

Project title: The impact of new technologies on fisheries management

Duration: January 2018 – December 2024

Client: The Research Council of Norway

Project leader: Linda Nøstbakken

### **Project description**

The advance of new technologies, the rapid expansion of big data, and the deep digitalization of society that allows consumers to trace products to their origin, or firms to live stream their trawl hauls online, opens hitherto unknown - and unassessed - potential for more effective resource control and increased value creation. In particular, there has been a surge in new technologies increasing the effectiveness of the enforcement activities, such as satellite monitoring of vessels and electronic logbooks. Compared to traditional fisheries enforcement, this allows for control of all operations of every vessel at all times, which significantly boosts enforcement efforts. At the same time, such approaches may also raise serious concerns about privacy and data protection that may easily undermine compliance unless they are accompanied by conscious efforts to maintain maximum transparency. This implies that the management system carefully has to take into account the repercussions of monitoring and compliance, both in the short- and long-term, which will be at the heart of the proposed research.

We also analyze how new technologies may enhance the value created from the oceans, for example by allowing for finer selectivity or increased seafood traceability and how management may contribute to harnessing the full potential of the oceans. Because the impact of new technologies on compliance is difficult to study, we approach it from different angles. FishTech uses empirical, experimental, and theoretical economics as well as biological modelling and qualitative approaches from social science to understand what determines compliance behavior and generate the knowledge that informs management how to strengthen compliance behavior. FishTech brings together the Norwegian social and economic marine research centers of Bergen, Oslo, and Tromsø to join forces and further strengthen Norway's world leading position in fisheries science.