Food Distribution

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Aquaculture Intelli-Blog offers information and insights to help inform its readers about the distribution of seafood throughout the world.

The Nereid Project, by Dr. Kumar Arun, FAO Marine Biologist. 1 May 2065

Aquaculture began when early cultures realized that keeping fish alive could be as valuable as catching fish to eat. The practice rapidly grew when people learned how to control the reproduction of many fish species. By the 21st century, aquaculture provided over 40% of the fish eaten globally, causing some people to wonder if this might be an effective method of fighting hunger. The UN's Food and Agriculture Organization (FAO) held debates about the value of aquaculture versus the fragile marine ecosystem. Some marine biologists concluded that aquaculture's role in fighting world hunger probably would not be sustainable nor worth the potential environmental risk. Still, the public's demand for seafood kept increasing as nutritionists praised its benefits.



Private seafood companies leapt at opportunities to satisfy the demand for seafood, and some companies also decided to distribute some of their fish to help feed the hungry. One example is the Poseidon Corporation, a huge international seafood conglomerate. (Conglomerates are made up of many small companies. Poseidon's companies include seafood producers, grain producers, and ocean transport services.) The corporation developed the Nereid Project to respond to growing food-supply issues for the exploding populations of underdeveloped countries. Poseidon pledged 20% of the project's fish supply to be distributed to the hungry.

In Greek mythology the Nereids are sea nymphs controlled by the god Poseidon to help people in need. In 2065, Poseidon's Nereids are robotic aquapods - floating fisheries which produce millions of fish. Genetically-modified fish eggs, laced with nanoparticles of iron, grow into faster-maturing, higher-protein fish than ever before. The fish eat corn-supplemented food, so fewer small fish are needed as the main food source. Poseidon began growing its own corn in South America in the 2030's. Today, it is the largest grain producer in South America and has bought out many small farms and independent companies. Poseidon basically controls the grain technology and production in the South Atlantic coastal region.

Each of the 50 unmanned Nereid aquapods has an above-water "shell" that contains a GPS, a back-up generator, and the feeding device. The shell, which is powered by sea swell/solar energy, is the size of a large cruise ship. The fish live in an enormous netting cage in the water beneath the shell. Nanotech food and water treatments have solved disease and pollution issues that were major problems for earlier fisheries. The Nereids float in selected deep-water currents of the southern Atlantic out of the range of local fishermen or other commercial fisheries. Although the robotic Nereids are slow to move, they can submerge to avoid hurricane damage or cross under shipping lanes. Marine biologists monitor and control the Nereids from egg bank stations located on the coasts. So far the Nereids have suffered only minor damages from marine life or human interference.

Mature fish are released directly from the Nereids to Poseidon's processing ships which also use natural energy (wind, sea swell, and solar) with backup bio-diesel motors. These highly-automated ships require only a minimal crew to handle the harvesting, onboard processing, and delivery of the Nereid fish to the corporation's seafood distributors or to coastal markets. Escaped fish pose no threat to native fish populations since the GMO species are unable to reproduce in the wild.

Poseidon's innovative technology is largely responsible for its domination in the global seafood market. Although other seafood conglomerates have tried to develop their own Nereid-like aquapods, these other conglomerates have been unsuccessful in winning back their market share.

The Poseidon Corporation's records show that it has lived up to its pledge to help feed the hungry - its fish contributions account for almost half of the seafood distributed to impoverished countries along the Atlantic coastlines of Africa and South America. However, its rapid growth and success have led to public questioning. As a marine biologist, I'm very interested in aquaculture's role in easing world hunger, and I would like to hear the reactions of others who analyze the Nereid Project, including the Future Problem Solvers.