include the data collection and management under RECOFI Recommendation RECOFI/6/2011/1 on minimum data reporting in the RECOFI area, considering that RAIS is well established and could provide any additional required functionalities. Despite the acknowledgement of the need to establish an agreed data access protocol and develop a standardized and integrated database prior to the dissemination of data, the Commission endorsed the immediate dissemination of data through Regional Aquaculture information System (RAIS) and advised to the Secretariat not to develop a regional common database at present. The Secretariat expressed concerns at that meeting about the technical feasibility of modifying an information system such as RAIS into a data management system. At the closure of the RECOFI-VIII, the Secretariat passed all the data and information that have been submitted under the RECOFI/6/2011/1 and its preparatory process to the correspondent of Kuwait. Currently this set of information has not yet been published under the RAIS.

2. The RAIS was established corresponding to the request by the RECOFI Members on the development and interest in the aquaculture sector in the Region, as a regional repository system for storing and sharing information including that generated from RECOFI and other technical workshops/meetings. During the Third session of the Commission (Doha, Qatar, 9–11 May 2005) the State of Kuwait offered to host the RAIS in the premises of the Public Authority of Agriculture Affairs and Fish Resources (PAAFR) and allocated extra-budgetary funds to develop the information system. The Commission subsequently requested the FAO Fisheries and Aquaculture Department to develop the system along with a bilingual (Arabic and English) “RAIS User Manual” to facilitate data submission by authorized RAIS users. The information system was developed within FAO through the Information Technology Division (CIO) staff. Before and after the official launching of RAIS three *ad hoc* technical trainings had been organized by the Secretariat to consolidate the information system and to strengthen the input capacities of the data owners and data managers. Currently the WGA Focal Points are those responsible for data reporting in each member country and the RAIS Regional Centre is responsible for the management and daily maintenance of the system.

3. The RAIS was designed applying the Open Source Content Management System TYPO3¹. The system aims to be as user-friendly as possible allowing rapid data entry from the administrators and easy retrieval from end users. The use of specific tool such as the “white page” directories also allow the easy development of web pages created upon request to provide preliminary outlooks on the major emerging regional aquaculture issues. For simple database records such as directories of experts or institutions, the RAIS has currently the capacity to support data and information submission directly through the web (online submission forms), while it does not have the capacity to integrate a more sophisticated database of regional statistical time series (such as catch and effort) along with its management and maintenance needs.

4. This document provides a general overview of primary requirements to integrate data compilation and management capacity within RAIS, items needed to define urgently and possible workplan, to facilitate the discussion at the 9th meeting of the Working Group of Fishery Management (WGFM9). It should be noted that the RECOFI-VIII also

¹ TYPO3 is a **free Open Source Content Management System** for enterprise purposes on the web and in intranets. It offers full flexibility and extendibility while featuring an accomplished set of ready-made interfaces, functions and modules (See www.typo3.org for more technical information).

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reviewed and adopted the draft RECOFI Recommendation RECOFI/8/2015/1 on Minimum Reporting on Aquaculture Data and Information, which will have similar implications for the RAIS.

Administrative issues

5. In order to properly manage and maintain data and information submitted under the RECOFI Recommendation RECOFI/6/2011/1, it is essential to have at least one dedicated data manager who takes the responsibility of coordinating data and information workflow from Member countries, handling data compilation and dissemination and assuring compliance with agreed rules. One dedicated data manager may be able to cover both aquaculture and capture fisheries minimum data requirements. The main task of data manager will include coordination and communication with Members on data submission, evaluation and quality control of submitted data, compilation, processing, analysis and dissemination of processed data and information, maintenance of database and information base, and preparation of integrated statistics, indicators, and summary analysis for the WGFM and RECOFI, including preparation of relevant meeting documents. It should be noted that the FAO would not be able to continue the services of this nature any more due to its limitation of human resource availability.

6. It is beneficial and cost-effective for one person to be responsible throughout, from data collection to dissemination, and therefore it is preferable to place the data manager and data management capacity at the RAIS Regional Centre.

7. The data manager should act as part of the RECOFI Secretariat, under their general supervision, regardless the location of work. The establishment of data manager's post may require the adoption at the Commission and securing supporting financial resources. In the interim period, a pragmatic solution would be for the RAIS Regional Centre staff to act as interim data manager.

8. Corresponding to the expansion of scope to integrate capture fishery component, the name of RAIS would be better modified, e.g. RAFIS (RECOFI Aquaculture and Fishery Information System) or more properly it should become the definitive RECOFI website.

9. As the Article XIV body of FAO, RECOFI is subject to the FAO Corporate governance. Currently, FAO is strengthening the overall control towards corporately more consistent and harmonized communications and IT products, which includes the branding of FAO's dissemination websites under www.fao.org. Future development and operation of RAIS and RECOFI data management and dissemination systems would require clearance and coordination with the FAO governance.

Technical options of future RAIS capacity

10. As a general nature of the future RAIS, there would be two main options: (1) to conduct all data submission and dissemination through the current RAIS website that will have to be modified according to data requirements; (2) to utilize RAIS with its current capacities as the website to disseminate RECOFI's public information, data, and statistics, while having a complementary working system to manage statistical and data workflow. The former would require substantial modifications of the existing system, in addition to standardization of strict data submission formats, which also needs significant amount of resources, both financial and technical. In case Members countries wish to take this first

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option, the WGFM should develop through a project proposal including detailed work plan, selection of system supporting architects, and budget requirement, for consideration of the Commission at the ninth session of RECOFI, scheduled to be held in May 2017. Regarding the second option, it should be noted that various groups have already developed similar web-based working systems which can provide interfaces enabling to publish the final products through the existing RAIS website. These include the General Fisheries Commission for the Mediterranean (GFCM), and i-Marine², a data e-infrastructure in support of the Ecosystem Approach to Fisheries (EAF) in which FAO plays a leading advisory role, and it would be a good idea to learn from their experiences and possibly reuse services already available before taking a final decision.

11. No budget was allocated for RAIS modification during the 2015-2016 period to integrate fisheries component, assuming to be covered by the existing IT and data management capacities of the RAIS Regional Centre. Therefore, it would be extremely important for all activities during this biennium to be planned with assurance of the RAIS Regional Centre on capacity to implement.

12. In addition, RECOFI currently has two dissemination domains/webpages within the FAO, one at the Regional Office for the Near East (RNE) www.fao.org/neareast/recofi/en, and the other at FAO Fisheries and Aquaculture Department www.fao.org/fishery/rfb/recofi/en. Both webpages contain basic information, including Objectives, Members, Organization structure and reports of the past meetings and it would be relatively easy to integrate this information into the future RAIS. Taking this opportunity, Members may consider the benefits to bring all the RECOFI related information into one place and establish a formal RECOFI website. It should be noted that RECOFI will remain described as a summary Regional Fishery Body (RFB) fact sheet as part of www.fao.org/fishery/rfb domain.

Tentative work plan

13. Based on the above, the following decisions have to be taken at this WGFM:
- the alternative name of RAIS;
 - general feature of a new website for disseminating fishery information (scope and functionality);
 - agreeing on a roadmap including milestones to identify, among the options presented above, the solution for a suitable working system for supporting implementation of RECOFI's minimum data requirements for fisheries and aquaculture;
 - the future formats of data submissions, i.e. the same as current, or establish new standard formats; and
 - standard classifications to be utilized (in order to establish the database).

WGFM and RAIS Regional Centre need to agree on procedure to assign an interim data manager as well as process to set up formal recruitment procedure of the dedicated RECOFI data manager. Also RAIS Regional Centre needs to confirm its IT capacities to accommodate general needs and identify areas requiring further technical assistance if any.

14. Considering that the kingfish joint-assessment would be held before the tenth meeting of the WGFM (scheduled to be held in November 2016), the data exchange

² iMarine, a Data e-Infrastructure Initiative for Fisheries Management and Conservation of Marine Living Resources Visit Integrated Catch Information System service; Stock assessment service.

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exercise would provide an excellent opportunity to examine the requirements to support fisheries data exchange, in addition to the next round of data submission under the the RECOFI recommendation RECOFI/6/2011/1. The options laid out and experiences reported in paragraph 10 of this document could be presented as side events during the regional kingfish workshop (to be held in Oman in 2016), in ways that will facilitate the formulation of a project proposal for implementation.

15. In the interim period between the ninth and tenth meetings of the WGFM, the RAIS Regional Centre will implement the features which were agreed at the ninth meeting of the WGFM and disseminate all the files submitted under the RECOFI recommendation RECOFI/6/2011/1 in the past, in an agreed format. RECOFI Member countries will decide what set of data will be accessible to public domain and what will be of restricted use. For new updates stemming from data exchange activities, data will be submitted to the interim data manager who will help to place them to the appropriate locations.

16. The progress will be evaluated at the tenth meeting of the WGFM. Also, when selecting the option to move toward dynamic web-based data submission and sharing, the detailed project document should be tabled at the tenth meeting of the WGFM for finalization with the aim to submit to the ninth session of RECOFI, together with the Terms of Reference of the RECOFI data manager and a sustainable resource plan.