22-27 September 2021 Shanghai, China

São Paulo State University, Aquaculture Center São Paulo, SP, Brazil

Aquaculture Sustainability Indicators and the Sustainable

Development Goals of UN 2030 Agenda

FABRIS, Mayara* & MORAES-VALENTI, Patricia

INTRODUCTION & OBJECTIVES

Aquaculture can be a major contributor to achieving the proposals outlined in the 2030 agenda. However, aquaculture production processes must become more sustainable.

METHODOLOGY

16677642

Quantitative indicators were selected from peerreviewed literature that reflect the sustainability of production systems within the three dimensions defined in the 2030 agenda of environmental, social and

Advances toward sustainable systems can be assessed using sustainability indicators (SI). Therefore, this research carried out an analysis of the association between the main SI used in aquaculture and the 17 sustainable development goals (SDGs).

economic sustainability. Governance was also considered as a fourth dimension. The SDGs were distributed in these four dimensions according to their relevance. Then, the SI obtained from the literature were linked to each of the SDGs.

DISCUSSION & RESULTS

Which sustainability aspects shoul be covered by the indicators?



Economic sustainability indicators show the efficiency in using financial resources, the economic feasibility, the capacity to absorb negative externality



M

costs, the capacity for resilience, and the capacity to generate capital for reinvestment.¹

Environmental sustainability indicators were defined to reflect the use of natural resources, the efficiency in using resources, the release of pollutants and unused byproducts, and the risk of damaging genetic diversity and biodiversity.¹

Social

Governance sustainability indicators in aquaculture cross the other dimensions, being important for the engagement of stakeholders and the application of efficient public policies.

Environmental

Social sustainability indicators should reflect the capacity to generate benefits to local communities, including jobs and food security, equitable income distribution, equality of opportunities and inclusion of vulnerable populations.¹

Governance



¹ Valenti, W. C., et al. "Indicators of sustainability to assess aquaculture systems." **Ecological indicators 88 (2018): 402-413.**

AHH







Preliminary findings suggest that indicators are able to assess the evolution of aquaculture as a driver of

sustainable development for various targets across all SDGs. The next step will be to relate each indicator to

the respective SDG, according to legal criteria, in accordance with the principles of international law. Thus,

indicators and SDGs can be integrated in more easily public policies.

*This study is part of the first author's Master Thesis.

ACKNOWLEDGMENTS





This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 818173. This report reflects only the authors' view and that the Commission is not responsible for any use that may be made of the information it contains.



