### FAO Expert Workshop on "Guidelines for the implementation of an ecosystem approach to aquaculture (EAA)"

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Cince 2006, the Aquaculture Management and Conservation Service (FIMA) of the FAO Fisheries and Aquaculture Department has been in the process of developing a framework for an "Ecosystem Approach to Aquaculture" (EAA). This is one component of the FAO project "Towards sustainable aquaculture: Selected issues guidelines" (GCP/INT/936/JPN), which is being implemented by FIMA, with the generous support of the Government of Japan. The process included organizational and brainstorming meetings within FAO, with groups of experts and other partner institutions. Within the planned activities, there was a workshop coorganized with the Universitat de les Illes Balears that took place from 7 to 11 May 2007 in Palma de Mallorca, Spain on "Building an ecosystem approach to aquaculture".

The main result of this activity is an FAO publication<sup>1</sup>, presenting the output of this workshop and including contributed papers on: definitions, principles, scales concerning EAA and some management measures. The proceedings additionally addressed the human dimensions, and the economic and legal implications that are relevant for an ecosystem-based management of the sector. Two comprehensive review papers covered the status of brackish, marine and freshwater aquaculture in the light of an ecosystem-based management, indicating the major shortfalls and opportunities for such an approach.

Based on the above expert workshop and desk studies/ reviews, it became clear that the implementation of the EAA will require changes in human behaviour and improved understanding of ecosystem's functioning. It will also require the development of institutions capable of integrating different sectors including aquaculture, especially in terms of shared agreed objectives and standards. As some of the reviews pointed out, scarce participatory processes, poor understanding of social sustainability requirements and poor governance hinder the widespread adoption of EAA and therefore require more guidance.

As part of continuing the process, FIMA prepared draft general guidelines for EAA during 2008 targeting policy and decision makers, with the assistance of an expert and in consultation with many other relevant persons and institutions. In order to review this first draft of these guidelines, FIMA organized an expert workshop on "Guidelines for the implementation of an ecosystem approach to aquaculture (EAA)" that took place in FAO Headquarters, Rome, Italy from November 24 to 26, 2008. The specific objectives of the expert workshop were to review, improve and reach agreement on the proposed general guidelines to make EAA operational and draw the way forward for its implementation.

The workshop brought together 24 internationallyrecognized experts representing different regions of the world and providing a wide range of expertise in the areas of aquaculture environmental, social and economic issues.

The workshop consisted of plenary presentations of case studies which highlighted the difficulties and opportunities in the implementation of EAA. This was followed by three working group discussions,



Fish ponds in Cameroon, Oreochromis niloticus, Clarias gariepinus and Heterotis niloticus

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each focussed on one of the three EAA scales (farm, waterbody, global) and one environment (freshwater, marine and coastal) to define key issues and recommendations on the scope and content of draft guidelines. The results of these working group discussions were then summarized and presented at the plenary for final discussion.

The final general guidelines derived from the workshop are currently being improved and are being initially tested in different situations such as workshops and country projects. Improved guidelines will be published as CCRF technical guidelines by the end of 2009.

These general EAA guidelines will be used in different countries and regions during the next biennium which will serve as basis for the development of more specific guidelines, such as aquaculture site selection and carrying capacity within an EAA framework.

<sup>1</sup>Soto, D., Aguilar-Manjarrez, J. & Hishamunda, N. (eds). 2008. Building an ecosystem approach to aquaculture. FAO/Universitat de les Illes Balears Expert Workshop. 7–11 May 2007, Palma de Mallorca, Spain. FAO Fisheries and Aquaculture Proceedings. No. 14. Rome, FAO. 221p.



Integrated farming: salmon (to the left) and mussels (right)



Harvesting native farmed fish in an aquaculture training institution, Iquitos, Peru











# FAO/NACA Expert Meeting on the Use and Exchange of Aquatic Genetic Resources Relevant for Food and Agriculture

31 March to 2 April 2009, Chonburi, Thailand

Information: Matthias. Halwart@fao.org

## FAO Meeting on Initiative to Create an Aquaculture Network of the Americas (RAA)

10-12 June 2009, Guayaguil, Ecuador

Information: Doris.Soto@fao.org/Alejandro.Flores@fao.org

### GFCM/CAQ Working Group Sustainable Aquaculture Meeting

July-September 2009

Information: Fabio.Massa@fao.org/frad@mersin.edu.tr