

# Brief for COP26



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

**Blue foods\* need to be centrally on the menu of climate action at COP26. They have enormous potential to contribute to achieving net zero, but their vital contributions to nutrition and livelihoods will need to be protected from climate change. Including blue foods into Nationally Determined Contributions and National Adaptation Plans, expanding access to finance for small-scale actors, and centering marginalized populations in climate policy can create opportunities to advance not only climate but also economic, nutrition, and social goals, helping decision-makers address multiple challenges at once.**



## Key Facts & Findings

### 1. Blue foods can play a key role in creating healthier, low-carbon, climate-resilient food systems.

More than 2,500 animal species of blue foods are caught and harvested. These diverse species are a rich source of sustainable and affordable nutrition, providing protein, essential micronutrients, and omega-3 fatty acids. Preserving and promoting the diversity of blue food systems – not only of species but also of production methods, actors, and markets – can enhance food system resilience and offers opportunities to explore synergies and navigate trade-offs in climate mitigation and adaptation.

### 2. Blue foods generally have a lower carbon footprint than terrestrial animal-sourced foods, and there are opportunities to further improve performance.

Blue foods comprise a diverse set of animals, plants, and algae that includes food with exceptionally low or negative greenhouse gas emissions, such as bivalves and seaweed. These food supplies can be increased to meet demand without increasing carbon emissions. Some blue food systems, such as fed aquaculture of species like carp, catfish, tilapia, and salmon, and wild-capture fisheries like

sardines and herring, are already highly efficient but can be further improved. The use of low-fuel gear, for example, can reduce greenhouse gas emissions in some fisheries by 61 percent, while reducing feed usage and switching to deforestation-free inputs can reduce emissions from aquaculture by half.

### 3. Climate change creates significant risks to the nutritional, economic, and cultural contributions of blue foods

Warming waters, ocean acidification, sea level rise, storms, and rainfall changes threaten the productivity, quality, and safety of blue foods, especially of wild-capture fisheries in the oceans and inland waters. Investments in adaptation and resilience are urgently needed to ensure sustained blue food contributions under climate change, particularly in Africa, South and Southeast Asia, and Small Island Developing States – benefitting not just these regions, but an interconnected world at large.

### 4. Small-scale actors produce most of the blue food destined for human consumption, often with lower emissions. Enhancing their resilience and environmental performance requires tailored consideration and support.

Over 50 million small-scale actors are active in the primary sector of blue food production alone, though they vary widely in their assets and capacities, degree of specialization, and the challenges they face. Explicitly including the range of small-scale actors in blue food climate policy is critical for meeting the sector's mitigation and adaptation potential.



## Recommendations for Action

All actors – governments, the private sector and civil society – have roles to play at multiple scales, ranging from local initiatives to international agreements. At COP26, decision-makers should consider the following actions to make blue foods a central component of climate action:

### 1. Make sustainable, nature-positive blue foods a key part of Nationally Determined Contributions.

Fostering a shift from high-impact animal-sourced foods toward blue foods and improving blue food practices can be important parts of climate solutions. Governments can work with fisheries and aquaculture managers to reduce the carbon emissions of current production systems – by promoting changes in feed composition and other technological innovations – and to incentivize shifts to low-carbon species. They can also work with actors along supply chains to reduce food loss and waste and create market infrastructure and consumer demand for nature-positive blue foods.

### 2. Include blue food ecosystems, infrastructure, workers, and assets in National Adaptation Plans, for example through investments in climate information services, wetland and mangrove restoration, and climate-smart agreements for transboundary resources. Governments should share best practices in their Adaptation Communications so they can be scaled up across relevant contexts. Actively including and empowering impacted populations – including women, Indigenous communities, and other marginalized groups – in adaptation plans presents an important opportunity to increase their effectiveness.

### 3. Mobilize climate mitigation and adaptation financing for blue foods, ensuring access for small-scale actors.

Significant investments in nature, infrastructure, technology, and governance are needed to fully enable the low-carbon potential of blue food systems

and enhance their resilience. Finance schemes – which could include existing and emerging tools like conservation financing, climate insurance, debt-for-nature swaps, and fiscal reforms – should be designed to ensure they reach the millions of small-scale blue food actors who are at the frontlines of a changing climate.

### 4. Work across agencies to maximize the potential of blue foods to reduce carbon emissions while supporting nutrition, livelihoods, and economies.

Actions in different parts of the food system – climate, fisheries and aquaculture, agriculture, public health, trade – often work towards different and sometimes conflicting aims. For example, aquaculture policy aimed at boosting low-carbon production could end up prioritizing low nutrient density species or squeeze out poor farmers. Integrative structures that coordinate policy and investments across sectors can help ensure that meeting climate goals also contributes to meeting economic, nutrition, and social goals.

Multiple events at COP26 will highlight the importance of blue foods, including:

- **Achieving Healthy Diets from Sustainable Blue Food Systems in Small Island Developing States - Nov 2**, 17:00-18:00 GMT, WHO Health Pavilion
- **Towards a Shared Blue Prosperity under Changing Climate - Nov 6**, 13:15-14:30 GMT, Forth Room
- **Resilient Asian Mega Deltas - Nov 8**, 6:30-7:30 GMT, Virtual
- **Climate Action for Shared Prosperity through Aquatic Food Systems: Eyes on SIDS and Beyond - Nov 9**, 14:45-15:45 GMT, SIWI Water Pavilion
- **Ocean Action = Climate Action - Nov 11**, 16:45-18:00 GMT, Multimedia Studio 1

A full list of events and registration details can be found at <https://bluefood.earth/events/cop26/>

The Blue Food Assessment is an international initiative led by the Stockholm Resilience Centre at Stockholm University, the Center for Ocean Solutions and the Center on Food Security and the Environment at Stanford University and EAT.