Collegio futuro

## Topic II - Class 2023/24

# Towards a sustainable aquaculture

Over the past half-century, aquaculture production has grown rapidly in many parts of the world. Aquaculture is the fastest-growing food-production technology, now globally accounting for more fish biomass than capture fisheries if non-edible amounts are included. Most of this development has occurred during the last 50 years, and thus sustainability, particularly environmental sustainability, has evolved into a growing concern. Attention has been increasingly devoted to the enhancement of awareness for environmental issues and the corresponding implementation of practices designed to reduce the environmental impact of aquaculture. Nowadays, whether aquaculture production should be managed in an environmentally responsible and sustainable fashion is no longer a question.

In the scope of this topic, the course participants will take a closer look at aquaculture current challenges, with a specific focus on ecological, environmental and economic impact. The policy brief should provide a concept to increase the sustainability of aquaculture activities, identifying issues that could be addressed by eco-certification criteria, supporting thereby continuous improvement of industry best practices. Furthermore, the concept could incorporate criteria related to the far-field effects of aquaculture, recognizing and accounting for the impact of local conditions on farming.

Impulse lectures

Prof. Dr. Jacopo Bacenetti, Sustainable development and management of agroecosystems, University of Milan
Prof. Dr. Luigi Orsi, Sustainable development, University of Milan
Prof. Dr. Marco Parolini, Ecology/Ecotoxicology, University of Milan

External partner & guest speaker:
Dr. Federico Håland Gaeta, NIVA (The Norwegian Institute for Water Research)