

## 8. The way forward

The incursion of EUS in southern Africa revealed serious biosecurity lapses which if not urgently addressed could lead to more risks to the communities surrounding the Zambezi River who are dependant on its resources for food and livelihood, as well as risks to animal health, fish welfare, biodiversity and environmental sustainability of the fisheries and aquaculture sectors. Since preliminary results of surveillance work indicate that EUS is spreading, further urgent intervention is necessary.

The current challenge now is to determine how EUS came about to Africa, to determine the risk factors for the African EUS outbreak, to improve capacity on aquatic animal health management in the region particularly in dealing with future outbreaks.

The work and accomplishments of the Task Force provided an impetus for further support for improving aquatic biosecurity awareness in Africa.

### **8.1 FAO REGIONAL TECHNICAL COOPERATION PROGRAMME (TCP/RAF/3111)**

Immediately following the Task Force mission and based on the above recommendations, an FAO Regional Technical Cooperation Programme (TCP/RAF/3111 [E]) *Emergency assistance to combat EUS in the Chobe-Zambezi River* was prepared and approved for implementation beginning October 2007. Seven southern African countries (Angola, Botswana, Malawi, Mozambique, Namibia, Zambia and Zimbabwe) are participating in this regional project. The specific objectives of the project are to: (i) strengthen the capacity of competent authorities of the seven participating countries in minimizing the impacts of the disease by enhancing surveillance and diagnostic capacities, (ii) increase their ability to educate and raise awareness of communities of both affected and unaffected locations/zones of risk factors and promoting responsible trading of live aquatics and (iii) facilitate the formulation of a regional emergency response strategy and implementation.

The first major activity was a week-long training course (see Plate 13), held from 7 to 11 November 2007 at the School of Veterinary Medicine, University of Zambia in Lusaka, for 22 key staff from eight countries (including Mauritius). The training course covered lectures, laboratory and field work on basic aquatic animal health management, EUS diagnosis and preparation of a targeted surveillance design for EUS.

## PLATE 13

**Activities undertaken during the first workshop of the FAO TCP/RAF/3111 [E]  
Emergency assistance to combat EUS in the Chobe-Zambezi River, Lusaka, Zambia,  
7-11 November 2007**

(All photos courtesy of M.B. Reantaso)



R.P. Subasinghe (FAO) giving a lecture on global aquaculture development and importance of aquatic animal health management



S. Kanchanakhan (AAHRI) demonstrating fish necropsy and procedures for collecting fish tissue samples for laboratory analysis



F. Corsin (FAO consultant) discussing with G Kanyerere (Malawi) a surveillance design for EUS



Participants experience field work



Twenty two key staff from eight countries (including Mauritius) participated in the workshop held at the University of Zambia from 7-11 November 2007 which trained participants on basic aquatic animal health management, EUS diagnosis and preparation of a targeted surveillance design for EUS

## **8.2 FAO REGIONAL WORKSHOP ON DEVELOPMENT OF AN AQUATIC BIOSECURITY FRAMEWORK FOR SOUTHERN AFRICA**

As part of FAO's continuing assistance, a capacity assessment questionnaire survey was undertaken from January to March 2008 to evaluate national capacities for managing aquatic biosecurity (i.e. capacity to manage risks associated with exotic or emerging pathogens of aquatic animals and invasive aquatic species). Nine countries (Angola, Botswana, Kenya, Malawi, Mozambique, Uganda, Tanzania, Zambia and Zimbabwe) participated in the survey which covered a number of areas with direct relevance to assessing aquatic biosecurity performance and include the following aspects: (1) international affiliations, (2) trade activity, (3) border control, (4) surveillance/monitoring, (4) incident/emergency response, (5) diagnostic capacity, (6) research/training, (7) expertise (knowledge base), and (8) challenges. The outcomes of the survey was presented during the FAO Regional Workshop on Development of an Aquatic Biosecurity Framework for Southern Africa held in Lilongwe, Malawi, from 22 to 24 April 2008, attended by 18 representatives from 9 countries participating in the survey, the OIE and FAO (see Plate 14). The workshop identified a number of key regional capacity building activities to address aquatic biosecurity gaps or lapses in the southern African region, foremost of which is a request to FAO to develop a follow-up project to assist countries in reviewing institutional and legal frameworks to better address current biosecurity issues, especially addressing aquatic animal health management, trans-boundary movement of live aquatics and maintaining aquatic biodiversity. Additional recommendations include the following: (i) countries in the region to work closely in collaboration with FAO and OIE and regional partners to collectively address matters pertaining to aquatic animal health and biosecurity; (ii) recognizing the University of Zambia's School of Veterinary Medicine as a potential regional diagnostic centre and Uganda as a regional coordinating centre; (iii) development of a regional model/template on import risk assessment for introductions and transfers of live aquatic animals; and (iv) holding of a ministerial level meeting for southern African countries to raise the issue of aquatic animal biosecurity. This workshop also recommended that the FAO focal points on aquatic animal health participate in the OIE Regional Seminar (see 8.2) in Maputo, Mozambique. The full recommendations from the FAO Lilongwe Workshop can be found in Annex 5.

## **8.3 OIE REGIONAL WORKSHOP ON OIE STANDARDS, A LEVER FOR GROWTH IN THE FISHERIES AND AQUACULTURE SECTOR IN SOUTHERN AFRICA**

The OIE Regional Workshop on "OIE standards, a lever for growth in the fisheries and aquaculture sector in Southern Africa" organized by the OIE Sub-Regional Representative, was held in Maputo, Mozambique, from 10 to 12 June 2008. Major recommendations resulting from this regional workshop relevant to fisheries and aquaculture include: (i) to promote dialogue between veterinary authorities and other competent authorities, as well as the private sector, to identify their respective roles and responsibilities with respect to aquatic animal health matters; (ii) to review the national legislative framework for allowing the development of

## PLATE 14

**Photographs during the FAO Workshop on Development of Aquatic Biosecurity Framework for Southern Africa, Lilongwe, Malawi, 22-24 April 2008**

(All photos courtesy of M.B. Reantaso)



**A,B,C:** Opening ceremony guest speakers FAO Representative Mr Mazlan Jusoh, Malawi Department of Fisheries Director Mr Alex Bulinari and Dr Rohana Subasinghe of FAO.  
**D:** Prof Eli Katunguka-Rwakishaya (OIE) making a presentation; **E:** Dr Patrick Bastiensen (OIE) with regional participants; **F:** Eighteen participants representing nine countries (Angola, Botswana, Kenya, Malawi, Mozambique, Tanzania, Uganda, Zambia, Zimbabwe) participated in this regional workshop

the fisheries and aquaculture sector; (iii) to prioritize aquatic animal diseases of concern and fast tracking the implementation of surveillance programmes; (iv) to enhance cross-border cooperation between competent authorities to control aquatic animal diseases; and (v) to coordinate and support the establishment of a regional aquatic animal health network for fisheries and aquaculture in southern Africa in close collaboration with relevant bodies at national, regional and international level. The full recommendations of the OIE Maputo Workshop can be found in Annex 6.

#### **8.4 FAO SPECIAL PROGRAMME FOR AQUACULTURE DEVELOPMENT IN AFRICA (SPADA)**

The Special Programme for Aquaculture Development in Africa (SPADA) is a new and innovative programme recently launched by FAO as recommended by the twenty-seventh session of FAO Committee on Fisheries (COFI) in recognition of the growing importance of aquaculture in the Africa region as well as the region's underutilized aquaculture resources. Strengthening aquatic biosecurity is included in one of the seven programme arenas of SPADA, under the theme *Strengthening institutions and enabling frameworks*.

#### **8.5 FAO TRAINING/WORKSHOP ON BASIC AQUATIC ANIMAL HEALTH MANAGEMENT AND INTRODUCTION TO RISK ASSESSMENT IN AQUACULTURE**

Participants from Botswana, Ghana, Kenya, Malawi, Mozambique, Namibia, South Africa, Uganda, Zambia and Zimbabwe attended this training/workshop which was held from 9 to 15 February 2009 at the School of Veterinary Medicine, University of Zambia in Lusaka, Zambia. This is a follow-up activity of two previous FAO training/workshops held in Lusaka (November 2007, see section 8.1) and Lilongwe (April 2008, see section 8.2) under the ongoing TCP/RAF/3111 "Emergency assistance to combat epizootic ulcerative syndrome (EUS) in the Chobe-Zambezi River System" and the Aquatic Biosecurity Project funded under FAO's Programme Cooperation Agreement with Norway, respectively. The training/workshop was preceded by a one-day session on updating the implementation of TCP/RAF/3111 particularly the targeted surveillance work for EUS and the EUS educational materials. Plate 15 shows some photographs taken during the workshop. The main objective is to provide continuous training opportunities that will support capacity building on aquatic biosecurity for sustainable fisheries and aquaculture development focusing in the areas of aquatic animal health management and risk analysis.

The workshop identified a number of follow-up activities under the broad heading of establishing a coordination team for aquatic animal health activities in the African region; assessing the current aquatic animal health status in the African region; drafting a regional surveillance system for Africa; facilitating the proposed Regional TCP on Aquatic Biosecurity in Africa; and following-up on the other recommendations identified during the Lilongwe Workshop in April 2008.

## PLATE 15

**FAO Training/Workshop on Basic Aquatic Animal Health Management and Introduction to Risk Assessment in Aquaculture , University of Zambia Lusaka, Zambia, 9-15 February 2009**

Participants (Botswana, Ghana, Kenya, Malawi, Mozambique, Namibia, South Africa, Uganda, Zambia and Zimbabwe) attended the FAO Training/Workshop on Basic Aquatic Animal Health Management and Introduction to Risk Assessment in Aquaculture held at the University of Zambia in Lusaka from 9-15 February 2009. The workshop was implemented by FAO officers, Drs Rohana Subasinghe and Melba Reantaso, supported by international consultants, Dr Flavio Corsin, Prof. Mohammed Shariff and Dr Richard Arthur.

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