The human population and its demand for food and nutrition is growing. At the same time, climate change is challenging the ability of food systems to meet these rising demands. Feeding and nourishing a growing human population will therefore require advances across all food production sectors. In this web application, we illustrate the opportunities for reforms in marine fisheries and expansion of sustainable marine aquaculture (hereafter referred to as mariculture) to reduce the negative impacts of climate change and jointly contribute to the growing demand for nutritious food. Note: inland capture fisheries and land-based aquaculture are excluded from this analysis.

We pair projected marine seafood production outcomes ([Free et al., 2020](https://doi.org/10.1371/journal.pone.0224347); Free et al., *in review*) with projected human population growth and food and nutrition demands to explore (1) the nutrient requirements of changing human populations; (2) the impact of climate change and management, technology, and policy reforms on the supply of food and nutrition from marine fisheries and mariculture; and (3) the extent to which reforms in marine fisheries and mariculture can contribute to changing nutrition requirements.

The web application is organized into the following three sections: