#### **VIEWPOINT**

# Just Transition for agriculture? A critical step in tackling climate change

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#### **Abstract**

Just Transition has become an established discursive and conceptual framework to transition economic industries toward a low-carbon and climateresilient future. In the coal and mining industry in particular, it has gained a foothold and transformed politics and livelihoods. In other areas, like animal agriculture, which is equally damaging to the climate, the need for change and the deployment of Just Transition to achieve it are not yet established. Drawing on the most recent scientific insights by the Intergovernmental Panel on Climate Change (IPCC), this viewpoint argues that transitioning toward a low-carbon production is just as imperative in agriculture. Specifically, it demands that we move away from animal agriculture. The viewpoint concludes by sketching possible areas and means of intervention.

## Keywords

Animal Agriculture, Climate Change, Greenhouse Gas Emissions, IPCC, Just Transition, Meat, Paris Agreement, Plant-Based Diet, Trade Unionism

# Just Transition: A Common Future Through Community Development

Massive changes in investments, economic policy, and enterprise-level transformation historically have focused on smooth financial transitions, but they have left the people affected by the turnarounds unprotected. Former military servants, for example, lacked guidance on how to make a living in times of peace. Similarly, coal workers affected by coal plant retirements are facing job loss and lack of employability. Entire communities in coaldominated towns are threatened by declining tax revenues, infrastructure maintenance, and local services. In response to these challenges, Just Transition emerged as a movement that recognizes that a shift toward a climate-resilient and low-carbon economy is inevitable, and which aims to support workers affected by economic restructuring. In

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short: "Transition is inevitable, justice is not" (Movement Generation, 2019, para. 1).

The framework is creative and revolutionary. It succeeds at arguing that the brunt of economic transitions should not be borne by individuals and communities previously thought to provide valuable services to the public, like extracting coal for energy production. Instead, it is the public's responsibility, as a whole, to ensure justice during transition. The Canadian Government was one of the first to recognize this by commissioning a task force to sketch a Just Transition for Canadian coal power workers and communities. In February 2019, the Task Force on Just Transition for Canadian Coal Power Workers filed its final report. It found that the federal government has a duty to prepare communities that are economically dependent on coal for a future when their products aren't needed, and demanded that its proposed policies to achieve this goal be written into legislation (Government of Canada, 2018). This was one of the first public acknowledgments of the fact that transitioning toward a sustainable future is a community effort.

Because its focus is on securing workers' rights and livelihoods, Just Transition is essentially a trade union movement, embedded in a broader environmental context. The movement gained a foothold internationally when, in 2010, the International Trade Union Confederation (ITUC) unanimously adopted Just Transition as a framework for climate change challenges:

Congress is committed to promoting an integrated approach to sustainable development through a just transition where social progress, environmental protection and economic needs are brought into a framework of democratic governance, where labour and other human rights are respected and gender equality achieved. (ITUC, 2010, para. 2)

Three years later, in 2015, the International Labor Organization (ILO) adopted the Guidelines for a Just Transition Towards Environmentally Sustainable Economies and Societies for All. At the Paris Climate Conference (COP21), which took place the same year, 195 countries signed the Paris

Agreement, a United Nations Framework Convention on Climate Change (UNFCCC) treaty dealing with greenhouse gas (GHGs) emissions mitigation, adaptation, and finance. The Paris Agreement provides in its preamble that the parties

Tak[e] into account the imperatives of a Just Transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities. (United Nations, 2015, Preamble, p. 2)

Just Transition, in short, is now widely accepted as a guiding framework to adapt and, in some cases, reform economic sectors in response to climate change challenges.

## Animal Agriculture is the 'New Coal'

Thus far, Just Transition has been applied primarily to the coal and mining industry. But as the world aims to transition toward a zero-carbon society, other sectors responsible for massive contributions to climate change will be subject to transition, too. This is highly likely when it comes to the agricultural sector, particularly animal agriculture.

Since 1960, the global population has more than doubled, while meat production has tripled and egg and dairy production has increased fourfold (Pew Commission, 2008). The animal agricultural industry today consumes 70% of global fresh water, utilizes 38% of global arable land, and causes 14% of the world's GHG emissions, generating more methane, nitrous oxide, and carbon dioxide than the worldwide transport sector (Poore & Nemecek, 2018; UNEP, 2010). As such, animal agriculture is one of the biggest contributors to climate change.

Across the world, the high demand for animal products is satisfied by intensifying production in factory farms (also known as concentrated animal feeding operations, or CAFOs), where animals are housed indoors in extreme confinement. CAFOs release immense amounts of ammonia, hydrogen sulfide, volatile organic compounds, nitrous oxide, and particulate matter that pollute air and water surfaces (Food and Agriculture Organization of the United Nations [FAO], 2006; Organization for Economic Co-operation and Development

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[OECD], 2004; Wilson, 2007). The production of animal protein uses far more food and water resources compared to plant-based diets, putting agriculture and drinking water supplies at peril (FAO, 2015; United Nations Environmental Programme [UNEP], 2010). Moreover, land requirements for CAFOs are ten times, and fossil energy requirements eleven times, greater than for plant farming (Pimentel & Pimentel, 2003).

These scientific insights have led the United Nations (UN) to acknowledge that animal agriculture is "one of the most important drivers of environmental pressures" and that "[a] substantial reduction of impacts would only be possible with a substantial worldwide diet change, away from animal products" (UNEP, 2010, p. 82). Nine years later, the Intergovernmental Panel on Climate Change (IPCC) essentially came to the same conclusion, finding:

Balanced diets, featuring plant-based foods, such as those based on coarse grains, legumes, fruits and vegetables, nuts and seeds, and animal-sourced food produced in resilient, sustainable and low-GHG emission systems, present major opportunities for adaptation and mitigation while generating significant co-benefits in terms of human health. (IPCC, 2019, p. 26)

Despite this knowledge and its endorsement by major international organizations, efforts to apply Just Transition to animal agriculture are few and far between. Climate Justice Alliance which was formed in 2013, is one of only a few organizations that recognize the global food system's GHGs, demand Just Transition be applied to the sector, and raise awareness for food sovereignty (2019). Yet the translocal organization fails to zoom in on animal agriculture or call for a bold move away from it, and thereby overlooks the elephant in the room. The same is true of Movement Generation (2019), which was critical in further developing the Just Transition concept and calling attention to the harm of extractive economies and promote a transformation toward regenerative economic practices.

One reason for the lack of attention paid to animal agriculture seems to be that the industry has long enjoyed a privileged status and sweeping exemptions from the law. Agricultural exceptionalism has consistently insulated agricultural producers from regulation, advancing social priorities in a range of fields including trade, environmental protection, labor and employment law, and animal protection (Blattner & Ammann, 2020; Ikerd, 2020; Pollans, 2016; Rodman et al., 2016; Schell, 2002; Trebilcock & Pue, 2015).

Another reason might be that many people consider their food choices to be beyond the grasp of law and politics. As a consequence, diet change for a common future in which climate change does not pose a constant threat is seen as a voluntary move, subject to each person's own decision. This seems odd because the same piecemeal approach could have been used when it comes to coal: "Let energy consumers decide for themselves!" Yet there was broad acknowledgment for the need to phase out coal because the industry contributes tremendously to climate change, threatening human livelihood and existence (Government of Canada, 2018).

It is precisely this massive contribution to climate change that the coal industry and animal agriculture have in common. By producing 25% of global GHG emissions, the burning of coal, natural gas, and oil for electricity and heat is considered to be "the largest single source of global greenhouse gas emissions" (U.S. Environmental Protection Agency, n.d., "Global Emissions by Economic Sector," para. 2). However, agriculture, forestry, and land use have the same carbon footprint. As the author of the Elcano policy paper on Just Transition make clear:

Agriculture, forestry and land-use account for a roughly comparable share of global greenhouse gas emissions as heat and electricity production—about 25 percent. . . . Yet there are 827 legislative and executive acts globally addressing low carbon energy supply and only 320 acts addressing emissions from agriculture, forestry and land use change. (Averchenkova, 2019, p. 22)

# The Need for Just Transition in Animal Agriculture

From a climate perspective, the failure to apply the Just Transition principles to animal agriculture is both irrational and irresponsible. It is *irrational* because coal and agriculture produce similar amounts of GHG emissions, yet, only one sector is subject to discontinuation. And while coal alternatives are not yet fully available, alternatives to carbon-heavy animal agriculture are ubiquitous, which should ease the transition. Keeping up a policy dichotomy between coal and animal agriculture is *irresponsible* because as governments focus on coal alone, valuable years of fighting climate change are lost and the rate at which it destroys the environment—and with it, human and animal livelihoods—accelerates.

Turning a blind eye on agriculture is also problematic from the perspective of agricultural workers. Research has shown that agricultural business practices stifle low-income communities, racial minorities, and migrant workers (Bullard, 2000). Farmworkers are at a predictable risk of serious physical injury, denied compensation, and crushed for their efforts to self-organize (Human Rights Watch, 2004). As a consequence, they continue to belong to particularly vulnerable social and economic groups (Rodman et al., 2016).

Today, individual farmers bear the brunt of transitioning toward carbon-neutral production (like plant-based foods). They have to develop new business models, retrain their personnel, stem the financial burden, and deal with social stigma (Axworthy, 2019). Farmers, like coal miners, need their community and governments to support them in this process. They need to know that there is a future, livelihood, stability, and identity if they decide to make the transition. By helping them move from degenerative farming toward regenerative farming practices, we as a society acknowledge our co-responsibility in food consumption and production and, thereby, help ourselves too. Just Transition, by working toward sound investments, social dialogue, research-based impact assessments, social protection, and economic diversification (Gilbert, Schindel, & Robert, 2018), must be part of this equation.

The legal bases for this move are already in place. Theoretically speaking, through the Just Transition lens, *any sector* affected by restructuring due to climate change must provide new green job opportunities, anticipate potential losses of economic activity, employment, and income in certain sectors and regions, and protect the most vulnerable (ITUC, 2010). Just Transition for animal agriculture should be taken up by activist groups and centered for discussion at established international organizations like the ILO, the IPCC, the UN, and particularly the UN's FAO. Specific areas that we should focus on as we transition toward a low-carbon and climate-resilient agricultural model are:

- Sound investments in low-emission and job-rich sectors and technologies. These investments must be undertaken through due consultation with all those affected, respecting human and labor rights and Decent Work principles.
- Social dialogue and democratic consultation with social partners (trade unions and employers) and other stakeholders (e.g., communities).
- Research and early assessment of the social and employment impacts of climate policies.
- Training and skills development, which are key to support the deployment of new technologies and foster industrial change.
- Social protection, along with active labor market policies.
- Local economic diversification plans that support decent work and provide community stability in the transition. Communities should not be left on their own to manage the impacts of the transition, as this will lead to an unfair distribution of costs and benefits (ITUC, 2015).1

Be it on the international, state, local, or community level, it is time that we acknowledge animal agriculture as a blind spot in climate politics; that we begin a conversation about the risks that we

<sup>&</sup>lt;sup>1</sup> For an attempt to describe Just Transition's demands in public school food systems, which can be used as a model for Just Transition in agriculture, more broadly, see Gilbert, Schindel, and Robert (2018).

thereby create for society, farmers, consumers, and future generations; and that we embark on these challenges together, through collective empowerment, rather than through antagonism, denial, and fear—dynamics that currently frame the discussion of agricultural policy. A first step toward achieving

these goals is producing more research that details affected subsectors and end goals, and shows how a transition could be initiated, who should be involved, how it could be financed, and what the process should look like so that the framework succeeds at delivering on being just for all.

#### References

Averchenkova, A. (2019). Legislating for a low carbon and climate resilient transition: Learning from international experiences (Elcano Policy Paper). Madrid: Real Instituto Elcano. Retrieved from

http://www.realinstitutoelcano.org/wps/portal/rielcano\_en/contenido?WCM\_GLOBAL\_CONTEXT=/elcano/elcano\_in/zonas\_in/policy-paper-2019-legislating-low-carbon-climate-resilient-transition

Axworthy, N. (2019, April 29). Arkansas farmers quit killing chickens and cows to grow mushrooms. *VegNews*. Retrieved from <a href="https://vegnews.com/2019/4/arkansas-farmers-quit-killing-chickens-and-cows-to-grow-mushrooms">https://vegnews.com/2019/4/arkansas-farmers-quit-killing-chickens-and-cows-to-grow-mushrooms</a>

Blattner, C.E., & Ammann, O. (2020). Agricultural exceptionalism and industrial animal food production: Exploring the human rights nexus. *Journal of Food Law & Policy, 15*(2), 92–151. Retrieved from

https://home.heinonline.org/titles/Law-Journal-Library/Journal-of-Food-Law-and-Policy/

Bullard, R. D. (2000). Dumping in Dixie: Race, class, and environmental quality (3rd ed.). London: Routledge.

Climate Justice Alliance. (n.d.). Food sovereignty. Retrieved March 13, 2020, from

https://climatejusticealliance.org/workgroup/food-sovereignty/

Food and Agriculture Organization of the United Nations (FAO). (2006). *Livestock's long shadow: Environmental issues and options*. Geneva: FAO. Retrieved from <a href="http://www.fao.org/3/a-a0701e.pdf">http://www.fao.org/3/a-a0701e.pdf</a>

FAO. (2015). *Statistical pocketbook world food and agriculture*. Rome: FAO. Retrieved from <a href="http://www.fao.org/3/a-i4691e.pdf">http://www.fao.org/3/a-i4691e.pdf</a>

Gilbert, J. L., Schindel, A. E., & Robert, S. A. (2018). Just transitions in a public school food system: The case of Buffalo, New York. *Journal of Agriculture, Food Systems, and Community Development*, 8(Suppl. 2), 95–113. https://doi.org/10.5304/jafscd.2018.08B.011

Government of Canada. (2018). Final report by the Task Force on Just Transition for Canadian Coal Power Workers and Communities. Retrieved from <a href="https://www.canada.ca/en/environment-climate-change/services/climate-change/task-force-just-transition/final-report.html">https://www.canada.ca/en/environment-climate-change/services/climate-change/task-force-just-transition/final-report.html</a>

Human Rights Watch. (2004). *Blood, sweat, and fear: Workers' rights in U.S. meat and poultry plants.* New York: Human Rights Watch. Retrieved from <a href="https://www.hrw.org/sites/default/files/reports/usa0105.pdf">https://www.hrw.org/sites/default/files/reports/usa0105.pdf</a>

Ikerd, J. (2020). A right to harm. *Journal of Agriculture, Food Systems, and Community Development, 9*(2), 5–8. http://dx.doi.org/10.5304/jafscd.2020.092.017

Intergovernmental Panel on Climate Change (IPCC). (2019, August 7). Climate change and land: Summary for policymakers. Retrieved from <a href="https://www.ipcc.ch/site/assets/uploads/2019/08/4.-SPM">https://www.ipcc.ch/site/assets/uploads/2019/08/4.-SPM</a> Approved Microsite FINAL.pdf

International Labor Organization (ILO). (2015). Guidelines for a just transition towards environmentally sustainable economies and societies for all. Retrieved from

https://www.ilo.org/global/topics/green-jobs/publications/WCMS 432859/lang--en/index.htm

International Trade Union Confederation (ITUC). (2010, June 25). Resolution on combating climate change through sustainable development and just transition (2CO/E/6.10 [final]). Retrieved from

https://www.ituc-csi.org/resolution-on-combating-climate

ITUC. (2015, March). Climate justice: There are no jobs on a dead planet (ITUC Frontlines Briefing). Retrieved from <a href="https://www.ituc-csi.org/ituc-frontlines-briefing-climate">https://www.ituc-csi.org/ituc-frontlines-briefing-climate</a>

Movement Generation. (n.d.). Transition is inevitable, justice is not: A critical framework for Just Recovery. Retrieved November 2019 from

https://movementgeneration.org/transition-is-inevitable-justice-is-not-a-critical-framework-for-just-recovery/

- Organization for Economic Co-operation and Development (OECD). (2004). Agriculture and the environment: Lessons learned from a decade of OECD work. Paris: OECD. Retrieved from
  - http://www.oecd.org/greengrowth/sustainable-agriculture/agri-environmentalindicatorsandpolicies/33913449.pdf
- Pew Commission. (2008). Putting meat on the table: Industrial farm animal production in America: Executive summary. Retrieved from <a href="http://www.pewtrusts.org/~/media/Assets/2008/PCIFAP">http://www.pewtrusts.org/~/media/Assets/2008/PCIFAP</a> Exec-Summary.pdf
- Pimentel, D., & Pimentel, M. (2003). Sustainability of meat-based and plant-based diets and the environment. *American Journal of Clinical Nutrition*, 78(3), 660–663. <a href="https://doi.org/10.1093/ajcn/78.3.6608">https://doi.org/10.1093/ajcn/78.3.6608</a>
- Pollans, M. J. (2016). Drinking water protection and agricultural exceptionalism. *Ohio State Law Journal*, 77(6), 1195–1260. https://moritzlaw.osu.edu/oslj/
- Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. *Science*, 360(6392) 987–992. https://doi.org/10.1126/science.aaq0216
- Rodman, S. O., Barry, C. L., Clayton, M. L., Frattaroli, S., Neff, R. A., & Rutkow, L. (2016). Agricultural exceptionalism at the state level: Characterization of wage and hour laws for U.S. farmworkers. *Journal of Agriculture, Food Systems, and Community Development, 6*(2), 89–110. https://doi.org/10.5304/jafscd.2016.062.013
- Schell, G. (2002). Farmworker exceptionalism under the law: How the legal system contributes to farmworker poverty and powerlessness. In C. Thompson & M. Wiggins (Eds.), *The human cost of food: Farmworkers' lives, labor and advocacy* (pp. 139–166). Austin: University of Texas Press.
- Trebilcock, M., & Pue, K. (2015). The puzzle of agricultural exceptionalism in international trade policy. *Journal of International Economic Law*, 18, 233–260. <a href="https://doi.org/10.1093/jiel/jgv022">https://doi.org/10.1093/jiel/jgv022</a>
- United Nations. (2015). Paris Agreement to the United Nations Framework Convention on Climate Change. Adopted Dec. 12, 2015; entry into force Nov. 4, 2016. T.I.A.S. No. 16-1104. Retrieved from <a href="https://unfccc.int/sites/default/files/english-paris-agreement.pdf">https://unfccc.int/sites/default/files/english-paris-agreement.pdf</a>
- United Nations Environmental Programme (UNEP). (2010). Assessing the environmental impacts of consumption and production:

  Priority products and materials. Geneva: UNEP. Retrieved from

  <a href="http://www.unep.fr/shared/publications/pdf/DTIx1262xPA-PriorityProductsAndMaterials">http://www.unep.fr/shared/publications/pdf/DTIx1262xPA-PriorityProductsAndMaterials</a> Report.pdf
- U.S. Environmental Protection Agency. (n.d.). Global greenhouse gas emissions data. Retrieved DATE from <a href="https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data">https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data</a>
- Wilson, S. C. (2007). Hogwash! Why industrial animal agriculture is not beyond the scope of Clean Air Act regulation. *Pace Environmental Law Review, 24*, 439–477. Retrieved from <a href="http://digitalcommons.pace.edu/pelr/vol24/iss2/5">http://digitalcommons.pace.edu/pelr/vol24/iss2/5</a>