

PUTTING PROTECTIONIST REGULATIONS OUT TO PASTURE: HOW INTERNATIONAL REGIMES CAN IMPACT THE ENVIRONMENT

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INTRODUCTION

As if there were not enough decisions to make when grabbing their morning coffee, consumers are now offered choices of at least oat, almond, soy, or traditional milk. These options are everywhere, but do they all fall under the same family of “milk” beverages? It turns out that cows are a little jealous of their new cousins in grocery coolers, leading dairy farmers to want the non-cow milk disowned from the milk family. Others, like the oat, almond, soy, and coconut milk industries, see cows as the problem.

Cows are cute and have become a beloved part of society, but just as much as one might not want to be near them when they pass gas, the environment does not like it either.¹ Meaning, when any of the 250 million dairy cows in the world fart or burp, greenhouse gases are released and the Earth gets a little warmer.² Despite this, governments expend significant time and money to support the industry.³ Consider how much dairy⁴ is a part of everyday life. It is an after-school ice cream with your grandpop, the cheesy best friend to a ham sandwich, or a cookie’s favorite drink, so of course it has been protected at all costs.⁵ However, many think it is time to change that. Since the 1990’s campaign of “Got Milk?,” the average number of milk mustaches has continued to

1. U.N. Food and Agric. Org. Animal Prod. and Health Div., *Greenhouse Gas Emissions from the Dairy Sector, A Life Cycle Assessment*, (hereinafter “Dairy LCA”) (2010), available at <http://www.fao.org/3/k7930e/k7930e00.pdf> (last visited Feb. 4, 2022).

2. *Id.*; Caroline Grunewald, *Biden Has a Plan to Save American Dairy*, THE HILL, (Aug. 20, 2020) available at <https://thehill.com/opinion/energy-environment/512948-biden-has-a-plan-to-save-americas-dairy-but-does-it-go-far-enough> (last visited Feb. 4, 2022).

3. Chris Edwards, *Milk Madness*, CATO INST. TAX & BUDGET BULL. (July 2007), available at https://www.cato.org/sites/cato.org/files/pubs/pdf/tbb_0707_47.pdf#:~:text=The%20federal%20government%20has%20subsidized,dairy%20industry%20since%20the%201930s.&text=1%20The%20government%20spends%20billions,dairy%20programs%20increase%20milk%20prices (last visited Feb. 4, 2022).

4. For the sake of clarity, this Note will use “dairy” solely in reference to cow milk and cow milk products despite trends to include alternative milks under the umbrella of dairy.

5. See Food & Agric. *supra* note 1.

drastically diminish.⁶ Today's market demand is not wholly cow milk but contains many alternatives like soy, almond, oat, rice, hemp, and coconut.⁷ Environmental, health, and ethical preferences mirror that cow's milk is not as popular as it used to be.⁸ Plus, dairy alternatives are growing in demand.⁹ Modern advertisements promote vegan and cruelty free options over the traditional "Got Milk?" message.¹⁰ What does this mean for the future of cows?

On one hand, there are society's favorite foods and the product of proud dairy farmers, and on the other hand, there are the somewhat healthier, environmentally more sustainable, and animal friendly options ready to step into dairy's shoes.¹¹ This tension can be seen in the United States as the "Milk Wars,"¹² the "Dairy Pride"¹³ movement versus the

6. See Kirk Kardashian, *The End of Got Milk?*, THE NEW YORKER (Feb. 28, 2014), available at <https://www.newyorker.com/business/currency/the-end-of-got-milk> (last visited Feb. 4, 2022); Danielle Wiener-Bronner, *America's Milk Industry is Struggling. Don't Blame Oat Milk*, CNN BUSINESS (Nov. 21, 2019), available at <https://www.cnn.com/2019/11/21/business/milk-industry-dean-foods/index.html> (last visited Feb. 4, 2022).

7. Nellie Bowles, *Got Milk? Or Was That Really a Plant Beverage?*, N.Y. TIMES (Aug. 31, 2018), available at <https://nyti.ms/2MFlkMh> (last visited Feb. 4, 2022).

8. Wiener-Bronner, *supra* note 6; See *Id.* at 30. The "Got Milk?" ad campaign was based on a deprivation strategy which would indicate that milk was the perfect and only complement to many foods. "Snapple on your Wheaties" or "Dunking your freshly baked tollhouse cookies in 7-Up" were examples of how milk was unable to be substituted. This strategy is now debunked as there are numerous alternatives in the plant industry.

9. Bowles, *supra* note 7.

10. See Ben Webster & Bronwen Lloyd, *Milk Can Be Branded Inhumane, Advertising Chiefs Tell Farmers After Vegan Campaign*, THE TIMES (July 26, 2017), available at <https://www.thetimes.co.uk/article/milk-can-be-branded-inhumane-advertising-chiefs-tell-farmers-after-vegan-campaign-jwgb1xmb7> (last visited Feb. 4, 2022); Jessica Wohl, *See Oatly Bring a 2014 Ad Banned In Sweden to the U.S. For its Super Bowl Debut*, ADAGE (Feb. 7, 2021), available at <https://adage.com/article/special-report-super-bowl/see-oatly-bring-2014-ad-banned-sweden-us-its-super-bowl-debut/2312321> (last visited Feb. 4, 2022).

11. See Christina Troitino, *The Dairy Pride Act's Beef with Plant-Based Milk*, FORBES (Apr. 6, 2017), available at <https://www.forbes.com/sites/christinatroitino/2017/04/06/the-dairy-pride-acts-beef-with-plant-based-milk/?sh=42c7844b454d> (last visited Feb. 4, 2022).

12. Iselin Gambert, *Got Mylk: The Disruptive Possibilities of Plant Milk*, 84 BROOK. L. REV., 801, 802 (2019), available at <https://brooklynworks.brooklaw.edu/blr/vol84/iss3/3> (last visited Feb. 4, 2022).

13. Defending Against Imitations and Replacements of Yogurt, Milk, and Cheese to Promote Regular Intake of Dairy Everyday Act, H.R. 778, 115th Cong. (2017). This bill attracted a lot of attention. Promoted as American, it narrowly got killed. Since then, there have been numerous attempts to revive the bill, lobby the FDA, and attack the "imitation products deceiving the American people."

“Let Dairy Die”¹⁴ protests. Both sides are milking the issues, but for the environment’s sake, the United Nation’s Food and Agriculture Organization (FAO) must step in and change the international food standard’s definition of milk to include plant-based alternatives.

THE PROMINENT SOCIAL ROLES OF DAIRY AND ITS SUBSTITUTES

As mentioned, the “Milk Wars” are becoming a highly contested debate. This note proposes a moderate approach between “letting dairy die” and allowing it to carry on business as usual. A middle ground is best because neither extreme fully satisfies the goals of international law.

Sustainable Development Goals Dilemma

The United Nations (U.N.) has 17 Sustainable Development Goals (SDGs) to promote economic and social development by 2030.¹⁵ Current environmental trends jeopardize the recognition of these goals.¹⁶ Specifically, the dairy industry and competing dairy alternative markets have a role in both hurting and helping a number of the SDGs.¹⁷ The dairy industry and its agricultural practices increase the amount of nutritious foods accessible to many people, contributing to SDG 2: Zero Hunger.¹⁸ However, current agricultural practices inadvertently contribute to global warming, thus, impeding the achievement of SDG 13: Climate Action.¹⁹ Similarly, additional food sources support SDG 3: Good Health and Well Being.²⁰ The entire dairy industry does not support this goal; however, as high-fat dairy products, commonly dumped on low-income

14. Let Dairy Die rose to prominence during the 2020 election as numerous advocates, some topless, crashed the stages of several democratic nominees including Bernie Sanders, Elizabeth Warren, and most notably, Joe Biden whose wife Jill, was pictured aggressively pushing the protestors away from the future president. Maria Cramer, *What is ‘Let Dairy Die,’ and Why is it All Over the Democratic Race?*, N.Y. TIMES (Mar. 4, 2020), available at <https://www.nytimes.com/2020/03/04/us/politics/joe-biden-let-dairy-die.html> (last visited Feb. 4, 2022).

15. G.A. Dec. 70/1, *Transforming our World: the 2030 Agenda for Sustainable Development* (Oct. 21, 2015). (hereinafter “U.N. SDGs”).

16. UNEP, *Making Peace with Nature*, at 87 (Feb. 2021), available at <https://wedocs.unep.org/xmlui/bitstream/handle/20.500.11822/34948/MPN.pdf> (last visited Feb. 4, 2022).

17. Katarina Arvidsson et al., *Research on Environmental, Economic, and Social Sustainability in Dairy Farming: A Systemic Mapping of Current Literature*, SUSTAINABILITY (July 2020), at 1; U.N. SDGs, *supra* note 15

18. U.N. SDGs, *supra* note 15; David Tillman, et al., *Agricultural Sustainability and Intensive Production Practices*, 418 NATURE 671 (2002).

19. Tillman, *supra* note 18.

20. U.N. SDGs, *supra* note 15.

communities,²¹ are linked to many preventable diseases.²² This would frustrate SDG 3.

Additionally, writing international dietary guidelines based on dairy consumption frustrates SDG 10: Reduced Inequalities²³, as more than half of Earth's population cannot digest lactose properly after infancy.²⁴ The number of individuals who have trouble digesting lactose is growing and is significantly higher among people of color.²⁵ This practice of writing dietary guidelines based on dairy consumption contributes to what Andrea Freeman calls "food oppression."²⁶

Despite the majority of the world's inability to properly digest lactose, obliterating the dairy industry would have a disastrous impact on SDG 8: Decent Work and Economic Growth.²⁷ Worldwide, there are an estimated one billion people supported by the dairy sector, relying on the industry for their livelihoods and the production of dairy for use in the economy.²⁸ There would be significant economic impact on dairy farmers, restaurant owners, and developing nations without milk, cheese, ice cream, butter, and other dairy products. With this in mind, SDG 15: Life on Land²⁹ would be jeopardized if current economic reliance precluded implementing sustainable practices to maintain future productivity and biodiversity.³⁰

21. Andrea Freeman, *The Unbearable Whiteness of Milk: Food Oppression and the USDA*, 3 UC IRVINE L. REV. 1251, 1252 (2013).

22. Tillman, *supra* note 18; Gene Baur, *The Best Way to Help Dairy Farmers is to Get Them Out of Dairy Farming*, THE WASH. POST (Jun. 12, 2019), available at <https://www.washingtonpost.com/opinions/2019/06/12/best-way-help-dairy-farmers-is-get-them-out-dairy-farming/> (last visited Feb. 7, 2022).

23. U.N. SDGs, *supra* note 15, at 14.

24. W. Steven Pray, *Lactose Intolerance: The Norm Among the World's People*, AM. J. OF PHARMACEUTICAL EDUC. 64 (2000), available at https://www.researchgate.net/profile/Walter-Pray/publication/237122817_Lactose_Intolerance_The_Norm_Among_the_World%27s_Peoples/links/540f11e30cf2df04e75a2194/Lactose-Intolerance-The-Norm-Among-the-Worlds-Peoples.pdf (last visited Mar. 22, 2022).

25. *Id.*; Medline Plus, NIH, available at <https://medlineplus.gov/genetics/condition/lactose-intolerance/#frequency> (last visited Feb. 7, 2022).

26. Freeman, *supra* note 21, at 1253.

27. U.N. SDGs, *supra* 15; Arvidsson et al., *supra* note 17.

28. *The Global Dairy Sector*, FOOD AND AGRIC. ORG. OF THE U.N., available at <http://www.dairydeclaration.org/Portals/153/FAO-Global-Facts.pdf?v=1#:~:text=xviii%20With%20an%20estimated%20150,to%20one%20billion%20people%20worldwide> (last visited Feb. 7, 2022).

29. U.N. SDGs, *supra* 15.

30. Arvidsson et al., *supra* note 17, at 2.

SDG 9: Industry, Innovation, & Infrastructure³¹ brings the two sides together by not only recognizing the important industry and infrastructure in place with dairy but by also promoting innovation to make these systems more sustainable.³² This note will propose one way the international framework can work to reconcile these goals. The proposal's necessity and impact will be explored by unpacking the destructive practices of dairy farming, the trends toward plant-based products, developing case law around the globe regarding labeling, and how international guidelines can create a more sustainable industry while promoting global food security and health by allowing plant-based and traditional dairy to compete.

DAIRY'S NEGATIVE IMPACT ON THE ENVIRONMENT

The largest threat posed by the dairy industry is environmental. Since humans cannot digest grass, the ability of cows to digest it contributes to the effective use of land Sustainable Development Goal.³³ However, to do this, cows process grass through enteric fermentation.³⁴ Their four-chamber stomachs allow the food to be re-digested with microbes that break down cud and release methane.³⁵ Cows mostly release this methane through belching.³⁶ Methane is one of the main Greenhouse Gases (GHGs) scientists attribute to climate change because of its heat-trapping qualities.³⁷ Therefore, it is necessary to determine how many millions of tons of gas the cow industry is responsible for in order to tackle climate change with appropriate measures.

A Life Cycle Assessment (LCA) follows the chain of what it takes to make a product.³⁸ The agriculture industry widely accepts this systemic analysis to determine the impact of livestock on the environment.³⁹ For dairy products, the analysis includes fertilizers, pesticides, and feed input's transportation to the farm, dairy processing, packaging costs, and

31. U.N. SDGs, *supra* 15.

32. Arvidsson et al., *supra* note 17, at 1-2.

33. Arvidsson et al. *supra* note 17, at 2.

34. Deanne M. Camara Ferreira, *Global Warming and Agribusiness: Could Methane Gas from Dairy Cows Spark the Next California Gold Rush*, 15 WIDENER L. REV. 541 (2010).

35. Brad Plumer, *California Wants to Regulate Cow Belches. It's Less Weird Than it Sounds*, VOX (Oct. 2, 2016), available at <https://www.vox.com/2016/9/27/13072714/california-methane-cow-belches> (last visited Feb. 4, 2022).

36. *Id.*

37. *Id.*

38. Dairy LCA, *supra* note 2, at 9.

39. *Id.* at 16.

distribution effects.⁴⁰ The only aspects excluded in the LCA relate to final consumption after consumer purchase.⁴¹ The LCA can be segmented, and the “cradle to farm-gate” segment tends to have the most significant impact on GHG emissions.⁴²

In this segment, the FAO’s LCA indicates about 6% of global GHG emissions are the result of livestock’s belching and flatulence.⁴³ Besides belching, cow manure must decompose which also releases warming gases like carbon dioxide, nitrous oxide, and methane.⁴⁴ The FAO concludes that dairy cows are responsible for 19% of total GHG emissions.

Beyond the LCA’s GHG emissions, other environmental concerns include water resource degradation, biodiversity, and erosion.⁴⁵ Cows do not like the hot weather and lose their appetites around 92 degrees Fahrenheit.⁴⁶ To keep them cool, farmers utilize air conditioning, impacting the environment further, and give them water.⁴⁷ Water is used to feed and wash cows as well as clean the dairies and employees and grow the crops for feed.⁴⁸

Some proponents of the dairy industry claim that the environmental impacts of cows are blown out of proportion or do not exist at all.⁴⁹ This note does not argue whether global warming is real. While some studies have been discredited and it may be hard to measure the methane released from cows, it is well-understood that methane release occurs, and it contributes to global warming.⁵⁰

40. *Id.* at 9.

41. Dairy LCA, *supra* note 2, at 19.

42. *Id.* at 11.

43. *Id.*

44. DENIS HAYES & GAIL BOYER HAYES, COWED, THE HIDDEN IMPACT OF 93 MILLION COWS ON AMERICA’S HEALTH, ECONOMY, POLITICS, CULTURE, AND ENVIRONMENT 33-34 (2015).

45. Dairy LCA, *supra* note 2, at 13.

46. Hayes, *supra* note 44, at 36.

47. *Id.* at 36-37.

48. *Id.* at 36.

49. Frank M. Mitloehner, *Yes, Eating Meat Affects the Environment, But Cows Are Not Killing the Climate*, CONVERSATION, Oct. 25, 2018, available at <https://theconversation.com/yes-eating-meat-affects-the-environment-but-cows-are-not-killing-the-climate-94968> (last visited Feb. 5 2022).

50. FAO, *Climate Change and The Global Dairy Cattle Sector*, GLOBAL AGENDA FOR SUSTAINABLE LIVESTOCK, at 7 (2019), available at <https://www.fao.org/3/ca2929en/ca2929en.pdf> (last visited Feb. 5 2022) [hereinafter “Climate Change and the Global Sector”].

Foods made from plants instead of animals, like alternative milk, are better for the environment and are gaining popularity.⁵¹ Adversaries to the plant-based industry point out that there are environmental externalities from vegan options as well, such as almond milk production hurting bees and soy plants leading to adverse consequences to the land.⁵² However, these effects are minimal compared to those produced in the dairy industry. Soy production's environmental impact is much less than that of cattle raising and milk production.⁵³ *Silk*, a popular dairy-alternative brand advertises that its soy, almond, and coconut milks use 80% less water than it would take to produce the same amount of cow milk.⁵⁴ The science is clear that dairy cows are part of the GHG emissions crisis.⁵⁵ The leading programs on climate change advocate for a reduction of traditional dairy consumption because plant-based is better for the environment.⁵⁶ Although there may not be a perfect solution at this time, action still must be taken.

DAIRY'S POSITIVE CONTRIBUTIONS TO THE ECONOMY

Despite dairy's flaws, if international law promoted the idea of totally ditching dairy, there would be too many stray cows on the loose along with numerous other side effects. Most significantly, SDG 8: Decent Work and Economic Growth would be substantially frustrated.⁵⁷ There are over 150 million hard-working dairy farmers who are an integral part of the global economy.⁵⁸ Additionally, farmhand positions

51. Annette McGivney, *Almonds Are Out. Dairy is a Disaster. So What Milk Should We Drink?*, THE GUARDIAN (Jan. 29, 2020), available at <https://www.theguardian.com/environment/2020/jan/28/what-plant-milk-should-i-drink-almond-killing-bees-aoe> (last visited Mar. 22, 2022).

52. *Id.*

53. Courtney Grant & Andrea Hicks, *Comparative Life Cycle Assessment of Milk and Plant-Based Alternatives*, 35 ENVTL. ENGINEERING SCI., UNIV. OF WISCONSIN-MADISON (2018); McGivney, *supra* note 51.

54. *Silk*, *Our Story, 2013 Water Footprint Assessment*, available at <https://silk.com/about-us/> (last visited Feb. 5, 2022).

55. See FAO, *supra* note 50.

56. UNEP, *supra* note 16, at 34.

57. U.N. SDGs, *supra* note 15.

58. Elizabeth Rembert, Megan Durisin, & Mike Dorning, *Dairy Farmers Worldwide Are on the Brink of Crisis*, BLOOMBERG (June 30, 2020), available at <https://www.bloomberg.com/news/articles/2020-07-01/dairy-farmers-dumping-milk-worldwide-are-on-the-brink-of-crisis#:~:text=The%20sector%20accounts%20for%20about,according%20to%20the%20United%20Nations> (last visited Feb. 5, 2022).

employ a large number of migrant workers.⁵⁹ Dairy products also serve as input commodities in other parts of the economy, creating millions of jobs.⁶⁰ Without dairy, many hospitality businesses would also suffer.⁶¹ Since dairy is a prominent food source, losing it would cause food insecurity to rise as well, frustrating SDG 2: Zero Hunger.⁶²

These considerations were included in the reasoning for this proposal in order to afford some protection to dairy farmers and recognizes the essential role of dairy in many lifestyles and economies. However, these reasons do not negate the serious problems posed by dairy farming, and therefore, an inflexible approach, like banning traditional dairy's competition, does not make the future of dairy any brighter. These problems need to be tackled now to make the future of agriculture more sustainable.

THE EFFECTS ON PUBLIC HEALTH

Later, this note will discuss consumer confusion between plant and cow milk and why there is a debate about the use of the word "milk." For now, it is important to understand the differences and each product's role in public health.

NUTRITIONAL CONTENT

For many years, dairy was touted as building strong bones and providing a good source of calcium.⁶³ Although plant-based alternatives may contain less calcium per calorie, there is still a well-founded debate over which type of drink is healthier.⁶⁴ Many dairy alternatives are fortified which adds nutrition where it may be deficient in comparison to

59. See Tim Craig, *Death of Farmworkers in Cow Manure Ponds Put Oversight of Dairy Farms into Question*, WASH. POST (Sept. 24, 2017), available at https://www.washingtonpost.com/national/deaths-of-farmworkers-in-cow-manure-ponds-put-oversight-of-dairy-farms-into-question/2017/09/24/da4f1bae-8813-11e7-961d-2f373b3977ee_story.html (last visited Feb. 5, 2022).

60. FAO, *The Global Dairy Sector: Facts 2019*, at 2, available at <https://www.fil-idf.org/wp-content/uploads/2021/01/DDOR-Global-Dairy-Facts-2019.pdf> (last visited Feb. 5, 2022).

61. *Id.*

62. *Id.*; FAO, *Climate Change and the Global Dairy Cattle Sector*, *supra* note 55, at 11.

63. Hayes, *supra* note 44, at 129.

64. See Christina Troitino, *The Dairy Pride Act's Beef With Plant-Based Milk*, FORBES (Apr. 6, 2017), available at <https://www.forbes.com/sites/christinatroitino/2017/04/06/the-dairy-pride-acts-beef-with-plant-based-milk/?sh=42c7844b454d> (last visited Feb. 5, 2022).

cow's milk.⁶⁵ Similar to chocolate milk containing less nutritional benefit compared to whole white milk, consumers will have to read labels to understand which products fit best in their diets.⁶⁶

Additionally, the nutritional value of cow milk is under scrutiny.⁶⁷ One article explains that “you don't need milk, or large amounts of calcium, for bone integrity. In fact, the rate of fractures is highest in milk-drinking countries, and it turns out that the keys to bone strength are lifelong exercise and vitamin D.”⁶⁸ With new studies showing overconsumption and less benefits, cow's milk cannot claim superiority. Despite the doubt around dairy, the industry insists that plant-based alternatives cannot use words like “milks,” “cheese,” or “yogurt” because they are nutritionally inadequate.

DIETARY GUIDELINES

As a result of clinging to outdated notions of cow milk's importance in human diets, most dietary guidelines require numerous servings of dairy per day. In 2019, Canadian Prime Minister, Justin Trudeau was under fire from the dairy sector because the Canadian Health Department updated guidelines eliminating a daily dose of dairy.⁶⁹ Trudeau was accused of pushing veganism and the liberal agenda.⁷⁰ However, this move was celebrated by dietitians because of lactose intolerance, allergies, and overconsumption.⁷¹

When discussing SDG 10: Reduced Inequalities, this article noted that the majority of people of color cannot properly digest lactose.⁷² Due to genetic mutations likely caused by European famines, people of European descent are more likely able to digest lactose beyond infancy.⁷³ This means that minorities disproportionately cannot digest lactose.⁷⁴ In

65. Carol Rees Parrish, *Moo-ove Over, Cow's Milk: The Rise of Plant-Based Dairy Alternatives*, 171 NUTRITION ISSUES IN GASTROENTEROLOGY 21 (2018).

66. *Id.* at 27.

67. Hayes, *supra* note 44, at 129-161.

68. Mark Bittman, *Got Milk? You Don't Need It*, N.Y. TIMES (July 7, 2012), available at <https://opinionator.blogs.nytimes.com/2012/07/07/got-milk-you-dont-need-it/> (last visited Jan. 31, 2022).

69. *Why Justin Trudeau Is Fighting Over Milk*, BBC NEWS (Jul. 23, 2019), available at <https://www.bbc.com/news/world-us-canada-49091439> (last visited Jan. 31, 2022).

70. *Id.*

71. *Id.*

72. Andrew Curry, *Archaeology: The Milk Revolution*, 500 NATURE 21 (2013); Freeman, *supra* note 21, at 1261-62.

73. Curry, *supra* note 72, at 21-22.

74. *See id.*

the United States, “as many as 50 million people are lactose intolerant, including 90 percent of all Asian-Americans and 75 percent of all African-Americans, Mexican-Americans and Jews”.⁷⁵ This poses significant hardships as most dietary guidelines require multiple servings of dairy a day.⁷⁶ By failing to address this large population, the guidelines contribute to the systemic health problems for people of color.⁷⁷

Although many people are lactose intolerant, there is evidence that many more struggle to digest dairy.⁷⁸ With the government’s dairy promotional efforts,⁷⁹ many consumers do not realize that dairy is negatively contributing to their health, and they continue to consume it or ignore any discomfort because they do not know the cause, or dairy alternatives are not readily available.⁸⁰ Restrictive labeling also presents the dairy alternative markets with other significant hardships. By defining milk as “mammary secretion of lactating mammals,”⁸¹ dairy-free alternatives are excluded from many government-sponsored programs like school lunches and welfare programs that specify food categories since they cannot be labeled in dairy’s category. This makes nutritious foods for lactose intolerant individuals harder to access.⁸² Plant-based products, then, do not get any revenue from governmental benefits. Therefore, labeling laws that limit the scope of dairy are problematic to public health and hurt the dairy alternative sector.

To remedy this, some dietary guidelines include soymilk under the umbrella of dairy and provide the proper information on its nutritional value. The dairy industry continues to lobby that cow’s milk is necessary to a healthy diet despite the widespread acceptance that this is no longer true, complicating the matter for those who do not consume dairy. International dietary guidelines need to reflect more diverse health standards by clarifying that plant-based alternatives are a part of the dairy family and can positively affect health.

The Rise of Plant-Based “Beverages”

75. Bittman, *supra* note 68.

76. Freeman, *supra* note 26.

77. *Id.*

78. See Bittman, *supra* note 68.

79. In addition to federal assistance, cow’s milk is incorporated into federal school lunch programs, and MilkPep has lobbied for nutritional education in schools hosted by the dairy industry, exposing children to a very one-sided ideology about milk from a young age.

80. Parrish, *supra* note 65.

81. Food and Agric. Org. of the U.N. & World Health Org., *Codex Alimentarius: Milk and Milk Products* (2011), available at <http://www.fao.org/3/i2085e/i2085e00.pdf> (last visited Mar. 22, 2022) [hereinafter *Codex: Milk and Milk Products*].

82. Freeman, *supra* note 26.

Subsidiary bodies in the U.N. are aware of traditional dairy's threat to the SDGs. In February 2021, the UNEP published a detailed guideline on how to address climate change, biodiversity, and pollution within the SDG framework.⁸³ In a section urging the transformation of food systems to be more equitable, efficient, and environmentally friendly, the blueprint considers how consumer norms and cultural practices can impact the SDGs:

Changing the dietary habits of consumers, particularly in developed countries, where consumption of energy- and water- intensive meat and dairy products is high, would reduce pressure on biodiversity and the climate system. These habits are a function of individual choices but are also influenced by advertising, food and agricultural subsidies and excess availability of cheap food that provides poor nutrition.⁸⁴

The change in dietary habits is already occurring. As incomes in developed countries continue to rise, so will the popularity of plant-based products. By not receiving the same preferential treatment cow's milk receives with government assistance and favorable regulations, dairy alternatives face an uphill battle. Despite this hardship, there has been great success for soy, oat, rice, coconut, and almond milk.⁸⁵ The alternative dairy industry has been experiencing growth that is expected to continue.⁸⁶

Dairy alternatives are substitutes for animal-based products like milk, cheese, and cream.⁸⁷ IBIS World's industry report on Soy and Almond Milk Production defines "plant milk" as a "beverage produced by soaking dry beans, nuts or seeds and grinding them with water."⁸⁸ The spike in demand is cited to "various factors such as growing consumer preference for a vegan diet and nutritional benefits offered by plant-based dairy alternatives."⁸⁹ The market is expected to be valued at \$35.06 billion by the end of 2024.⁹⁰

83. UNEP, *supra* note 56.

84. *Id.* at 34.

85. Grand View Research, *Dairy Alternatives Market to Be Driven by Rising Number of Lactose Intolerance Cases Till 2024*

86. Claire O'Connor, *Soy & Almond Milk Production*, IBISWORLD, (June 2020)

87. *Id.* at 5.

88. *Id.* at 46.

89. *Global Dairy Alternatives Market (2020 to 2025)*, BUSINESSWIRE (July 20, 2020), available at <https://www.businesswire.com/news/home/20200720005287/en/Global-Dairy-Alternatives-Market-2020-2025> (last visited Mar. 22, 2022).

90. Grand View, *supra* note 85.

Soy milk originally occupied the largest chunk of the sector.⁹¹ However, almond milk has since overtaken soy for the lead.⁹² Despite the array of dairy alternatives, the main competition to milk alternatives is cow's milk, rather than competition amongst themselves.⁹³ Dairy alternatives and cow's milk are not perfect substitutes due to health and moral concerns, but an increase in the price of one product increases the demand of the other.⁹⁴ Industry growth has been driven, and will likely to continue to be driven, by health as consumers are growing more concerned about "additives in traditional cow's milk, such as growth hormones and antibiotics."⁹⁵ Since some are uncomfortable with hormones and antibiotics, this touches back to why plant-based alternatives must be considered in dietary guidelines under the milk category.

With the rise in popularity of plant-based milks, there has been a simultaneous decrease in demand for cow milk.⁹⁶ As more and more coffee shops are offering plant-based milks for lattes,⁹⁷ dairy farmers are growing more and more concerned.⁹⁸ The most apparent attempt to knock the new market entrants down has been through lobbying for restrictive labeling.⁹⁹

THE CURRENT LAWS THAT SPARK THE "MILK WARS"

The dying dairy industry and rising plant-based-milk-demand coupled with unclear guidance on health has caused a legal battle that is unmatched to any lunchroom food fight.

Branding: The Confusion Between Plants and Cows

91. BUSINESSWIRE, *supra* note 89.

92. O'Connor, *supra* note 86, at 12.

93. *Id.* at 22.

94. *Id.*

95. *Id.* at 15.

96. *Id.*

97. Samantha Kubota & Chrissy Callahan, *Starbucks adds oat milk to the menu nationwide*, YAHOO! (Dec. 10, 2020), available at <https://www.yahoo.com/lifestyle/starbucks-adds-oat-milk-menu-063216016.html> (last visited Jan. 30, 2022); Mariana Fabian, *OPINION: Oat milk is becoming the new standard – and I've never been happier*, TECHNICIAN (Feb. 2, 2021), available at http://www.technicianonline.com/opinion/article_d4caa1e4-65c3-11eb-8a5f-0beceef91c02.html (last visited Jan. 30, 2022).

98. Marsha Mercer, *Stop Milking It, Dairy Farmers Tell Plant-Based Competitors*, PEW (Mar. 20, 2020), available at <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2020/03/02/stop-milking-it-dairy-farmers-tell-plant-based-competitors> (last visited Jan. 30, 2022).

99. *Id.*

When you bring up branding and cows, one usually thinks of the practice of marking cattle with a hot iron. However, dairy farmers now have a different type of branding problem, that is, alternative milks sharing the brand they love, milk. Some fear that consumers will not know the difference between a cow and a plant product.

The proponents of restrictive labeling claim that plant-based products violate the “standard of identity” for milk.¹⁰⁰ A standard of identity requires that certain foods be made from specific components in order for it to be labeled as such.¹⁰¹ The traditional rule is that foods be identified as their “common name” if there is one or the name prescribed by regulations.¹⁰² This is to prevent consumer confusion by mislabeled food. By excluding plant-based alternatives from the definition of milk, consumers are supposed to be sheltered from being deceived into thinking cow’s milk and plant-based milk are the same. The laws regarding labeling all call for milk’s standard of identity to prevent consumer confusion. However, the issue of whether there is actual consumer confusion without these laws will be discussed below.

THE INTERNATIONAL LAW ON LABELING

The United Nations’ Food and Agriculture Organization (FAO) is one of the oldest specialized agencies of the U.N. as it was established in the inaugural session of the U.N. in 1945.¹⁰³ Specialized agencies, like the FAO, are autonomous organizations funded by both voluntary and assessed contributions.¹⁰⁴ There are currently 194 FAO member states, and it is headquartered in Rome, Italy.¹⁰⁵ The FAO’s mission includes to “[reduce] food insecurity and rural poverty,” “ensur[e] an enabling policy and regulatory framework for food and agriculture,” and to “[conserve] and [enhance] the natural resource base.”¹⁰⁶ These goals are like many

100. See *The Codex General Standard for the Use of Dairy Terms- Its nature, intent, and implications*, INT’L DAIRY FED’N, (Nov. 2020), available at [file:///Users/alexistelga/Downloads/Bulletin-of-the-IDF-507_2020_The-Codex-General-Standard-for-the-Use-of-Dairy-Terms.CAT_-snusw3%20\(2\).pdf](file:///Users/alexistelga/Downloads/Bulletin-of-the-IDF-507_2020_The-Codex-General-Standard-for-the-Use-of-Dairy-Terms.CAT_-snusw3%20(2).pdf) (last visited Jan. 31, 2022) [hereinafter IDF Bulletin].

101. *Id.*

102. *Id.*

103. *About FAO*, FOOD AND AGRIC. ORG. OF THE U.N., available at <http://www.fao.org/about/en/> (last visited Feb. 1, 2022).

104. *FAO and the UN*, FOOD AND AGRIC. ORG. OF THE U.N., available at <http://www.fao.org/about/fao-and-the-un/en/> (last visited Feb. 1, 2022).

105. *About FAO*, *supra* note 103.

106. *Overall strategic framework*, FOOD AND AGRIC. ORG. OF THE U.N., available at <http://www.fao.org/3/x3551e/x3551e02.htm> (last visited Feb. 1, 2022).

of the SDGs. Therefore, the actions of this autonomous agency do affect the goals of other U.N. bodies including the SDGs.

Global Administrative Law (GAL) refers to the increasing number of international agencies that have an impact on international and national laws.¹⁰⁷ GAL is a normative project that justifies the structure of global administrative regulations.¹⁰⁸ With the expansion of these international organizations that have power in global governance, there is a need to tackle normative projects from an international level instead of just domestically.¹⁰⁹

The United Nation's Food and Agriculture Organization (FAO) is one of these international organizations that has developed a weighty authority in terms of regulations, but its rule-making processes should cause those affected to question the validity of such regulations.¹¹⁰ Typically, international organizations get input from numerous committees, commissions, and experts when crafting regulations.¹¹¹ This embraces the propensity for the organization to gather the information it needs to hear rather than getting it from independent investigations, swaying the data.¹¹² When it comes to the global regulations regarding food standards, these input organizations include the World Health Organization, the Codex Alimentarius Commissions (CAC), and members of the FAO. Together, these bodies create the Codex Alimentarius (the Code).

The Code is the set of standards produced by the FAO in conjunction with the World Health Organization (WHO) to "protect the health of consumers and ensure fair practices in the food trade".¹¹³ By reducing barriers to trade, the Code's goals include reducing hunger and poverty while helping farmers.¹¹⁴ In order to draft these regulations which were originally suggestive and nonbinding, the FAO and WHO created the

107. Edoardo Chiti, *Where does GAL find its legal grounding?*, 13 INT'L J. OF CONST. L. 486, 487 (2015).

108. *Id.* at 488.

109. Benedict Kingsbury & Lorenzo Casini, *Global Administrative Law Dimensions of International Organizations Law*, 6 INT'L ORG. L. REV. 319, 325 (2009).

110. Michael A. Livermore, *Authority and Legitimacy in Global Governance: Deliberation, Institutional Differentiation, and the Codex Alimentarius*, 81 N.Y.U. L. REV. 766, 767 (2006).

111. Kingsbury, *supra* note 109, at 355.

112. *Id.*

113. Codex: Milk and Milk Products, *supra* note 81.

114. Food & Agric. Org. & World Health Org., *The Codex System: The Codex Alimentarius Commission and How It Works*, in *Understanding the International Food Trade*, available at <http://www.fao.org/3/w9114e/W9114e06.htm> (last visited Feb. 7, 2022) [hereinafter Codex and the International Food Trade].

CAC. The CAC is made up of representatives from 188 member countries, a European Union representative, plus heavy participation from non-state actors.¹¹⁵

The Code defines milk in its *General Standard for the Use of Dairy Terms (GSUDT)* in Section 2.1 as “the normal mammary secretion of milking animals.”¹¹⁶ This is the definition that Big Agriculture and proponents for the dairy industry, like the International Dairy Federation (IDF), are pushing for or have successfully lobbied for around the globe.¹¹⁷ Section 4.2.1 specifies that “only a food complying with the definition in Section 2.1 may be named ‘milk.’”¹¹⁸ The Code does create exemptions by not applying the prohibition when “the exact nature of [the non 2.1 compliant product] is clear from traditional usage or when the name is clearly used to describe a characteristic quality of the non-milk product” in Section 4.6.2.¹¹⁹ This does not clearly allow the use of the word milk for plant-based products, allows room for nations to add additional requirements for plant-based milks to meet, and is unevenly applied.

This definition skews the market in favor of traditional dairy products as dairy alternatives need to alter their names in different countries and worry about varying rules. Although, it seems that the dairy lobby has not reached to FAO to ban the use of the words *milk*, *cheese*, *yogurt*, etc. for all non-animal products, the IDF which works closely with the FAO has espoused that the definition should be narrower and reads the exemption to still prohibit plant products, resulting in ambiguity.¹²⁰

The current CAC website describes international food standards as “voluntary.”¹²¹ However, the Sanitary and Phytosanitary (SPS) Agreement, passed during the Uruguay Round negotiations, gives

115. Livermore, *supra* note 110, at 781; U.N. FAO, *About Codex Alimentarius*, available at <http://www.fao.org/fao-who-codexalimentarius/about-codex/members/en/> (last visited Feb. 7, 2022).

116. JOINT FAO/WHO FOOD STANDARDS, CODEX ALIMENTARIUS: MILK AND MILK PRODUCTS 176 (2nd edition 2011) [hereinafter GSUDT].

117. International Dairy Federation, *The Codex General Standard for the Use of Dairy Terms- Its Nature, Intent, and Implications*, BULLETIN OF THE INT’L DAIRY FED’N, 507/2020 at 3 (Nov. 2020), available at <https://www.fil-idf.org/wp-content/uploads/2020/11/IDF-Position-Paper-The-Codex-general-standard-for-the-use-of-dairy-terms-FINAL.pdf> (last visited Feb. 7, 2022) [hereinafter IDF Bulletin].

118. GSUDT, *supra* note 116, at 177.

119. *Id.* at 178.

120. IDF Bulletin, *supra* note 117, at 3.

121. FAO, *supra* note 115.

international food standards weight.¹²² A difficulty in international food trade is ensuring health standards do not fall below consumer expectations in another part of the world.¹²³ Evidently, food standards can also be a form of protectionism for domestic producers.¹²⁴ To prevent this, the SPS agreement allows governments to take only the sanitary and phytosanitary measures that are necessary to protect human health. With a goal of harmonizing member countries' regulations, the SPS agreement adopted the Codex Alimentarius Commission's standards.¹²⁵ Member countries are encouraged to use these standards but can set their own. If they set their own, they are only allowed to adopt higher standards if there are scientific justifications, the measures only apply to the extent needed to protect health and are not more trade-restrictive than necessary to protect health.¹²⁶

INTERNATIONAL LAWS POTENTIAL INFLUENCE OVER US LAW

In the United States Congress, the “Dairy Pride Act” or “Defending Against Imitation and Replacements of Yogurt, Milk, and Cheese to Promote Regular Intake of Dairy Everyday Act” was a 2017 attempt to enforce the standards of identity of milk and reduce the confusion around dairy alternatives.¹²⁷ This bill, introduced by Tammy Baldwin, along with other proposals to the FDA, sought to preclude the use of the words “milk” and “cheese” for products made from plants. If passed, plant-based products would need to be labeled as “soy beverage” or “oat-product.”¹²⁸ The bill did not pass Congress, but has since been reintroduced, and Scott Gottlieb, the Trump Administration's FDA head, had expressed approval for proposals along those lines.¹²⁹ Although it is

122. Livermore, *supra* note 115, at 774.

123. Codex and the International Food Trade, *supra* note 114.

124. *Id.*

125. *Id.*

126. WTO Marrakesh Agreement, Art. 2.2 of the SPS Agreement

127. Defending Against Imitations and Replacements of Yogurt, Milk, and Cheese to Promote Regular Intake of Dairy Everyday Act, H.R. 778, 115th Cong. (2017).

128. Alexander Nieves, *Gottlieb: FDA to Crack Down on Labeling Nondairy Products as 'Milk'*, POLITICO, (July 17, 2018), available at <https://www.politico.com/story/2018/07/17/almond-lactate-nondairy-milk-scott-gottlieb-725974> (last visited Feb. 9, 2022).

129. *Id.*

unclear whether the Biden administration will completely rebuke this proposal, it is likely.¹³⁰ President Biden has pledged to save the American dairy industry with a plan that does not attack the competing industries.¹³¹ That being said, the Dairy Pride Act had significant bipartisan support.¹³²

For now, since the Dairy Pride Act did not become law, grocery store shelves in the U.S. are filled with plant-based products using the words “milk,” “cheese,” and “yogurt.” The current Food and Drug Administration regulations do not allow this on their face, but thanks to a wave of court rulings, animal and plant products are sharing the titles.

In *Ang v. Whitewave Foods Co.*, Plaintiffs alleged that the makers of Silk products, a popular brand of plant-based beverages, were misbranded because the FDA defines “milk” as “mammary secretions.”¹³³ Since almonds, coconuts, etc. do not lactate, they should not be called “milk.” However, the court decided as a matter of law that the FDA’s definition only defines what milk is and does not define what milk cannot be.¹³⁴ Since the FDA has not said what a plant-based beverage is and “almond milk,” “soymilk,” etc. were the common names that “clearly convey the basic nature and content of the beverages while clearly distinguishing them from milk,” the case was dismissed in favor of the plant-based beverages.¹³⁵

Similarly, in *Gitson v. Trader Joe’s Co.*, plaintiffs argued that soymilk did not fit into the standard of identity of milk.¹³⁶ The court explains that there was no reliance on the word “milk” for nutrition, so the claim for misbranded milk was dismissed.¹³⁷ This was also held in the Ninth Circuit in *Painter v. Blue Diamond*, holding that “the consumer could not plausibly allege that a reasonable consumer would be deceived into believing that the almond milk products were nutritionally equivalent to dairy milk based on their package labels and advertising.”¹³⁸ If

130. See Caroline Grunewald, *Biden Has a Plan to Save America’s Dairy, but Does it go Far Enough?*, THE HILL, (Aug. 20, 2020), available at <https://thehill.com/opinion/energy-environment/512948-biden-has-a-plan-to-save-americas-dairy-but-does-it-go-far-enough> (last visited Mar. 22, 2022).

131. *Id.*

132. Troitino, *supra* note 11.

133. *Ang v. Whitewave Foods Co.*, 2013 WL 6491353 (N.D. Cal. Dec. 13, 2013).

134. *Id.*

135. *Id.* at 12.

136. *Gitson v. Trader Joe’s Co.*, 2013 WL 5513711 (N.D. Cal. Oct. 4, 2013).

137. *Id.* Although it should be noted that Trader Joe’s now brands its plant-based drinks as “beverages” not “milk.” See Trader Joes, PRODUCTS, *Unsweetened Almond, Cashew & Macadamia Nut Beverage*, available at <https://www.traderjoes.com/home/products/pdp/061942> (last visited Mar. 22, 2022).

138. *Painter v. Blue Diamond Growers*, 757 Fed. Appx. 517, 518 (9th Cir. 2018).

international law continues to allow room for stricter trade barriers with food standards regarding milk products, Congress might act to undo the progress plant-based companies have made in the industry.

INTERNATIONAL LAW'S INFLUENCE ON EU REGULATIONS

Similar to the Dairy Pride Act, European Union farmers led efforts to narrow milk's definition.¹³⁹ In 2017, the European Court of Justice granted dairy producers' requests to ban the terms "milk" and "butter" for plant-based beverages.¹⁴⁰ In October 2020, the European Parliament passed a proposal to further ban descriptions on non-dairy products.¹⁴¹ This proposal does not even allow "cream imitation" or "yogurt-style."¹⁴² Even stricter rules are being considered in Amendment 171 to EU Regulation 1308/2013 which would prohibit plant-based products from being compared to animal products at all.¹⁴³

The European Union regulations do have some exemptions like the Code does, but the proposed amendment would wash these exemptions away.¹⁴⁴ This is why it is worth fighting over the word milk. Some proponents of the plant-based industry have argued it is unnecessary as the plant-based industry can still be disruptive by deliberately misspelling the word to be "malk," "myllk," or "M*lk."¹⁴⁵ However, the IDF has released documents interpreting the Code and considers these deliberate misspellings as an infraction on the rule.¹⁴⁶ So although these arguments are clever, ending the debate once and for all is necessary.

Since European food safety laws seek to harmonize regulations among the EU's member states, there is great deference to international law. If the FAO's definition of milk was broader, there is a higher likelihood that European regulations would reflect that.

139. *EU Court Bans Dairy-Style Names for Soya and Tofu*, BBC NEWS (June 14, 2017), available at <https://www.bbc.com/news/business-40274645> (last visited Mar. 22, 2022).

140. Case C-422/16, *Verband Sozialer Wettbewerb evidence v, TofuTown.com GmbH*, 2017 E.C.J.

141. Isabella Kwai, *E.U. Says Veggie Burgers Can Keep Their Name*, N.Y. TIMES (Oct. 23, 2020), available at <https://www.nytimes.com/2020/10/23/world/europe/eu-plant-based-labeling.html> (last visited Mar. 22, 2022).

142. *Id.*

143. Eur. Parl. Doc. (A8-0198/2019) at 172, available at https://www.europarl.europa.eu/doceo/document/A-8-2019-0198_EN.pdf (last visited Mar. 22, 2022).

144. *Id.*

145. Iselin Gambert, *Got Mylk: The Disruptive Possibilities of Plant Milk*, 84 BROOK. L. REV. 801 (2019) available at <https://brooklynworks.brooklaw.edu/blr/vol84/iss3/3> (last visited Mar. 22, 2022).

146. IDF Bulletin, *supra* note 117, at 30.

A PROPOSAL TO ENCOURAGE COUNTRIES TO ESCHEW RESTRICTIVE LABELING

Under international law, countries are presumptively required to follow the code as a floor and not a ceiling for food standards. If the trade agreements required countries to allow plant-based milks to compete with the dairy industry, governments and the dairy industry would be prompted to consider environmental concerns consumer have. By deemphasizing dairy, there would also be a significant shift toward more sustainable options, thus decreasing cows' hoofprints on the environment.

EXPANDING THE DEFINITION OF "MILK"

If the United Nations is committed to each of the 17 Sustainable Development Goals equally, its member countries like the United States and bodies like United Nations Environment Programme (UNEP) need to direct the World Trade Organization (WTO) and FAO to change restrictive labeling laws. Specifically, it needs to settle the debate causing the "Milk Wars." For environmental, economic, and health reasons, the Code's definition in Section 2.1 should be more inclusive to help reach the goals set by the U.N. and its bodies. An inclusive supplemental definition would read something like "beverages derived from plants or nuts which provide a significant amount of nutrition and have the texture and quality that is associated with that of the public's perception of milk." The specifics of the nutritional requirements and perceptions can be reworded as necessary, but there is room to make a definition that differentiates between juices and dairy but includes plant-milk.

The modification of the definition of milk to eliminate exclusive reference to lactation or "mammary secretions" can have a broad reach on numerous SDGs. Confining the use of the words to animal products does not protect consumers. Instead, it hurts the environment by promoting a methane intensive industry, so countries and bodies committed to the climate goals should support the natural decline of dairy and the organic increase of dairy alternatives.

DEEMPHASIZING DAIRY

The statistics about current agricultural practices and the negative impacts on climate change indicate that dairy cannot continue to carry on business as usual if the global community wants to meet the 2030 SDGs. International law should seek opportunities to limit the harmful

externalities that come from the four-legged, spotted creatures across the globe.

A SHIFT TO MITIGATE HARMS

This proposition would likely find support from UN bodies, like the United Nations Environment Program (UNEP). As explained above, the UNEP is advocating for a gradual transition away from dairy because of its impact on climate change.¹⁴⁷ By making regulations more attractive to the plant-based industry, international law would be facilitating this shift.

The IBIS Plant Milk report continues to cite labeling and marketing regulations as potential issues for the industry. It directly states that “[the passing of the Dairy Pride Act] could have detrimental effects on the Soy and Almond Milk Production Industry.”¹⁴⁸ Passing and enforcing laws that are detrimental to the more sustainable industry is not in line with the UNEP’s guidelines.¹⁴⁹ There is an inverse relationship between dairy and dairy alternatives consumption, so restrictive labeling would not encourage less consumption of dairy products which is needed to reduce GHGs.

Beyond the environmental challenges, there are other disturbing aspects of the dairy industry that could be mitigated if regulations did not favor the entrenched industry. Milk is over-produced because of the false notions of its superiority and support from governments.¹⁵⁰ There are more than a billion pounds of cheese in storage in the United States due to overproduction.¹⁵¹ The United States government tries to deal with this surplus in ways that contribute to systemic racism, like dumping low nutritional value products on African American and Latinx communities which perpetuates health problems.¹⁵²

CONSUMER CONFUSION AS A FACADE FOR PROTECTIONISM

147. UNEP, *supra* note 16.

148. O’Connor, *supra* note 88, at 43-44.

149. UNEP, *supra* note 16

150. Kelsey Gee & Julie Wernau, *A Cheese Glut is Overtaking America*, WALL ST. J. (May 17, 2016), available at <https://www.wsj.com/articles/a-cheese-glut-is-overtaking-america-1463477403> (last visited Mar. 22, 2022).

151. *Id.*

152. Freeman, *supra* note 21.

The restrictions discussed on the use of the word “milk” are all under the guise of consumer protection.¹⁵³ Lobbyists for the dairy industry claim that using words like “milk,” cheese, and yogurt for products that are not from cows appropriates the goodwill of dairy and misleads consumers.¹⁵⁴ These proponents of the regulations argue that consumers are being tricked and cite nutritional deficiencies in dairy alternatives as a harm.¹⁵⁵ However, there is no evidence of actual confusion.

Plant and Animals Can Share the Word “Milk.”

The dairy farmers’ fuss suggests that the word *milk* is theirs,¹⁵⁶ as if a trademark or a certified mark that is an indicator of source. They claim their animosity towards the dairy alternative industry is only because dairy alternatives rip consumers off. However, the dairy alternative market uses the word “milk” not the broad concept of it. Brands actually spend a lot of money to distance the alternative product from ordinary cow milk in an attempt to add value.¹⁵⁷ This extra value, whether it be nutritional, ethical, or aesthetic, is why consumers are willing to pay a premium for the product.¹⁵⁸ This difference will ensure that appropriate qualifiers, like “non-dairy” and “plant-based” will always be used.¹⁵⁹ These qualifiers are enough of a hoop for the alternative sector to jump through. Traditional cow’s milk does not need to label that it is animal product, but perhaps it should if the industry is worried and believes that is where the value lies. In fact, the GSUDT provides for this in Section 4.1.2 by allowing the omission of the animal only if “the consumer would not be misled by [it.]”¹⁶⁰ If there was confusion as the dairy industry claims, labeling it as “cow milk” would be required.

153. IDF Bulletin, *supra* note 117.

154. *Id.*

155. *Id.*

156. Bowles, *supra* note 7.

157. See O’Connor, *supra* note 88, at 15, 21, 24, 29. This report cites the marketing of the product’s distinct ingredients is a success factor as well as growing popularity of soy and almond milk products directly to consumers’ increased concerns regarding growth hormones and antibiotics in cow’s milk as well as allergy, intolerance, and genetic disorders as driving dairy alternative’s demand.

158. *Id.*

159. PBFA, *Plant Based Foods Association Tells FDA that Efforts Restrict “Milk” Labeling Would be Unnecessary, Costly, and Unconstitutional* (Jan. 28, 2019), available at <https://www.plantbasedfoods.org/plant-based-foods-association-tells-fda-that-efforts-to-restrict-milk-labeling-would-be-unnecessary-costly-and-unconstitutional/> (last visited Mar. 22, 2022).

160. GSUDT, *supra* note 116.

In the Code's "Standard for Non-Fermented Soybean Products," the term "soybean beverage" is used instead of "soymilk."¹⁶¹ However, the drafters found it necessary to include a footnote to clarify that the term "soymilk" is often used.¹⁶² Suggesting, there would be confusion if just "soybean beverage" was used. Additionally, the beverage is described as a "milky liquid" numerous times.¹⁶³

If the word "milky" is necessary to describe the beverage, then it seems appropriate to call it as such.

DAIRY COWS DO NOT OWN THE WORD MILK.

Dictionary entries for "dairy" contain secondary and tertiary definitions including plant-based products. The Oxford Dictionary's second definition reads "the white juice of certain plants."¹⁶⁴ As Gambert points out, Big Ag does not own the word milk.¹⁶⁵ She further explains that using only the first definition of an opaque white fluid produced by female mammals is a power move over the female reproductive system.¹⁶⁶ There has also been U.S. jurisprudence to suggest that it could be a free speech violation.¹⁶⁷ Again, confusion is unlikely since plant products are a recognized meaning of the word.

PLANT-BASED PRODUCTS ARE NOT PART OF A "NEW VEGAN/LIBERAL AGENDA."

The etymology of the word for lettuce indicates that it shares a root with the Latin word for milk because of the white substance obtained from the vegetable.¹⁶⁸ The Latin word for lettuce is "lactuca," and the

161. Joint FAO/WHO Food Standards Programme, CXS 1-1985, *General Standard for the Labelling of Prepackaged Foods*, at 2, available at http://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?lnk=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcode_x%252FStandards%252FCXS%2B1-1985%252FCXS_001e.pdf (last visited Mar. 22, 2022).

162. *Id.*

163. GSUDT, *supra* note 116, at 2.2.1.1 and 2.2.1.2 and 2.2.1.3.

164. Benjamin Kemper, *Nut Milks are Milk, Says Almost Every Culture Across the Globe*, SMITHSONIAN (Aug. 15, 2018), available at <https://www.smithsonianmag.com/history/nut-milks-are-milk-says-almost-every-culture-across-globe-180970008/> (last visited Feb. 5, 2022); *Dairy*, OXFORD ENGLISH DICTIONARY

165. Gambert, *supra* note 145, at 811-812.

166. *Id.*

167. Kathleen Justis, *Lactose's Intolerance: The Role of Manufacturers' Rights and Commercial Free Speech in Big Dairy's Fight to Restrict Use of the Term "Milk,"* 84 BROOK. L. REV. 999, 1010 (2019).

168. *Lettuce*, ONLINE ETYMOLOGY DICTIONARY, available at https://www.etymonline.com/word/lettuce#etymonline_v_6713 (last visited Feb. 5, 2022).

Latin word for milk is “lactis.”¹⁶⁹ Additionally, the translation of milk from Latin includes “milky juice of plants.”¹⁷⁰ The English word “lactate” clearly stems from the word “lactis.” Therefore, the association of the white opaque liquids from plants and mammals’ breasts is not new. Excluding plant-based products from using the word “milk” because plants do not lactate does not align with the words’ origins and would not prevent confusion.

Plant-based milks appear in cookbooks from thousands of years ago, establishing that plant-based milk is nothing new.¹⁷¹ “Soy milk” has been used for many years, so banning the use of the terms “milk” with soy products would be disruptive. Constant rebranding and convoluted descriptions of milk products would be more likely to confuse consumers than the continued use of “soy milk.”

LABELING DOES NOT CHANGE WHAT PLANT-BASED BEVERAGES ARE CALLED.

The restrictive labeling rules in the European Union show that the dairy farmers’ concerns are much ado about nothing, or as Simon Lester and Inu Manak explain, “[i]t’s [n]o [u]se [c]rying [o]ver [s]pelt [m]ilk.”¹⁷² Regulations restricting the use of the word “milk” to animal products in Europe have shown that the label does not really matter.¹⁷³ Supermarkets still group the alternatives with cow milk, and retailers use the word milk on price tags and websites and buy search terms using the restricted words.¹⁷⁴ It is unclear whether consumers have stopped noticing the difference between cow milk and plant milk or if they just do not care, but either way, consumers and retailers will still consider dairy alternatives to be “milk,” even if they cannot be labeled as such.¹⁷⁵

169. *Milk*, WHITAKER’S WORDS, available at <http://archives.nd.edu/cgi-bin/wordz.pl?english=milk> (last visited Feb. 5, 2022); see also *Lettuce*, WHITAKER’S WORDS, available at <http://archives.nd.edu/cgi-bin/wordz.pl?english=lettuce> (last visited Feb. 5, 2022).

170. *Id.*

171. Kemper, *supra* note 161.

172. Simon Lester & Inu Manak, *It’s No Use Crying Over Spelt Milk*, CATO AT LIBERTY: CATO INST. (Nov. 19, 2018, 3:07 PM), available at <https://www.cato.org/blog/its-no-use-crying-over-spelt-milk> (last visited Feb. 6, 2022).

173. Tom Levitt, *Dairy wars: when a glass of milk is really a glass of m*lk*, THE GUARDIAN (July 23, 2017), available at <https://www.theguardian.com/lifeandstyle/shortcuts/2017/jul/23/dairy-milk-court-animal-plant-nut> (last visited Feb. 6, 2022).

174. *Id.*

175. *Id.*

On the other hand, companies with plant-based alternative products who are trying to break into the market are negatively affected by the bans.¹⁷⁶ The alternative industries are further kneecapped by the fight over the word “milk.”¹⁷⁷ Supporters of the dairy industry constantly scrutinize these companies, forcing them to litigate the legitimacy of their brand names.¹⁷⁸ A finance report claims that “stringent regulations imposed on the manufacturing of dairy alternatives, as they are directly consumed by consumers, are expected to be the key threat to the industry’s participants.”¹⁷⁹ The regulations include labeling and the definition of milk which is hampering plant-based growth in the EU.¹⁸⁰

Accepting the fact that plant-based products do need qualifiers like “soy,” “almond,” “plant-based,” or “oat,” the industry is trying to differentiate from traditional dairy.¹⁸¹ The target markets have grown accustomed to calling their favorite thing to put in cereal “soymilk.” Now, companies are stuck playing linguistic gymnastics to convey what the product is. Some of the results are laughable like “pulverized almond meat” or “liquidated almond mash,”¹⁸² but it becomes a serious game to talk about plant-based *milk*, *butter*, and *cheese* without saying the forbidden words. Therefore, it would be more confusing for consumers to find their favorite plant-based milks be re-labeled as “soy beverages,” “white plant juice,” or “nut spreads.”

176. O’Connor, *supra* note 88; see also Annisa Leialohilani & Alie De Boer, *EU Food Legislation Impacts Innovation in the Area of Plant-Based Dairy Alternatives*, TRENDS IN FOOD SCI. & TECH. 104, 264 (2020).

177. See generally *id.* A key success factor to the dairy alternative industry is its ability to establish brand names. By going after their names, dairy is directly attacking its success.

178. See *Ang v. Whitewave Foods Co.*, No. 13-CV-1953, 2013 WL 6492353, at *1 (Dist. Ct. N.D. Cal. 2013); *Gitson v. Trader Joe’s Co.*, No. 13-CV-01333, 2013 WL 5513711, at *1 (Dist. Ct. N.D. Cal. 2013); *Painter v. Blue Diamond Growers*, No. 17-55901, 757 F. App’x. 517, at *518, *519 (9th Cir. 2018).

179. Globe NewsWire, *Global Dairy Alternatives Market Outlook to 2024: Focus on Soy, Almond, and Rice Milk Opportunities*, YAHOO! (Aug. 2, 2019), available at <https://www.yahoo.com/now/global-dairy-alternatives-market-outlook-091519619.html> (last visited Feb. 7, 2022).

180. See Leialohilani, *supra* note 176.

181. PBFA, *supra* note 159.

182. Mayukh Sen, *What Could We Call Plant Milks That Aren’t Actually Milk?*, FOOD52 (Mar. 3, 2017), available at <https://food52.com/blog/18813-what-could-we-call-plant-milks-that-aren-t-actually-milk> (last visited Jan. 31, 2022).

CONSUMERS DO NOT NEED TO BE TOLD WHAT MILK IS

There are many inconsistencies on grocery store shelves.¹⁸³ No one believes that gummy bears are made from bear meat. If the qualifier gummy negates the need for the standard of identity for meat, then why should the words “soy” or “almond” not negate the need for milk’s standard of identity? The word “bear” describes what the candy looks like. Here, the beverage looks and feels like milk, so the using the word “milk” is fitting. It also seems contradictory that there is no butter in peanut butter, but the rules banning vegan spread from using the word do not apply to JIF.¹⁸⁴ The FDA and other regulatory bodies are acting like consumers are stupid.¹⁸⁵ Honey does not come from bears, but the bottle might indicate so. And like the so-called problem here, shoefly pie contains no flies. Animal crackers contain no animals. Riced cauliflower contains no rice. Yet, these items are not likely to get a name change or repackaging.

Consumers know that almonds do not lactate.¹⁸⁶ If consumers do not understand the differences between almonds and cows, this signals a problem that is much deeper than standards of identities. That is “Americans are basically agriculturally illiterate.”¹⁸⁷ In the 1990s, the Department of Agriculture conducted a study that backed this claim up. At that time, only four out of five respondents knew that hamburgers were not made from pig.¹⁸⁸ This does not mean the dairy industry is correct about the need for labeling. For, in the dairy industry itself there are some

183. See Ellie Krieger, *How Food Companies Use Packaging to Fool You into Thinking an Item is Healthful*, WASH. POST (Oct. 23, 2019), available at https://www.washingtonpost.com/lifestyle/wellness/how-food-companies-use-packaging-to-fool-you-into-thinking-an-item-is-healthful/2019/10/23/40304d84-e9d4-11e9-9c6d-436a0df4f31d_story.html (last visited Jan. 31, 2022).

184. See Umair Irfan, “Fake Milk”: *Why the Dairy Industry is Boiling Over Plant-Based Milks*, VOX (Dec. 21, 2018), available at <https://www.vox.com/2018/8/31/17760738/almond-milk-dairy-soy-oat-labeling-fda> (last visited Jan. 31, 2022).

185. See Cheryl Leahy, *The FDA Should Protect Consumers, Not a Dying Dairy Industry*, TRUTHOUT (Mar. 14, 2019), available at <https://truthout.org/articles/the-fda-should-protect-consumers-not-a-dying-dairy-industry/> (last visited Jan. 31, 2022).

186. Nieves, *supra* note 128. Former FDA Head, Scott Gottlieb, had enlightened the public numerous times by declaring “an almond doesn’t lactate.”

187. Caitlin Dewey, *The Surprising Number of American Adults Who Think Chocolate Milk Comes from Brown Cows*, WASH. POST (June 15, 2017), available at <https://www.washingtonpost.com/news/wonk/wp/2017/06/15/seven-percent-of-americans-think-chocolate-milk-comes-from-brown-cows-and-thats-not-even-the-scary-part/> (last visited Jan. 31, 2022).

188. Robert H. Birkenholz, *Pilot Study of Agricultural Literacy* (Dec. 1993), available at <https://files.eric.ed.gov/fulltext/ED369890.pdf> (last visited Jan. 31, 2022).

incorrect notions. For example, seven percent of adult Americans supposedly believe chocolate milk comes from brown cows.¹⁸⁹

On top of that, Cheryl Leahy explains that under the dairy lobby's own definition of "lacteal secretion of a healthy hooved mammal," a lot of cow milk would not pass muster.¹⁹⁰ Because of the conditions that cows are often raised in, they are not considered "healthy" as required by the standard of identity.¹⁹¹ "Treated as mere milk-producing machines, they regularly suffer from a number of health problems, such as painful mastitis, skin and hoof infections, diarrhea, digestive diseases and lameness."¹⁹² These moral concerns are reasons why many choose dairy free alternatives, but they also indicate that cows supplying the milk are not "healthy hooved mammals."¹⁹³

Although many dairy farmers and marketing schemes like to depict happy cows, that concept is a little morphed.¹⁹⁴ Many animal advocate groups publish pictures and videos exposing the dairy industry's harmful practices.¹⁹⁵ Lactation is part of the female reproductive system and is not an inherent trait of cows, as many think.¹⁹⁶

Milk production is the result of being repeatedly impregnated.¹⁹⁷ The semen is extracted from the bull using a variety of methods, all of which are too graphic for this Note.¹⁹⁸ The sperm is then separated to increase the likelihood of producing female calves.¹⁹⁹ Next, the cows are put onto a rack that is allegedly called by some farmers, "the rape rack," where the cows are artificially inseminated, again, by methods that are

189. Dewey, *supra* note 187. ("Seven percent of all American adults believe that chocolate milk comes from brown cows, according to a nationally representative online survey commissioned by the Innovation Center of U.S. Dairy. If you do the math, that works out to 16.4 million misinformed, milk-drinking people.")

190. Leahy, *supra* note 185.

191. *Id.*

192. *Id.*

193. O'Connor, *supra* note 86.

194. Gregory Solman, *Deutsch's "Happy Cows" Keep CMAB Content*, ADWEEK (Aug. 18, 2003), available at <https://www.adweek.com/brand-marketing/deutschs-happy-cows-keep-cmab-content-66475/> (last visited Jan. 31, 2022); see *Happy Cows? You Decide*, PETA, available at <https://www.peta.org/features/unhappy-cows/> (last visited Jan. 22, 2022).

195. See *Exposing the Truth. Inspiring Change*, ANIMAL OUTLOOK, available at <https://animaloutlook.org/> (last visited Jan. 31, 2022).

196. Mackenzie L. April, *Readying the Rape Rack: Feminism and the Exploitation of Non-Human Reproductive Systems*, DISSENTING VOICES 51, 58 (Aug. 9, 2019), available at <http://hdl.handle.net/20.500.12648/2779> (last visited Jan. 31, 2022).

197. Hayes, *supra* note 44, at 287-289.

198. *Id.*

199. *Id.*

too graphic for this Note.²⁰⁰ This process is not portrayed by the cartoon cows on the carton. When consumers see the label, they are misled into thinking they are supporting a good life for animals that must be milked.

THE “GOT MILK?” AD CAMPAIGN DESCRIBES PLANT-BASED MILKS TOO

If farmers ask why plant-based alternatives insist on associating their products with milk, the answer can be found by the California Milk Processor Board’s logic for the infamous “Got Milk?” campaign.²⁰¹ The board’s strategy was to emphasize certain situations that required milk, not soda.²⁰² The creative brief said “there are times when only milk will do, when milk is irreplaceable. Running out will lead to angst, anger, and general chaos.”²⁰³ This indirectly illustrates that dairy alternatives are “milk,” because unlike Snapple and Coke, they can be used as a substitute for the product advertised.²⁰⁴ Dairy alternatives have the same qualities that make cow’s milk the perfect complement to cookies, peanut butter, coffee, and cereal, and, therefore, wish to be called “milk.” This quality would not be portrayed by words like “juice.”

3. Alignment with Anti-Protectionist and Sustainability Goals

The main protectionism concerns that brought the SPS agreement to fruition regarded countries favoring domestic markets over foreign trade.²⁰⁵ Labeling was often a protectionist trade barrier that countries tried to disguise as a sanitary measure.²⁰⁶ The SPS agreements requirements for higher standards seek to prevent this protectionism. Therefore, labeling laws that seek to prevent competition rather than prevent inferior food should be a clear violation.

The restrictive definition of milk is a labeling law that seeks to prevent competition. By prohibiting the use of the words “milk” or “cheese” with plant-based dairy alternatives, the FAO is allowing protectionism. Instead of protecting the domestic sellers, it protects the entire domestic dairy industry of that country against rising competitive markets. Proponents of a narrow definition will try to disguise this labeling law as a sanitary measure, claiming animal-based milks have

200. April, *supra* note 196; Hayes, *supra* note 44, at 288.

201. See Manning, *supra* note 8, at 39.

202. *Id.*

203. *Id.* at 40.

204. *Id.* at 30.

205. David Victor, *The Sanitary and Phytosanitary Agreement of the World Trade Organization: An Assessment After Five Years*, 32 N.Y.U. J. INT’L L. & POL. 865 (2000).

206. *Id.*

greater health benefits. However, even if it was clearly proven that cow's milk was more nutritional than plant-based alternatives, precluding the use of the word "milk" with qualifiers goes beyond the need to protect health, and other measures could be taken that do not restrict trade like requiring appropriate disclaimers.

Article 3.1 of the SPS Agreement encourages states to adopt measures based on international standards.²⁰⁷ As mentioned, the Code, the FAO's international food standards does provide an exemption for non-milk that is clearly marked.²⁰⁸ Although this exemption should just be part of the definition and its application is questionable, it shows that banning the use of the words on all non-animal products is not in line with international standards. Therefore, restrictive labeling should also be a violation of article 3.1.

This violation would be much clearer if the Code was revised to include plant-based alternatives in the definition, rather than being an exception to the prohibition. In addition to the SPS agreement, there is also the WTO's Technical Barriers to Trade (TBT) agreement.²⁰⁹ The principle of this agreement is that a barrier to trade should only be used for legitimate objectives not to protect certain markets.²¹⁰

In the 1990s, the WTO panel was faced with controversy over the European Union's ban on hormone treated meats.²¹¹ It was well-known that these measures were based on European opinions and masked as sanitary and phytosanitary concerns.²¹² The United States challenged this ban because of an estimated loss of over \$200 million, claiming it violated GATT, SPS, TBT, and Agreement on Agriculture agreements.²¹³

The WTO panel agreed with the United States that the ban violated the SPS agreement.²¹⁴ The European Union appealed this ruling and was given time to conduct a risk-assessment of the disputed hormone-treated meat.²¹⁵ Refusing to lift the ban, the United States put tariffs and trade

207. Agreement on the Application of Sanitary and Phytosanitary Measures, GATT B.I.S.D., art. 3.1 (1995).

208. GSUDT, *supra* note 116, at 178.

209. Codex and the International Food Trade, *supra* note 114.

210. *Id.*

211. Lisa K. Seilheimer, *The SPS Agreements Applied: The WTO Hormone Beef Case*, 4 ENV'T. L. 537 (1998).

212. *Id.*

213. *Id.*

214. Seilheimer, *supra* note 211.

215. *Id.*

sanctions on Europe.²¹⁶ In 2008, the WTO panel reversed its decision because of the scientific studies.²¹⁷

Here, plant-based milk is not like hormone-treated meat. The health risks that are still questioned under the European Union studies were not merely about nutritional value.²¹⁸ Instead, the studies purported that the hormones were carcinogenic or could be carcinogenic.²¹⁹ The data regarding plant-based milk does not suggest that dairy alternatives put consumers at risk if consumed.²²⁰ The risk would only be in comparison to other products that are healthier than the alternatives. If this is a risk that is scientifically justified for, then chocolate milk should not be allowed the title of “milk” as the added sugars negate the high protein.²²¹ Nevertheless, there is no inherent health risk.²²² Many dairy alternatives are fortified and will be properly labeled to show that.²²³ Additionally, many dairy alternatives have health benefits that are superior to milk.²²⁴ Therefore, this is an opportunity for anti-protectionist policies to embrace sustainability initiatives.

PROBLEMS WITH OTHER STRATEGIES

This note only explores the regulatory aspect of labeling dairy alternatives. As mentioned in the beginning, many activists would like to see dairy die, but there are currently far too many cows to put out to pasture. To promote all SDGs, the transition needs to be natural and gradual. In a free market global economy, people should have the choice. That is why this note promotes only letting some safeguards to the dairy industry down. With easier access to dairy-free alternatives, more people can afford to try and switch to plant-based products, thereby, decreasing the dairy industry’s footprint.²²⁵

216. *Id.*

217. Seilheimer, *supra* note 211.

218. *Id.*

219. *Id.*

220. Angelica Sousa & Katrin A. Kopf-Bolan, *Nutritional Implications of Increasing Consumption of Non-Dairy Plant-Based Beverages Instead of Cow’s Milk in Switzerland*, 5:4 J. ADV. DAIRY RES. 1, 6 (Nov. 29, 2017).

221. *Get the Facts: Types of Milk Explained*, MILK LIFE, available at <https://gonnaneedmilk.com/articles/types-of-milk-explained> (last visited Feb. 4, 2022).

222. Parrish, *supra* note 65.

223. *Id.*

224. Sanae Ferreira, *Going Nuts About Milk? Here’s What You Need To Know About Plant-Based Milk Alternatives*, AM. SOC’Y FOR NUTRITION (Jan. 25, 2019), available at <https://nutrition.org/going-nuts-about-milk-heres-what-you-need-to-know-about-plant-based-milk-alternatives/> (last visited Feb. 4, 2022).

225. UNEP, *supra* note 16.

Despite Innovations, It is Still Difficult to Control Methane.

There are numerous technologies that can substantially decrease the amount of methane that is released when cows and other livestock relieve gas.²²⁶ Scientists have spent years developing cures for livestock's gas problem.²²⁷ An Australian startup, Sea Forest, has been cultivating seaweed with bromoform to block the gut's methane-producing enzymes.²²⁸ New Zealand dairy giant, Fonterra, is testing the effect on methane emissions.²²⁹ Another study that is still awaiting publishing suggests that 0.5% seaweed diet has potential to reduce methane emissions by 80%.²³⁰ Other alterations to feedstock include garlic, lemon grass, bovaer, and flaxseed.²³¹ A Penn State Dairy fed a cow oregano; this method cut methane emissions and boosted milk production essentially debunking any worries about negatively affecting supply.²³²

In addition to altering livestock's diets, there are efforts to capture the gas and use it as energy.²³³ Countries like Argentina are experimenting with cow backpacks, accessories the cows can wear to trap the methane, and companies like Cargill are putting manure in domes to collect the gas.²³⁴ Beyond the capture method, breeding strategies can influence the genetics that affect gaseousness.²³⁵ Although much more research is required, there are promising efforts in the works that merit policy-makers' attentions to at least attempt to achieve climate goals.²³⁶

However, the dairy industry is justifiably reluctant to jump on these solutions due to the potential drawbacks.²³⁷ The solutions that require the alteration of feedstock can be pricey and time consuming, but worst of all can alter the taste of milk.²³⁸ Other methods do not affect taste but can skew the production of milk downward.²³⁹ However, this problem can

226. See Plumer, *supra* note 35.

227. Jon Emont, *Cows Make Climate Change Worse. Could Seaweed Help?* WALL STREET J. (Oct. 31, 2020, 10:00 AM), available at <https://www.wsj.com/articles/cows-make-climate-change-worse-could-seaweed-help-11604152802> (last visited Feb. 4, 2022).

228. *Id.*

229. *Id.*

230. *Id.*

231. *Id.*

232. Hayes, *supra* note 44 at 35.

233. Plumer, *supra* note 35.

234. Plumer, *supra* note 35.

235. Plumer, *supra* note 35.

236. Plumer, *supra* note 35.

237. Emont, *supra* note 227.

238. Emont, *supra* note 227.

239. Emont, *supra* note 227.

be adjusted for with proper compensation by governments. Milk is already overproduced because of government guarantees to buy up surpluses.²⁴⁰ If farmers were compensated to under produce instead, farmers would be more willing to try new things and break even, solving the methane and overproduction problems. This would require a multi-step approach by governments, likely proving to be more difficult.

Subsidy Reductions Proposals Are Usually Stuck Down.

It is important to note that many argue that the dairy alternative industry is not what is hurting the traditional dairy sector or encouraging environmental degradation.²⁴¹ Instead, it is the ineffective subsidies that allow dairy farmers to overproduce, or EPA regulations that make farms unprofitable.²⁴²

In New Zealand, agricultural subsidies were canceled, but this might be considered unfeasible in most nations.²⁴³ Although this seemed like it would be devastating to New Zealand dairy farms, the dairy industry came back stronger in the long run.²⁴⁴ Economists and activists now use New Zealand as an example they wish Europe, and the United States would follow. A New York Times article explains “[subsidies] generally encourage inefficient farmers to grow unprofitable crops far beyond what consumers actually need, secure in the knowledge that the government will help protect them from loss.”²⁴⁵ A New York Times article explains “[subsidies] generally encourage inefficient farmers to grow unprofitable crops far beyond what consumers actually need, secure in the knowledge that the government will help protect them from loss.”²⁴⁶ By cutting subsidies altogether, agriculture struggled at first, but it now relies on science to be more efficient.²⁴⁷ The dairy farmers are also more

240. FAO, Dairy Market Review, *Price and Policy Update*, July 2020. CB0408EN/1/07.20

241. Chase Purdy, *Plant-Based Milks Aren't the Reason US Dairies Are Struggling*, QUARTZ (Dec. 21, 2019), available at <https://qz.com/1772981/dairy-farmers-arent-that-nervous-about-plant-based-milk/> (last visited Feb. 6, 2022); Danielle Wiener-Bronner, *America's Milk Industry is Struggling. Don't Blame Oat Milk*, CNN BUSINESS (Nov. 21, 2019), available at <https://www.cnn.com/2019/11/21/business/milk-industry-dean-foods/index.html> (last visited Feb. 6, 2022)

242. Julie Murphee, *EPA Permitting Could Be the Straw the Breaks the Dairy Cow's Back*, ARIZONA FARM BUREAU

243. Wayne Arnold, *Surviving Without Subsidies*, N.Y. TIMES (Aug. 2, 2007), available at <https://www.nytimes.com/2007/08/02/business/worldbusiness/02farm.html> (last visited Feb. 7, 2022).

244. *Id.*

245. *Id.*

246. *Id.*

247. *Id.*

responsive to shifting demand and determine quantities of cow breeds based on that knowledge.²⁴⁸

Dairy programs in the United States cost taxpayers over \$200 million annually.²⁴⁹ Because of this economic intervention by the government, the United States butter prices are twice as much as in the rest of the world.²⁵⁰ Cheese and dry milk prices are also higher.²⁵¹ There have been proposals to cut down government subsidies in the United States, but they usually do not make it out of committee.²⁵² The supply management prong of the program has also caused over production.²⁵³ The debate over milk support programs is not new. Ronald Reagan set off the battle in the 1980s by not increasing the price support program.²⁵⁴ An article from 1981, *The Great Dairy Wars Begin*, notes that the dairy lobby spent more than \$1.2 million on candidates.²⁵⁵ This number has only grown since then.

Other proponents have proposed government programs to transition struggling farms to more sustainable crops with higher demands.²⁵⁶ As Gene Baur has claimed multiple times, “the best way to help dairy farmers is to get them out of dairy farming.”²⁵⁷ Dairy farms can transition to producing other food sources that have a better impact on environmental and consumer health.

Elmhurst Dairy was a multigenerational dairy farm in New York that was once booming.²⁵⁸ When demand for dairy declined the farm faced

248. *See Id.*

249. Laurel Kays, *The Steep Cost of US Dairy Programs*, AMERICANS FOR TAX REFORM, (Aug 14, 2012).

250. *Id.*

251. *Id.*

252. Cato Institute, *Reforming Federal Farm Policies*, TAX AND BUDGET BULLETIN, at 82, available at <https://www.cato.org/tax-budget-bulletin/reforming-federal-farm-policies> (last visited Mar. 22, 2022).

253. *See* Press Release, Congressman Bob Goodlatte and Congressman David Scott, *Goodlatte and Scott Statement on Dairy Amendment Vote* (May 15, 2013); *Price Fixing Milk*, IDFA (Oct. 16, 2013), available at <https://www.idfa.org/news/price-fixing-milk> (last visited Feb. 7, 2022).

254. Robert G. Kaiser, *The Great Dairy Wars Begin*, WASH. POST (Feb. 14, 1981), available at <https://www.washingtonpost.com/archive/politics/1981/02/14/the-great-dairy-wars-begin/4d0f8124-f87f-4c0a-ace7-1b1201008d1d/> (last visited Feb. 7, 2022).

255. *Id.*

256. Baur, *supra* note 22.

257. Gene Baur, *America's Failing Dairy Farms*, N.Y. TIMES (May. 3, 2019), available at <https://www.nytimes.com/2019/05/03/opinion/letters/dairy-farms-milk-overproduction.html> (last visited Feb. 7, 2022); Baur, *supra* note 22.

258. *See* Lanna Garfield, *A Major Dairy Producer Collapsed—now It's Making Nut Milks and Business is Booming*, BUSINESS INSIDER (Apr. 22, 2017), available at

the economic hardships that many others are still feeling, Elmhurst decided to close and reinvest.²⁵⁹ The family reopened its business, focusing on plant-based products instead of dairy.²⁶⁰ Since then, Elmhurst has enjoyed much success and can be a model to revitalize the sector to match market trends. The CEO says, “it’s about transforming with the times.”²⁶¹ However, not all small farms have the capital to drop what they have done for generations and regroup.

Given the entrenched interests of dairy farmers in every state and country across the globe and the sheer magnitude of the subsidies and the planning need to transition, it would be very difficult for these ideas to gain enough traction and be implemented without causing more harm than good. This is why competition from the plant-based milk market would be a more effective solution at this time.

Conclusion

Dairy does not need to die to reduce the effects of GHGs. However, it cannot continue to bully its way to dominance. Plant and nut-based beverages may be called “fake milk,” but the industry cannot call the environmental impacts of dairy “fake news.” Consumers should be free to make the choice to consume or not consume dairy and animal products. Part of this choice requires giving brands access to the market.

In order to meet the Sustainable Development Goals by 2030, the United Nations must act to market plant-based products and make them available to those who want to buy them without interference from the dairy industry. This marketing should include the use of words commonly associated with the products like “milk” and “cheese.” Both the environment and people with dietary restrictions benefit from looser standards in regulations.

Despite its flaws, dairy is here to stay. The entire planet is not quite ready to adopt a vegan lifestyle. There are some recipes that grandma would never dare make with milk from a nut or cheese made with soy, and there are far too many cows to let wander the countries. Allowing fair competition to the dairy industry is a great first step to making dairy more sustainable and providing the public with a fair choice.

<https://www.businessinsider.com/dairy-farm-nut-milks-elmhurst-2017-4> (last visited Feb. 7, 2022).

259. Elmhurst 1925, *Our Story*, available at <https://elmhurst1925.com/pages/our-story> (last visited Feb. 7, 2022).

260. Garfield, *supra* note 258.

261. *Id.*