

Destructive fishing: An expert-driven definition and exploration of this quasi-concept





Figure 1: The article on destructive fishing is among the top 5% of research outputs scored by Altmetric

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Integration of SDGs in

- □ Research

SDG focus

- ⊠ Goal 14 Life below water

What did we do?

Numerous policy and international frameworks consider that "destructive fishing" hampers efforts to reach sustainability goals but do not usefully define "destructive fishing" meaning it cannot meaningfully be measured. This project proposed the following definition developed through expert consultation: "Destructive fishing is any fishing practice that causes irrecoverable habitat degradation, or which causes significant adverse environmental impacts, results in long-term declines in target or nontarget species beyond biologically safe limits and has negative livelihood impacts." It showed strong stakeholder support for a definition, consensus on many biological and ecological dimensions, and no clustering of respondents from different sectors. This provided a significant step toward defining sustainable fisheries goals and helping to interpret and implement global political commitments which utilize the term "destructive fishing." This will assist the Food and Agricultural Organization's Code of Conduct to meaningfully support member countries to prohibit destructive fishing practices accounting for environmental, social and economic aspects.

What were the benefits and outcomes?

- 1. Resulted in a proposed new holistic and meaningful definition of "destructive fishing" to address SDG 14.6 target.
- 2. Provided a potential baseline for the development of metrics to assess progress towards the goal of reducing and preventing destructive fishing
- 3. Demonstrated a consensus that (1) there is a hierarchy of "destructiveness" in gears and practices (Chuenpagdee et al., 2003) and (2) inherently destructive practices can include "legitimate" gears and or practices.

What barriers or challenges did you encounter in embedding this aspect of the SDGs into your work and how did you overcome them?

- 1. Getting consensus from a diverse body of stakeholders on destructive fishing (academics, NGOs, indigenous and local knowledge holders on fisheries and commercial fisheries) on a global scale was the most challenging component of the study. To overcome them and reduce the impact of psychological biases such as dominance effect and ego effect, we used the expert-based Delphi technique.
- 2. Conducting research during the Covid-19 pandemic posed its own challenges. We were unable to host in person workshops. This was overcome to some extent by holding online

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workshops and several online discussions amongst the research team to co-ordinate the global study.

3. This was a collaborative project with some of the largest conservation organisations in the world working on destructive fishing. Supervising the team for three years as a senior author on the paper and balancing viewpoints on SDGs required diplomacy, empathy and compromise on several occasions. I am grateful to my line manager and the head of the department for their unconditional support during challenging times and allowing me to balance the additional workload that this entailed over the last three years.

What are your conclusions and recommendations for others?

The SDGs are an aspirational vision that all member states have committed themselves to. Building bridges between academia and diverse stakeholder groups is imperative to achieving any of the SDGs. In this regard, Brunel University London's senior management team has shown considerable leadership in creating an environment conducive to building such partnerships. We hope other institutions follow such practices. The case study of creating a policy relevant definition of destructive fishing at a global level might help subsequent generations meet their food security needs as 22% of global meat production is extracted from the oceans.

Web link to further information: The Society for Conservation Biology (wiley.com)