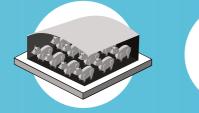
LIVESTOCK PRODUCTION COMPARISON



MCE is committed to supporting food system reform to protect the health of our environment as well as the health and well-being of essential food system workers and frontline communities. Each component of the food system affects the social, economic, and environmental sustainability of our food. This tool contrasts the steps in the industrial livestock production system with those in an environmentally-responsible livestock production system to show the externalized impacts of the industrial food system.

Industrial Livestock **Production**

Estimates show¹ that over 90% of American meat comes from concentrated animal feeding operations (CAFOs) or factory farms. That means that most of the time, the meat and animal products we eat come from an industrial livestock production system. Looking at industrial livestock production from a supply chain perspective, we can trace negative externalities throughout the system: from subsidized feed to workers' rights and safety to a whole lot of animal waste.



PRODUCTION



in confinement² live their lives protections are in place for industries are considered neck in the food supply chain indoors with hundreds to food and farm workers, some of the most exploitative because four massive corp-orations and reduce the overall thousands of other animals, including CAFO workers, who industries in the country⁷, and control 55-85% of production⁹. Not nutritional quality of To increase growth and prevent are directly exposed to animal rely heavily on immigrants, only has this level of consolidation animal products. disease, confined animals are waste, air pollution and other refugees, and workers of led to dramatic price increases¹⁰, but fed an unnatural diet of occupational hazards⁵. Up to color. Pervasive COVID-19 plant closures and disruptions subsidized corn and soy³, given 73% of United States farmhormones and antibiotic. workers are immigrants⁶, many plants continue to shed light With few processors, farmers must Confined animals have a of whom may be undocumented on the gross inadeauacy of travel farther to processors and their disturbingly short, stressful and or work under temporary work workplace safety measures⁸, products may ultimately be sold to unhealthy lifespan⁴. visas that may be exploited by



PROCESSING

Livestock animals that are raised Minimal health and safety The slaughter and processing Meat processing is a major bottle-



DISTRIBUTION

outbreaks in meat processing present manor food security risks¹¹. consumers hundreds of miles away.



Animal stress¹²

increase food safety risks



WASTE DISPOSAL

A single CAFO generates as much waste as a small city¹³. Existing regulations on how to store, treat, and use this animal waste are not sufficient¹⁴ to protect the air, water, and surrounding communities from possible contamination.

Environmentally-Responsible Livestock Production

In contrast, an environmentallyresponsible livestock production system better serves our health and economic resilience each step of the way. You can support environmentallyresponsible producers in the St. Louis region through MCE's Known & Grown program¹⁵.



PRODUCTION

Animals have access to the outdoors and engage in natural behaviors like grazing and foraging for food. Proper grazing can actually improve soil health and fertility¹⁶, providing added benefits of carbon sequestration¹⁷, water and nutrient management in the face of a changing climate.



WORKFORCE

their employers.

farms provide good jobs with working conditions that adequately protect workers' health; migrant workers have pathway to legalization place. and citizenship as desired

PROCESSING



DISTRIBUTION

Environmentally-responsible Independent, small-scale meat Independent and environmentally processing increases food responsible livestock producers from pasture-raised animals system resilience¹⁸ by providing and processors have better tend to be healthier, leaner are respectful, safe and more direct access to both access to local and regional farmer and consumers - if there markets for their products, is adequate infrastructure in making their products more vitamin E¹⁹. accessible to consumers.





WASTE DISPOSAL

Grazing animals may naturally reintegrate their waste products into soil in appropriate amounts overall and richer in omega-3 to act as a fertilizer, rather than fatty acid, antioxidants, and a contaminant.

Meat and dairy products

CONSUMPTION

LIVESTOCK PRODUCTION COMPARISON REFERENCES

- 99% of U.S. Farmed Animals Line on Factory Farm, Matthew Zampal, Sentient Media, Apr 16, 2019, URL: https://sentientmedia.org/u-s-farmedanimals-live-on-factory-farms/
- Animal Feeding Operations, USDA, Natural Resources Conservation Service, URL: https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/ plantsanimals/livestock/afo/
- ³ How the Way We Farm Makes Us Sick: 6 Things You Need to Know about the U.S. Farm Bill, Ron Weiss, Forks Over Knives, Mar 5, 2018, URL: https://www.forksoverknives.com/wellness/the-way-we-farm-makes-us-sick/
- ⁴ **CAFO Facts and Fallacies, John Ikerd,** URL: http://web.missouri.edu/ ikerdj/papers/Bayfield%20WI%20-%20CAFO%20Facts%20and%20 Fallacies.htm
- Essential And In Crisis: A Review of the Public Health Threats Facing Farmworkers In the USJohns Hopkins Center for a Livable Future & Vermont Law School Center for Agriculture & Food Systems, May 2021, page 46, URL: https://clf.jhsph.edu/sites/default/files/2021-05/essential-and -in-_crisis-a-review-of-the-public-health-threats-facing-farmworkers-in-the-us. pdf#page=46
- Farm Labor, USDA, Economic Research Service, URL: https://www.ers. usda.gov/topics/farm-economy/farm-labor/
- Who are America's meat and poultry workers?, Angela Stuesse & Nathan T. Dollar, Economic Policy Institute, Sept 12, 2020, URL: https://www.epi. org/blog/meat-and-poultry-worker-demographics/

- ⁸ Smithfield Foods sued over working conditions in Missouri during coronavirus, Daniel Wiessner, Reuters, Apr 24, 2020, URL: https://www.reuters.com/ article/us-health-coronavirus-usa-smithfield-idUSKCN2262BX
- ^{9,10} Addressing Concentration in the Meat-Processing Industry to Lower Food Prices for American Families, Brian Deese, Sameera Fazili, & Bharat Ramamurti, The White House, Sept 8, 2021, URL: https://www.whitehouse. gov/briefing-room/blog/2021/09/08/addressing-concentration-in-the-meatprocessing-industry-to-lower-food-prices-for-american-families/
- ¹¹ NSAC Issue Brief: Financing Options For Local/Regional Meat Processing Infrastructure, National Sustainable Agriculture Coalition, Aug 2021, page 1, URL: https://sustainableagriculture.net/wp-content/uploads/2021/08/2021-NSAC-Infrastructure_Training-Funding-Policy-Briefs.pdf#page=1
- Stress in Farm Animals and Food Safety: Is there a Connection?, Dr. Marcos Rostagno, USDA-ARS-MWA Livestock Behavior Research Unit, Food Safety Fact Sheet, Fall 2010, URL: https://www.ars.usda.gov/ARSUserFiles/50201500/ Stress%20and%20Food%20Safety%20Fact%20Sheet.pdf#:~:text=Stress%20 reduces%20the%20fitness%20of%20an%20animal%2C%20which,quality%20of %20food%20products%20%28meat%2C%20egg%2C%20and%20milk%29.
- ^{13,14} Understanding Concentrated Animal Feeding Operations and Their Impact on Communities, Carrie Hribar, NALBOH, page 10, URL: https://www.cdc. gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf#page=10

- ¹⁵ **Supporting Environmentally Responsible Farmers, Know & Grow STL,** URL: http://knownandgrownstl.org
- ¹⁶ Soil Health: Principle 5 of 5- Livestock Integration, Jay Fuhrer, NRCS Soil Health Specialist, USDA, Natural Resouces Conservation Service North Dakota, URL: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/nd/soils/ health/?cid=nrcseprd1300922
- ¹⁷ Carbon Sequestration in Grazing Land Ecosystem, Maria Silveira, Ed Halon, Mariana Azenha, & Hiran M. da Silva, UF IFAS Extension URL: https://edis.ifas.ufl.edu/publication/SS574
- ¹⁸ NSAC Issue Brief: Financing Options For Local/Regional Meat Processing Infrastructure, National Sustainable Agriculture Coalition, Aug 2021, page 2, URL: https://sustainableagriculture.net/wp-content/uploads/2021/08/2021-NSAC-Infrastructure_Training-Funding-Policy-Briefs.pdf#page=2
- ¹⁹ Effects of fatty acids on meat quality: a review, J D Wood, R I Richardson, A V Fisher, M M Campo, E Kasapidou, P R Sheard, & M Enser, PubMed.gov, Jan 2004, URL: https://pubmed.ncbi.nlm.nih.gov/22063928/