

The Big Industry That COP26 Failed to Tackle

From Reynard Loki, Earth/Food/Life a project of the Independent Media Institute
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Cruelty and climate change on the COP26 menu: Cattle are transported for slaughter across the Bulgarian-Turkish border. (Photo credit: Jo-Anne McArthur/[We Animals Media](#))

The impact of agriculture on climate change is significant. According to the Environmental Protection Agency (EPA), the agriculture sector is responsible for [10 percent of the total U.S. greenhouse gas emissions](#), after transportation (29 percent), electricity production (25 percent), industry (23 percent), and commercial and residential usage (13 percent). However, [according](#) to Peter Lehner, managing attorney for EarthJustice, a nonprofit environmental law firm, the EPA estimate is “almost certainly significantly quite low.”

Lehner [argues](#) that most analyses exclude five unique sources of emissions from the farming sector: soil carbon (carbon released during the disturbance of soil), lost sequestration (carbon that would still be sequestered in the ground had that land not been converted into farmland), input footprints (carbon footprint for products used in agriculture, like the manufacturing of fertilizer), difficult measurements (it is harder to measure the carbon emissions of biological systems like agriculture than it is to measure the emissions of other industries that are not biological, like transportation), and potent gases (like methane and nitrous oxide).

Regarding that last source: Focusing on carbon dioxide as the main greenhouse gas often ignores powerful planet-warming gases that are emitted by agriculture and that are even more potent than carbon dioxide. Methane, which is emitted by the burps and farts of ruminants like cows and sheep, has up to [86 times](#) more global warming potential over a 20-year period than carbon dioxide (and also impacts public health, [particularly in frontline communities](#)). Nitrous oxide, a byproduct of fertilizer runoff, has [300 times](#) more warming potential than carbon dioxide (and also [harms plants and animals](#)).

“Most other studies, including by the [United Nations (UN)] and others, say that agriculture contributes much closer to 15 or 20 percent or more of world greenhouse gas emissions,” Lehner [points out](#).

Disappointingly, agriculture was not a central topic of discussion at [COP26](#), the international climate summit that recently concluded in Glasgow, Scotland. “Despite [the] huge impact to ecological systems and climate,” [writes](#) Suzannah Gerber, a nutrition scientist and fellow of the National Institute of Food and

Agriculture—a research agency within the U.S. Department of Agriculture—“specific high-level talks about agriculture comprised less than 5 percent of all official negotiations and less than 10 percent of side events, favoring the less controversial topic of renewable energy.”

And while renewable energy supporters cheered the fact that the [Glasgow Climate Pact](#) is the first UN climate agreement to explicitly mention “coal” and “fossil fuels”—something that the fossil fuel industry fought hard against in previous summits, and that [China and India managed to water down in the current agreement](#)—the [pact](#) makes no mention of the words “agriculture” or “food.”

Meat Is Murder—for Animals and the Environment

Forests continue to be clear-cut to [make room for farms](#), such as factory farms—which supply humans’ appetite for meat—and [plantations](#) that produce the world’s most used vegetable oil: palm oil. And while deforestation and methane emissions were main topics at COP26 (resulting in pledges to reduce both), agriculture—which is intimately linked to deforestation and land-use change—was relegated to a sideline topic. “Unlike forest, finance and transport—that got the feted ‘title of a day’ at ... [COP26]—agriculture was taken up as part of ‘Nature Day’ on a Saturday,” [reported](#) Richard Mahapatra for Down to Earth. “Outside the venue, thousands protested against a gamut of things, including step-motherly treatment to food systems that have been a major source of greenhouse gas... emissions.”

Within agriculture, [producing meat is the main climate problem](#): Plant-based foods account for 29 percent of the global food production greenhouse gas emissions, while animal-based food accounts for almost twice as much—57 percent—with beef being the main contributor. “Every bite of burger boosts harmful greenhouse gases,” [said](#) the United Nations Environment Program (UNEP). “Research shows that if cows were a nation, they would be the world’s third-largest greenhouse gas emitter,” [according](#) to UNEP. “As humans, meat production is one of the most destructive ways in which we leave our footprint on the planet.”

And many, many more human footprints are on the way. By 2050, the human population is [expected](#) to reach a staggering 9.9 billion people. (Today, there are 7.7 billion people on the [planet](#); just 50 years ago, the global population was [less than half](#) that number.) To ensure global food security in 2050, the Food and Agriculture Organization (FAO) said that [food production](#) must increase by 60 percent.

A More Sustainable Future Is Plant-Powered

Animal-based agriculture is ultimately a poor way to feed a skyrocketing human population. “Farming animals is notoriously inefficient and wasteful when compared to growing plants to feed humans directly, with the end result that ‘livestock’ animals take drastically more food from the global food supply than they provide,” [writes](#) Ashley Capps, a researcher specializing in farmed animal welfare for A Well-Fed World, an international food security organization advocating for the transition to plant-based agriculture.

“This is because in order to eat farmed animals, we have to grow the crops necessary to feed them, which amounts to vastly more crops than it would take to feed humans directly,” writes Capps. “To give one example, it takes 25 pounds of grain to yield just one pound of beef—while crops such as soy and lentils produce, pound for pound, as much protein as beef, and sometimes more.”

Switching to plant-based agriculture would help prevent food shortages, hunger and even famine at a time when [climate change is creating food insecurity across the globe](#). Patricia Espinosa, executive secretary of the UN Framework Convention on Climate Change, had [warned](#) during the Saudi Green Initiative Forum on October 24 that failure to stem the climate crisis “would mean less food, so probably a crisis in food security.”

A Well-Fed World [points out](#) that “[c]limate change is a hunger risk multiplier, with [20 percent more people projected to be at risk of hunger by 2050](#) due to extreme weather events. Unfortunately, the world’s most food insecure populations are also those disproportionately harmed by climate-related events, including increased heat waves, droughts, hurricanes, tsunamis and flooding.”

Climate, Conflict and COVID-19: A Perfect Storm

“A perfect storm of conflict, climate crises, the effects of the COVID-19 pandemic and rising costs for reaching people in need is causing a seismic hunger crisis,” [warns](#) the World Food Program, the food assistance branch of the UN. The agency has recently launched a public appeal to the world’s billionaires to donate [\\$6.6 billion to save 42 million people](#) across 43 countries from famine.

“Concurrently replacing all animal-based items in the U.S. diet with plant-based alternatives will add enough food to feed, in full, 350 million additional people, well above the expected benefits of eliminating all supply chain food waste,” according to a [2018 study](#) by an international team of researchers published in the journal Proceedings of National Academy of Sciences of the United States of America. The authors note that the results of their study “highlight the importance of dietary shifts to improving food availability and security.”

The dietary shift from meat to plants is something that UNEP has underscored as a way to combat climate change and increase the efficiency of our food system. In their [Emissions Gap Report 2021](#), the agency noted that—in addition to switching from the combustion of natural gas to renewables—“behavioral changes such as reduced consumption of cattle-based foods and reduced food waste and loss” present a significant opportunity to reduce methane emissions. “[F]ast methane action, as opposed to slower or delayed action, can contribute greatly to reducing midterm (2050) temperatures,” the [report](#) states.

COP26’s Missed Opportunity

In many ways, this behavioral change is already underway, as [veganism is on the rise](#). “It can be difficult to get an accurate picture of how many vegans there are in the U.S., but one survey found a 300 percent increase in vegans between 2004 and 2019, amounting to about 3 percent of the total population or nearly 10 million people,” [notes](#) Sentient Media, a nonprofit animal rights journalism organization. Still, even though there has been a steady increase in plant-based diets, [meat consumption is hitting record levels](#), aided by carnivores in low- and middle-income countries where incomes are on the rise, like [India](#) and [China](#).

Considering the growing interest in plant-based eating, the COP26 negotiators missed an opportunity to make dietary and agricultural changes a main thrust of the global climate solution. “Without positions and main messages from COP26 leadership, the need to address the climate change contributions from diet will not be able to gain ground,” [writes](#) Gerber. In the UN-managed “Blue Zone” at the Glasgow Science Center, for example, while COP26 attendees were presented with mainly animal-based food choices, only [38 percent](#) of the menu was plant-based, as opposed to the earlier promise of ensuring “50 percent plant-based offerings within the Blue Zone.”

In order to limit global warming to 1.5 degrees Celsius above preindustrial levels (which will help avoid the worst impacts of climate change), the world must achieve net zero emissions by 2050. To meet this goal, the COP26 organizers [listed](#) four distinct strategies: accelerate the phase-out of coal; curtail deforestation; speed up the switch to electric vehicles, and encourage investment in renewables.

They would have done well to add a fifth: transition the world to a plant-based diet.

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Take action...



Climate fail: Factory farming accounts for 37 percent of emissions of methane, which has up to 86 times more global warming potential than carbon dioxide. (Photo credit: Toto/[Flickr](#))

[ProVeg](#): “The livestock sector already accounts for more than 14 percent of global greenhouse gas (GHG) emissions while the demand for animal protein could increase massively by 2050 due to a growing population and rising incomes. Shifting away from resource-intensive, animal-centered diets and towards more plant-rich ones has been identified as one of the most impactful solutions for mitigating climate change, reducing pandemic risks, tackling food waste, and supporting regenerative farming communities. The 2019 Special Report on Climate Change and Land by the International Panel on Climate Change (IPCC) insists that reducing the consumption of animal products is key to achieving the Paris Agreement.”

[Urge President Biden to call for a transition to a plant-centered food system as a solution to climate change.](#)

Cause for concern...



Treehuggers: Firefighters work to protect the [General Sherman Tree](#), the world's largest tree by volume. The firefighters protect the tree from the [KNP Complex Fire](#) by covering it with fire-resistant structure protection wrap and raking dead branches and other combustible plant material away from its base. (Photo credit: [National Park Service](#))

“Wildfires have killed thousands of giant sequoias this year, which added to last year’s devastating toll means that [nearly a fifth of the world’s largest trees have perished over the past 14 months](#),” [reports](#) Daniel Politi for Slate. “Somewhere between 2,261 to 3,637 giant sequoias perished in the KNP Complex and Windy fires this year, which represents somewhere between 3 to 5 percent of the total population of the trees, according to [new estimates by the National Park Service](#). That toll is particularly devastating when added to the toll of last year’s Castle fire that killed up to 14 percent of the world’s population of giant sequoias.”

Round of applause...



Danger zone: Methane isn't just a super-potent greenhouse gas. It's also a dangerous airborne pollutant that harms human health. (Photo credit: Jeremy Buckingham/[Flickr](#))

“[C]limate change isn't the only issue exacerbated by methane: Public health also suffers, as methane emissions increase ground-level ozone, commonly known as smog, a cause of respiratory disease like asthma, as well as cardiovascular disease. In the COVID era, anything that negatively impacts lung function makes people [more susceptible to the effects of coronavirus infection](#). Natural gas development also emits pollutants, including ultrafine particulate matter that can damage the heart, liver, kidneys and central nervous system. Fracking, the process of extracting natural gas, also uses... [toxic chemicals that are known or suspected carcinogens](#). These health effects impact ‘frontline communities,’ communities of color and low-income, whose neighborhoods usually lack basic infrastructure to support them and protect them from pollution, [many of them near oil and gas facilities](#).”

—Reynard Loki, “[Methane: The Forgotten Climate Change Driver That’s Poisoning Frontline Communities](#)” (*Independent Media Institute*, January 5, 2021)

Decolonizing Thanksgiving...



(Screenshot via [Native Land Digital](#))

Bioneers: “A fundamental task for non-Indigenous people who want to be better allied with Indigenous people is to learn whose land they are currently living on. Identifying the Nation native to the land you live on can foster gratitude, humility and open doors to learning more about the history of colonial dispossession.”

Find out on whose ancestral territories you are living.

Parting thought...



Friends, not food: Susie Coston in the pig barn at [Farm Sanctuary](#) in Watkins Glen, New York. Co-founded by Gene Baur and Lorri Houston in 1986 when they rescued Hilda, their first sheep, Farm Sanctuary was the first sanctuary of its kind, focusing exclusively on rescuing and advocating for animals farmed for food. (Photo credit: Jo-Anne McArthur/[We Animals Media](#))

“The love for all living creatures is the most noble attribute of man.” —Charles Darwin

Editor’s note: Earth | Food | Life will be taking a break next week, so there will be no Take Action Tuesday newsletter. Have a happy, safe and [compassionate Thanksgiving](#). [Earth | Food | Life](#) (EFL) explores the critical and often interconnected issues facing the climate/environment, food/agriculture and nature/animal rights, and champions action; specifically, how responsible citizens, voters and consumers can help put society on an ethical path of sustainability that respects the rights of all species who call this planet home. EFL emphasizes the idea that everything is connected, so every decision matters.

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Questions, comments, suggestions, submissions? Contact EFL editor Reynard Loki at reynard@ind.media. Follow EFL on Twitter [@EarthFoodLife](#).