BROWE BREET



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Agriculture is arguably the beginning of human civilization. It allowed us to settle down in one place, develop specialized jobs and passions and expand our population. This led to the development of human societies. Back when gardening and farming first began, everything was produced locally. Farms or large-scale gardens produced food mere feet from the people who would eat it. Nowadays, things are different. The development of the global economy has exploded the food industry, allowing us to eat food from other climates and cultures across the globe. This is largely facilitated by the practice of industrial farming. It is an incredible phenomenon, but it can carry harsh consequences for the environment and workers

Industrial farming, or industrial agriculture, refers to the practice of producing crops and animals at a large scale while using methods that streamline production. According to the National Resources Defense Council (NRDC), an environmental interests group, this typically involves the use of concentrated animal feeding operations (CAFO), colloquially known as "factory farms." CAFOs consist of facilities that house large numbers of animals in the smallest possible space. Even when labeled "free range," animals are likely still raised in CAFOs. In his documentary "Supersize Me 2: Holy Chicken," filmmaker Morgan Spurlock examines the way fast-food chain restaurants maintain a facade of morality by opening his own fast food chain. He explains that in order to qualify as freerange, chickens need only have access to the outdoors for 51% of their lives, and there is no minimum

requirement for the size of the outdoor access. CAFOs are in many ways exemplary of how industrial farming cuts corners.

Spurlock goes on to elucidate how industrial farming exploits the actual farmers. In the film, he interviews owners of small farms that raise chickens. The standard way they started their farms was by taking out loans and receiving assistance from large agriculture corporations, such as Tyson Foods. Tyson is the parent company of innumerable subsidiaries whose products can be found in supermarkets across the country. They are then contracted to sell their produce to the parent company. These corporations proceed to continually keep the farmers in debt. They require the farms to perpetually upgrade technology and change standards in expensive and largely unnecessary ways. One of the farmers interviewed by Spurlock who failed to comply was brought to court. Farmers are also paid based on how the corporations rate their chickens against chickens from other farms. Although it may seem like a way of rewarding farmers for performing more highly, many farmers claim this is an arbitrary process used to prevent any one farm from earning enough to pay off their debts. The farmers are essentially chained to the companies for the rest of their lives, and even then their debt is passed down to their heirs. It is modern-day indentured servitude.

In early 2021, The Huffington Post reported that leaders of Indigenous peoples in Brazil brought charges against current Brazilian president Jair Bolsonaro at the International Criminal Court (ICC). The charges assert that Bolsonaro's removal of protections from Amazonian land and the Indigenous tribes living on it constitutes crimes against humanity. Although illegal clearance of Indigenous Amazonian land has been occurring far longer than Bolsonaro has been in office, he has greatly exacerbated the issue with both policy changes and inflammatory comments on

the ownership of Indigenous land.

Early on in his presidency, he transferred the authority of demarcating Indigenous lands from the Indigenous Missionary Council to the Agriculture Ministry — a move that federal prosecutors see as a violation of the rights Indigenous ethnic groups are guaranteed in the Brazilian constitution. This led to a 135% increase in invasions of Indigenous lands in 2019 and an increase in deforestation and violence against the local Indigenous populations. Much of this is driven by Brazilian cattle ranchers, a massive industry in Brazil. The country is responsible for 20% of the world's beef exports. Land is cleared not only for the cattle, but for soybeans used as feed for the cattle.

Even when the deforested area is replaced with crops as opposed to livestock, there is still a net deficit in carbon uptake and biodiversity is reduced. Not all plants are made equal. Due to the size of the industry and the significance of the Amazon Rainforest to the global climate, Brazil is a particularly outsized case, but it is by no means unique. Industrial farming drives deforestation around the world.

Deforestation is not the only channel by which industrial farming damages the environment. Cows raised in CAFOs produce significant amounts of methane, a greenhouse gas with a warming effect far more potent than that of carbon dioxide. Methane is released via gaseous releases and in manure. Cattle raised in smaller farms produce significantly fewer greenhouse gasses as a result of their diet as well as due to better manure disposal techniques.

CAFO manure is also a cause of a great deal of ground and surface water contamination, according to a 2010 academic paper published by the National Association of Local Boards of Health. In addition to the usual contaminants in manure, because animals in CAFOs are packed together tightly, some diseases that are carried in manure can

in manure can spread more readily among the animals. The 2021 E. Coli outbreak in romaine lettuce, for example, was caused by contaminated waste runoff from cattle that were carrying the bacteria. E. Coli

does not naturally occur in lettuce.

Industrial farming has streamlined production at the expense of workers and small farm owners, often with the expressed intention of preventing their growth. It causes monumental damage to the environment through deforestation and air and water pollutants in ways that disproportionately affect Indigenous people.

We can combat these effects by shopping at farmers markets and purchasing from local farms and vendors whenever able. Supporting small, local farms helps them continue operating independently. You can find farmer's markets in your area by using farmersmarketplaces.com. From a structural standpoint, we can contact our elected officials and encourage them to support the Farm System Reform Act of 2021. Introduced to the Senate by Sen. Cory Booker, the bill aims to prevent the establishment of further CAFOs immediately and end operation of current CAFOs by 2040.

If passed, it will also set up a fund to offer debt forgiveness and transition assistance to owners of smaller farms and future independent farm owners, as well as offering incentives for more environmentally friendly farm maintenance practices. The bill also offers protections to farmers who are contracted to corporations like Tyson. Lastly, it includes a clause that would require beef, pork, and dairy products to have country of origin labeled, which would ensure that the use of CAFOs were not simply being outsourced to a country where they were still legal (and could allow us to avoid purchasing from farms that are invading the Amazon rainforest).

It is currently under review by the Committee for Agriculture, Nutrition, and Forestry. Badgering elected officials about this bill could go a long way towards dismantling industrial agriculture and the

harm it does to workers, Indigenous people, and the environment. We can still enjoy the food we eat, but something must change about the way it is grown.