



## **Genevieve Regli**

Over 120 years ago, a family that milked cows by hand morning and night, carried calves with their bare arms, and grazed their cattle on lush, green pastures proved to be sustainable, providing for their basic needs. Flashforward 120 years, and I, a member of this same family sit in a black rolling chair, as I attempt to hold my legs still as a nervous shaking tick reveals my eagerness in the situation. With my knee-length dark green dress, black heels, and blazer, I gaze at the room locking eyes on twenty-four student leaders. Acknowledging the fact that ten of them are vegan, fifteen of them aspire to be in politics, only two reside from a production agriculture operation, and within the votes of these people lies the future of our college's agriculture land. This room depicts a weekly Wednesday night Board of Directors Meeting at Cal Poly San Luis Obispo. Students enact bills, proposals, and resolutions that drastically shape the future of the university. Knowing that my future career lies within the dairy industry, one question constantly replays in my mind "How do I survive here?" To me, sustainability directly corresponds to understanding our future consumers, the new arising generation. In order to address how dairy farmers can sustain their livelihood into the future, we must dive into the ways dairymen have addressed all three sectors of sustainability: environmental, economic, and social.

While this generation has launched movements ranging from no plastic straws to dairy cows kill the environment, these same people order food from GrubHub in plastic pre-wrapped containers and fly on jets across the world for global climate discussions. Winning an argument in a generation that contradicts themselves presents a challenging, yet necessary hurdle to sustain into the future. Within my family's fifth generation organic dairy farm, conversations surrounding environmental sustainability, succession planning, and managing waste are the sole reason we've been able to adapt rapidly.

Through the Alternative Manure Management Program (AMMP), our family obtained a grant to address the environmental impact within our operation. This grant allowed us to build a compact pack barn, helping our operation reduce the carbon footprint. Through composting manure before spreading it on the field, we have been able to sequester more carbon from the atmosphere, transforming us into a more sustainable operation. In the 2006 United Nations report entitled "Livestock's Long Shadow", the summary attributed 18% of greenhouse gas emissions to the livestock industry, specifying the industry had a larger share than transport. A worldwide eruption regarding the damage of livestock to the environment outraged the public generating misconceptions that haunt us to this day. Thankfully, Dr. Frank Mitloehner debunked the study with his argument revolving around Global Qualifying Emission Factors noting how the measurements for cattle emissions and transportation emissions were not consistent. Moreover, according to Dairy Cares "more than 40 percent of feed ingredients used on California dairies are agricultural byproducts such as almond hulls, tomato pulp, cotton seed, citrus pulp, and brewer's grain, which could otherwise be wasted." Utilizing their ruminant digestive system, these cows transform what would've been food waste into a nutrient-dense product that meets a consumer nutrient requirements.

Furthermore, we can talk about the environment and being stewards of the land, but without a generated income to provide for a family's livelihood, the conversation is invalid. To exercise true sustainability, a need remains to discuss both economic and social components. In describing the current situation of the American Agriculture economy, United States Secretary of Agriculture, Sonny Perdue stated, "Get Big, or Get Out". Unfortunately, being on a dairy that milks 350 cows, these words can be difficult to comprehend, which is why we should tackle economic challenges with an approach of "Get Big, or Get Creative". This showcases a movement identifying alternative modes of income within

the dairy industry whether it be an AirBNB on a farm or bottling of your own milk. These showcase some alternative ways of thinking about our situation. According to an article entitled “The Fluid Milk Firestorm Drags on Dairy Demand” published by Mike North of Hoards Dairyman, “in the last eight years, fluid milk consumption per capita has dropped 16 percent, a total of nearly 30 pounds a person”. This startling statistic leaves an abundant supply of fluid milk, resulting in lower prices per hundredweight for the producer. As consumers’ palates evolve overtime with exposure to a variety of foods, new products interest them. Fortunately, this demand can promote innovative product ideas using dairy that secure a stable and sustainability economy. In a true capitalistic society, consumers control the market which means we must adapt to their wants in order to be economically sustainable.

When asked what sustainability means to me, the social aspect specifically motivates me to continue my family’s legacy. Reflecting back to the Board of Directors Meeting, I am drawn to a challenging situation like this with optimism and hope. Eventually, I aspire to own and operate a Jersey Dairy Farm outside of Sacramento serving as a tourism attraction. Visitors eating lunch on picnic tables in the grass while ‘babysitting calves’ around them, viewers watching eagerly through glass as cows are milked, consumers filling up their glasses sampling a variety of milk flavors; this depicts the image I want the public to see. From hosting farm camps to recruiting high school students to help on the operation, these are just some ideas I have to remain socially sustainable. This teachable experience will shed on a light on the crucial role dairies play within California.

Ultimately, what people do not understand, they do not value, and what people do not value, they do not protect, and what people do not protect, they ultimately loose. Simply put, if we want to encourage sustainability, we must communicate sustainability properly. My future aspirations tie directly to what Dairy Cares strives to ensure through helping continue family legacies for generations to come. Finally, for me sustainability means continuing my family’s operation prospering in environmental, economic, and social components.