



### Product Description

Farmed Shellfish includes food products composed primarily of crustaceans and mollusks produced by aquaculture. Product types include shrimp, prawns, lobster, crab, mussels, oysters, clams, abalone, scallops, and cockles.

### Mission

The mission of The Sustainability Consortium (TSC) is to improve the sustainability of products when they are made, purchased, and used, with a focus on manufacturers and the retail buyers who decide what products to carry in stores. The information in this document is drawn from our detailed research on known and potential social and environmental impacts across product life cycles. TSC acknowledges that other issues exist, but we have included here those that are most relevant to the decision making of retail buying teams and manufacturers. The topics are listed alphabetically for ease of reading; the order does not represent prioritization or other criteria.

### Sustainability Insights



#### Managing the Supply Chain

##### Biodiversity

Potential biodiversity impacts occur throughout the aquaculture process. Aquaculture operations should use certifications and place new farms in appropriate locations, with a focus on native species. Shellfish may escape from aquaculture operations, disrupting local shellfish fisheries through mating and spreading of diseases, and the process of catching young shellfish to start a farm can disturb the sea floor and lead to overfishing. Clearing land for aquaculture farms can also cause deforestation and impact local people.

##### Climate and Energy

Aquaculture operations should use certifications and integrated management to reduce greenhouse gases released from ponds, electricity, and fuel that can pollute the air and water. Distributors should implement programs, practices, and technologies to reduce fuel impacts and optimize the transportation routes used to distribute their products.

##### Pollution

Chemicals and antibiotics used on shellfish farms can have negative effects on the local environment, animals, and plants and can lead to increased antibiotic resistance and poor health in workers. Aquaculture operations can avoid or limit the use of antibiotics to prevent disease and implement practices to manage water quality.

##### Supply Chain Transparency

Addressing many of the environmental and social challenges within an agriculture supply chain requires cooperation among companies at different stages of the supply chain. Manufacturers should determine the locations of aquaculture operations that produce their supply and engage in initiatives that improve transparency, communication, and data sharing. Suppliers can work together to address common issues,

such as energy use, water availability and quality, chemical use, worker health and safety, and labor rights.

### **Water**

Aquaculture operations for farmed shellfish can use a significant amount of water and contribute to freshwater depletion, which is especially problematic in water-stressed regions. Aquaculture operators should implement best practices to optimize, measure, and track the efficiency of freshwater use, and preserve water quality by monitoring the water effluent discharged from their facilities.



## **Use of Resources**

### **Packaging**

Packaging design should be optimized to ensure that packaging performs its essential functions of containment and protection while minimizing use of materials, energy resources, and environmental impacts across the life cycle of the packaged product. Under-packaging and over-packaging can both lead to increased impacts. These impacts may be mitigated by using more energy-efficient manufacturing, creating packaging materials from renewable resources, designing packaging to be recyclable, and encouraging consumer recycling.



## **Workers and Communities**

### **Community Rights**

Aquaculture operations may cause conflicts with other users over access to land, water, and fishing grounds. Suppliers should consult with communities about their operations and avoid restricting community access to fishing grounds.

### **Forced or Child Labor**

In some areas, there is a risk of forced or child labor, characterized by actions such as trafficking, withholding wages or documents, and restricting workers to the work site. Manufacturers should determine if and where forced or child labor occurs, and work with supply chain partners and experts to address these issues, to ensure all workers have fair working conditions.

### **Workers**

Aquaculture workers, especially women and migrants, may face unfair pay, discrimination, and limited freedoms. Workers may also be exposed to harmful chemicals or other hazards. Aquaculture operators should implement programs that protect labor rights and ensure the health and safety of their workers.