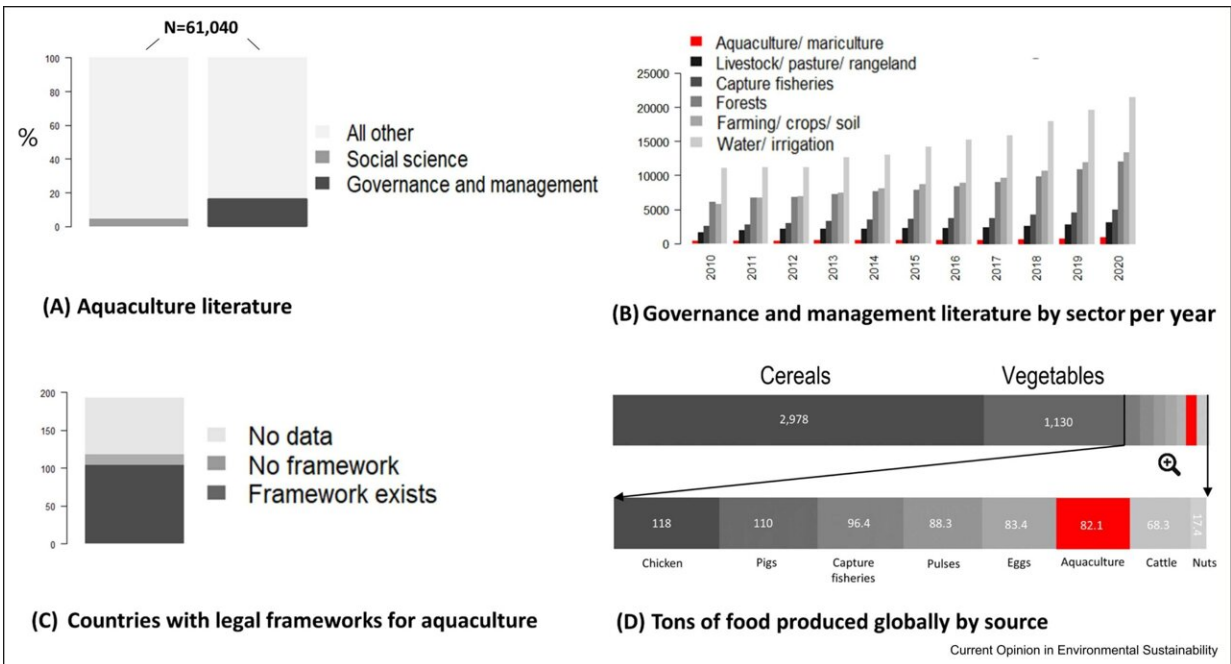


# Aquaculture needs more effective governance to be sustainable

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Lack of knowledge on aquaculture governance despite importance. (a) The percentage of literature classified as social science among reviewed aquaculture literature (left). The percentage of literature search results retrieved when searching for ‘governance OR management’ among all aquaculture literature (right). Data from the Scopus database (July 1, 2021). (b) The amount of governance literature in related food and environment sectors from the Scopus peer-reviewed literature database over time. Aquaculture has by far the least. Search strings in Appendix 1. (c) The number of countries with self-reported legal frameworks for aquaculture, taken from the 2021 report [11] on the compliance with the Code of Conduct for Responsible Fisheries [12] Article 9. (d) Tons (millions) of food produced in 2019 (live weight), subdivided by major

protein sources (bottom). Credit: *Current Opinion in Environmental Sustainability* (2023). DOI: 10.1016/j.cosust.2023.101379

The aquaculture sector needs more effective governance to be sustainable, according to new research co-authored by an expert at the University of Stirling.

Aquaculture provides about the same amount of food worldwide as wild caught fisheries or the egg sector, yet many important questions remain unanswered about the sector's environmental and [social impacts](#).

In a new study, an international consortium of aquaculture experts suggests five areas that can guide research agendas and policy making.

Professor Dave Little of the Institute of Aquaculture, who was a co-author of the research, said, "Good governance is critically important for ensuring that aquaculture does not cause more harm than benefits. However, current knowledge and practices related to aquaculture governance currently lack a set of unifying topics and [sustainability](#) goals.

"This is in part due to aquaculture's rapid expansion and intensification over the last two decades, in part outpacing the ability of research and policy to catch up. As state ministries worldwide now begin to think more concretely about governance issues in the sector, the five priority areas suggest in this recent research are essential for guiding unified economic, policy and environmental planning.

"Concerted [governance](#) efforts can help move the sector beyond fragmented technical questions associated with intensification and expansion, social and environmental impacts, and toward system-based

approaches that address interconnected sustainability issues."

The study reviews the most recent literature and synthesizes expert advice to suggest five priority areas for research and policymaking: setting sustainability transformation goals; cross-sectoral linkages; land–water–sea connectivity; knowledge and innovation; and value chains.

The five areas highlight the need to balance social, economic and environmental outcomes, and how [aquaculture](#) is connected with other important food and [economic sectors](#), suggesting the need for joint decision-making in the ministries, agencies and institutions responsible for agenda setting and resource allocation.

The research titled [Aquaculture governance: five engagement arenas for sustainability transformation](#) was published in the journal *Current Opinion in Environmental Sustainability*.

**More information:** Stefan Partelow et al, Aquaculture governance: five engagement arenas for sustainability transformation, *Current Opinion in Environmental Sustainability* (2023). [DOI: 10.1016/j.cosust.2023.101379](#)

Provided by University of Stirling

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