

## SUMMARY

# Resource Constraints in the Development of the Australian Southern Bluefin Tuna Industry

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Demand for tuna has been increasing due to a global sushi boom, changes in diet patterns toward health consciousness in Western countries and the economic development of emerging countries such as China. This trend is an opportunity for the Australian southern bluefin tuna (SBT) farming industry. However, the industry faces serious SBT resource constraints, and the catch quota on juvenile tuna for fattening is strictly limited by the Conservation Committee of Southern Bluefin Tuna (CCSBT).

Solutions might include an acceleration of SBT resource recovery, and an expansion of the future production capacity for fattening farming. This paper aims to answer this question concerning the resource recovery strategy by applying a surplus production model that represents the reproductive relations of marine resources, and by projecting the future resource trends based on the estimated range of the carrying capacity and the intrinsic growth rate of SBT resources.

It was found that resource recovery is unlikely to take place even if the current quota, historically the most strict, is maintained, especially in the cases of relatively large carrying capacities and low intrinsic growth rates. This finding was supported by alternative simulations that assumed further strict catch quotas. Therefore, it is urgent that the industry promotes the development or licensing of full-cycle farming technology that does not depend on wild resources.