

□□□ **ACADEMIC STUDIES WITHOUT TEARS** □□□

ACADEMIC RESEARCH FINDINGS TURNED INTO INFORMATION THAT ADVOCATES CAN GRASP AND USE EFFORTLESSLY

To learn why we launch this program, read the Explanatory Note placed at the end. Feedbacks welcomed. Contact: [min@tinybeamfund.org](mailto:min@tinybeamfund.org)



• SPECIAL ISSUE 1 – APRIL 2021 •

A Potpourri of New Academic Studies Relevant Mainly to High-Income Countries



This is a "Special Issue" because it is different from ASWT's usual format of focusing on a theme and on low- and middle-income countries. Instead, this issue contains nine new academic studies on various topics related to food system, food consumption, alt-protein, farm animal welfare, etc., and they are *not* about developing countries.

We generally do not pay much attention to studies about high-income countries. When we come across such studies we pass them on to other organizations. The idea of this special issue came about when we shared these new papers with an organization, and it recommended that we share them more widely.

The studies were published from June 2020 to March 2021. Six of them are openly accessible. Three are paywalled (please contact us for a free PDF copy if you would like to read them).

The way we present these academic studies is also different from that used in our regular ASWT issues. There are no "headlines" and excerpts. For each study, we try to highlight in about 80 words the main reasons why it is of interest to advocates.

We have also included two recent reports and recordings of webinars from universities actively researching food-related issues. These do involve developing countries and a global perspective.

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1. Lazarus, Oliver, Sonali McDermid, and Jennifer Jacquet. "The Climate Responsibilities of Industrial Meat and Dairy Producers." *Climatic Change* 165, no. 1 (March 25, 2021): 30.

<https://doi.org/10.1007/s10584-021-03047-7> (PAYWALLED)

**Why is this study of interest to advocates?**

- How each of the world's largest 35 industrial meat/dairy companies reports its GHG emissions and mitigation commitment varies significantly (e.g. Danish Crown and JBS have very different reporting practices).

- Including a company's full global emissions would impact its headquartered country's *Nationally Determined Contribution* under the Paris Climate Agreement. But these impacts differ markedly, from over 100% for Nestlé (Switzerland) to 4% for four Chinese companies combined.
- All ten U.S. companies studied made efforts to undermine the link between animal agriculture and climate change (e.g. lobbied Congress and EPA).



2. Sievert, Katherine, Mark Lawrence, Christine Parker, and Phillip Baker. "Understanding the Political Challenge of Red and Processed Meat Reduction for Healthy and Sustainable Food Systems: A Narrative Review of the Literature." *International Journal of Health Policy and Management* (December 2, 2020): 1–16.

[https://www.ijhpm.com/article\\_3975.html](https://www.ijhpm.com/article_3975.html)

**Why is this study of interest to advocates?**

- It is essential to consider the role of power and politics when working to reduce consumption of red and processed meat.
- "Asymmetries of power" between those for and against such reduction must be recognized.
- There are lots of institutional barriers and powers involved, especially "government-industry dependence, trade agreement conflicts, and policy incoherence".
- Power of those who resist meat reduction comes in various forms, including: lobbying; shaping evidence and knowledge; creating highly concentrated markets.



3. Newton, Peter, and Daniel Blaustein-Rejto. "Social and Economic Opportunities and Challenges of Plant-Based and Cultured Meat for Rural Producers in the US." *Frontiers in Sustainable Food Systems* 5 (2021).

<https://www.frontiersin.org/articles/10.3389/fsufs.2021.624270/full>

**Why is this study of interest to advocates?**

- In the U.S. alt-protein will probably be an *additional* form of protein and not significantly displace meat production.
- The study is based on interviews of 37 "expert informants" from a range of sectors, from alt-protein, government, NGOs, to soy growers and beef farmers.
- Alt-protein sector presents opportunities to rural U.S. farmers, but also challenges and threats.
- Suggestions of ways NGOs, universities, and government can help are included.



4. Santo, Raychel E., Brent F. Kim, Sarah E. Goldman, Jan Dutkiewicz, Erin M. B. Biehl, Martin W. Bloem, Roni A. Neff, and Keeve E. Nachman. "Considering Plant-Based Meat Substitutes and Cell-Based Meats: A Public Health and Food Systems Perspective." *Frontiers in Sustainable Food Systems* 4 (August 31, 2020): 134.

<https://www.frontiersin.org/article/10.3389/fsufs.2020.00134/full>

**Why is this study of interest to advocates?**

- "it is unknown whether . . . plant-based substitutes would offer comparable nutritional or chronic disease reduction benefits as replacing meats with whole legumes"
- Plant-based substitutes may have smaller environmental impacts than that of farmed meat, but "the relative impacts differ significantly depending on the type of products under comparison".
- "many of the purported environmental and health benefits of cell-based meat are largely speculative"
- Plant- and cell-based meat "may significantly reduce dependence on livestock".

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5. Johnson, Hope. "Regulating Cell-Cultured Animal Material for Food Systems Transformation: Current Approaches and Future Directions." *Law, Innovation and Technology* (March 29, 2021): 1–33.

<https://www.tandfonline.com/doi/full/10.1080/17579961.2021.1898311> (PAYWALLED)

**Why is this study of interest to advocates?**

- Proponents and industry stakeholders of cell-cultured meat assert that such product will "transform food systems by replacing, or significantly reducing, intensive use of animals in food systems". But they are actually "preventing regulators from engaging with deeper questions about, and pathways for, food systems transformation", and facilitating a "lock-in to the incumbent, productivist regime for agricultural innovation".
- The reason is that "intellectual property has become the regulation-by-default" in the lab-grown meat space, and depending on "intellectual property rights to transform agricultural systems" has well-known limitations.

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6. Kristiansen, Silje, James Painter, and Meghan Shea. "Animal Agriculture and Climate Change in the US and UK Elite Media: Volume, Responsibilities, Causes and Solutions." *Environmental Communication* (September 7, 2020): 1–20.

<https://www.tandfonline.com/doi/full/10.1080/17524032.2020.1805344>

**Why is this study of interest to advocates?**

- This content analysis of UK and US elite media (2006–2018) shows coverage for animal agriculture's role in climate change is low. And when this issue is mentioned, the emphasis is put heavily on consumer responsibility and personal dietary change.
- Solutions such as government policies, reforming agricultural practices, holding major animal food companies accountable for their GHG emissions are seldom discussed.



7. Pieper, Maximilian, Amelie Michalke, and Tobias Gaugler. "Calculation of External Climate Costs for Food Highlights Inadequate Pricing of Animal Products." *Nature Communications* 11, no. 1 (December 15, 2020): 6117.

<https://www.nature.com/articles/s41467-020-19474-6>

**Why is this study of interest to advocates?**

- The external environmental/climate costs of producing various food categories in Germany was calculated by quantifying and monetizing their respective GHG emissions.
- The highest costs are incurred by producing meat using either organic or conventional practices. Second highest by producing dairy conventionally. Lowest is organic production of plant-based food.
- Incorporating such costs into meat would increase its price by 146%, dairy by 91%, vegetables and fruits by 25%.



8. Lin-Schilstra, Li, and Arnout R. H. Fischer. "Consumer Moral Dilemma in the Choice of Animal-Friendly Meat Products." *Sustainability* 12, no. 12 (June 13, 2020): 4844.

<https://www.mdpi.com/2071-1050/12/12/4844>

**Why is this study of interest to advocates?**

- This is a review of studies on moral dilemmas faced by some meat-eaters ("harming an animal" versus "the joy of eating meat").
- Situations as well as personal values give rise to dilemmas. And "different situations may lead to different moral dilemmas for different people".
- Meat-reduction campaigns "criticizing consumers' behavior . . . may be counterproductive", especially if that involves situations where people cannot think of obvious reasons why meat-eating is not okay; the criticisms may lead them to shift "toward a lasting justification of eating meat."



9. Jones, Peter, and Daphne Comfort. "A Commentary on Animal Welfare in the US Meat and Poultry Industry." *Journal of Public Affairs* (August 23, 2020).

<https://onlinelibrary.wiley.com/doi/10.1002/pa.2358> (PAYWALLED)

**Why is this study of interest to advocates?**

- Most top U.S. meat corporations' sustainability reports include "strategic commitment to animal welfare" and "meeting a number of their animal care targets".
- But reasons for concern abound, including: 1) Not reporting how they pursue their commitments. 2) Not providing detailed, explicit evidence of their animal welfare achievements. 3) Case studies and stories are chosen specifically and choreographed. 4) No quantitative performance indicators and independent external verification. 5) The country's regulation and governance of animal welfare uses audit exercises that are "shaped by the food industry itself".



## TWO EXTRA ITEMS WITH GLOBAL PERSPECTIVES:

Christopher B. Barrett et al, *Socio-Technical Innovation Bundles for Agri-Food Systems Transformation, Report of the International Expert Panel on Innovations to Build Sustainable, Equitable, Inclusive Food Value Chains*. Cornell Atkinson Center for Sustainability and Springer Nature, December 2020.

[https://www.nature.com/documents/Bundles\\_agrifood\\_transformation.pdf](https://www.nature.com/documents/Bundles_agrifood_transformation.pdf)

Blog of the expert panel: <https://blogs.cornell.edu/nature-sustainability/>

This is a report from a year-long expert panel convened by Cornell Atkinson Center for Sustainability in collaboration with the journal Nature Sustainability and Nature Food.

"The panel brought together experts who come from many different continents and who span a wide range of disciplines and organizations—from industries and universities to social movements, governments, philanthropies, institutional investors, and multilateral agencies. Its task was to assess the current state of agri-food systems and the external drivers that will reshape them over the coming 25–50 years, to articulate a vision for agri-food systems at that 2045–2070 horizon, to review and synthesize the many emergent technologies that might help transform agri-food systems to achieve that vision, and to chart a strategy to transition from a perilous today to a healthier, more equitable, resilient, and sustainable tomorrow."



University of South Carolina, Arnold School of Public Health. *Drivers of Food Choice Program*.

Funded by: Foreign, Commonwealth & Development Office; UKaid; Bill & Melinda Gates Foundation.

<https://driversoffoodchoice.org>

Webinar Series: *Drivers of food choice in low- and middle-income countries: a synthesis of evidence*.

January 14, 2021 webinar [link](#): Drivers of food choice at the individual and household levels.

February 8, 2021 webinar [link](#): Ways in which community perspectives about food safety can influence food choices.

March 11, 2021 webinar [link](#): How cultural and personal values drive food choice decision making and play a central role in the changing food choice behaviors.

April 13, 2021 webinar [link](#): Drivers of food choice in the context of rapidly changing livelihoods.

"The purpose of the Drivers of Food Choice program is to facilitate, synthesize and disseminate research to provide a deep understanding of the drivers of food choice among the poor in developing countries."

"Food Choice Defined: Food choice involves the processes by which people consider, select, prepare, distribute, and consume foods and beverages. The overarching question addressed in studies of food choice is, "why do individuals eat the foods they do?" Food choice behaviors are integral to social and economic expression of identities, preferences, and cultural meanings and ultimately influence nutrient intake and health. Drivers of food choice include interconnected biological, psychological, economic, social, cultural, environmental, and political factors. Influencing food choice involves efforts to promote and facilitate the purchase, provision, and consumption of healthier foods of individuals, families and communities and includes emphasis on food environments."

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### EXPLANATORY NOTE:

- Academic studies are notoriously hard to find, read, and put into practical use by non-academics.
- Super-busy advocates cannot afford to spend a lot of time and effort to dig up, digest, and deploy academic research even though they recognize the value of academic studies in informing and improving their advocacy work.
- *Academic Studies Without Tears* aims to help advocates faced with this dilemma.
- Its target audience are leaders and funders of non-profit advocacy organizations addressing the many negative impacts of industrial animal agriculture in low- and middle-income countries.
- It uses a communication style – reminiscent of quiz or news items – that makes everything a breeze to read.
- Each issue focuses on a particular topic and includes 8 – 10 academic studies.
- It goes without saying that the academic studies featured are *not* the final word. They have flaws and limitations. They are just a tiny selection of perspectives and findings for advocates to consider, to whet their appetite. But every relevant data point and nugget of cogent information adds to one's store of knowledge and has the potential to spark new ideas.

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