

Framing Ambitions



*Blue foods include aquatic animals, plants, and algae cultivated or captured in freshwater and marine environments.

Blue foods* are extremely diverse and contribute to nutrition, economies, livelihoods, and cultures all over the world. [New research](#) shows how blue foods can help achieve four broad policy objectives, and which of those objectives may be most relevant to national food systems currently. In addition to providing a guiding framework for understanding the policy relevance of blue foods in different nations, the paper's [interactive tool](#) allows public- and private-sector decision-makers to explore and assess which blue food policies are likely to be most relevant to their contexts and geographies.



Policy Objectives

1. Harness the potential of blue food consumption to reduce nutrient deficiencies.

Blue foods are diverse and rich in many essential nutrients. Over 2,500 species or species groups are caught or cultivated for food. Where accessible and consumed in adequate quantities, these blue foods can play a vital role in reducing deficiencies in vitamin B12 and omega-3 fatty acids which play an important role in fetal and child development, and also for elders, pregnant women, and women of childbearing age.

2. Leverage blue foods to reduce non-communicable diseases related to red meat over-consumption.

If blue foods replace the consumption of less healthy red and processed meats they can help reduce the incidence of non-communicable diseases, such as heart disease and certain cancers. As blue foods are already part of the local food culture in many high meat-consuming countries, they are a promising step away from red meat over-consumption.

3. Reduce the environmental footprints of food production and consumption through low-impact blue foods.

Many blue foods can provide nutrients with a relatively low environmental footprint. Farmed bivalves like oysters and mussels not only produce low levels of emissions – they also require limited freshwater and land while providing 76 times more vitamin B-12 and five times more iron than chicken. Small pelagic fish also result in low average emissions, with generally negligible nitrogen and phosphorus emissions, and freshwater and land inputs. Investing in these options can therefore increase the supply of high-value nutrients without contributing to climate change. There is also potential to improve performance of blue food production. For capture fisheries, fossil-free energy and a shift to low-impact gear can cut emissions. In aquaculture, reducing feed usage and switching to deforestation-free inputs can reduce emissions by half.

4. Safeguard just blue food economies, livelihoods and cultures.

Blue foods are a cornerstone of many nations' cultures, diets, economies and livelihoods. They are among the most traded commodities providing significant export revenue for many nations, and livelihoods for 800 million people. Multiple environmental stressors, and climate change, in particular, threaten these contributions. These

threats may compound existing challenges and exacerbate inequities, making it essential to anticipate where climate hazards will be most severe. One way to ensure a wider variety of responses to such shocks is to allow food systems to include diverse small-scale fisheries and aquaculture actors who can help build national food system resilience to climate and other environmental change through a diverse set of species and production systems.



Framing Policy Ambitions

The relevance of these four broad policy ambitions will differ across geographies. In many countries, multiple policy objectives are relevant, creating opportunities for synergies. However, potential trade-offs need to be carefully considered before pursuing these objectives.

1. Identify relevant policy objectives.

To get started on blue food ambitions, explore the maps below and our related [interactive tool](#). Adjusting cut-off values for conditions that make a policy objective relevant in a country – such as disability-adjusted life years (DALYs) – can change the relevance of each objective. Users of the tool can therefore explore changes in the cut-off values for the calculations to inform more targeted opportunities for action.

2. Leverage diversity for multiple benefits.

A holistic approach to food systems transformation can ensure blue foods are built into diverse strategies, such as those aiming to improve nutrition, reduce greenhouse gas emissions, increase sustainability, create livelihoods and improve equity across terrestrial and aquatic food systems. For instance, in 103 countries, blue foods play an important role for nutrition, livelihoods, or revenue, and many of these countries also exhibit omega-3 deficiencies. In these settings, win-win policies would reduce malnutrition through climate adaptations that ensure access to low-impact blue

foods. They would also secure quality jobs and remove barriers to wealth-generating benefits.

3. Navigate food system trade-offs.

The complex nature of food systems means that actions that improve performance along some dimensions may trade off performance on others. For example, the commodification of certain blue food species offers economies of scale and potential for export revenues but may compromise local domestic nutrition and squeeze out small-scale actors. To minimize such trade-offs, policies could be introduced that retain select blue food volumes for domestic nutrition, enhance producer diversity – like financial relief for small businesses highly vulnerable to environmental and trade fluctuations, and improve access to production-related insurance.

4. Explore targeted policy recommendations.

Thoughtful investments and policies that foster a thriving, regenerative blue food sector can help achieve these four policy ambitions. The Blue Food Assessment [brief on transforming blue food systems](#) offers overarching recommendations for action, and [a series of Action Briefs](#) share specific findings and recommendations for various blue food actors throughout the sector.

Read the full Blue Food Assessment paper [here](#)

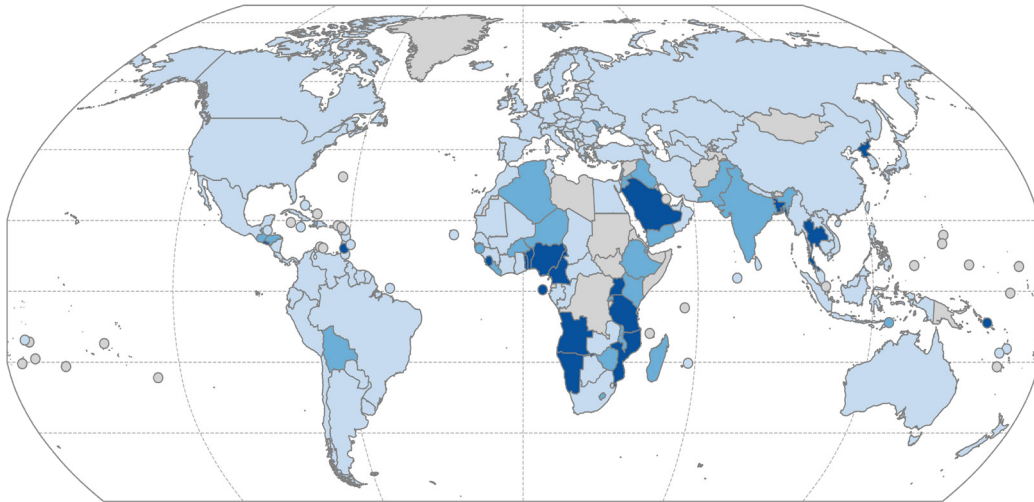
Examine locally relevant policy relevance using the [interactive tool](#)

The Blue Food Assessment brings together over 100 scientists from more than 25 institutions around the world. The Stockholm Resilience Centre at Stockholm University and Stanford University's Center for Ocean Solutions and Center on Food Security and the Environment are lead science partners and EAT is the lead impact partner.

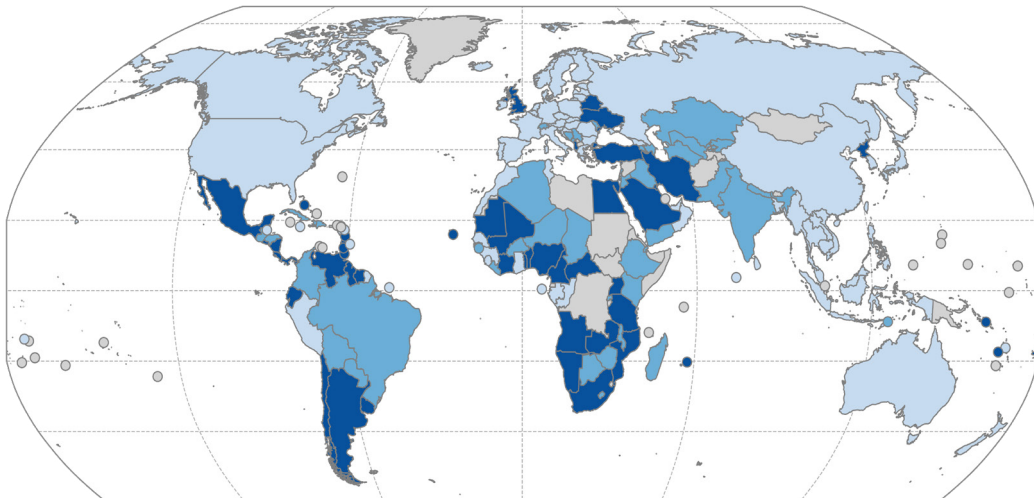
Additional recommendations for action can be found on the [Blue Food Assessment website](#)

Assess which objectives are most relevant to your geography

Reducing Deficiencies: B12

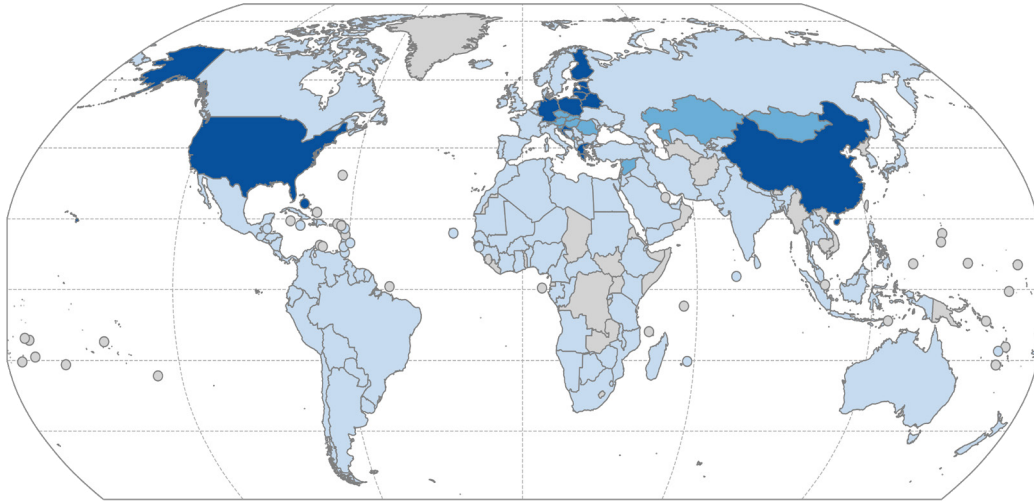


Reducing Deficiencies: omega-3

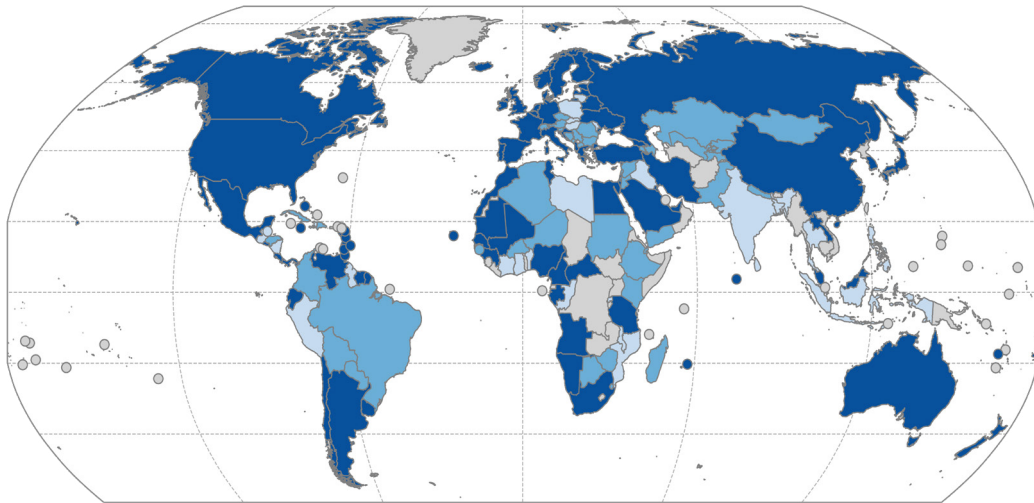


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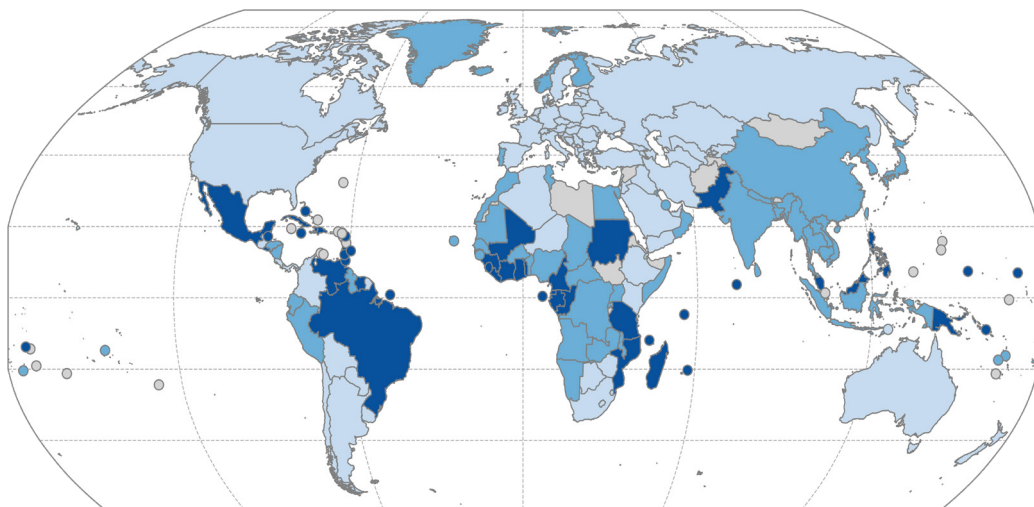
Reducing cardiovascular disease



Reducing environmental footprints



Safeguarding food system contributions



○ missing data ○ less relevant ● relevant ● highly relevant