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## **Aquatic Biosecurity and Trade**

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## **AQUATIC BIOSECURITY AND TRADE**

### **Purpose**

1. The purpose of this paper is to:
  - i. Provide a regional perspective of aquatic biosecurity and its implications for trade and development;
  - ii. Highlight current examples of biosecurity concerns;
  - iii. Seek the views and support of Heads of Fisheries for the suggested terms of reference for a regional aquatic biosecurity program.

### **Background**

2. In an era of rapid and global changes, strategies to protect, conserve and utilize our aquatic resources must be constantly refined to help maintain traditions and culture, access to food security and generate economic growth.
3. In the Pacific region, the aims of aquatic biosecurity would be to safeguard against the risks to human health, the environment, and national economies. Biosecurity covers natural resources as well as extending to the realm of public health (food safety).
4. Managing biosecurity risks in a responsible manner is essential. For example, in deciding whether to introduce a new species, authorities need to assess whether this may lead to a disease outbreak and if so, the measures necessary to reduce the risk to an acceptable level. The probability and consequence of this disease outbreak has to be weighed against the potential positive social and economic benefits that might from improved food production and export.
5. The current trend to address the type of scenario presented above is to take a holistic approach, assembled under the banner of “biosecurity”. This has been evidenced regionally by a wave of new biosecurity legislation to supersede previous obsolete quarantine and disease acts in an attempt to harmonise legislation and enable multi-agency responses. However, biosecurity has largely been driven by the terrestrial plant and livestock sectors and the fisheries sector lags behind in this arena. This is highlighted by the formation of a biosecurity and trade unit within the SPC Lands Resources Division whereas within the SPC Marine Resources Division the issue is handled on an ad-hoc basis.

6. The link between biosecurity and trade can be simplified by viewing biosecurity as a mechanism for sovereign governments to implement border controls on their import and exports. Therefore, countries typically use biosecurity as a faucet to regulate trade. Whilst it is desirable that decisions and processes are underpinned by science, the unfortunately reality is that trade barriers do arise for politically motivated reasons, especially to protect domestic producers. At its apex, the global instruments which govern such arrangements are under the auspices of the World Trade Organization. Agreements such as the UN Convention on Biological Diversity also have an important role.
7. There is a lot of grey area in the definitions and the scope of aquatic biosecurity. This concept can be viewed as encompassing responsible practices for trans-shipment and quarantine of aquatic animals and plants, managing aquatic diseases, maintaining food safety standards and meeting the obligations for international trade.
8. Properly evaluating aquatic biosecurity risks requires a sound technical knowledge base, including with respect to aquatic pests and diseases, the aquatic environment and industry practices.
9. In many cases Pacific countries do not have the technical capacity in terms of people or facilities to conduct risk assessments or to carry out appropriate biosecurity measures. Possibly even more notably is the inability to deal with potentially large scale adverse environmental, economic and social consequences. Given the high level of trade in within the region, disease or pest incursions into a member country has the capacity to spread widely causing serious regional impacts.
10. Given the limited resources within countries the provision of well targeted technical assistance at a regional level is important. In building effective aquatic biosecurity capacity within our region, an inherent recognition that a multi-agency involvement - between fisheries, environment, quarantine, veterinary and public health agencies - is imperative.

### **Aquatic Biosecurity Concerns in the Region**

11. The Pacific is both a recipient and exporter of aquatic commodities and is facing an increasingly complex and broad range of biosecurity related concerns.
  - a. Given the importance of air and sea transport in the region there are many pathways for invasive hitchhiker species to be unintentionally introduced at international and domestic borders. Bilge and ballast water discharge, hull cleaning and waste discharge pose particular concern as a major source of invasive species. Such introductions pose a significant regional threat given the extensive exchange of sea traffic within the region. Even countries such as New Zealand and Australia with strong biosecurity capacities have suffered extensive incursions from this source.

- b. Aquatic trans-border issues are particularly important in certain Pacific Island countries such as Papua New Guinea which is threatened by invasive species such as snakehead and fish diseases such as Koi herpes from its border with Indonesia.
- c. Mass hatchery production and reseeded for aquaculture and culture fisheries often proceed in the region without considering the genetic pollution of wild stocks. For example, sea cucumber bred in Australia have been reseeded without proper import risk assessment in several Pacific Islands with as yet unknown adverse affects upon the resident populations of these important resource species.
- d. Maintaining a biosecure status in Pacific Island countries is critically important to protect current and future international trade prospects. Yet few countries have surveillance programs to monitor diseases, which has ramification when required to produce animal or plant health export certification assurances.
- e. Like agriculture, the expansion of aquaculture is reliant upon regular replenishment with new or improved stocks from overseas. Many countries who are currently legitimately importing seed stock require technical advice on quarantine protocols and risk management strategies for these imports in order to prevent disease incursions. A number of countries in the Pacific now regularly import live tilapia fingerlings from Asia. Contrary to popular belief, recent experiences overseas indicate that that tilapia are quite susceptible to diseases.
- f. The capacity of PICTs agencies to provide adequate export health certification is becoming an increasingly important requirement for international trade agreements on sanitary and phytosanitary certification measures. A recent example of this is the imposition by the European Commission of new regulations for the import of live aquatic animals into Europe – the new regulations require exporting countries to join the World Animal Health Organisation (OIE) and establish competent animal health authorities. This directly impinges upon the export of marine ornamentals by the region. The SPC is currently negotiating with the commission for a derogation of OIE membership and is collaborating with the Land Resources Division to instigate a Pacific Animal Health Information System (PAHIS) to satisfy conditions.
- g. Similarly, a lack of capacity in the areas of monitoring food safety compliance programs, traceability and accreditation of best practice standards are impending trade issues of significance.

## **A Regional Response**

12. The SPC Marine Resources Division has taken a leading role amongst CROP agencies for regional aquatic biosecurity initiatives and is encouraging a new program in this area. The objectives of such a program could be as follows:

- (i) to assist member countries to develop and adopt science-based, internationally accepted practices for the responsible and safe movement of live aquatic organisms and their products;
- (ii) to improve capacities for national and regional legislation, planning and administration to prevent and manage aquatic pest and disease risks;
- (iii) to improve resource sharing and interagency co-ordination in all aspects of biosecurity; and
- (iv) provide meaningful guarantees of health and food safety status to facilitate domestic, regional and international trade in live aquatic organisms and their products.

**See also**

- SPC Policy Brief 6/2008: Aquatic Biosecurity