



FAO Aquaculture e-Bulletin

March 2014

Welcome to this March 2014 edition of the **FAO Aquaculture e-bulletin**, covering our most recent news, publications, technical workshops and projects for the period **October 2013 to February 2014**. 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 website 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 Branch (FIRA) responsible for the various activities.

Highlights

- The Aquaculture Branch has recently developed an **aquaculture thematic page** for the new fao.org web site. The FAO thematic pages have been conceived to provide a general overview of the main areas of work of the organization. In particular, the aquaculture theme has a section highlighting the key facts of aquaculture development and the body of the page gives a global view of the main characteristics of the sector. The page contains linkages to publications, production statistics, glossary, fact sheet collections, spatial analysis tools and photo library as well as other relevant FAO aquaculture web sites.
Information: V. Crespi 
- The Seventh session of the **Sub-Committee on Aquaculture** (SCA) of the FAO Committee on Fisheries (COFI) was held in St. Petersburg, Russia from 7-11 October 2013 at the kind invitation of the Government of the Russian Federation. It was attended by 51 Member countries of the Food and Agriculture Organization of the United Nations (FAO) and by observers from six intergovernmental (IGOs) and four international non-governmental organizations (NGOs).
Information: R. Subasinghe 

Publications

- Hishamunda, N., Ridler, N. & Martone, E. 2014. **Policy and governance in aquaculture: lessons learned and way forward**. FAO Fisheries and Aquaculture Technical Paper No. 577. Rome, FAO. 59 pp.
- Hishamunda, N., Bueno, P., Menezes, A.M., Ridler, N., Wattage, P. & Martone, E. 2014.

Improving governance in aquaculture employment: a global assessment. FAO

Fisheries and Aquaculture Technical Paper No. 575. Rome, FAO. 48 pp.

- FAO. 2014. **Report of FAO Expert Workshop on Assessment and Monitoring of Aquaculture Sector Performance**, Gaeta, Italy, 5–7 November 2012. FAO Fisheries and Aquaculture Report No. 1063. Rome. 94 pp.
- Hasan, M.R. & New, M.B., eds. 2013. **On-farm feeding and feed management in aquaculture**. FAO Fisheries and Aquaculture Technical Paper No. 583. Rome, FAO. 67 pp. Includes a CD-ROM containing the full document (585 pp.). Available also in **CD-ROM**.
- **Частные стандарты и сертификации в рыболовстве и аквакультуре Современная практика и возникающие проблемы** (Private standards and certification in fisheries and aquaculture: current practice and emerging issues). 2013. FAO Fisheries and Aquaculture Technical Paper No. 553. Rome, FAO. 2011. 181p. Russian version)
- FAO/Regional Commission for Fisheries. 2013. **Report of the Regional Technical Workshop on a Spatial Planning Development Programme for Marine Capture Fisheries and Aquaculture**. Cairo, the Arab Republic of Egypt, 25–27 November 2012. FAO Fisheries and Aquaculture Report No. 1039. Rome. 127 pp.
- Ramakrishna, R.; Shipton, T.A.; Hasan, M.R. 2013. **Feeding and feed management of Indian major carps in Andhra Pradesh, India**. FAO Fisheries and Aquaculture Technical Paper No. 578. Rome, FAO. 90 pp.
- Valderrama, D., Cai, J., Hishamunda, N. & Ridler, N., eds. 2013. **Social and economic dimensions of carrageenan seaweed farming**. Fisheries and Aquaculture Technical Paper No. 580. Rome, FAO. 204 pp.
- FAO. 2013. **Report of the Stakeholder Workshop on the GEF Climate Resilient Fisheries and Aquaculture Development Project in Bangladesh, 29–30 August 2012, Dhaka, Bangladesh**. FAO Fisheries and Aquaculture Report No. 1056. Rome. 27 pp.
- FAO. 2013. **Report of the Second Session of the Central Asian and Caucasus Regional Fisheries and Aquaculture Commission, Dushanbe, Tajikistan, 16–17 April 2013**. Протокол мероприятия Вторая Сессия Региональной Комиссии По Рыбному Хозяйству И Аквакультуре В Центральной Азии И На Кавказе, Душанбе, Таджикистан, 16–17 апреля 2013 г. FAO Fisheries and Aquaculture Report/Доклад ФАО по рыбному хозяйству и аквакультуре. No. 1045. Rome/Рим. 39 pp/стр.
- FAO. 2011. Aquaculture development. 6. **Use of wild fishery resources for capture-based aquaculture**. FAO Technical Guidelines for Responsible Fisheries. No. 5, Suppl. 6. Rome, FAO. 2011. 81 pp. This publication is now available in all FAO languages: **AR - ES - FR - RU - ZH**.



Web-based products

- The **National Aquaculture Sector Overview (NASO)** collection has been enriched with two new fact sheets: **South Africa** and **Senegal**, achieving the 106th NASOs.
- The Spanish version of two NASO Fact sheets (**Spain** and **Mexico**) have been updated.

- The **National Aquaculture Legal Overview (NALO)** collection has been enriched with the new fact sheets of **Croatia** and **Honduras**, achieving the 56th NALOs.
- The English version of **United States of America** has been update.
- The French version of **Costa Rica, Italy** and **Uganda**, and the Chinese version of **Mexico, Netherlands** and **United Kingdom** have been released, adding six new translations to the collection.

Projects

- **TCP/ALG/3402** – The Algerian government, represented by the Ministry of Fishery and Fisheries Resources (MPRH), has requested the technical assistance of FAO for the elaboration of the national programme for the development of aquaculture in the southern part of the country. A mission composed by two FAO aquaculture officers, one international consultant, two national consultants and staff from the MPRH was undertaken in October 2013 to visit four Wilayas (District) namely Ouargla, Ghardaïa, Laghouat, El Oued and Biskra located in arid lands at about 600-800 km south of Algiers. At the end of the mission, the team produced a comprehensive report including short-medium and long term recommendations to be integrated in the national strategy (2014-2020) for the development of fishery and aquaculture, recently elaborated by the MPRH. Five models of fish farms integrated with agriculture have been elaborated by the team, providing technical drawings of the fish farm, an estimation of investment costs and the equipment needed to run an aquaculture farm.

Information: V. Crespi  and C. Toueilib 


- **GCP/NAM/014/SPA** – In 2010, an FAO-facilitated South-South Cooperation (SSC) exchange was launched to improve the aquaculture sector in Namibia through aquafeed production, species diversification and the application of modern aquaculture techniques. Viet Nam provided three long-term experts and five technicians; they were supported through funds from the Government of Spain. One Aquaculture Officer and one Food Security Officer from FAO headquarters undertook a second 10 days backstopping mission in November 2013 to review the progress of the project implementation in relation to the work plan and to initiate the work planning process for 2014. Early results show a substantial improvement in aquaculture techniques and research programmes. In the first half of the project life (2010-2013), the permanent presence of Vietnamese experts in the country along with the punctual intervention of international consultants enabled the Namibian Department of Aquaculture to identify and promote improved aquaculture practices and technologies at the national level, strengthening in particular the technical skills of national staff in the research institutions. During the second phase of the project (2014-2015) up to the end, an effective extension strategy will ensure the dissemination of acquired skills and information and capacity transfer to the local fish farmers.

Information: M.R. Hasan  and V. Crespi 

Aquaculture events (2013-2014)

- **Fish Disease Practical Training Course**, Trabzon, Turkey; 17-21 February 2014. The


primary objective of the practical training course was to provide the participants with the basic practical fish disease diagnostic techniques. The course was organized in collaboration with the Central Fisheries Research Institute of the Turkish Ministry of Food, Agriculture and Livestock, located in Yomra, Trabzon. The course included practical sessions of diagnostic techniques for bacterial, viral and parasitic fish diseases in addition to sessions of DNA isolation, Polymerase Chain Reaction (PCR), DNA sequencing and the use of molecular techniques in fish diseases diagnosis. The workshop also included theoretical lectures on sampling techniques, non-infectious diseases, fish health management; Aquaculture system and predator damages; Use of therapeutics, drugs and fish vaccines; and disease prevention and quarantine.

Information: H. Fersoy 

- **The third subregional workshop on aquaculture in the North African countries** was held in Oran, Algeria 6-12 December 2013. The meeting was attended by more than 60 representatives from the public and private aquaculture sector from Tunisia, Algeria, Morocco and Mauritania, FAO Officers and international experts. The aim of the workshop was to highlight the technical, institutional, legal and financial strengths and weaknesses that characterize the aquaculture sector and to support cooperation among member countries of the subregion. Among the main outputs of the workshop, there was the establishment of a multi-stakeholders subregional aquaculture platform that will be hosted by the government of Algeria. The role of the platform is to facilitate the exchange of information and particularly the active participation of all aquaculture stakeholders in decision making process related to aquaculture development in the subregion.


Information: C. Toueilib  and V. Crespi 

- **Expert Meeting on Fish Breeding and Broodstock Management** Istanbul, Turkey, 10-12 December 2013, held under the 2013 work programme of the Technical Advisory Committee of the **Central Asian and Caucasus Regional Fisheries and Aquaculture Commission** (CACFish). The primary objective of the Expert Meeting was to reveal the status of fish breeding and broodstock management in CACFish competence area. The Meeting included technical presentations, country presentations and consultation sessions. The meeting concluded that fish breeding and selection has not been put into practice into Central Asian in a systematic manner. The Meeting agreed that the science-based efforts are required to improve broodstock management in the CACFish area. It was underlined that most of hatcheries in the Central Asian region need upgrading and modernizing/optimizing in terms of effective hatchery operations. The Meeting generated technical/scientific recommendation for the consideration of the Technical Advisory Committee of the Commission.

Information: H. Fersoy 

- **Regional Workshop on Seafood Safety and Quality Control**, 14-16 November 2013, Bodrum, Turkey. The workshop was attended by fourteen participants, comprising ministerial staff involved in seafood safety, quality control and inspections, as well as fish farmers, from Azerbaijan, Kyrgyz Republic, Tajikistan and Uzbekistan. The primary goal of the workshop was to provide the participants with the basics on seafood safety and quality

controls. The main subjects covered by the workshop were as follows: (i) handling and processing of fish and fish products; (ii) basics of food safety and quality of fish and fishery products; (iii) FAO/WHO Codex Alimentarius; (iv) agreements of the World Trade Organization; (v) control and inspection of fish marketing chain; (vi) biological, chemical and physical hazards; (vii) monitoring programmes for fish safety and quality; (viii) sampling and laboratory analyses for seafood quality assurance; quality determination of fish and fishery products, including aquaculture through electronic means; (ix) fish processing plant design and European Union requirements for prerequisite programmes (x) labeling, traceability and certification in fisheries and aquaculture; (xi) basics of Hazard Analysis and Critical Control Points (HACCP). The workshop was consisted of technical presentations, country presentations, discussion and a field study to fish meal plant and fish processing establishment.

Information: H. Fersoy 

- **FAO supported the 34th Asian conference on remote sensing. The 34th Asian Conference on Remote Sensing (ACRS 2013)**, held in Bali from 20-24 October 2013 organized by the Indonesian Society for Remote Sensing (ISRS/MAPIN) and the Asian Association on Remote Sensing (AARS) had the theme of "Bridging Sustainable Asia". The event brought together 1 379 researchers, policy-makers, and practitioners from 52 developed and developing countries to share insights into the challenges and opportunities of remote sensing technology and application in solving global problems. FAO actively participated in this conference with: One plenary speech and Two oral presentations. In parallel to the conference, discussions over a draft memorandum of understanding took place between the Ministry of Research and Technology of the Republic of Indonesia (RISTEK) and FAO concerning geospatial information for food security.

Information: J. Aguilar Manjarrez  and A. Mosteiro 

Upcoming Aquaculture events (2014)

- **The 5th Offshore Mariculture Conference** will be held from 9 to 11 April 2014 in Naples, Italy. This is the fifth biennial Conference on offshore mariculture, the previous four events were successfully held in Spain, Malta, Croatia and Turkey. The 2014 edition will explore the progress and prospects of the offshore aquaculture and a wide range of technical issues will be discussed with international experts. Furthermore the event will represent an excellent opportunity for strengthening the network between international offshore finfish aquaculture business players. Additional information is available online on the [Conference website](#).

Information: A. Lovatelli 

- **Regional Ad-hoc Training on Live Food Production**, 4-7 March 2014, Cesme, Turkey. The Training, designed for participants from the Central Asian region, aims to provide practical hands-on production techniques of live food. The training also covers theoretical sessions on fish hatchery management, feed management applications; live food planning annual production strategies and calculations methods.

Information: H. Fersoy  and A. Ozgur 

- **Regional Ad-hoc training on trout culture in net cages**, 25-28 March 2014, Soma, Turkey. The Training aims at providing the participants from the Central Asian region practical and theoretical knowledge on the basics of trout culture in net cages. The training includes the following key technical themes: site selection; cage construction and mooring; calculations for cage carrying capacity; legal obligations and rules of a cage culture system; and environmental impacts of the cage culture.

Information: H. Fersoy and A. Ozgur

- **The Second Session of Technical Advisory Committee of the Central Asian and Caucasus Regional Fisheries and Aquaculture Commission**; 21-23 April 2014; Bishkek, Kyrgyzstan. The Session will be attended by representatives of four CACFish Member States and Observer States from the Central Asian and Caucasus region. The Committee will table the following technical/scientific issues in terms of generating scientific advice for the consideration of the Central Asian and Caucasus Regional Fisheries and Aquaculture Commission (CACFish): (i) inland stock assessment; (ii) fish breeding and broodstock management; (iii) climate change; and a framework for a regional strategy and associated principles for aquatic animal health management in CACFish Area. The Session will also review the progress with the 5-year work Programme of CACFish and identify its work programme for 2014-2015.

Information: H. Fersoy

- **Third Session of the Central Asian and Caucasus Regional Fisheries and Aquaculture Commission**; Baku, Azerbaijan, June 2014. The Session will be attended by representatives of four CACFish Member States and Observer States. The Session will discuss the scientific/technical recommendations submitted to Commission for endorsement consideration. Besides, at its third session the Commission will discuss and identify its work programme for 2014-2015, and will adopt its autonomous budget for 2015.

Information: H. Fersoy

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