

# Causes of performance differences between scallop culture in Peru and Chile: a bio-economical modelling approach

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Peru and Chile cultivate the same scallop species (*Argopecten purpuratus*). While the Peruvian scallop farming on the seafloor has proliferated greatly over the past decade, the scallop cultivation in hanging cultures in Chile has greatly decreased during the same period. We attempt to understand these changes in production by intertwining different research disciplines: biology, economy, modelling. We plan to assemble data on growth and mortality rates, harvest size and season, cultivation costs and scallop market prices at both places, in order to feed this data into a bio-economic model for both sites (e.g. Taylor *et al.*, 2006; Molina *et al.*, 2012). Using this model, we expect to estimate and compare profitability and rentability of the different modes of aquaculture in both countries. We expect to find differences in environmental as well as economic conditions between both places, with faster scallop growth to market size and lower production costs in Peru.

## References

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