Welcome to this February 2013 edition of the FAO Aquaculture e-bulletin, covering our most recent news, publications, technical workshops and projects for the period October 2012 to February 2013. We hope that this information can be also useful to you in your own aquaculture work.

This newsletter presents just a selection of what we do and we encourage you to visit our Web site www.fao.org/fishery/aquaculture to find out more or to contact by e-mail the officers of the FAO Fisheries and Aquaculture Department’s Aquaculture Service (FIRA) responsible for the various activities.

**Highlights**

- Last month the FAO Fisheries and Aquaculture Department launched a new Web site containing all FAO Aquaculture information products from 2006 to date. Over 200 publications related to aquaculture - including CD-ROMs, web-based products and newsletters - have been produced and distributed worldwide since 2006, in both hard and electronic versions. This site is designed to make all these products easily available and searchable to all users.

  (Information: V. Crespi)

- By January 2013 the FAO Aquaculture Service is circulating the new Code of Conduct for
**Responsible Fisheries (CCRF)** aquaculture questionnaire in electronic form to all member countries in the 6 United Nations languages. The questionnaire does not only inform about the compliance with CCRF aquaculture provisions but it can also be used as a country self-assessment tool and as a platform for communicating to FAO specific needs to implement such provisions. FAO is encouraging all member countries to fill in and return the questionnaire before March 15. Results will be extremely useful in advancing global sustainable aquaculture.

(Information: D. Soto)

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**Recent publications**


  (Information: A. Lovatelli)

- **FAO Aquaculture Newsletter – FAN 50**, December 2012 (soon available online). The 50th issue of FAN features interesting articles on nutrition, genetic resources, tuna farming, gender mainstreaming in fisheries and aquaculture, sustainable aquaculture legislation and strengthening FAO/FI and OIE cooperation. It also highlights aquaculture and aquaculture related workshops in Africa, Asia-Pacific, Central Asia and the Pacific Islands. Updates of projects in Israel, Suriname, Viet Nam and Western Balkan countries are also provided. FAN 50 also pays tribute to three great aquaculture colleagues (Dr Ziad Shehadeh, Dr André Coche and Dr Mudnakudu Nandeesha) and their significant contributions to aquaculture development.

  (Information: M. Reantaso)

  (Information: M. Reantaso)


  (Information: M. Reantaso)


  (Information: H. Fersoy)

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### Web-based products

**National Aquaculture Sector Overview (NASO)**

NASO updated:

- Bahrain
- Cyprus
- Oman
- **France** (French version)

**National Aquaculture Legislation Overview (NALO)**
Two new translations:

- **Germany** (Chinese version)
- **Ireland** (Chinese version)

**Cultured Aquatic Species Fact sheets**

Two new Fact Sheets:

- **Arapaima** (*Arapaima gigas*)
- **Sea trout** (*Salmo trutta*)

**Projects**

- **GCP/NAM/014/SPA** – The project entitled “Support to the South South Cooperation Technical Assistance Programme between Namibia and Viet Nam” aims at providing technical assistance in support to the aquaculture sector development in Namibia, through the deployment of aquaculture experts from Vietnam. Six projects proposals are being implemented: (i) growth performance of three spotted tilapia fed with local and imported feed; (ii) acclimatization of largemouth bass (*Microlepterus salmoides*); (iii) establishment of a fish museum at KIFI institute for native fish fauna; (iii) acclimatization of African river prawn (*Macrobrachium vollenhovenii*); (iv) selective breeding for increased body weight of an indigenous tilapia species (*Oreochromis andersonii*); (v) preparation of aquaculture extension material; and (vi) breeding programme for increasing body weight of North African catfish (*Clarias gariepinus*).
**UTF/SAU/048/SAU** – The implementation of the project entitled “Strengthening and supporting further development of aquaculture in the Kingdom of Saudi Arabia” was effectively launched at the start of 2013. The main objective of the project is to assist the sustainable and responsible development of marine aquaculture in the Kingdom of Saudi Arabia with improved performance capacity of the Department of Aquaculture (DoA) and the Fish Farming Centre (FFC) located in Jeddah to support and facilitate marine aquaculture development. The overall and expected outputs from the proposed activities are as follows: 1) the DoA and the FFC capacitated in providing technical and managerial assistance in the development of marine cage culture; 2) the development and further expansion of marine hatchery and onshore fish production further supported; 3) human resources capabilities within the DoA and the FFC in support of better advisory services to the government and the private sector upgraded; and 4) general staff capacity building in support for responsible aquaculture development in the Kingdom of Saudi Arabia. The primary beneficiaries of the project will be the fish farming communities.

**TCP/RER/3402 (D)** - Assistance to Western Balkan Countries for Improving Compliance to International Standards on Aquatic Animal Health (Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia). The overall development goal is to contribute to global food security through sustainable aquaculture supported by improved aquatic animal health management capacity that reduces the risks and potential negative impacts of aquatic disease incursions. Major outputs include: 5 national competent authorities’ have adequate tools to implement effective biosecurity governance and aquatic animal health protection programmes; participating country representatives trained on various aspects of biosecurity and aquatic animal health management (e.g. diagnostics, surveillance, risk assessment); regional legislative review of aquatic animal health legislation
completed for 5 countries; regional disease surveillance network established and disease survey completed for 3 key pathogens/diseases; knowledge and human capacity on various aspects of aquatic animal health enhanced and exchange of information and experience between fish health workers, policy-makers and other stakeholders enhanced; and a database for documenting results of project’s outputs established allowing stakeholders access and lessons learning. Implementation will commence January 2013 until September 2014.

(Information: M. Reantaso)

Aquaculture and aquaculture-related events (2012-2013)

- Inception workshop of the newly initiated project titled “Building Trade Capacity of Small-scale shrimp and prawn farmers in Bangladesh: Investing in the bottom of the Pyramid Approach” was held in the Asia-Pacific Hotel in Dhaka, Bangladesh, 13-14 January 2013. The project is funded by Standard Trade Development Facility (STDF) and aim to support the shrimp and prawn aquaculture sector to produce quality products and better market access through application of cluster farming concept. The meeting was attended by representatives of all project partners; Department of Fisheries (DoF), WorldFish, Bangladesh Shrimp and Fish Foundation (BSFF), and FAO. The meeting revised the project document and discussed the work plan for 2013.

  (Information: R. Subasinghe)

- The “FAO-Government of Kenya Capacity-Building Workshop on Conducting Aquaculture as a Business” was held during 17th-21st December, 2012 in Kisumu, Kenya. The workshop was jointly organized by the Government of Kenya and FAO under the EU-
funded project “Implementation of a Regional Strategy for East and South Africa & Indian Ocean” (GCP/RAF/466/EC), a.k.a. SMARTFISH. The participants of the workshop include fish farmers, feed producers, fish traders, and government extension personnel. Through thematic discussions, case studies, field visit and group exercises on using a user-friendly tool to assess the economic profitability and financial feasibility of aquaculture business, the workshop enhanced participants’ understanding of and capacity in conducting aquaculture as a business.

(Information: J. Cai ▶️, N. Hishamunda ▶️)

● Under the auspices of the GCP/KYR/003/FIN project - Support to Fishery and Aquaculture Management in the Kyrgyz Republic and the technical assistance of Aquaculture Service (FIRA), FAO HQ, Rome, a National training on Fish Feed Development was organized from 18-20 December 2012, Issyk-Kul, the Kyrgyz Republic. The training programme was designed to build skills among the fish farmers and line institutions (Department of Fisheries, the Institute of Biology and Pedology of the National Science Academy of the Kyrgyz Republic, and the Centre of Innovation Technology in Agriculture of Agricultural University of the Kyrgyz Republic) in developing farm-made aquafeeds based on locally available feed ingredients, and to provide the participants the opportunity to learn how to formulate and prepare farm-made aquafeeds, improve feed management, and increase the productivity of their culture systems.

(Information: M.R. Hasan ▶️, S. Siriwardena ▶️)

● Expert Workshop on the Development of an Evaluation Framework for Aquaculture Certification was held in the FAO HQ in Rome, Italy, 11-13 December 2012. The expert workshop was attended by 27 experts from member countries, aquaculture certification scheme, retailers, academia, feed industries, international non-profit organizations, development agencies and intergovernmental organization. The workshop discussed and reviewed a draft evaluation framework to assess conformity of public and private certification.
schemes with the FAO Aquaculture Certification Guidelines.

(Information: R. Subasinghe)

- Consultation Workshop on **Review and Formulation of the Bangladesh National Aquaculture Development Strategy and Action Plan**. With technical assistance of Aquaculture Service (FIRA), FAO HQ, Rome, FAO Bangladesh prepared a draft strategy and action plan, which served as the working paper for the stakeholders’ consultation workshop held in Dhaka, Bangladesh on 10 December 2012. The strategy and plan was informed by the country investment plan, national fishery policy, the plans for the fisheries and livestock sectors, and the results of the TCPF project on seed and feed. The workshop was joined by 32 participants from government agencies, R&D institutions, private industry including farmers, civil society organizations, World Fish Centre and FAO.

  (Information: M.R. Hasan, B.N. Naher)

- The **fourth Aquaculture Network for Africa (ANAF) annual meeting** was held in the Central Inn Hotel in Entebbe, Uganda, 04-06 December 2013. The meeting was attended by representatives of nine ANAF member countries, two international consultants and representatives from NEPAD and ACP FISH II programmes. The meeting discussed the work plan for 2013 and defined further steps for ANAF to become an Inter Governmental Organization (IGO).

  (Information: V. Crespi)

- A Technical Workshop for a Regional **Spatial Planning Development Programme for Marine Capture Fisheries and Aquaculture** was held in Cairo, the Arab Republic of Egypt from 25–27 November 2012, was hosted by the FAO Regional Office for the Near East. Twelve delegates participated representing six RECOFI Member countries (the Kingdom of Bahrain, the Republic of Iraq, the Sultanate of Oman, the State of Qatar, the Kingdom of Saudi Arabia, and the United Arab Emirates) and FAO (secretariat staff/resource experts from Rome, the Subregional Office for North Africa and consultants). This workshop was a
follow-on activity to the Regional Technical Workshop on Spatial Planning for Marine Capture Fisheries and Aquaculture which took place in Doha, the State of Qatar (24–28 October 2010). The purpose of this workshop was to complete a field programme outline in as much detail as possible, including preliminary budget estimates for the development of the capacity to use spatial tools in fisheries and aquaculture planning and management.

(Information: J. Aguilar-Manjarrez, F. Carocci)

- RAA-FAO training course on **aquaculture zoning and carrying capacity, Nicaragua**
  November 2012. Within the framework of the project GCP/RLA/190/BRA and as part of Network of Aquaculture of the Americas (RAA) biennial work programme for 2011–2012, the RAA and FAO conducted the second training course on “Aquaculture zoning and carrying capacity” at the Universidad Centroamericana (UCA) in Managua in Nicaragua (12–16 November 2012) which targeted 20 government aquaculture technical personnel from five countries in Central America (including Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua). The workshop gave emphasis on zoning and site selection for aquaculture following an ecosystem approach to aquaculture (EAA) and was designed for all the countries of Central America where aquaculture is starting to grow. The workshop focused on the process to national aquaculture zoning within an EAA and the process to site selection with considerations of carrying capacity.

  (Information: J. Aguilar-Manjarrez, D. Soto)

- Under the NEPAD-FAO Fish Programme (NFFP), the FAO Expert Workshop on **Assessment and Monitoring of Aquaculture Sector Performance** was held during 05-07 November, 2012 in Gaeta, Italy. The workshop provided a platform for international experts from different disciplines to share information, techniques and experiences in assessment and monitoring of the economic, social and environmental performance of aquaculture development in different regions. A user-friendly tool on World Aquaculture Performance
Indicators (WAPI) initiated by FIRA was presented in the workshop for comments, suggestions and collaborations. The knowledge, insights and synergy generated in the workshop would facilitate assessment and monitoring of the aquaculture sector performance, especially in regions (such as Africa) where aquaculture development is less advanced. (Information: J. Cai, N. Hishamunda)

- From 29 to 31 October 2012, the FAO and the NPCA organised a workshop in Accra, Ghana, on the **Ecosystem Approach to Fisheries (EAF) and to Aquaculture (EAA) in Africa** in collaboration with other partners. The workshop was funded by the NFFP, the EAF-Nansen Project, the Sweden-Netherlands Multidonor fund and the SmartFish Programme. A total of 55 persons from 26 countries, Regional Organisations and projects, NGOs, the NPCA and FAO participated in the workshop. The overall objective of the Workshop was to create a common platform of understanding of EAF/EAA concepts in Africa and discuss and plan next steps on how to improve the integration of the principles of EAF and EAA into the management and development of African fisheries/aquaculture systems. Within the workshop the aquaculture working group (16 participants from 15 countries) agreed that the EAA offers the countries an opportunity to address in an integrated manner the socio-economic, environmental and governance issues at all scales. Participants expressed special interest in the potential of EAA to facilitate the implementation of national aquaculture strategies and plans at local level and requested further training and pilots implementation projects. (Information: M. Tandstad and on the specific aquaculture outcomes D. Soto)

- **Consultation to finalize and approve a draft questionnaire on Aquatic genetic Resources (AqGR)** - A key milestone in the FAO Commission on Genetic Resources for Food and Agriculture’s (CGRFA) Multi-year Programme of Work (2013-2021) (MYPOW), is the first report on the **State of the World’s Aquatic Genetic Resources for Food and Aquaculture (SoWAqGR)**. This report will be released at the Commission’s 16th Session in 2017. The Commission noted that preparation of a country-driven first report on the SoWAqGR will
provide countries with opportunities to assess the status of their aquatic genetic resources and to enhance the contributions of aquatic genetic resources to food security and rural development, it will assist countries in determining their needs and priorities for the conservation and sustainable use of aquatic genetic resources, and it will contribute to raising awareness among policy-makers CGRFA -13/11/11. paragraph 20. In order to facilitate this process, Members are in the process of nominating national focal points; we have approximately 33 national focal points so far nominated. FI has produced a draft questionnaire that countries will complete and submit to FAO in order to produce the first SoWAqGR. The purpose of this first consultation is to convene a group of approximately 15 people composed of technical experts, regional fishery body representatives and national focal points to review, amend where necessary and finalize the questionnaire. The finalized questionnaire will be submitted to the next Session of the CGRFA in April 2013.

(Information: D. Bartley ☐, M. Halwart ☐)

- **Consultation to establish Terms of Reference for a Advisory Group on Aquatic Genetic Resources** - A decision of the last Session of COFI was to establish an FAO Advisory Working Group on Genetic Resources and Technologies, that would advise FAO on matters concerning aquatic genetic resources and technologies, to enhance international cooperation on aquatic genetic resource management... (para. 39(j)). The purpose of this second consultation is to convene the same group of experts from the first consultation to develop draft Terms of Reference, composition, operating procedures and plan of work for this Advisory Working Group. Draft Terms of Reference will be submitted to the next Session of the CGRFA for information and to the 7th Session of the COFI Sub-Committee on Aquaculture in October 2013 for approval. Following approval by the Sub-Committee, the TORs would be submitted to the 31st Session of COFI for decision.

(Information: D. Bartley ☐, M. Halwart ☐)
Job opportunity at FAO

FIRA is in the process of recruiting an Aquaculture Officer (Economics) at P-3 level. For detailed information, see the attached Professional Vacancy Announcement and the FAO Employment Webpage.

More information on the FAO Fisheries and Aquaculture e-Bulletins

Visit the FAO Aquaculture Gateway page

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