



## FAO Aquaculture e-Bulletin

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### Recent FAO aquaculture publications

The FAO Fisheries and Aquaculture Department has just released new **Technical Guidelines for Responsible Fisheries on the Ecosystem approach to aquaculture (EAA)** . The EAA is a strategy for the integration of the activity within the wider ecosystem such that it promotes sustainable development, equity and resilience of interlinked social-ecological systems. As such, the focus is not what is done, but rather how it is done. The main objective of these guidelines is to assist countries, institutions and policy-makers in the development and implementation of a strategy to ensure the sustainability of the aquaculture sector, integration of aquaculture with other sectors and its contribution to social and economic development.

For further information please contact: Ms Doris Soto .

**FAO Aquaculture Products 2008-2009**. This second issue of titles produced by the Aquaculture Service of the FAO Fisheries and Aquaculture Department describes FAO aquaculture information products published during 2008–2009. The fifty-seven titles listed, include documents, CD-ROMs and newsletters distributed worldwide, in both hard and electronic versions and are available as PDF files on an enclosed CD-ROM.

For further information please contact: Mr Valerio Crespi .

Hasan, M.R.; Halwart, M. (eds). 2009. **Fish as feed inputs for aquaculture: practices, sustainability and implications**. *FAO Fisheries and Aquaculture Technical Paper*, No. 518. Rome,

FAO. 407p.

Hasan, M.R.; Chakrabarti, R. 2009. **Use of algae and aquatic macrophytes as feed in small-scale aquaculture: a review**. *FAO Fisheries and Aquaculture Technical Paper*. No. 531. Rome, FAO. 123p.

Tacon, A.G.J.; Metian, M.; Hasan, M.R. 2009. **Feed ingredients and fertilizers for farmed aquatic animals: sources and composition**. *FAO Fisheries and Aquaculture Technical Paper*. No. 540. Rome, FAO. 209p.

Rana, K.J.; Siriwardena, S.; Hasan, M.R. 2009. **Impact of rising feed ingredient prices on aquafeeds and aquaculture production**. *FAO Fisheries and Aquaculture Technical Paper*. No. 541. Rome, FAO. 63p.

## Web-based products

### **Global Aquaculture Conference**

Audio recordings of the two keynote addresses, plenary lectures, invited guest lectures and presentations of the thematic sessions and the discussions thereof are now available for download/streaming from the following link: [www.enaca.org/modules/aqua2010/presentations.php](http://www.enaca.org/modules/aqua2010/presentations.php).

Locations of aquaculture sites and their characteristics are now available online through the new **National Aquaculture Sector Overview (NASO) map collection** which uses Google Maps and Google Earth technology to assist FAO member countries to inventory and monitor aquaculture. The collection is in its early stages but holds potential use in a number of ways such as monitoring the status and trends of aquaculture development and addressing site selection and zoning issues. The NASO map collection is coordinated by the Aquaculture Service of the FAO Fisheries and Aquaculture

Department in close collaboration with FAO's Fisheries and Aquaculture Statistics and Information Service.

To explore cooperative activities or to obtain additional information, please contact: Mr Valerio Crespi

or Mr Jose Aguilar Manjarrez .

Two new Cultured Aquatic Species Fact sheets have been recently published on the Internet:

- **Orange-spotted grouper** (*Epinephelus coioides*)
- **Tiger tail seahorse** (*Hippocampus comes*)

### Aquaculture projects

- GCP/HAI/022/OPF – **Promotion of small-scale poultry farming and aquaculture for the improvement of food security in Haiti** (Lead officer: Mr Valerio Crespi .
- TCP/RAS/3203 (D) – **Reducing the dependence on the utilization of trash fish/low-value fish as feed for aquaculture of marine finfish in the Asian region** (participating countries: China, Indonesia, Thailand and Viet Nam) (Lead officer: Mohammad R. Hasan .

### Meetings/Workshops

The **RECOFI Technical Workshop on Spatial Planning for Marine Capture Fisheries and Aquaculture** took place in Doha, Qatar, from 24–28 October 2010. The workshop was attended by 21 delegates representing official participants and observers from seven RECOFI member countries, representatives from FAO/Rome, two international consultants on marine capture fisheries and aquaculture respectively, and one National consultant on geographic information systems (GIS) from

Muscat, Sultanate of Oman. The workshop reviewed the regional needs and capacities for the use of spatial planning tools (e.g. GIS, remote sensing and mapping) and recommended a road map on how to move forward in Spatial planning for Marine Capture fisheries and Aquaculture in RECOFI member countries.

For further information contact Mr José Aguilar-Manjarrez .

The **Fifth meeting of the Regional Commission for Fisheries (RECOFI) Working Group on Aquaculture (WGA)** was held in Doha, Qatar on 27 October 2010, back-to-back with the joint RECOFI WGA and WGFM (Working Group on Fisheries Management) technical workshop on Spatial Planning for Marine Capture Fisheries and Aquaculture. The meeting was attended by seven RECOFI Members. The RECOFI-WGA Focal Points presented the main achievements since the previous WGA meeting and discussed regional aquaculture emerging issues elaborating a draft work plan and budget proposal for submission and consideration by the next Commission session (May 2011).

For further information contact Mr Alessandro Lovatelli .

The **terminal workshop of the Regional TCP “Reducing the dependence on the utilization of trash fish/ low value fish as feed for aquaculture of marine finfish in the Asian region”** was organized by FAO and NACA in collaboration with the Fishery Division, Guangdong Provincial Ocean and Fishery Administration, Guangzhou and held in Zhuhai, China, 25–27 October 2010. The workshop brought together representatives of all the participating countries (China, Indonesia, Thailand and Viet Nam) to include the country project coordinators, member(s) of the project monitoring team, farmers selected from each country, consultants to the project and representatives from FAO and NACA. The workshop adopted four basic recommendations on four broad areas: (i) adoption of the use of pellet feeds for mariculture; (ii) pros and cons of continued use of trash fish/ low-value fish in mariculture; (iii) Better Management Practices (BMP); and (iv) dissemination of the project findings.

For further details contact Mr Mohammad R. Hasan .

A first workshop on the **Implementation of the Ecosystem Approach to Fisheries (EAF) and Aquaculture (EAA) in the Lingayen Gulf, Philippines** took place in Lingayen, the Philippines October 4–6 2010 and was attended by key stakeholders in the management of the sector mainly dominated by milkfish farming and small- scale fisheries. This is the first activity within the SIDA Inception project on the “pilot implementation of the ecosystem approach to fisheries and aquaculture”, co-organized with the WorldFish Center (WFC) in the country. The workshop was highly successful in raising awareness on the principles and processes of the ecosystem approach among the participants. The activity was especially relevant in terms of capacity development and training for the regional members of the Bureau of Fisheries and Aquatic Resources and Local Government Units members.

For further information contact Doris Soto  and Ms Gabriella Bianchi .

A workshop on **Estimating environmental status and carrying capacity of the Estero Real, Nicaragua** took place in Chinandega, Nicaragua 22–29 September 2010. This was the fourth training and participatory workshop as part of the SIDA Inception project “pilot implementation of the ecosystem approach to fisheries and aquaculture (EAF/EAA)” activity co-organized with the Instituto Nacional de la Pesca y la Acuicultura de Nicaragua (INPESCA). The workshop was conducted to clarify concepts and methodologies to assess the environmental status of Estero Real and to address carrying capacity estimates of the estuary for shrimp culture and other activities. The workshop produced a consensus plan for: (i) an improved integrated environmental monitoring programme; and (ii) the development of a hydrodynamic model of the Estero Real.

For further information contact Ms Doris Soto  and Mr José Aguilar-Manjarrez .

An expert workshop on “**On-farm feeding and feed management in aquaculture**” was organized by FAO in collaboration with the Southeast Asian Fisheries Development Center Aquaculture Department (SEAFDEC/AQD) and held in Manila, the Philippines, from 13–15 September 2010. The workshop consisted of technical presentations and working group discussions. The workshop

identified seven primary issues that currently constrain feed use and management in aquaculture: i) limited access to information on feed and feed ingredients (availability, prices and quality); ii) poor feed preparation, processing, handling and storage at the farm level; iii) inadequate monitoring of feed and farm performances; iv) low impact of current dissemination strategies on improved feeding and feed management; v) gaps in the understanding of the economic aspects of feed management; vi) health aspects and their implications on feed management; and vii) feed quality - lack of regulatory mechanisms.

For further information contact Mr Mohammad R. Hasan .

One expert workshop on "**Aquaculture development in the desert and arid lands**" was organized by FAO in collaboration with the "Centro de Investigación en Alimentación y Desarrollo (CIAD) and held from 6-9 July in Hermosillo, Mexico. The expert workshop provided an excellent opportunity to discuss salient issues related to desert aquaculture development and to identify actions that will assist Member countries in developing this economic sector. The main outputs of the workshop are: i) a global overview of status of desert aquaculture development; ii) a strategy document titled "*Desert and arid land aquaculture development: The way forward*", based on the workshop discussions and recommendations; and iii) seven national reviews. An FAO publication will be produced and made available to all interested users by early next year.

For further information contact Mr Valerio Crespi .

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