Blue Food Assessment

The Report of the Blue Food Assessment

Brief for Retail and Food Service

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

Blue foods* offer a myriad of opportunities for retail and food service companies to respond to consumer interest in healthier foods produced with strong environmental and social commitments. These companies can develop and promote diverse blue food products, support equitable livelihoods for millions and help create food environments that enable healthy and sustainable choices.

Key Facts & Findings

1. **Blue foods generally have a lower environmental footprint than many land-based animal-sourced foods, and there are enormous opportunities to improve performance.**
Fed aquaculture of commonly farmed species – carp, trout, salmon, catfish, tilapia – has environmental footprints on par with chicken, the most efficient land-based source of animal protein. Producers can reduce their environmental footprints by improving practices. Reducing the use of feed and switching to deforestation-free inputs, for instance, can reduce aquaculture CO2 emissions by half. As there are large differences between systems, shifting to lower-impact species can also create big gains. Unfed aquaculture – of bivalves and seaweed – produces negligible emissions and can even improve water quality. The CO2 emissions associated with catching herring are one-fourth those of catching flounder.

2. **Most blue foods are dense in protein and other essential nutrients,**
including Vitamin A, Vitamin B-12, calcium, iodine, iron, zinc, and omega-3 fatty acids. Many have higher concentrations of these nutrients than chicken, beef or pork. Blue foods can therefore play a vital role in ensuring that people get the nutrients they need and reducing the incidence of diet-related diseases. Not all blue foods are the same, however: Small pelagic fish, for example, have about eight times more iron, five times more omega-3 fatty acids and four times more Vitamin B-12 than tilapia. Selling the right fish, therefore, makes a big difference. Blue foods also complement and enhance the uptake of nutrients from plants, making well-balanced meals particularly nutritious.

3. **Small independent actors are the engine of blue food systems but are often neglected by policymakers and markets.**
Small-scale production accounts for about 90% of jobs in fisheries and two-thirds of all blue foods consumed, contributing to local economies and local health. Small-scale actors vary widely in their assets and capacities, degree of specialization and the challenges they face.

4. **Like other sectors, the blue food sector is beset by inequities.**
Blue food value chains employ roughly equal numbers of men and women, but influence, voice and access to benefits are often highly unequal. Some fisheries use forced labor. Policymakers and industry often undermine or overlook the practices, knowledge and rights of Indigenous Peoples and traditional small-scale fishers.

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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. The retail and food service industries might consider the following actions to realize the potential of blue foods:

1. **Adopt an ambitious vision of social and environmental responsibility.**
   Blue foods offer enormous potential to meet consumer and citizen demand for food products that improve health and advance both environmental and social sustainability. Commitments to environmental sustainability can drive progress by both demanding best practices in production and shifting consumption to lower-impact species. Commitments to social sustainability should embrace human rights and support the diverse small-scale producers that are the heart of the system.

2. **Embrace the diversity of blue foods.**
   Sourcing a diversity of blue foods offers better nutrition for customers, supports small-scale actors and improves the resilience of food systems. Companies can offer a wide array of blue foods with different nutrient profiles, sourced from diverse producers.

3. **Create food environments that encourage consumers to make more nutritious and sustainable choices.**
   Engaging consumers at the point of sale offers a unique opportunity to expand their awareness of blue food options and opportunities for healthier and more sustainable choices. Certification standards provide visibility and assurance of sustainability in supply chains. Companies can offer species that have a lower environmental impact and higher nutrient richness, such as mussels and herring, and source from producers that use lower-impact gear and production systems. Stores and restaurants can also nudge consumers toward better choices by featuring better options on their shelves or menus, adding nutrition and sustainability labeling and deciding not to sell the most harmful products.

4. **Develop new products.**
   Many diets do not include the healthiest and most sustainable blue foods. Innovations in processing and preparation to help make these options more attractive and convenient can increase their consumption. In some places, reviving lost local traditions can reintroduce healthy foods with strong cultural significance.

5. **Increase sourcing from small-scale producers.**
   In sourcing from small-scale fisheries and aquaculture actors, food service and retail actors have an opportunity to align sourcing with consumer interests in equitable, sustainable and storied products. Retailers can source from small boats that fish in local waters and let their customers know that they do. They can work with, or help develop, groups that bring together individual fishers and fish farmers in cooperatives. To empower diverse suppliers to meet market demand for sustainable and nutritious blue foods, they can use sourcing policies and procurement specifications to support the development of necessary skills, knowledge, rights and resources.

6. **Work with partners to help shift the sector and the policies that govern it.**
   Working with civil society, government and value chain partners, retail and food service companies can demonstrate leadership by sharing data with governments and civil society to facilitate transparency and better management; adopting more rigorous standards for measuring progress, such as true cost accounting; and participating in public-private partnerships such as school food programs to increase access to affordable nutrition.

The Blue Food Assessment brings together over 100 scientists from more than 25 institutions around the world. The Stockholm Resilience Centre 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.