

Arthur, J.R.; Bondad-Reantaso, M.G.; Campbell, M.L.; Hewitt, C.L.; Phillips, M.J. & Subasinghe, R.P. Understanding and applying risk analysis in aquaculture: a manual for decision-makers *FAO Fisheries and Aquaculture Technical Paper*. No. 519/1. Rome, FAO. 2009. 113p.

Abstract: This manual aimed to promote wider understanding and acceptance of the applications and benefits of risk analysis in aquaculture development and management, provides an overview of the process as applied to aquaculture and demonstrates the variety of ways in which risk can manifest in aquaculture operations. Section 1 provides a background to the aquaculture sector and an introduction to the concepts of risk analysis. Section 2 presents the operating environment, i.e. relevant international framework, for risk analysis for the aquaculture sector. Section 3 discusses a general risk analysis process for aquaculture. Section 4 provides brief overviews of the process as applied in each of the seven risk categories. Section 5 briefly summarizes actions that need to be taken by FAO Members to promote the wider use of risk analysis for aquaculture development. Section 6 discusses future challenges to aquaculture and the role risk analysis might play in addressing them.

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Bondad-Reantaso M.G. & Prein, M. (eds). Measuring the contribution of small-scale aquaculture: an assessment. *FAO Fisheries and Aquaculture Technical Paper* No.534. Rome, FAO. 2009. 180p.

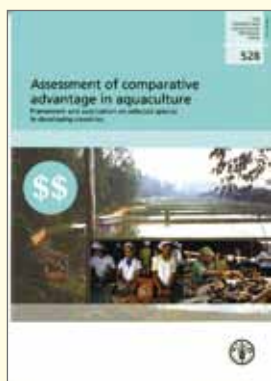
An “FAO Expert Workshop on Methods and Indicators for Evaluating the Contribution of Small-Scale Aquaculture to Sustainable Rural Development”, held in Nha Trang, Viet Nam from 24 to 28 November 2008, attempted to develop an indicator system which can measure the contribution of small-scale aquaculture (SSA) to sustainable rural development (SRD). The major outcome was the development, through an iterative process, of an indicator system thought to provide a good measure of the contribution of SSA using an analytical framework (i.e. the Sustainable Livelihood Approach or SLA) and agreed criteria (accuracy, measurability and efficiency or AME). This publication contains two parts: Part 1 contains the report of the above expert workshop; Part 2 contains 10 technical papers presented during the expert workshop and an additional paper which provides a detailed account of the processes undertaken in the development of an indicator system to measure the contribution of SSA to SRD.

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Report of the FAO Western Balkan Regional Seminar/Workshop on Aquatic Animal Health. Sarajevo, Bosnia and Herzegovina, 19–21 May 2008. *FAO Fisheries and Aquaculture Report*. No. 879. Rome, FAO. 2009. 25p.

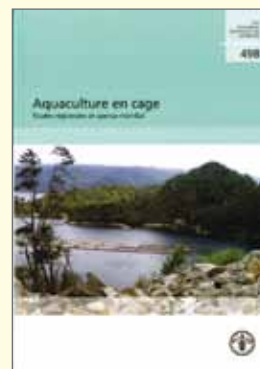
The Western Balkan Regional Seminar/Workshop on Aquatic Animal Health (TCP/BiH/3101) held in Sarajevo, Bosnia and Herzegovina, from 19 to 22 May 2008 was participated by a total of forty representing fisheries and veterinary authorities and the private sector from Western Balkan countries (Bosnia and Herzegovina, Croatia, Montenegro, Serbia and The Former Yugoslav Republic of Macedonia) including representatives from the FAO and OIE. The regional seminar/workshop successfully disseminated the outcomes of TCP/BiH/3101 (Strengthening Aquaculture Health Management in Bosnia and Herzegovina); exchanged information on the status of aquaculture and aquatic animal health, diseases affecting aquaculture, and programmes for disease diagnosis and prevention in Western Balkan countries; and identified opportunities for seeking solutions to common problems related to pathogen issues affecting regional trade between Balkan states and other key European Union trading partners; and discussed and formulated a possible programme for regional cooperation.



Cai, J.; Leung, P. & Hishamunda, N.
Assessment of comparative advantage in aquaculture: framework and application on selected species in developing countries. *FAO Fisheries and Aquaculture Technical Paper*. No. 528. Rome, FAO. 2009. 73p. Available in French.

How successful a country is in competing against other producers depends in part on transport and on satisfying food standards, but also on its production costs. Comparative advantage is a means of assessing relative costs and indicating the species and markets where there is the greatest likelihood of success. This paper discusses this concept and two methods that can be used for its assessment, namely the “Domestic Resource Cost” (DRC) method, which relies on production cost data to compare efficiency, and the “Revealed Comparative Advantage” (RCA) method, whereby comparative advantage is inferred from an ex post assessment of actual trade and specialization. Through two case studies (the shrimp exports and the freshwater aquaculture production of carp, catfish and tilapia) the paper illustrates how this concept can be assessed and discusses some of its policy implications. The RCA method is used for this purpose.

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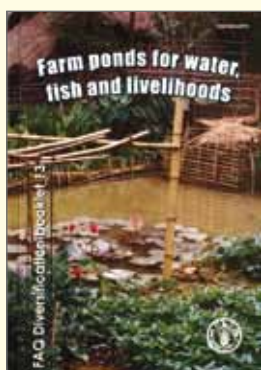


Halwart, M.; Soto, D. & Arthur, J.R.
Aquaculture en cage: Études regionales et aperçu mondial. *FAO Document technique sur les pêches* No. 498. Rome, FAO. 2009 259p. Also available in Spanish.

The FAO Fisheries and Aquaculture technical paper “Cage aquaculture - regional reviews and global review” highlight the tremendous importance of cage aquaculture today and its key role for the future growth of the aquaculture sector. The document includes all the papers presented during the FAO Special Session on Cage Aquaculture at the Asian Fisheries Society Second International Symposium on Cage Aquaculture in Asia in July 2006. Each review, by geographic region, includes information on the current situation, major regional issues and challenges. The global overview discusses trends in cage aquaculture, summarizes information on cultured species, culture systems and environments and explores the way forward for cage aquaculture, which offers especially promising options for multitrophic integration of current coastal aquaculture systems as well as expansion and further intensification at increasingly offshore sites.

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Miller, J.W. Farm ponds for water, fish and livelihoods. FAO Diversification booklet number 13. 2009. 62p.

The booklet provides basic and practical information on multiple use smallholder farm ponds. Information is provided on the role of development organisations, opportunities for and pitfalls of providing assistance, direct and indirect support required, and the strategic and technical challenges of making farmers self-reliant. It suggests ways by which smallholder farmers can participate in the market economy through better market access and outlines strategies to attract the private sector to do a business with smallholders.



Halwart, M. & Settle W. (eds). 2008. Participatory training and curriculum development for Farmer Field Schools in Guyana and Suriname. A field guide on Integrated Pest Management and aquaculture in rice. Rome, FAO. 116p.

In Guyana, approximately 140,000 hectares of arable land is under rice cultivation and the industry is the largest private sector activity. It employs over 100,000 people directly and indirectly. In Suriname, about 42,000 ha is under rice cultivation. Nieuw Nickerie is the main rice growing area in the country. The rice industry is the major economic activity and employer in the area. However, profitability from rice farming in both countries has been declining with the increasing cost of cultivation and declining international prices for rice. The increasing use of chemicals over time has resulted in additional costs, as well as increased costs to the environment and human health, with questionable corresponding returns in yield increases. In view of this situation, rice farmers have been looking for ways to reduce input costs in paddy cultivation and to introduce other crops into the farming system. Aquaculture has been recognized as one of the diversification crops for inclusion in the rice farming systems. The field guide on Integrated Pest Management and aquaculture in rice aimed to provide technical support to address these constraints.



Ce qu'il faut savoir sur le syndrome ulcératif épizootique (SUE): brochure de vulgarisation. FAO, Rome, 2010. (French version)

This extension brochure – What you need to know about epizootic ulcerative syndrome (EUS) – provides simple facts or frequently asked questions about EUS such as: What is EUS?; Why it is a problem today?; What does it do to the fish; When does it occur?; How is it diagnosed?; Which species are susceptible or affected?; How is it spread?; What factors cause the fish to be infected with EUS?; Safety concerning eating EUS affected fish, simple biosecurity measures to prevent EUS?; What can be done in the event of an outbreak and simple procedures for collecting EUS samples for laboratory examination. This brochure is intended to a wide range of audience from fishfarmers and fishermen to extension officers as well as policy makers as a public information campaign to make available factual information about the disease so that awareness may be raised and for better understanding of the potential impact of the disease.

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