#### Nichirei Fresh

# **Conserving Biodiversity on the Yellow Sea Coast** through a Clam Fishery Improvement Project

Social Issue Sustainability of Ecosystem of Tidal Flats That Nurture Asari (Japanese Carpet Shell Clams)

Approximately 60% of Japan's supply of asari is imported from China,<sup>1</sup> and the natural bounty of the Yellow Sea coast, a major production area for these clams, supports Japanese cuisine. However, the tidal flats have been disappearing because of factors including coastal land reclamation due to rapid urban development, while overfishing has also become a problem. These problems have led to concerns about a decrease in clam stocks and the impact on the natural environment in which the clams are produced. Consequently, it became necessary to take action to preserve the richly productive wetlands of the Yalu Estuary.

#### Initiatives to Resolve the Issue

### Asari Fishery Improvement Project for Sustainable Production and Supply

#### Environmental and Biodiversity Study in Yalu Estuary Region

Nichirei Fresh Inc. began handling asari from China in 2006 as a premium ingredient. The environment of the Yalu Estuary, where these clams are produced, is changing day by day, so we have been studying issues such as the shrinkage of clam beaches caused by land reclamation for development and the impact of agrochemicals used in saltwater farming on the clams. In the Yellow Sea Ecoregion Support Project, carried out by the World Wide Fund for Nature (WWF) from 2007 to 2014, a study was conducted on the ecological connections among migratory birds, regional fishing and benthic organisms. Based on the results, the WWF submitted recommendations to the government of China on conservation of biodiversity and promotion of sustainable fisheries.

#### Launch of Fishery Improvement Project

In 2011, Nichirei Fresh and the WWF began exchanging information on asari in the Yalu Estuary, and in 2015 agreed on the idea of conserving the biodiversity of the Yellow Sea through promotion of sustainable production and consumption of marine products.

Nichirei Fresh explained to clam processing company Dandong Taihong Foodstuff Co., Ltd. the significance of the Marine Stewardship Council's (MSC) fishery certification,<sup>2</sup> which is given only to sustainable fisheries, even though such certification was not well-known in China at the time. Nichirei Fresh gained Dandong Taihong Foodstuff's understanding, and strongly committed to achieving the WWF's sustainable clam fishery. The two companies then launched an *asari* Fishery Improvement Project (FIP<sup>3</sup>) in the Yalu Estuary on the Yellow Sea coast in 2016.

The FIP is a project to make step-by-step improvements to the clam fishery, with the goal of meeting three principles that serve as the criteria of the MSC certification program: 1) Sustainable fish stocks, 2) Minimal environmental impact, and 3) Effective management. Based on the issues identified in the preliminary review, a survey revealed that the clam fishery could potentially have an impact on the ecosystem, and following discussion of a fishery management plan, improvements were made to the clam fishery, including promoting appropriate management over the medium to long term.

There were times at the start of the project when things did not go smoothly. However, numerous consultations were held among those concerned, and the project was carried out tenaciously.

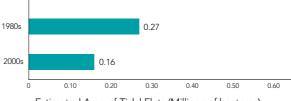


#### Acquisition of MSC Certification

As a result of the FIP, the clam fishery underwent MSC assessment in January 2020, and certification was acquired following completion of the assessment in September 2021. Certified clam fisheries are recognized as sustainable fisheries that consider the rich natural environment of the Yellow Sea coastal region.

The Yalu Estuary asari fishery is the first in China to obtain MSC certification. It was made possible by the FIP, a collaborative effort by everyone involved in the supply chain in China and Japan linking the process from the fishing grounds to processing and the commercial product.





Estimated Area of Tidal Flats (Millions of hectares)

Prepared by Nichirei Corporation based on Murray, et al. (2014), "Tracking the rapid loss of tidal wetlands in the Yellow Sea." Frontiers in Ecology and the Environ

#### Why Nichirei Fresh Group is Uniquely Capable

Human resources capable of building relationships of trust with partners in initiatives

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Know-how in handling marine products that have been certified for sustainability

### Success from Acquisition of MSC Certification through a FIP



Three Principles of the MSC **Fisheries Standard** 1) Sustainable fish stocks 2) Minimal environmental impact 3) Effective management

Highlight

#### Japan Sustainable Seafood Award

At the fourth Japan Sustainable Seafood Awards held in October 2022, this project, "Acquisition of MSC Fisheries Certification for Japanese Carpet Shell Clams through a Fishery Improvement Project on the Yellow Sea Coast in China," was honored as a Champion in the collaboration category. The award was shared by the four entities that collaborated in the project: Nichirei Fresh Inc., Dandong Taihong Foodstuff Co., Ltd., WWF China, and WWF Japan.



https://sustainableseafoodnow.com/2022/en/award/

1. As of 2019.

2. A certification program that recognizes properly managed sustainable fisheries that consider aquatic resources and the coastal environment. 3. This FIP ended in April 2019

- Achieving sustainable fisheries and fish stocks
- Protecting tidal flats that are highly significant for conserving biodiversity. Preserving a stopping point for migratory birds, particularly snipes and plovers

Social Value

Economic Value



Ability to link the food supply chain from production areas to customers

Met the conditions of these principles and acquired certification as an environmentally friendly, sustainable fishery

#### **Future Developments**

## Working toward Expansion of MSC-Certified Products Nichirei Fresh will continue to promote both conservation of biodiversity and sustainable production of marine products, and will work toward the expansion of MSC certification for asari products.

Stakeholders

Plan

Business

Sustainability & Human Resources