Chilean salmon farmers see brighter days ahead

Responsible Seafood Advocate logo
3 October 2016 Clare Leschin-Hoar

Disease and disaster had the industry on the ropes, but even critics admit it’s fighting back with stronger oversights. Are they enough?

A salmon farm in southern Chile. Chile’s farmed salmon industry has had a rough decade with disease and natural disasters. A lot is riding on its ability to work through the turbulence, including 70,000 jobs and $3.5 billion in annual sales.

Chile's farmed salmon industry has endured a rough stretch over the last decade, to put it mildly, starting with the devastating Infectious Salmon Anemia (ISA) outbreak in in the mid-2000s that swept through farms killing millions of fish, and prompting some serious global handwringing.

In many ways since then, it's been a virtual parade of manmade upheavals and natural calamities: turbulent market swings, deepening global worries over rampant antibiotic use; persistent problems with sea lice; further bouts with disease including **Salmon Rickettsial Syndrome** (SRS); conflict among industry insiders over stricter regulations; and opposition from NGOs over proposed expansion plans.

And that's not all. Chile's salmon producers have had to wrangle with net pen- and hatchery-damaging earthquakes, ash-spewing volcanic eruptions and changing climate conditions – including El Niño, unusually calm winds and drought – that prompted a toxic algal bloom one government official recently deemed "an extraordinary event."

If the Chilean salmon industry were a movie it would be billed as an action-thriller.

> It's very hard to change perception. You can't erase the past 10 years. They did not do things right, but they are, in fact, working on it.

A lot is riding on Chile's ability to work through the turbulence, including 70,000 jobs and $3.5 billion in annual sales.

"It's a complicated region, but so are many others," said Christina Torres, marine program coordinator for the World Wildlife Fund (WWF). "The question is, how does Chile coordinate all the variables?"

Indeed, it's a big list. Near the very top sits the country's reliance on antibiotics. As global calls grow more urgent for a decrease in routine antibiotic use in animal production, difficult-to-control diseases like SRS, which causes pink sores to form on salmon, have pushed Chile's antibiotic use to dizzying new heights.

Last year, Chile-based salmon companies used a whopping 557 metric tons of antibiotics, according to Sernapesca, the Chilean National Fisheries and Aquaculture Service – the highest amount ever and double what the industry used five years ago.

International ocean conservation organization **Oceana** puts that figure into perspective this way: It's 660 grams of antibiotics per metric ton of fish, compared to Norway's 0.17 grams per ton. Another way to look at it? It's almost four times more than the 172 grams per ton used in **global pork production** in 2010.

A snapshot of the natural spectacle last year in Chile, when the Calbuco Volcano erupted. Photo

courtesy of Adolfo Alvial.

It's still too soon to tell if a **new vaccine** will eventually rein in SRS, but there's little doubt the country's staggering dependence on antibiotics, including oxytetracycline and florfenicol (both listed as "highly important" to human medicine, according to the World Health Organization), has come at a financial cost.

That reliance on antibiotics prompted prominent U.S. club store retailer Costco to take business away from Chile in favor of Norwegian producers to fill its warehouse freezers. Antibiotic use has been a lingering factor in Chile's inability to shed its sticky red label, or "avoid" recommendation, issued by the influential Seafood Watch consumer buying guide.

"Chile got a critical score for chemical use," said former Seafood Watch aquaculture program manager Peter Bridson, founder of the Seagreen Research consulting firm. "They have such high antibiotic use and few effective regulations to control the amount and frequency. Costco was a wake-up call."

Dead fish, SalmonChile both dumped

Antibiotic use isn't the only threat facing the industry. While scientists were able to **point the finger** at changing ocean conditions that prompted the massive algal boom that wiped out 23 million fish earlier this year, companies dumping the dead salmon 75 miles out to sea didn't improve the industry's image and prompted **high-profile protests** by local fishermen.

According to Adolfo Alvial, regional director for the Chilean National Agency for Economic Development (CORFO), more than 5,000 farming and processing workers lost their jobs in 2016; 9,000 fishermen, 600 small-scale mussel farmers and 2,000 shops and restaurants were also affected.

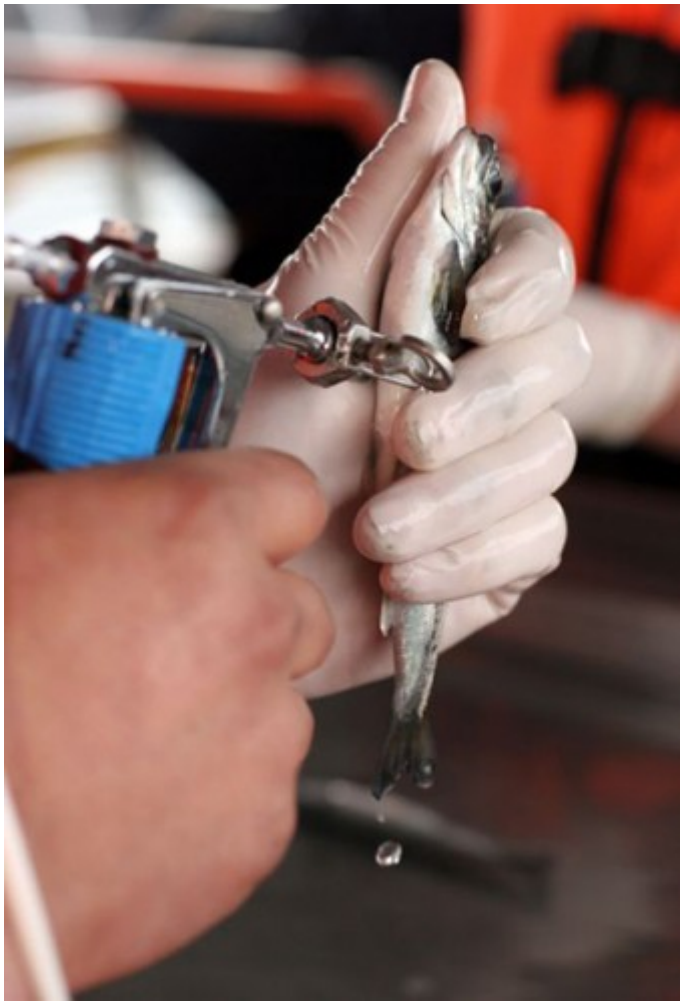

Photo courtesy of Pharmaq. It attenuated live vaccine Alpha Ject LiVac® SRS received a provisional marketing authorization from the Chilean authority Servicio Agrícola y Ganadero de Chile.

This summer, the turmoil eventually prompted industry leader Per-Roar Gjerde, managing director for Marine Harvest Chile, to pull out of industry group SalmonChile.

“The reason we left SalmonChile was that we didn’t agree on the new regulations coming from the government,” Gjerde told the *Global Aquaculture Advocate*. “There are too many licenses in Chile. There needs to be stricter change here. What Chile needs now is to step back and decide the maximum production that is sustainable in Chile at the moment.”

Gjerde wants to see a 400,000-ton annual cap placed on Chile’s salmon production. According to **Reuters**, in an effort to slow the spread of diseases like SRS or ISA, SalmonChile has been pushing for larger production areas with increased spacing between them.

Site changes in sight?

Change is on the horizon. Companies say they are invested in improving the production system, and the government is now sharing more research in an effort to turn things around.

In terms of heavy antibiotic use to control disease and chemical inputs to manage sea lice, the companies know they can’t continue, said Torres of WWF. “They understand the problem and are trying to solve it. Before, they

knew the problem, but there was no incentive to solve it."

While pen density frequently gets blamed for what ails Chile's salmon industry, it's important to remember that density in a cage is different than overproduction.

"Density is already low. It's lower than it was five to 10 years ago. It's been regulated since the ISA outbreak. Farmers can't farm whatever they want. It's very restricted," she said.

The issue now, she added, is how expansion areas will be determined, how a particular bay should be utilized, or maybe a shift in farm locations. "That's something the government is working on."

Expansion, however, is something Oceana **strongly opposes**, especially inside Las Guaitecas National Reserve. They call it a "careless expansion", saying the industry has a track record and that it has "failed to contain its diseases and the abuse of chemicals and antibiotics will have irreversible implications both for the Las Guaitecas National Reserve and for Aysén," said Liesbeth van der Meer, vice president of Oceana's Chile operations, in a statement.

But even longtime critics believe there's a shift happening in the industry, and a renewed focused on responsible production.

"It's very hard to change perception. You can't erase the past 10 years. They did not do things right, but they are, in fact, working on it," said Merrielle Macleod, WWF lead specialist for aquaculture. "We sat down with producers and buyers to talk about the technical issues about disease. They want to get this right. They want to make sure these problems are solved."

Gorjan Nikolik, industry analyst for Rabobank, thinks it will be two or three years before major improvements to Chile's salmon production will be made.

"Disease, weather issues and labor [issues] are common in every single food-producing industry globally. I don't think salmon in Chile is unique in this. They are however, behind Europe when it comes to regulation of the industry," said Nikolik. This could impact production limits, biosecurity restrictions and other safety and sanitary regulations.

The key focus, he concluded, will center on cost reduction through better biological performance and, in turn, through better regulation. A stronger image from lower antibiotic use would also have a positive impact on market prices, he said.

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California-based journalist Clare Leschin-Hoar covers food policy and seafood. Her work has appeared in The Guardian, NPR, Scientific American, EatingWell and many more. Follow her on Twitter: @c_leschin.

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