



CASE STUDY OF IMPACT
October 2018



Boosting aquaculture industry in Chile



The SIMA Austral¹ project seeks to transform the Chilean aquaculture sector through the implementation of an integrated environmental and sanitary management system, based on an ecosystemic approach.

The challenge

A disease outbreak in 2008 led to the total collapse of the Chilean salmon farming industry. As a result, 20,000 people lost their jobs and some \$2 billion in export sales were lost. The measures put in place to try to prevent a similar disease outbreak in the future were extremely labour intensive and significantly increased the costs of the industry and led to a loss of competitiveness.

The response

A collaborative project between CSIRO, SERNAPESCA², the Chilean government fisheries agency, the Under-secretariat of Fisheries, the Chilean Fisheries Research Institute, and the Salmon Technology Institute was funded by the Chilean Ministry of Economy. The main focus is to assist the transformation and recovery of the aquaculture sector through the implementation of a new ecosystem-based sanitary and environmental management system.

The CSIRO-led and science-based management system is a leap forward from qualitative systems that are no longer sufficient for state-of-the-art industry decision making.

The impact

The SIMA Austral project delivers a comprehensive, interoperable information system and modelling platform that provides the Chilean Aquaculture industry, government agencies and other stakeholders with access to improved environmental intelligence allowing them to make better strategic and operational decisions.

The platform is scalable from farm to regional levels and can be used in operational contexts, as well as in scenarios for planning, and in forecasting of environmental conditions or disease spread.

The experience gained in Chile will enable the CSIRO to more quickly build similar models for Australian salmon farms and other Latin American countries. CSIRO has already been awarded a \$3 million project to build a water quality model for Storm Bay (Tasmania) and a proposal to build a connectivity model for the same region is currently being considered.

Helping the Chilean aquaculture rebound from poor environmental status and a \$2 billion economic loss.

¹ SIMA Austral is the Sistema Integrado de Manejo de la Acuicultura Austral. In English, this translates to integrated system for aquaculture management.

² SERNAPESCA is the Servicio Nacional de Pesca y Acuicultura. In English, this translates to National Fisheries and Aquaculture Service.

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