

# FISHING FOR NEW MARKETS

BY STEVE WERBLOW

## US Soybean Export Council builds aquaculture markets.

When most folks think of soy-based animal feed, chances are they imagine a chicken, pig, or cow eating it. But with their high protein levels, amino acid profile, and fish-friendly phospholipids, soy products like soybean meal and soy protein concentrate are also an outstanding feed ingredient for seafood.

As catches of wild fish plummet due to overfishing and billions of people seek more protein in their diet, consumption of seafood has doubled in the past 50 years. Aquaculture—fish farms—are a vital link in the world’s future protein supply.

**Go fish.** In recent years, the aquaculture industry has grown to account for half of the world’s seafood production volume—122.6 million metric tons (mmt) in 2020. Of that total, 87.5 mmt were aquatic animals, including a wide variety of fish and shrimp species. By the end of this

decade, that figure is expected to grow to 106 mmt.

That’s exactly the kind of opportunity marketers dream of hooking. And although soybean farmers can’t fish for customers in aquaculture, the industry has a checkoff-funded team of its own on the lookout for overseas opportunities: the U.S. Soybean Export Council (USSEC).

“Essentially, USSEC is the international marketing arm for U.S. Soy,” says Mary Peck, the council’s marketing communications manager. “We work to differentiate U.S. soy from other soy that’s grown in other parts of the world, to attain market access, and elevate a preference for U.S. soy.”

Global markets are increasingly important to American soybean growers, she notes.

“U.S. soy is the United States’ number-one commodity export, with 60% of the soy that is grown here being exported annually,” Peck says. “We have talented

folks all over the world working toward that end.”

USSEC has staff and contractors in more than 80 countries. Much of their aquaculture team is focused in Asia, where more than 90% of the world’s fish farming industry is concentrated.

Jessica Kaye Turner, a veterinarian and assistant managing director of Nam Sai Farms in Ban Sang, Thailand, explains why demand for fish like her company’s red and black tilapia is growing so rapidly in the region.

“Tilapia is quite cheap, but from our point of view, tilapia is considered to be a very good source of protein that low-income people can afford,” she says.

As a result, Nam Sai Farms’ sales of tiny fish fry—baby fish—to aquaculture producers throughout Asia, Africa, and Latin America are booming. So is their own production of fully grown fish for the Thai market.

Turner’s company includes fish



**Opposite.** Asian sea bass gobble soy-based feed in 88 Foods’ in-pond raceway. Company staff fillet sea bass. 88 Foods’ mill integrates U.S. soy into many of its pellet feeds. Warawut “Nam” Sophanowong, founder of 88 Foods Co., has collaborated with the U.S. Soybean Export Council for a decade. **Above.** It takes about 6 months to feed 88 Foods Company’s Asian sea bass to market weight, turning just 1.4 units of feed protein into a unit of fish protein.

at every stage of development. As with any carefully managed livestock, feed for fish is tailored specifically for each life stage. Nam Sai Farms draws on the strengths of fish meal—the traditional standard for the industry—soy, and is even experimenting with feeding soldier fly larvae.

**Challenges.** USSEC aquaculture experts Lukas Manomaitis and Chuchai Kanjanamayoon recommend soy where it fits best. Their approach is heavy on science and light on salesmanship.

“It’s really about technical servicing and showing them how to use technology better, and how to use soy—American soy in particular,” Manomaitis says. “We are neutral with an open bias.”

Soy has a great story to tell in the aquaculture market. Like fish meal, soy contains 65% pro-

tein, and its amino acid profile is a good fit for fish and crustacean needs. There’s also a stable supply, so feed mill operators don’t have to continually change their formulations, Manomaitis notes.

In addition, he says, U.S. soy has a strong sustainability message. Aquaculture producers appreciate that 98% of America’s soybean operations are highly efficient family farms. Many have adopted sustainable practices like reduced tillage, variable rate technology, and cover crops. That’s a competitive advantage.

Soy’s top disadvantage, Manomaitis laughs, is that it doesn’t smell fishy, which producers associate with top-quality feed.

USSEC has been a major supporter and promoter of the International Aqua Feed Formulation Database, a scientific, source-neutral ration-planning

resource. The council has also been helping top-level producers adopt Auburn University researcher Jesse Chapell’s In-Pond Raceway System (IPRS), which concentrates fish for grow-out in 2.2% of a pond, using the rest of the space to manage water quality. Think of it as a fish feedlot with a big biological filtration system.

In Thailand, Asian sea bass producer Warawut “Nam” Sophanowong of 88 Foods has been working with USSEC on developing soy-optimized feed in his feed mill and intensive production techniques. Sophanowong built Thailand’s first marine IPRS installation. He notes that his IPRS pond produces triple the yield compared to traditional ponds, and boosted his fish survival rate to a remarkable 99%.

Talk about diving right into the future of protein production. ❁



**Above.** Workers feed nursery fish at Nam Sai Farms. U.S. Soybean Export Council sees huge opportunities for American soy in the fast-growing aquaculture industry. Jessica Kaye Turner applies her veterinary training daily.