



ALLIANCE™

[.https://www.globalseafood.org](https://www.globalseafood.org)**Responsible  
Seafood**  
ADVOCATEHealth &  
Welfare

# Nestlé backs integrated multi-trophic aquaculture projects to promote sustainable food production and ocean health

30 June 2025

By Responsible Seafood Advocate

## Nestlé explores integrated multi-trophic aquaculture through global projects to boost sustainability, ocean health and food production

Nestlé, the world's largest food and beverage company, is expanding its research into alternative food production methods with a focus on the ocean. In collaboration with partners in New Zealand and the United Kingdom, the company's Institute of Agricultural Sciences is studying whether integrated multi-trophic aquaculture systems – where seaweed and shellfish are grown together – can deliver environmental benefits at scale. The work is part of a broader effort to explore more sustainable approaches across the global food supply chain.

“This collaborative research will provide new, science-based insights on the contribution that integrated multi-trophic aquaculture can make towards sustainable food production while optimizing marine



Nestlé will explore integrated multi-trophic aquaculture through global projects to boost sustainability, ocean health and food production.

ecosystem restoration and carbon sequestration,” said Jeroen Dijkman, Head of the Nestlé Institute of Agricultural Sciences.

Integrated multi-trophic aquaculture involves farming multiple species from different trophic levels together. In this system, waste from one species becomes a resource for another, helping to maintain water quality while supporting biodiversity and providing more stable incomes for farmers.

## Study: Farming shrimp with oysters and seaweed cuts nitrogen output



A new study finds pairing shrimp with oysters and seaweed reduces nitrogen levels, making shrimp farming more responsible and profitable.



**Global Seafood Alliance**

In New Zealand, Nestlé has partnered with the Cawthron Institute, the country's largest independent science organization, to study the interactions between seaweed and shellfish species. Drawing on the institute's expertise in marine science and aquaculture, along with support from local PhD research, the initiative aims to identify the most effective combinations of species and ocean conditions to enhance both productivity and environmental outcomes.

At the same time, Nestlé is supporting research at an offshore aquaculture farm in the United Kingdom, in collaboration with the start-up Algapelago. Located off the north coast of Devon, the site cultivates seaweed and mussels together under real-world marine conditions. Scientists are using advanced monitoring technologies and field data collection to assess biodiversity, water quality, environmental conditions and overall productivity. The project, conducted in partnership with the University of Portsmouth, also draws on the knowledge of local marine scientists and contributions from PhD researchers.

As part of its broader efforts to support more sustainable food systems, Nestlé signed a research agreement in 2023 with the Pontificia Universidad Católica de Chile (UC Chile). The collaboration focuses on exploring the potential of marine plants and other alternative vegetable protein sources in Latin America, with an emphasis on identifying sustainable ingredients that could contribute to future food solutions.

### Author

---



**RESPONSIBLE SEAFOOD ADVOCATE**

[editor@globalseafood.org](mailto:editor@globalseafood.org) (<mailto:editor@globalseafood.org>)

Copyright © 2025 Global Seafood Alliance

All rights reserved.