

INTERNATIONAL AQUACULTURE WORKSHOP

Environmental and Social Responsibility for Sustainable Aquaculture

Sponsored by Canada – Chile Collaborative Agreement on Environmental
Management of Aquaculture

Santo Tomas University
Buena Vecindad # 91, Puerto Montt, Chile
March 20-21, 2006

Objectives

- To better understand future trends and upcoming issues from an industry, non-governmental organization, academic and government perspective.
- To improve environmental management of the sector to ensure market viability and competitiveness, public confidence, and environmental sustainability.
- To share best practices and experiences related to environmental management of the aquaculture sector.
- To discuss opportunities for future collaboration.

Monday March 20, 2006

09:00-09:05 Welcome

Mr. Lautaro Contreras

Director Santo Tomas University, Puerto Montt.

09:05-09:20 Overview on environmental sustainability in Aquaculture

Dr. Wendy Watson-Wright

Assistant Deputy Minister-Science, Fisheries and Oceans Canada.

Mr. Ricardo Norambuena

Head of Aquaculture Division, Undersecretariat for Fisheries, Chile.



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Session I. Environmental Monitoring of Aquaculture

Chair: Dr. Alex Brown, Aquaculture Specialist, Chile.

- 09:20-09:50 *Environmental Monitoring of Marine Aquaculture in Canada*
Dr. Toby Balch
Nova Scotia Provincial Government, Canada.
- 09:50-10:20 *Environmental Monitoring and Aquaculture: concepts, comments and challenges*
Dr. Leonardo Guzmán
Director Aquaculture Division IFOP, Chile.
- 10:20-10:35 Discussion and questions
- 10:35-10:50 Coffee Break

Session II. Sedimentation Modeling of Aquaculture

Chair: Dr. Al Castledine, Provincial Gov. of British Columbia, Canada.

- 10:50-11:20 *Modeling the environmental effects of marine aquaculture operations*
Dr. Jon Chamberlain
Department of Fisheries and Oceans, Science Branch, Canada.
- 11:20-11:50 *The Environmental Capacity as Management Tool for Aquaculture Activity* **Dr. Marco Salamanca**
University of Concepción, Chile.
- 11:50-12:20 *Sedimentation Model of Organic Waste From Cage Fish Farms*
Dr. Martin Hevia
Fundación Chile
- 12:20-12:50 *Aquaculture and Coastal Zone Management: GIS & Modeling*
Dr. Jon Grant,
Dalhousie University, Canada.
- 12:50-13:10 Discussion and questions
- 13:10-14:30 Lunch



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Session III. State of Research for aquaculture regulation - Industry and research institutions
Chair: Dr. Robin Anderson, Department of Fisheries and Oceans, Canada

14:30-15:00 *Assessing Cumulative (Far-field) Effects of Aquaculture on Coastal Ecosystems*
Dr. Barry Hargrave

Department of Fisheries and Oceans, Science Branch, Canada.

15:00-15:30 *Sustainable aquaculture: Monitoring of water quality in Norway combining the documentation relevant for EUs Water Directive on pollution and fish welfare control.*

Dr. Bjørn Olav Rosseland

Norwegian University of Life Sciences, UMB.

15:30-16:00 *Voluntary Initiatives in the Salmon Industry in Chile: Role and Prospects*

Mr. Adolfo Alvial

Technological Institute of Salmon (INTESAL), Chile.

16:00-16:30 Coffee Break

16:30-17:00 Discussion and questions

17:00-17:30 **Final remarks**

Dr. Wendy Watson-Wright

Assistant Deputy Minister-Science, Fisheries and Oceans Canada.

Mr. Ricardo Norambuena

Head of Aquaculture Division, Undersecretariat for Fisheries, Chile.



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Tuesday March 21, 2006

Session IV. Policies, Experiences and Challenges

Chair: Mr. Ricardo Norambuena, Undersecretariat for Fisheries, Chile.

- 09:00-09:05 Welcome
Mr. Aníbal Vial
Director Santo Tomas University, Chile.
- 09:05-09:20 *Canada-Chile Collaborative Agreement on Environmental Effects Management of Aquaculture*
Dr. Alex Brown
Aquaculture Specialist, Chile.
- 09:20-09:40 *The Aquaculture in Chile: Interests, concerns and challenges*
Mr. Carlos Hernandez
Undersecretary for Fisheries, Chile.
- 09:40-10:00 *Fisheries and Oceans Canada (DFO): Science and Sustainable Aquaculture*
Dr. Wendy Watson-Wright
Assistant Deputy Minister-Science, Fisheries and Oceans Canada.
- 10:00-10:20 *Relevant Aspects of Aquaculture in Peru*
Mr. David Lemor
Minister of Production, Peru.
- 10:20-10:40 *Aquaculture Development in Indonesia*
Mr. Ketut Sugama
Ministry of Marine Affairs and Fisheries, Republic of Indonesia.



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10:40-10:50 *Internationalization of Aquaculture Education*

Mr. Odd-Ivar Lekang

University of Life Sciences, UMB, Norway.

10:50-11:00 MoU Ceremony UST (Chile) – UMB (Norway)

11:00-11:20 Coffee Break

Session V. Public and Private Responsibilities for the Aquaculture Management

Chair: Dr. Jon Chamberlain, Department of Fisheries and Oceans Canada.

11:40-12:00 *Chilean Scallops Cultures Took The First Steps Toward Social Responsibility Business*

Mrs. Ivonne Etchepare

General Manager Oysters and Scallops Growers Association, Chile.

12:00-12:20 *The Education as the Basis of Salmon Farming Development in Chile*

Mr. Rodrigo Infante

General Manager SalmonChile

12:20-12:40 *Corporate Social Responsibility in the Aquaculture Industry: Summing up the Theory*

Mr. Ricardo Bosshard

PriceWaterHouse Coopers, Chile.

12:40-13:10 Discussion and questions

13:10-14:30 Lunch

Session V Cont. Public and Private Responsibilities for the Aquaculture Management

Chair: Mr. Ricardo Norambuena, Undersecretariat for Fisheries, Chile.

14:30-14:50 *Integrated Oceans Management for Sustainable Aquaculture*

Ms. Carol Ann Rose

Department of Fisheries and Oceans Canada.

14:50-15:10 *Environmental Regulations in Chile*

Ms. Jessica Fuentes,

Head Legal Division, Undersecretariat for Fisheries, Chile.



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- 15:10-15:30 *Dialoguing Towards a Sustainable Salmon Farming Industry*
Ms. Katherine Bostick
Aquaculture Program Officer, World Wildlife Fund.
- 15:30-15:50 Coffee Break
- 15:50-16:10 *Environmental and Social Responsibility for Sustainable Aquaculture: the British Columbia Experience*
Dr. Al Castledine
Province of British Columbia, Canada.
- 16:10-16:30 *Indicators for Sustainable Aquaculture: Toward a Common Framework*
Dr. Raul O’Ryan
University of Chile.
- 16:30-16:50 *Aquaculture and Sustainable Development*
Mr. Francisco Pereira
FAO Regional Fisheries Officer
- 16:50-17:10 Discussion and questions
- 17:10-17:30 Final remarks and conclusion
Dr. Wendy Watson-Wright
Assistant Deputy Minister-Science, Fisheries and Oceans Canada.
- Mr. Ricardo Norambuena**
Head of Aquaculture Division, Undersecretariat for Fisheries, Chile.



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