

Update on salmon farming in Chile

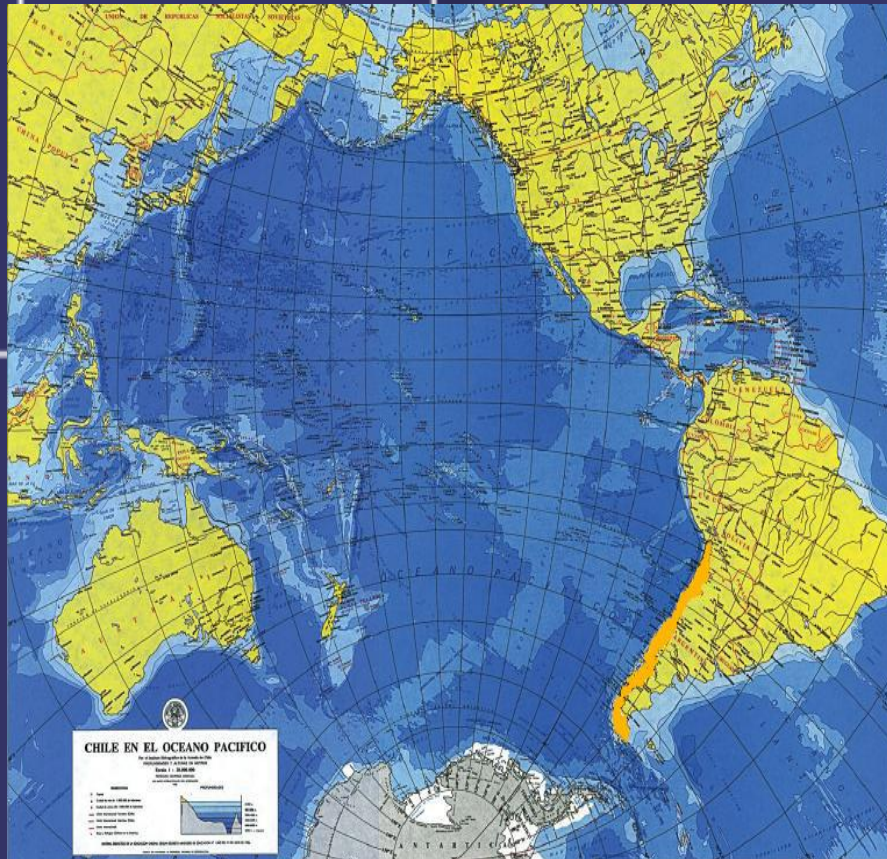
Mr. Jorge Chocair
Vice Minister of Fisheries



Norway, 20 th august, 2009



Chile: fisheries and aquaculture country



- Population: 16.3 million people
- Coastline: 4,300 Km².
- Language: Spanish
- Annual Economic growth: 6.3% (*)
- Balance of trade: US\$ 10,179.5 millions
- Foreign Direct Investment:
US\$15,407.3 (millions) (2007).

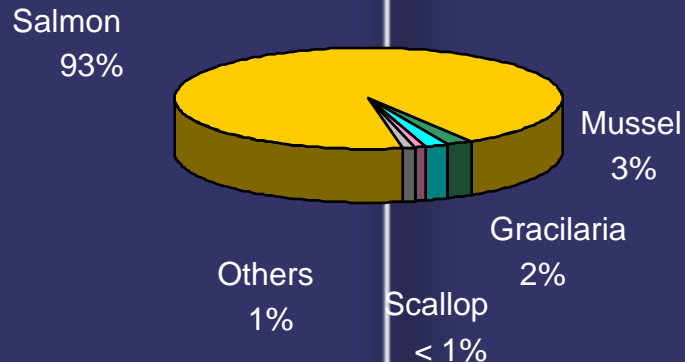
(*) Preliminary

Sources: Ministry of Finance, Central Bank, IMF, INE



Chilean aquaculture

% exported value



- ✓ Aquaculture Concessions : 3 thousand
- ✓ Species in commercial farming: 18
- ✓ Harvest : 900 thousand tons
- ✓ Exports : 580 thousand tons
- ✓ Revenue: US\$ 2,693 millions
- ✓ Main target markets: Japan, the United States, China, and Spain.

Source: Undersecretariat for Fisheries-2008



Salmon Farming in Chile 2008



- ✓ Aquaculture Concessions : 1 thousand
- ✓ Species in commercial farming (Atlantic salmon, rainbow trout, pacific salmon, king salmon): 4
- ✓ Harvest : 650 thousand tons (Atlantic Salmon is 58%).
- ✓ Exports : 530 thousand tons
- ✓ Revenue: US\$ 2,500 millions
- ✓ Salmonids are mainly exported to Japan, the USA, and Europe.

Source: Undersecretariat for Fisheries- 2008

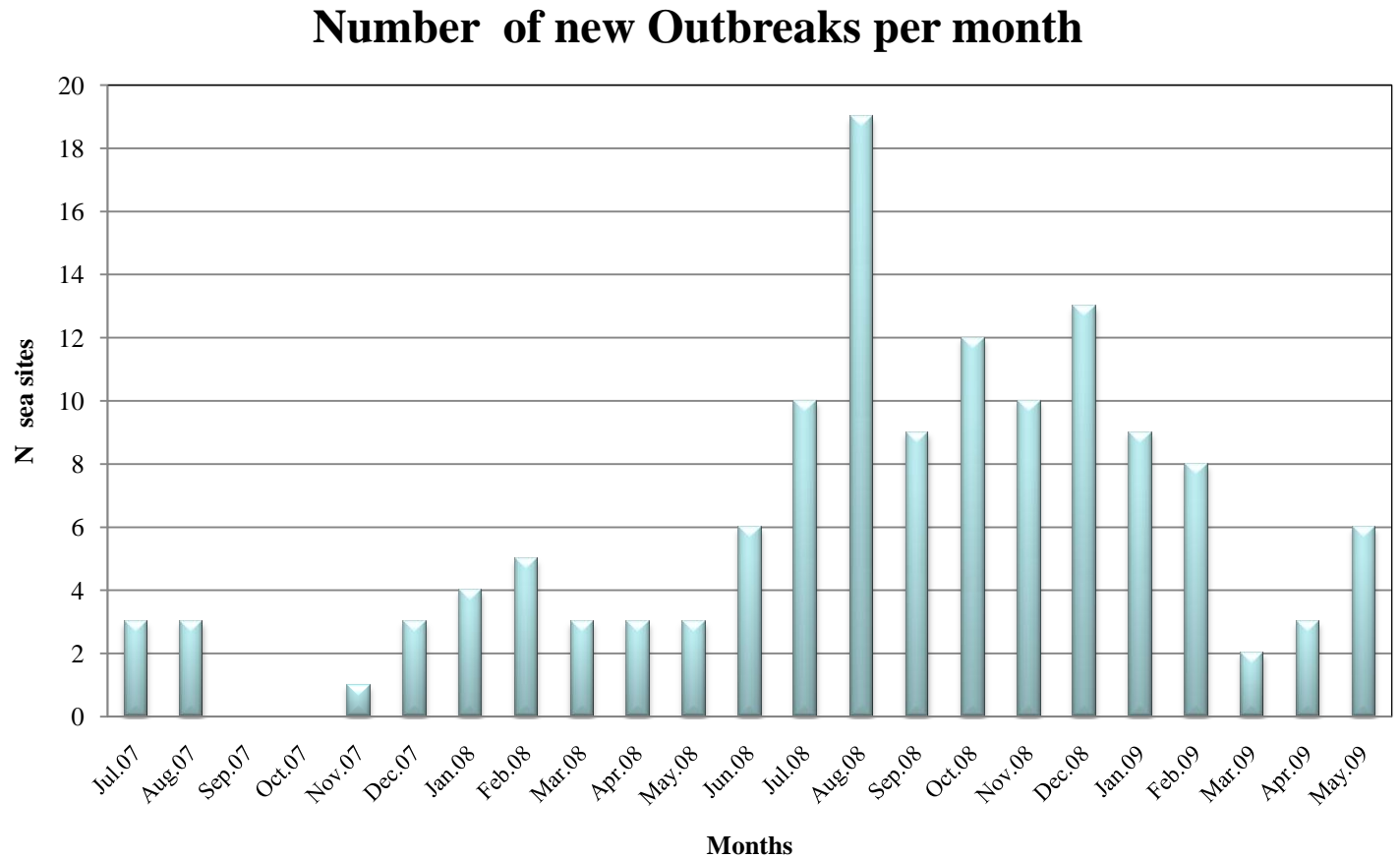


Impacts of ISA in Chile

- Reduction of the number of fish farms in operation.
- Reduction of harving. The effects will be observed from 2009 on.
- Social impacts of closing facilities and processing plants.



New Outbreaks per month

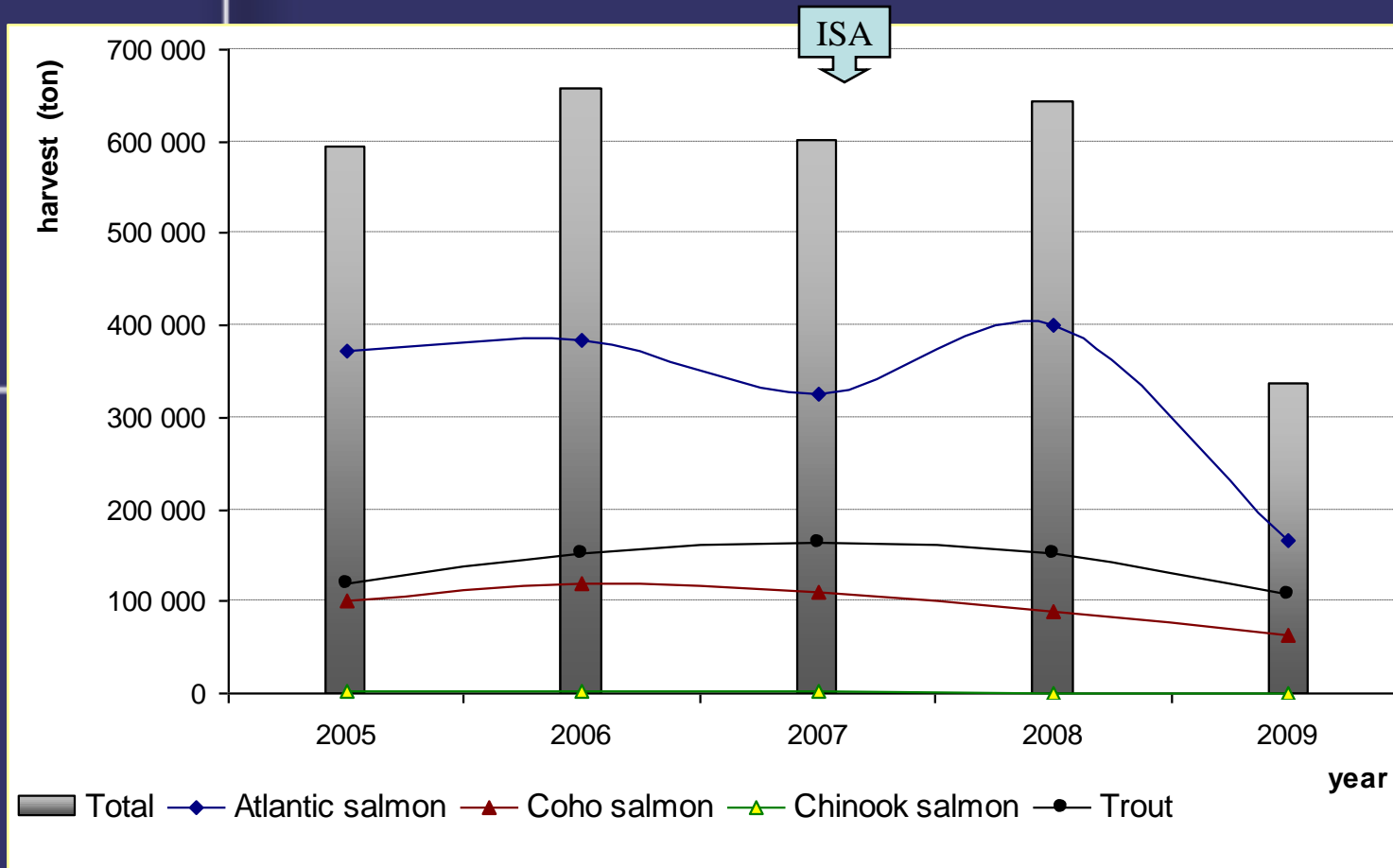


Source: National Fisheries Service



Impacts of ISA in Chile

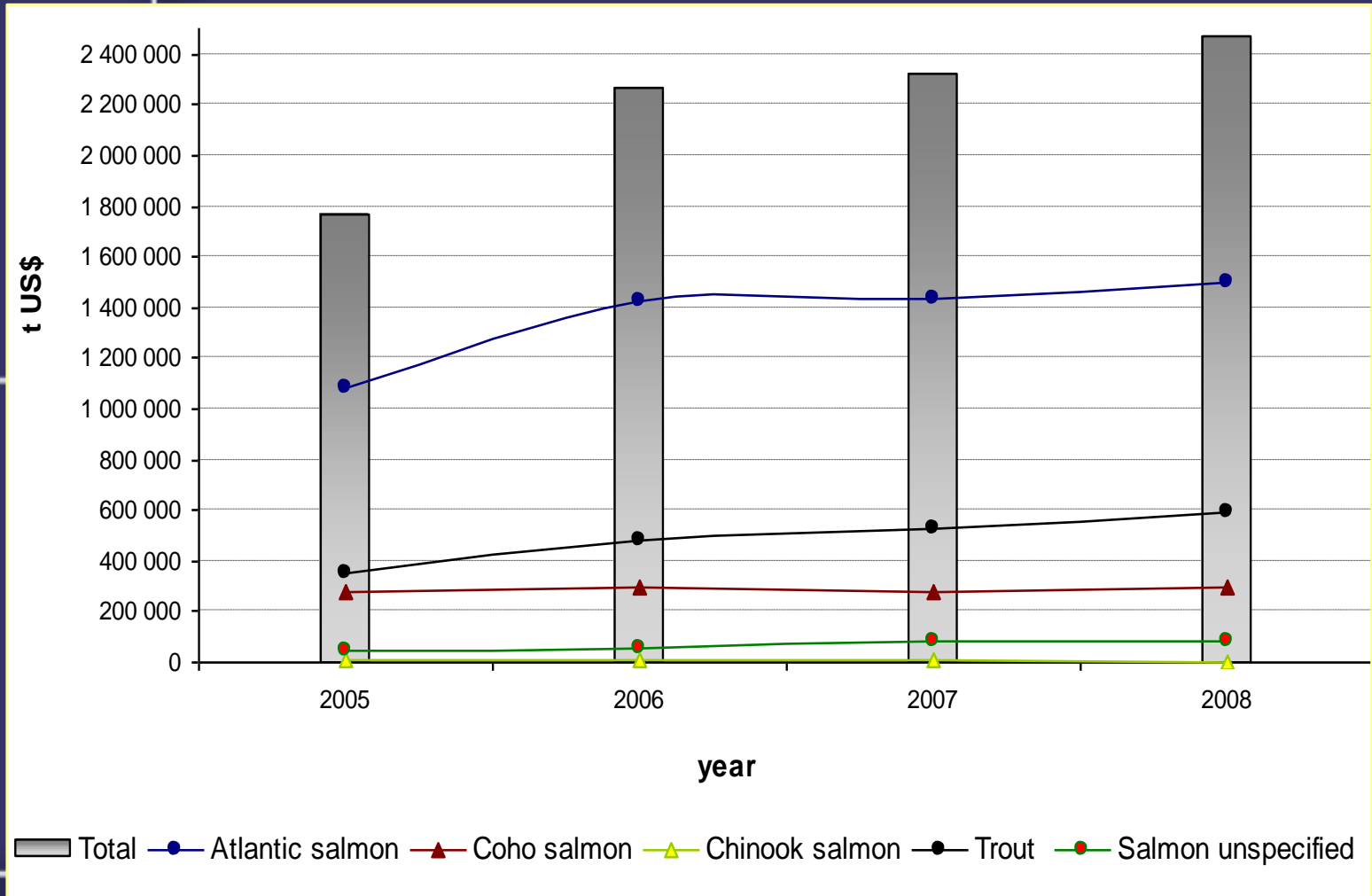
Biomass harvested annually.



NOTE: 2009 shows 6 months: January - May

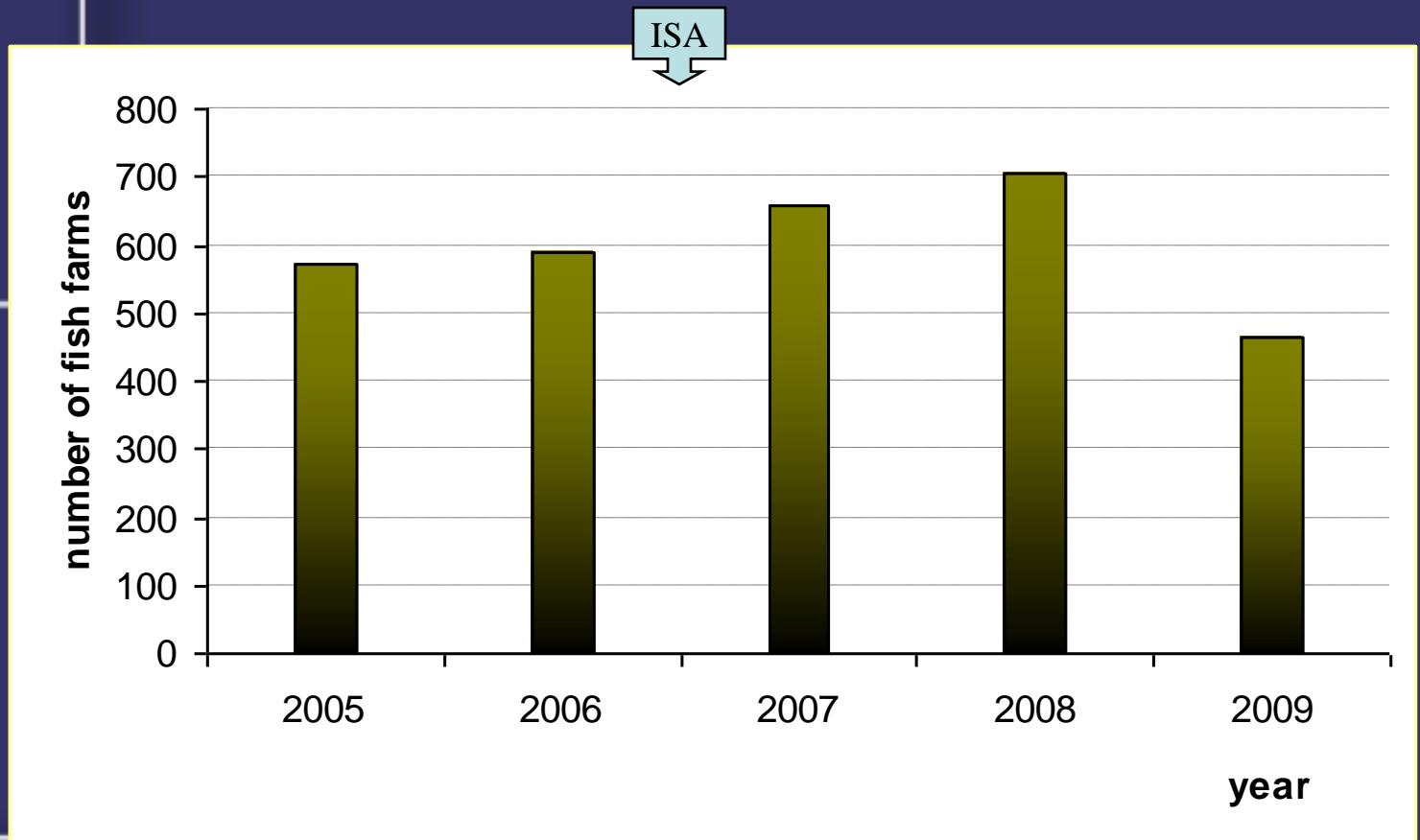


Exports (thousands US\$) of salmon by species.



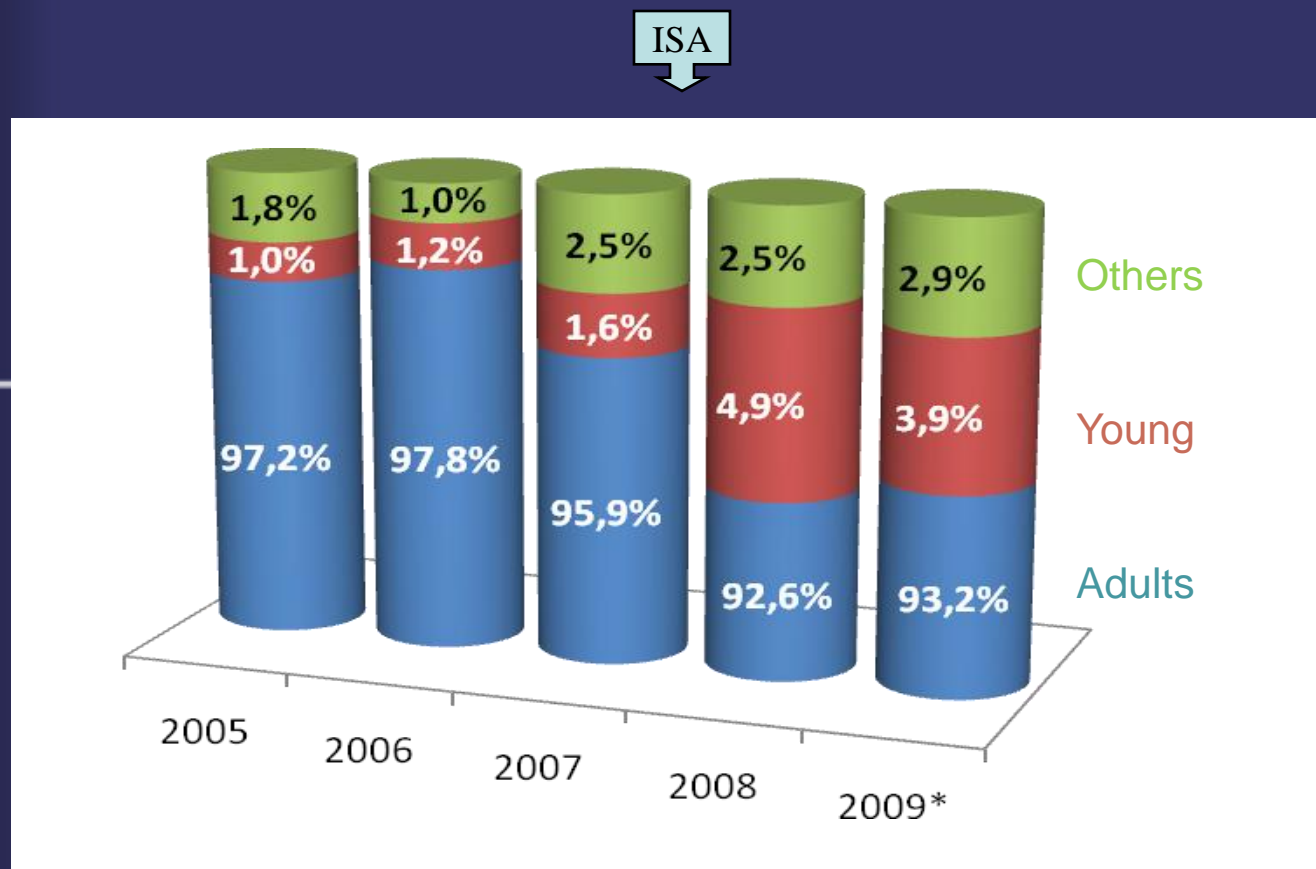
Impacts of ISA in Chile

Total number of centers with operation by year in marine and estuarine areas.



Impacts of ISA in Chile

Evolution of the Harvesting Structure



Main Activities 2008-2009

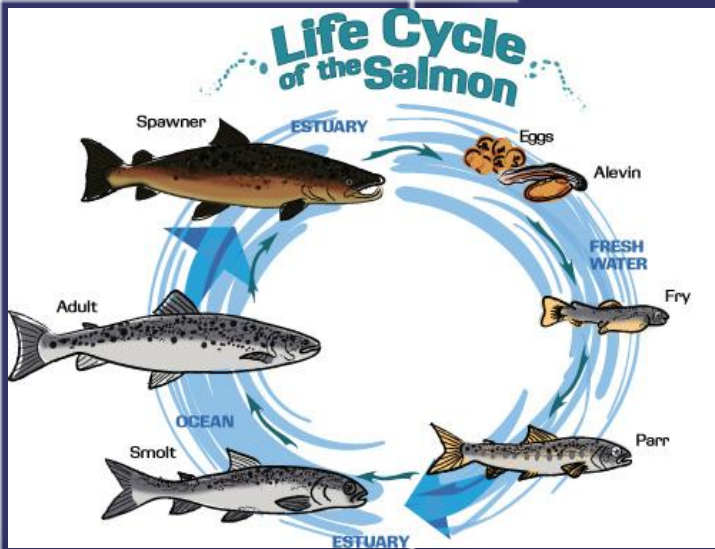
- Establishment of an advisory group (called “The salmon working table”) in April 2008.
- Improvement of information and control systems
- Strengthening of the regulatory regime
- Development of relevant research
- Institutional aspects
- Financial Support to the Industry
- Legal modifications



Main Activities 2008-2009

Strengthening of the Regulatory Regime

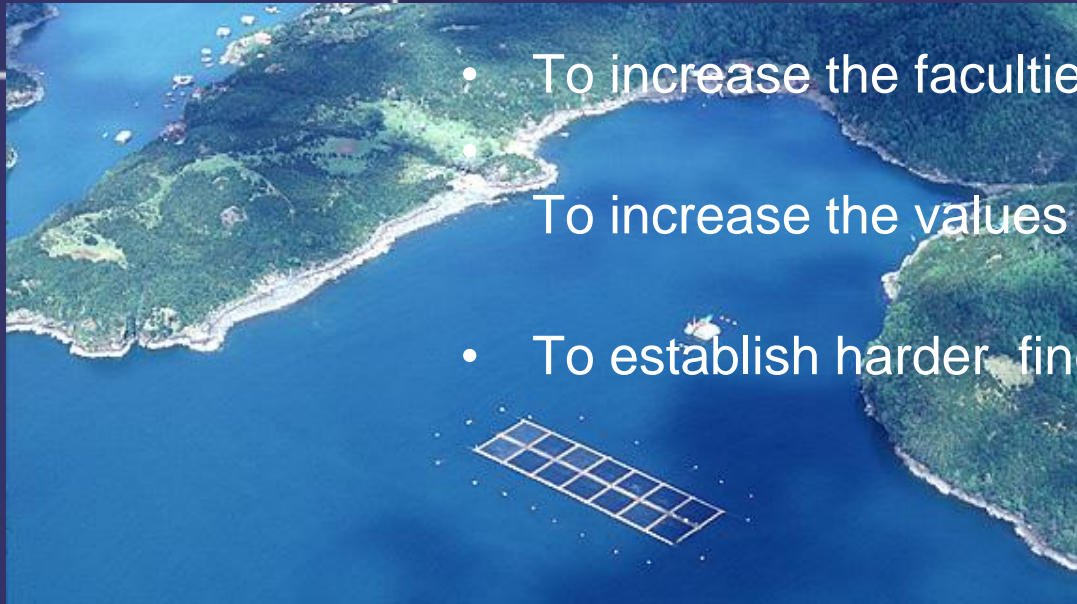
- Amendments to the Sanitary regulation for aquaculture.
- Amendments to the environmental regulation for aquaculture.
- Definition of new indicators for environmental impacts.
- Additional health requirements for import of salmon eggs and Changing Regulation of Imports.
- New measures for a more rational management of antibiotics.



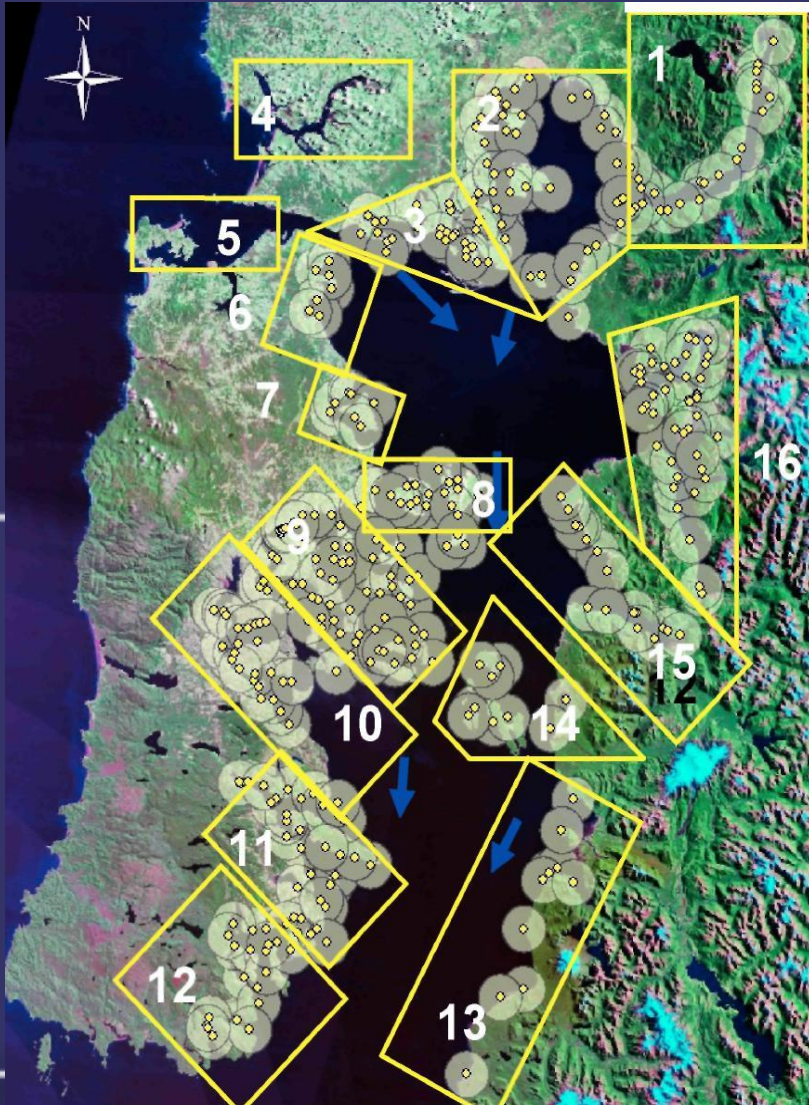
Amendments to the General Law on Fisheries and Aquaculture.

Main Objectives:

- To modify the supply and operation model of fish farms, in order to achieve an improvement of environmental and sanitary conditions.
- To increase the faculties of the SERNAPESCA
- To increase the values of the licencing for fish farming.
- To establish harder fines for major violations



Aquaculture Bay Management Areas



- Zoning based on oceanographic data.
- It does include sanitary risks analysis for farming sites.
- Marine geography, ocean currents, tides, farming sites presence.



Main Challenges and Concerns

- To improve aquaculture production practices.
- To increase research on prophylaxis and vaccines.
- To design aquaculture bay management system based on science.
- To create a data analysis system of early detection of diseases (sanitary indicators).
- **To improve data analysis in aquaculture and traceability system.**



Thanks

