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Our Food System is Sick: The Newly Passed FARM Act is Just its Latest Symptom

Behind every policy, there is a story. This is part of the story of the federal [Fair Agriculture Reporting Method](#) (FARM) Act, and how its passage in March 2018 allows bad practices in our food system to continue to negatively impact our health.

What the FARM Act Does

The FARM Act gives the animal agriculture industry a legislative exemption from reporting its releases of harmful pollutants, which would otherwise be required under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) and EPCRA (Emergency Planning and Community Right-to-Know Act). CERCLA and EPCRA are two laws that stipulate that anyone who releases “large quantities of hazardous materials... into the environment” needs to report said release to the Environmental Protection Agency (EPA) (Waterkeeper Alliance, et al., *Petitioners v. Environmental Protection Agency, Respondent U.S. Poultry and Egg Association, et al.*). This is a pretty moderate demand – so moderate, in fact, that the EPCRA was signed into law by none other than President Ronald Reagan.

Ever since these two laws were passed, there has been a debate as to whether or not large animal agriculture facilities should be held to the same standard as other industries when it comes to reporting the release of hazardous materials. And yes, many a hazardous substance is, in fact, released from industrialized animal agriculture facilities. The EPA calls these facilities CAFOs – Concentrated Animal Feeding Operations consisting of at least 1,000 head of cattle for meat, 700 dairy cows, 2,500 pigs, 125,000 chickens for meat, or 82,000 laying hens (USDA Natural Resources Conservation Service, n.d.). Confining this magnitude of animals in a relatively small area causes nutrients (from animal poop and pee) to concentrate to the extent that they become toxic. In 2010, the National Boards of Health reported that hydrogen sulfide and ammonia – both substances covered by CERCLA and EPCRA reporting requirements - were two of the most common chemicals released into air, water, and soil from CAFOs (Hribar & Schultz, 2010). Hydrogen sulfide and ammonia are both natural byproducts of animal waste and are not harmful if applied to land in the right concentrations. Ammonia, in fact, is a rich source of nitrogen – a nutrient that most crops need to grow. Unfortunately, at concentrations generated by CAFOs, both hydrogen sulfide and nitrogen from ammonia become hazardous (Graham and Nachman, 2010).

Despite these realities, the EPA considered all farms, including CAFOs, exempt from CERCLA reporting and most farms exempt from EPCRA reporting requirements up until April of 2017 (EPA, 2018). At that time, the United States Court of Appeals for the District of Columbia Circuit ruled that this exemption was in violation of the two laws and required that CAFO operators begin reporting under CERCLA and

EPCRA by May of 2018 (Waterkeeper Alliance, et al., Petitioners v. Environmental Protection Agency, Respondent U.S. Poultry and Egg Association, et al.).

Before May could roll around, however, Congress passed the FARM Act to formally grant these producers the exemption to CERCLA and EPCRA that most had been utilizing all along.

Did you miss the vote on the FARM Act? That's understandable since it was rolled into the 2018 Omnibus Spending Bill, as a rider in Title XI.

Who Is Harmed by the FARM Act?

If you live near a CAFO, you are likely all too aware of the health hazards emanating therefrom. Other things being equal, the closer you live to a CAFO, the more likely you are to contract asthma and/or other respiratory diseases (Mirabelli et al., 2006; Schinasi et al., 2011). As noted above, ammonia is a common air pollutant from CAFOs and specifically causes "chemical burns to the respiratory tract" and/ or "chronic lung disease" in some people (Hribar & Schultz, 2010, p. 6). Airborne exposure to hydrogen sulfide – another common pollutant released from animal agriculture facilities – can lead to loss of sense of smell and/or inflammatory respiratory diseases, including death (Hribar & Schultz, 2010).

If your water source is near a CAFO, you are also more likely to drink water contaminated by ammonia, among other substances (Showers, 2011). The real problem with high levels of ammonia in your water is high levels of nitrates, a by-product of ammonia. Consuming too many nitrates can lead to problems in your blood – namely a reduced ability to carry oxygen to the 100% of cells in your body that need oxygen. In infants and children this problem is called blue baby syndrome because a lack of sufficient oxygen in the blood causes a blue instead of pink coloration of the skin (Hribar & Schultz, 2010). Exposure to elevated levels of nitrates in drinking water is also associated with a range of additional adverse health effects, including cancer (Chiu et al., 2007; Gulis et al., 2002; Ward, 2009; Ward et al., 2010), thyroid problems (Burkholder et al, 2007; Ward, 2009), and birth defects and other reproductive concerns beyond blue baby syndrome (Brender et al., 2013; Burkholder et al, 2007; Manassaram et al., 2007; Ward, 2009).

In summary, it's really best not to breathe air or drink water that interacts with large animal agriculture facilities – especially if you're pregnant. The problem is that many people have no choice but to do so.

Of course, no one is more exposed to the hazards of CAFOs than farmers and farm workers, and they do indeed bear the brunt of the health impacts described above (Showers et al., 2008; Burkholder et al., 2007; Heedrick et al., 2007; Wing, & Wolf, 2000).

Who Benefits from the FARM Act?

Unfortunately, exposure to hazardous substances is only one of many risks that U.S. farmers are forced to accept in order to remain viable in a market with razor thin profit margins. They are part of the approximately 1,000,000 animal producers (Kellogg, 2002) competing for contracts with roughly 40,000 food wholesalers and/or 30,000 food manufacturers (Neff, 2013, p. 346). That's two orders of

magnitude more farmers than firms to buy their products, which goes a long way toward explaining why raising animals for food in the U.S. is so financially challenging (see Figure 1). Under these conditions, wholesalers and food manufacturers – or food retailers to whom they are beholden – have the power to set prices and production standards.

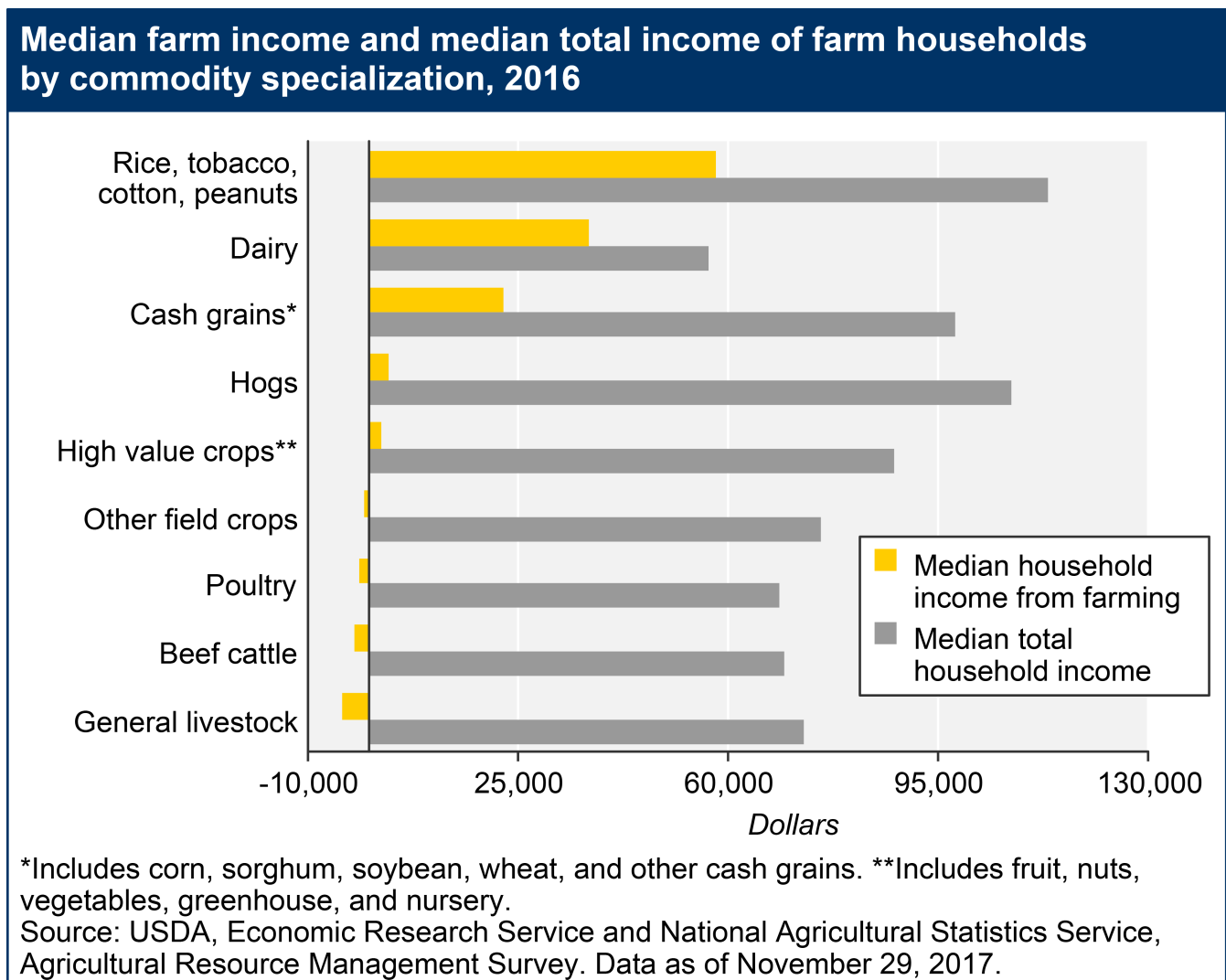


Figure 1 Retrieved from [USDA](#)

It’s possible to argue that all “consumers” (you know, people) benefit from a reduced reporting burden on farmers via lower food prices. The evidence is stronger, however, that what cheap food has really done is create profit for the sectors in between farmers and eaters, including food manufacturers and retailers (Miner, 2006) (see Figure 2).

Thus, while we will likely hear that both farmers and consumers benefit from the FARM Act, the reality is instead that food manufacturers and retailers benefit from the propagation of our current food system, at the expense of both farmers and consumers.



Figure 2 Retrieved from [USDA](#) for Food at Home Dollar in 2016

Conclusion

So, is the FARM Act really that bad for our health? For those of us living near a CAFO, it is certainly a missed opportunity to at least gain an understanding of what we are being exposed to. For everyone else, the FARM Act is only as bad as anything that allows “large quantities of hazardous materials” to enter our environment unrecorded and unaddressed.

The real problem, however, is a food system that forces us to choose between our immediate health and supporting our farmers. It forces farmers themselves to choose between their health and their financial viability. The very existence of the FARM Act is merely analogous to a vehicle’s “Check Engine” light being illuminated. Turning off the light won’t address the problem, which is actually in the engine. What we need is a food system in which farmers have the power to dictate their own production practices and in which farms are not industrialized to the point of releasing hazardous materials. Admittedly turning off the indicator light is easier than repairing than the engine. Fortunately, a team of “mechanics” with the skills we need to rebuild our food system is emerging from this generation of young people.

Much of that work is going on right here at the Center for A Livable Future’s [Food System Policy Program](#). Stay tuned for more projects and ideas for a sustainable food system.

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This publication contains personal opinions and insights that do not necessarily reflect the opinion of the Johns Hopkins Bloomberg School of Public Health or the Center for a Livable Future.