

Dairy Farmer's Startup is Sprouting Up and Sparking Interest

Learn more about Forever Feed Technologies and other innovative, new models at the California Dairy Sustainability Summit, March 25 in Visalia.

California dairy farmers put a lot of their own time, effort, and money into making their farms more sustainable. Perhaps one of the most outstanding examples is Jack de Jong, Co-founder, CEO, and Chair of Forever Feed Technologies. He's also a third-generation California dairy farmer. Inspired by the idea of growing high-quality feed with less water on his farm, Jack partnered to create the world's largest automated sprouted grain grow system — just the start of the Forever Feed vision that's now coming to life.

Co-founded and funded by farmers, Jack's Forever Feed Technologies is pioneering a new model for growing fresh, high-quality dairy feed year-round, using 95% less water, 99% less land, and less fuel than the status quo. The crop produced is a highly nutritious and digestible spouted grain that's grown year-round in an indoor, automated facility. Harvested after three to six days depending on farm preferences, the sprouted grains are then pulled apart and evenly mixed into total mixed feeding rations for cows or heifers, replacing alfalfa and several other components. The company's first facility, known as the Forever Feed Technologies Innovation Center, began operating a few months ago on Jack's dairy in Kings County.

Jack has been an early adopter of many sustainable dairy farm practices. He first came across the idea of Forever Feed when looking for forage alternatives to lower water use needs, preparing for increasingly limited groundwater and surface water availability. The initial company that was starting to grow sprouted grains for fodder ended up dissolving, but Jack still wanted to give the concept a try. He teamed up with the former CEO to create a new company—focused on creating a durable facility to meet the 24-7-365 need for nutritious livestock feed.

Other leading dairy farmers and cattle ranchers, both in California and in other states, saw promise in this vision, signing on as investors. The environmental benefits are clear. Additionally, these



Jack de Jong, Forever Feed Technologies' Co-founder, CEO, and Chairman, is a third-generation dairy farmer in Kings County.



The Forever Feed Technologies Innovation Center is a development-scale indoor feed growing system capable of producing 30,000 pounds of sprouted grain per day, using 5% of the water needed for field-grown alfalfa. *Images courtesy of Forever Feed Technologies*.

farm families believe in the promise of creating a more resilient, dependable future. However, perhaps the most motivating factor for farmers and ranchers is the potential for making fresh, nutritious, and much appreciated feed for cows.

Jack said that one of the main learnings from prior developments of the system was that the sprouted grains need to be broken into small pieces and evenly mixed into the total mixed rations. He's seen cows fighting over the larger pieces of fresh sprouted grains and even pulling them out of each other's mouths. He looks forward

to seeing many cows savor over the fruits of his labor. He's also anxious to see what adding fresh sprouted grains to daily diets could do to boost feed intake, cow nutrition, and even milk production.

This aspiration of feeding cows fresh spouted grains daily has been years in the making. A significant milestone occurred when construction of the first facility, the innovation center, was completed in October 2024. The 10,000-square-foot building can produce up to 15 tons of fodder per day and has the capacity to feed 850 cows about ten percent of their diet. This system is one-third of the size of the planned commercial version, which will produce more than 35-tons per day in California's environment. Everything is built to scale, to fully test all aspects of the commercial system. Jack and his team of engineers and nutritionists are collecting data to better understand and make adjustments to achieve maximum consistency in the fodder, a key to animal nutrition.

To date, the innovation center is still ramping up its production. The sprouted grains are being fed to a control group of milking cows in order to monitor performance. As more data becomes available, it will allow Jack and his team to see for themselves the nutritional effect on the milking cows. Construction of the first commercial-scale system is expected to start as early as this year.

"I'll tell you, my emotions swung from side to side when we first started building. There was a lot of nervous energy because I put a lot of time, effort and money into something that is still very novel," Jack said in his recent interview with <u>Progressive Dairy</u>. "It still needs to be proven to a point that this scale and operation is going to be cost-effective and worth the investment put into it. However, seeing this go from a design on paper to operating at scale has been exciting to see. Especially how big and durable it is."

Durability is key, as Jack sees Forever Feed as a long-term solution to California's water availability crisis. With the implementation of the Sustainable Groundwater Management Act (SGMA) and limited surface water availability, California's farmers will continue to become more vulnerable to the effects of climate change. The Public Policy Institute of California has estimated that at least 500,000 acres of irrigated San Joaquin Valley farmland (ten percent) will need to come out of production to comply with SGMA. By using 95% less water and 99% less land, the Forever Feed system shows great promise to help address this challenge.

"We've received an incredible amount of interest and support," said Jack. "People have seen value in what we are trying to achieve and have been amazed at the sight of the Innovation Center. This feedback is reassuring as we continue our hard work to make Forever Feed an important tool for sustainable agriculture."

Jack's story embodies the spirit of California dairy farmers, who have long been making strides to become increasingly efficient, resilient, and sustainable. Where solutions are needed, they are willing to collaborate and support research and innovation. This spirit and the ongoing progress achieved will be celebrated at the next California Dairy Sustainability Summit on March 25, 2025, in Visalia. Jack will join several other dairy farmers on the speaker roster, sharing insights with fellow farmers, industry leaders, policymakers, and partners throughout the supply chain, to promote the continued advancement of California's world-leading sustainable dairy farm practices. Jack believes his fellow dairy farmers should take pride in their heritage, their successes, and their future.

"I'm a third-generation dairy farmer in California, and I'm not even sure how many generations of de Jong's farmed in Holland before that," said Jack. "I'm proud to be a farmer. And I'm proud to be partnering with fellow dairy farmers and others to innovate and improve how we sustainably feed the world."

Learn more about Forever Feed Technologies and other incredible, new models and partnerships at the California Dairy Sustainability Summit on March 25.

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