

## Risk Analysis in Aquaculture Production

Aquaculture as a very diverse sector (in terms of species, environments, systems and practices) faces a range of hazards and the perceived risks can sometimes be complex. The application of the risk analysis process is driven by multiple objectives such as resource protection, food security, trade, consumer preference for high quality and safe products, production profitability and other investment and development objectives many of which are embedded in regional and international agreements/instruments. The Fisheries and Aquaculture Department has a number of initiatives in the application of risk analysis particularly in the area of environmental risk assessment, pathogen risk analysis, genetic risk assessment, food safety in fish and fishery products. A project to further understand the risk analysis process and how it can be applied to aquaculture was undertaken through commissioned papers which were presented during an expert workshop held in Thailand in June 2007. The seven major risk sectors that were the subject of the consultation were: (1) pathogen, (2) food safety and public health, (3) ecological (pests and invasives), (4) genetical, (5) environmental, (6) financial and (7) social risks. While the hazards and the risk elements in some of the sectors are clearly recognized and methodologies (as well as standards) for their assessment have been developed and applied, in many of these areas of concern, they are still vaguely understood and methods for their assessment are not yet clearly defined. Nevertheless, all these risk sectors are inextricably linked and can pose serious biosecurity threats if the risks are not reduced and managed responsibly. More details about the study and the outcomes of the expert consultation can be obtained from Melba Reantaso at [Melba.Reantaso@fao.org](mailto:Melba.Reantaso@fao.org)

### **TCP/BIH/3101(A) Strengthening capacity on aquaculture health management.**

Commenced in October 2006 until March 2007. Project components include: (i) 6 Training/Workshops on various aspects of aquaculture, aquatic animal health and food safety, (ii) National Biosecurity Framework and National Strategy on Aquatic Animal Health, including targeted surveillance design for specific diseases, (iv) Health Extension Manual and Fish Inspection Manual/HACCP Guidelines and (vi) improvement of virology laboratory through provision of equipment and staff training equipment. Project is expected to culminate in a Regional Conference that will involve other Balkan states and will serve as a venue to share/disseminate findings and the forum will be used to explore possibilities for regional interventions on issues concerning healthy and safe aquatic production and a possibility for developing a regional project for donor funding. [Responsible Officers: MB Reantaso and R Subasinghe (FIMA)].

### **NOR/06/2a (MTF/GLO/125/MUL): Assessment and management of risks in aquaculture (2006-2007).**

Commenced in 2006 and will be completed in 2007. Activities included a desk study and an expert workshop (held in Rayong, Thailand) on Understanding and Applying Risk Analysis in Aquaculture Production. Both activities examined the seven risk sectors affecting aquaculture (pathogens, food safety and public health, environment, genetics, marine invasive species, social risks and financial risks) and a few thematic areas (aquaculture insurance, better management practices) which became the basis for the production of a Manual on Understanding and Applying Risk Analysis in Aquaculture Production and a peer-reviewed Workshop Proceedings. [Responsible Officers: MB Reantaso and R Subasinghe (FIMA)].

### **TCP/BZE/3003: Strengthening the Biosecurity Framework.**

Implemented from 2006-2007, this TCP reviewed and revised Belize's existing legislative framework for plant and animal (including aquatic) health as well as food safety. Cooperative work jointly undertaken by LEGN, FIMA, AGAP and AGNS. The Ministry of Agriculture, Fisheries and Cooperatives in collaboration with the Belize Agricultural Health Authority (BAHA) was the counterpart agency responsible for project execution. [Responsible Officers: J Vapnek (LEGN) and MB Reantaso (FIMA)]