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CAFOs: The Horror Behind Our Food

Human beings have bred and fed animals in captivity in order to slaughter them for food since the Agricultural Revolution over 5,000 years ago. Up until the 1950s, this was mostly done on a small scale, with each farmer tending to only a handful of animals, often killing them him or herself. But only for the last 60 years or so has this practice had so much of a negative impact on our natural environment, human health, and entire communities. This is because most animals currently raised for human food, including cows, pigs, chickens, turkeys, ducks and sheep, are kept in large facilities known as Confined Animal Feeding Operations, or CAFOs, which are often mistaken for warehouses filled with heavy machinery. However, inside are thousands of living creatures, confined without access to sunlight and fresh air, producing more waste than most cities. Raising these animals is a mechanized process requiring very little human labor, so CAFOs often have only a handful of employees supervising more than 100 animals each. As animal farms become larger and more consolidated, their impact continues to increase.

Before 1920, most meat and dairy products came from small farms which, usually family businesses handed down over generations. These farms mostly served nearby markets. The first large-scale animal farms appeared in the 1920s, and many more were built during the 1950s and 1960s. The discovery of vitamins A and D was vital to this process. When these vitamins are added to their feed, animals no longer require exercise and sunlight for growth. Because of this, large numbers of animals could be raised indoors year-round without being able to move (In Defense of Animals). This allowed for the mechanization of raising and slaughtering of animals for food, which cut labor costs and other expenses because it was no longer (theoretically)

necessary to provide animals with anything close to a natural environment. The resulting increase in supply and decrease in cost of meat and dairy satisfied consumers, removing the public's attention from the flaws in the new system. This was helped by the successful efforts of agribusiness companies to hide the realities of mass farming.

The first intensive confinement of animals created new problems. 500 or more animals now lived in one warehouse, sharing the same food and breathing the same air, aiding the quick spread of disease. To combat this, each new advancement in medicine, including the invention of antibiotics like penicillin, was administered to farmed animals, allowing them to be kept disease-free in even more densely packed warehouses (In Defense of Animals). But this created an even bigger problem in the form of antibiotic resistance. Animals are given the same kinds of antibiotics used to treat human illness in large amounts, which led to the evolution of bacterial strains that are resistant to antibiotics. More and more people are reporting that the antibiotics they are taking to treat various ailments are not effective (ICASH).

Today, approximately ten billion food animals are slaughtered every year, with 90,000 cows and calves and 14,000 chickens slaughtered every 24 hours in the United States (Shoestring Travels). The problem is not that more total animals are being raised for food today than before 1920, but that more animals are being raised on less land. According to the US Department of Agriculture, there are many fewer dairy cows being milked today than there were in previous years. The US dairy cow population peaked in 1944, when 25.6 million cows were raised for milk. In 1990, the number was below 10 million (NASS). Even if animal welfare and environmental practices on the smaller farms that dominated American agriculture prior to 1950 were the same as on larger ones, the increase in sheer volume of animals raised per square foot since then has greatly increased food animal production's overall impact many times. Unlike on

smaller-scale farms, it is virtually impossible for CAFO operators to meet individual animals' needs and control the effects of their massive amounts of waste on the air and water.

The amount of animal waste produced by some CAFOs is larger than that of many cities, with the total quantity being more than 130 times greater than that produced by humans. (Farm Sanctuary) The feces of cows, pigs and chickens contain nitrogen, phosphorus and other organic materials. It is often stored in open-air "lagoons" near the facilities, which flood when it rains, spilling the waste into waterways. The excess nitrogen and phosphorus provide nutrients for algae, which begins the process of eutrophication, leaving the water uninhabitable for most fish, plants and microbes. Additionally, increased amounts of suspended materials and decomposition of excess organic matter in water can also cause a waterbody to become stagnant and develop an offensive odor, taste, and/or color ("Animal Waste").

The US Environmental Protection Agency (EPA) reports that manure runoff from giant factory farms contributes significantly to increasing ground and surface water pollution. This causes EPA to regulate CAFOs (identified as point sources of pollution) in a separate category from other industries in its National Pollutant Discharge Elimination System (NPDES). The agency documented that 41% of non-point source pollution is a result of agriculture, with animal waste from feedlots, holding areas, and pastures making up approximately one-third of this pollution ("Animal Waste"). Sixty percent of American streams and rivers have been identified as "impaired" due to runoff from animal agricultural facilities. (Farm Sanctuary)

CAFOs are identified as major contributors to localized air pollution, such as ammonia and other gases, aerosol vapors, and dust generated by livestock farming operations, are a source of numerous air quality problems. These include noxious and nuisance odors, corrosion of structures and outdoor objects. Ammonia, carbon dioxide, hydrogen sulfide, and methane are

potentially deadly in high amounts ("Animal Waste"). The disease-ridden air of factory farms often affects communities living near them. The organization Farm Aid cites studies that found people living near hog factories suffering from headaches, runny noses, sore throats, excessive coughing, diarrhea and burning eyes, contributed to by noxious gases as well as water pollution from hog manure. Occasionally, neighbors of CAFOs have developed neurological diseases and women have suffered miscarriages resulting from air and water contamination.

Not only does the mass production of human food from animals have major environmental impacts, growing massive amounts of grain to feed to livestock does as well. It requires 8 kilograms of grain to produce 1 kilogram of beef. Two-fifths or more of the grain consumed in 9 out of 20 developing countries is fed to livestock, while 66% of total US grain is in animal feed. The resultant overload of grainland causes soil erosion and other forms of land degradation. Grain production is also a water-intensive process, requiring 1,000 metric tons of water to produce one metric ton of grain. Government subsidies for grain production in most developing countries continue to keep grain prices low, thus making grain meal attractive to American-based agribusi-ness corporations (Myers et al.).

Poor and hazardous working conditions exist on most CAFOs. Sanitation jobs on farms, slaughterhouses and meatpacking plants provide salaries just above the poverty level to a largely immigrant workforce (Schlosser). Workers are constantly exposed to dust and gases emitted from concentrated manure. These fumes contain many chemicals, including toxics such as ammonia and hydrogen sulfide, whose inhalation can cause respiratory problems, neurological disorders, and, at high levels, even death. 25-30% of CAFO employees report serious respiratory ailments (ICASH) and 70% of all swine confinement workers suffer from some form of respiratory illness or irritation (Iowa State University). Researchers determined that 10% of these workers experi-

ence toxic organic dust syndrome (TODS) and 58% suffer from chronic bronchitis – this is three times higher than the incidence of chronic bronchitis among workers in conventional swine housing units (Iowa State University, "The Issues…").

The expansion of large-scale agribusiness hurts local communities, not only those where CAFOs are located, but also those where small, family-owned farms are forced to go out of business. Reliance on the mass production of meat for export with minimum-wage labor drains the local economy in favor of stockholders in multinational corporations. About seven million farms existed in the United States around 1930, now that number is just over two million. It is estimated that every new industrial farm puts ten family farmers out of business, with 330 American farmers leaving their land every week. (Farm Aid) In North Carolina, the diminishing tobacco market and the growth of large-scale hog farms in place of local farms and dairies are evidence of this trend. (Runkle)

In the free market, greater consolidation of farms in fewer corporate hands favors the bigger corporations that own the most farms and produce the most food at the least immediate financial burden. Agricultural policies in the United States today, as well as international free trade policies, serve to promote such consolidation. Since prices for industrially farmed meat, dairy and produce are so low and production is so high, much of the food produced in the US is exported, out-competing local farmers in countries like Mexico and forcing them out of business. Market prices are set according to the interests of multinational agribusiness, forcing small farmers to pay even more for animal feed, medicine and supplies. Urban expansion raises land values in rural areas so much that small farmers many times cannot afford to stay on their land.

The advantages of modern factory-style farming are purely economic: more meat, poultry, dairy and eggs are available at lower prices while large corporations maximize profit and cut cost. On the downside, however, animals suffer unimaginably in a system that does not see them as living creatures but as production units. Massive air and water pollution are produced, hurting communities located near CAFOs. Employees on modern farms are subjected to poor working conditions at minimum wage and small family farms going out of business. Ownership of industrial farms is consolidated into the hands of fewer corporations, which gain more leveraging power as their share of the market grows. Disease from animal products continues to spread into the human population.

Although agribusiness claims to help people by providing an abundance of cheap food, many of these same people are suffering the externalized costs of modern methods. The owners and stockholders in major agriculture conglomerates continue to reap large profits. As they become wealthier they can afford to move farther away from the communities bearing the brunt of environmental and economic deterioration.

Thinkers in different disciplines have focused on alternative agricultural systems that take the wide array of affected people and organizations into account. Many ideas developed with plant agriculture in mind can also be applied to animal agriculture. One of these is a transition to community-supported agriculture, whereby everybody in a local area contributes money or labor to a collective farm that would raise animals and harvest crops humanely and sustainably. Because everybody who receives food from a community-supported farm pays part of its cost, the ultimate cost of food per consumer is able to compete with that offered by industrial agriculture. Implementing community-supported agriculture on a large scale would require convincing large numbers of people of the many benefits of smaller-scale farms and would encounter resistance

from those who wish not to contribute so much time or money to food production. Many would see the idea as socialist and antithetical to the American free-market ideal. Having communities support small farms might work in some parts of the United States, but it probably is not a panacea and would not result in the elimination or massive reform of industrial agriculture unless done on a scale so large that it would be unattainable in the necessary time period.

New Generation Cooperatives (NGCs) are another idea that is being put in practice. This requires large amounts of small, family farmers getting together and marketing their products under a single name independently from giant corporations. The Organic Valley group of dairy and egg farms is an example of an NGC. This approach also keeps family farmers in business, offers competitively priced food, and rewards farmers that use at least some organic growing methods. The dangers of NGCs are that they can start to operate like corporations themselves, eventually running into the trap of having to cut costs by firing workers and confining animals more intensively. Agribusiness giants that offer irresistible sums of money to take over the operations of the most successful NCGs end up buying them out and consolidating them. By the start of 2004, a majority of organic food brands were owned by only eight companies.

Some of the most vocal opponents of "factory farming" are animal rights groups. They are primarily concerned with the suffering of animals raised on CAFOs and offer only one alternative to the status quo: encouraging more people to eliminate all animal products from their diets, becoming vegan. They reason that as more people stop buying animal products, agribusiness will run out of customers and will have to end its operations. While cutting one's meat consumption has been established as a positive thing for one's health and the environment, animal rights advocates alienate many potential allies in the fight against factory farming by saying that one has to be vegan to be on their side. A massive trend towards veganism would

hurt small farmers as much as large ones, which most animal rights activists see as a good thing because fewer animals would be killed for food overall. But it is imperative that animal rights joins in a coalition with other constituencies, including family farmers, to combat agribusiness, and a vegan revolution is not likely to happen very soon. Thus, it is important that animal protection advocates put aside their differences with environmentalists, labor activists and family farmers and work with them on cooperative solutions to the CAFO trend.

One effective way for those concerned with the maleffects of industrial agriculture to enact change is to organize politically and gain enough influence with legislators to level the playing field with agribusiness. Forming an organized voting block within the constituency is the only effective way to do this. The corporations that own industrial farms are strong, well-financed, and ideologically united in their support of the expansion of the current system. The industry's tremendous advertising budget, overwhelming that of any advocacy group, gives it the power to convince consumers that the current method is harmless through advertisements that depicts happy animals in clean, pastoral settings. It also wields political power over government regulators through coordinated, well-funded lobbying and campaign contributions. Affecting legislators by threatening their jobs at the polls is the only way most advocacy groups with limited finances can wield power comparable to that of well-financed corporate lobbies.

One way to start building such a coalition is to make the case that industrial agriculture cannot be allowed to grow beyond a certain point because it endangers quality of life for both humans and animals. Quality of life is a factor that the environmental movement has been successful in raising in the consciousness of politicians and executive decision makers. The task of an anti-factory farming coalition is to leverage this concern to its advantage.

The array of organizations and individuals working against factory farming is small and diffuse, each with its own ideology and distinct reasons for its positions, each trying to fight a strong, entrenched, ideologically monolithic foe. There is no question that all stakeholders favoring alternatives to factory farming would benefit from working cohesively to gain the political power necessary to combat agribusiness. The predominant issue keeping this kind of networking from happening is ideological absolutism, of which factions of all stakeholder groups are guilty. Each interested party is focused quite narrowly on its particular aspect of the larger issue. Animal rights groups tend to be especially closed-minded, feeling increasingly that people have to be vegan, not wear fur or leather and not support any other form of animal exploitation to be "on the animals' side." People who claim to care about some animals (their pets) but not others (farmed animals) are seen as hypocrites who aren't committed to the cause. Some environmentalists are unconcerned with the animal suffering, but are quite worried about the effects of pollution from CAFOs on ecosystems and the people who depend on them. Labor rights and family farm advocates wonder why both of the other groups do not pay attention to the immense human costs of the current system.

It is imperative for animal rights advocates, environmentalists, labor activists and family farmers to be able to find common ground and work as a united political alliance to reform animal agriculture, although they may disagree on a host of other issues. Otherwise, they all lose because no one of the stakeholders in the anti-intensive farming camp has enough support on its own to take on the agribusiness establishment.

The very principles modern animal agriculture runs on are unsustainable. A system that takes so many resources, produces so much waste, and provides such an abundance of food for so few people, by nature, cannot last long before it runs into roadblocks of its own making.

Although it is so well entrenched, modern animal agriculture has only been around for the last 60 years or so. If it only took that long for it to evolve out of a culture that relied mostly on small, family-owned farms for its meat, dairy and eggs, it may not take very long for it to dismantle, given time as well as the energy, creativity, and care of people who realize that a more sensible, humane, equitable and sustainable way is possible.

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