

**CANADA-CHILE
COLLABORATIVE
AGREEMENT
ON
ENVIRONMENTAL
EFFECTS
MANAGEMENT OF
AQUACULTURE**



Alex Brown
Aquaculture Planning Consultant

BACKGROUND

- In 1991 the Chilean Fisheries and Aquaculture Law was passed. This was followed in 1994 by the Chilean Environmental Protection Law
- Similarly, Fisheries and Oceans Canada has developed a strong regulatory capacity related to Environmental Assessment frameworks
- Both countries have similar environments and species under aquaculture production
- Canada and Chile compete for the same markets, where increases in demand for sustainable aquaculture products can benefit both countries

BACKGROUND

- Both countries recognise the importance of consumer confidence and the benefits of cooperation in achieving this goal
- Failure to address public confidence has lead to lost economic, social and environmental opportunities for all aquaculture producing nations
- Canada and Chile share issues of common concern related to the economy and environment with respect to aquaculture

Rational

- In 2004 Chile organized an APEC workshop on Environmental Principles and Policies in Aquaculture Administration, where Canada was co-chair
- The existing Collaboration Agreement was developed under the Canada – Chile Agreement on Environmental Cooperation which is sub-agreement to the Canada – Chile Free Trade Agreement
- Implementation Schedule June 2005- April 2006
- Consistent with APEC, UN and other international objectives

The Collaborative Agreement

OBJECTIVES

- To facilitate exchange of personnel and information on environmental management
- To develop a work plan identifying key areas for cooperative work
- To analyze environmental management practices related to aquaculture
- To share information through organizations such as APEC, UNFAO and SOTA

WORK PLAN

- **Science Based Management Frameworks**
- **Modeling and Monitoring**
- **Environmental Impact Assessment**
- **Integrated Coastal Zone Management**
- **Management of Exotic Species and Escapes**
- **Stakeholder Consultation**
- **Workshop**

Personal Exchange

- **Paula Moreno – Chile**

- 01/06/05- 30/11/05

- **Allison Webb – Canada**

- 15/07/05- 15/01/06

- **Joseph Crocker
- Canada**

- 15/10/05- 15/04/06



RESULTS

- **Science Based Management Frameworks**
 - Improvements to Canadian and Chilean management frameworks (sulfide monitoring, certification programs)
 - Proposal for APEC to develop a regional Strategy Sustainable Aquaculture
- **Modelling and Monitoring**
 - Modelling Workshop (August 2005)
 - Workshop (March 2006)
 - Review of RAMA Certification project in Chile
 - Review of Decision Support System in Canada
 - DEPOMOD Workshop- St. Andrews, Canada (July 2005)

RESULTS

- **Environmental Impact Assessment**
 - Technical guide for sulphide measurements, monitoring and evaluation
 - Revision of environmental Impact Statements and reviews in Canada and Chile for finfish and shellfish aquaculture
- **Integrated Coastal Zone Management**
 - Participation in work related to Integrated Coastal Zone Management in Chile and Canada and review of existing projects

RESULTS

- **Management of Exotic Species and Escapes**
 - Involvement in the Cooperation Agreement Chile-UICN for addressing exotic species in aquaculture
 - Involvement in Regulatory modification concerning imports of exotic species to Chile
 - Involvement in the exotic species importation request process in Chile
 - Review of the APEC Management Framework for Introduced Marine Pests, co-developed by Chile and Australia

RESULTS

- **Stakeholder Consultation**
 - Participation in the National Habitat Management Working Group on Aquaculture in Canada
 - Attendance to meetings with farmers associations in both countries; this also included NGOs
 - Meetings with fisheries and aquaculture authorities
- **Workshop**
- **Others**
 - Travel to mussel and salmon facilities in Chile
 - Travel to Atlantic Canada to participate in National conference for aquaculture and DFO National Habitat Management Working Group for Aquaculture

Conclusions

- Canada has been recognized as a world leader in environmental effects management and research. A similar approach has been recognized in Chile however requires better communication
- The environmental management of aquaculture in Chile is recognized as effective to achieve sustainable aquaculture production
- Further opportunities exist for bilateral collaboration in the areas of environmental effects research, in APEC and UN initiatives at which Canada and Chile have been involved.

Next steps

- Extension of the collaborative agreement
- Co-development of the APEC Strategy for Sustainable Aquaculture
- Development of mechanisms for mutual recognition of environmental regulations
- Undertake cooperative research
- Development of a bilateral / open network on Sustainable Aquaculture Management
- Explore other areas of cooperation, such as Marine Protected Areas and recreational fisheries management

Gracias



alexbrown@vtr.net