

China may add life to Calif. dairy industry

By Susanne Rust and Serene Fang, Center for Investigative Reporting

A growing demand for milk and cheese in China has the potential to bring California's beleaguered dairy industry back to life – and with it, renewed concern about its damaging effects on the environment.

As China's middle class grows, so does its appetite for dairy products such as milk, cheese and yogurt. U.S. government data show that Chinese demand for dairy products is growing rapidly. Imports of skim milk powder grew by 49 percent in 2012 over the previous year and are expected to increase an additional 18 percent this year.

California's dairy industry has gone through hard times over the past five years. According to the California Department of Food and Agriculture, more than 300 dairies in the state have gone out of business since 2007.

Feed prices have skyrocketed – the result of competition with the biofuels industry, a severe drought in the Midwest, and increased shipping and transportation costs, according to UC Davis agricultural economist Leslie Butler.

Now the industry sees hope for a potential market in China, said Ross Christieson, a consultant for the California Milk Advisory Board, a trade group for the state's roughly 1,600 dairy farmers.

"China has been going through a major economic growth boom over the last 20 years, and that has fueled consumption of dairy products," he said. "We know a lot of these markets will grow ten- or twentyfold over the next few decades. By being

there now, we can be at the start of the growth.”

But this possibility, given the toll California’s large dairy farms are having on air and water quality in the Central Valley, is making many environmentalists nervous.

“Definitely, there’s a carrying capacity for dairy, and it’s air quality,” said Brent Newell, legal director for the Center on Race, Poverty and the Environment, an environmental justice organization that focuses mostly on the San Joaquin Valley. “You can’t keep sticking more dairies in the San Joaquin Valley in order to export cheese to China.”

California is the nation’s largest dairy-producing state. It produced nearly 42 billion pounds of milk in 2011, 21 percent of the nation’s total output, according to the Dairy Institute of California.

That success has been attributed largely to the state’s model for dairy farming, which maximizes the number of cattle per farm while minimizing the need for on-site food production.

“The traditional dairy-farm model in the rest of the country is one where dairy farmers grow a considerable amount of their own feed,” said Bill Schiek, an economist with the Dairy Institute, a dairy processors trade group. In California, he said, dairy operators don’t grow grain or hay on site but bring it in. “It’s a very specialized operation.”

But it’s a model that environmental scientists say has wreaked havoc on air and water quality. Critics and scientists point to studies showing that the dairy industry, with roughly 1.8 million head of cattle, is the single largest contributor of smog-forming volatile organic compounds in the San Joaquin Valley.

Government and academic research indicates that gases emitted from fermented feed, cattle and cattle waste combine with other free-floating particles in the air to form smog.

The dairies also have been implicated in the pollution of groundwater. Research has shown that nitrogen produced by cattle waste can seep through soil into groundwater, contaminating water sources and, in some cases, making the water undrinkable.

For instance, dairy manure, which is the largest source of animal waste in California, accounts for more than 200,000 tons of nitrogen every year, much of which ends up in groundwater, according to research by Thomas Harter, a hydrologist at UC Davis.

Nearly 10 percent of public wells in California have more nitrogen than the government deems acceptable, according to the UC Davis study.

Newell of the Center on Race, Poverty and the Environment said the poor bear the brunt. "It is fundamentally unfair and unjust to burden low-income communities in the San Joaquin Valley with all of this pollution," he said.