

## PERSPECTIVE

# Emerging from COVID-19: A New, Rights-Based Relationship with the Nonhuman World?

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### Abstract

This essay argues that the global response to COVID-19 should lead to new thinking and action, and specifically, a new relationship with the nonhuman world that is centered on mutuality and respect, not commodification and exploitation. Such a response would acknowledge and embed concepts like ecological justice and One Welfare in policy and practice, particularly regarding the consequences of intensive animal agriculture and production of monocultures of feedstock for the billions of farmed animals used in food production each year. Drawing on examples from the Global South and Global North, the essay suggests ways forward that provide opportunities for new thinking, research, and action, with the COVID-19 crisis contextualized by the urgency of the climate and biodiversity crises. With deep inequalities and infringement of rights embedded in each of these global challenges, successfully addressing them likely depends on useful disruptions in, and a bridging of, the divides that have separated human and nonhuman rights and have limited the intersections between public health, the environment, and animal welfare and rights.

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Any way it's said, it's going to be an understatement: the wreckage caused by the COVID-19 pandemic has been enormous. Across the world, more than five million lives have been lost and millions more have been upended.<sup>1</sup> Children have missed months of vital schooling; rates of child marriage, domestic violence, and social isolation have increased; and many individuals have been unable to work, visit others, and grieve. The pandemic has also revealed the shortcomings and short-sightedness embedded in the relationships of most human societies with the nonhuman world, whether due to our failure to combat zoonoses, our reckless overuse of antibiotics, or the chronic vulnerability of our food systems. Yet, as governments apportion trillions of dollars to post-COVID-19 recovery, we await a true reckoning—including another pandemic. For COVID-19 is “not necessarily the big one,” according to Michael Ryan, head of emergencies at the World Health Organization.<sup>2</sup>

This essay argues that our response to COVID-19 should lead to new thinking and action, and specifically, a new relationship with the nonhuman world that is centered on mutuality and respect, not commodification and exploitation. Such a response would acknowledge and embed concepts like ecological justice and One Welfare (which I discuss later) in policy and practice, particularly regarding intensive animal agriculture and monocultures of feedstock.

### A globalized commodity-based food system

Over the last several decades, the model of food production embedded in the United States, Europe, Australia, and New Zealand has spread across the world, encompassing countries as varied in their economic and development status as China, Kenya, and Paraguay.<sup>3</sup> Here, what is often referred to as “big ag”—including “big meat,” “big dairy,” “big feed,” and the factory farms and feedlots they rely on—has moved from the margins closer to the center of food systems.

China is now the world's biggest producer and consumer of food products, including meat, and

factory farms there are growing in number and size.<sup>4</sup> Brazil is among the world's leading producers and exporters of meat—including beef, chicken, and pork—and of soybeans, a prime component of feed for farmed animals (corn is another).<sup>5</sup> India's poultry industry is largely industrialized, and India has the world's largest herds of cows and buffaloes. Although used mainly to produce milk for domestic consumers, buffalo meat in particular has made India one of the top global exporters of red meat.<sup>6</sup>

Even in Ethiopia, with a tragic history of food insecurity and famine, industrial meat operations are expanding, as people in middle- and upper-income brackets seek to eat more “Western” diets and industrialists look to export markets in the Middle East and the European Union. Intense new competition is likely to ensue in the country for grains and oilseeds, as well as access to water and land, between fast-rising populations of people and livestock.<sup>7</sup>

Contrary to claims made by its defenders that this method of farming is modern, sustainable, and necessary, industrial animal agriculture poses immense challenges to the human and nonhuman worlds, and it makes many bad problems worse. Global greenhouse gas (GHG) emissions from food systems account for one-third of all human-caused GHGs, with animal agriculture contributing at least 14.5% of overall GHGs.<sup>8</sup> Agricultural expansion, including for cattle grazing and feedcrops fed to billions of animals raised on factory farms and feedlots, is a principal driver of biodiversity and habitat loss and land use change and conversion.<sup>9</sup> Large-scale animal agriculture also consumes immense quantities of potable water, wasting much of it.<sup>10</sup> And it edges out smaller-scale producers, and, in some cases, “grabs” land illegally (sometimes through threats, intimidation, and violence), as in Brazil's Amazon forest and Cerrado savanna.<sup>11</sup>

The meat and dairy industries argue that they are meeting demands from growing, urbanizing populations around the world for more animal-based foods through global supply chains that maximize efficiency and lower costs.<sup>12</sup> The truth, however, is more complex. At least 80 *billion* chickens, pigs, cows, sheep, goats, ducks, and

geese are raised and slaughtered globally each year. Feeding those animals, who are usually confined in crowded sheds or barren feedlots, requires vast quantities of corn, soybeans, or other grains, as well as the routine use of antibiotics to accelerate the animals' growth to "slaughter weight" and keep them alive in insalubrious surroundings.

A record harvest for corn (maize)—1.16 billion tons—is anticipated in the 2020–2021 growing season.<sup>13</sup> And yet hunger is a reality for more than 800 million people, and this number will almost certainly continue to rise in the wake of COVID-19.<sup>14</sup>

One of the reasons for the scarcity amid so much productivity is that more than 40% of crop calories, including from soybeans and corn, are used to feed farmed animals or to manufacture bio-fuels.<sup>15</sup> These monocultures rely on fossil fuel-based fertilizers that leach chemicals into waterways and groundwater, causing eutrophication and pollution. "Intensified agricultural production degrades soils and ecosystems, driving down the productive capacity of land and necessitating even more intensive food production to keep pace with demand," according to the United Kingdom-based Chatham House think-tank and nongovernmental organization Compassion in World Farming.<sup>16</sup>

And what of those who live around or are employed in factory farms and slaughterhouses—not to say of the animals who are raised and killed there? At the most fundamental level, both of these groups should have their basic rights respected, whether that be the right to a safe working environment, to access clean air and water, to a decent standard of living, to be able to flap their wings or turn around in their stalls, to be free of sickness and to rear their young, or to have a life free from the deliberate infliction of pain.

Yet in modern animal agriculture, none of these is the case. Factory farms foul their surroundings, bedeviling communities with persistent odors, polluted water and air, and infestations of insects that drive people indoors. Most of those affected are lower-income residents or people of color, or both. It is these communities, too, who are the most affected by climate change and yet have contributed the least to the crisis. The animal

agriculture industrial complex relies on a poorly paid and marginalized workforce that is exposed to zoonoses such as avian and swine flu and has some of the highest rates of injuries compared to other industries.<sup>17</sup>

The animals themselves are bred for such fast growth that their skeletal structure struggles to support their weight, leading to bone breaks and injuries. Billions are routinely mutilated—horns, tails, toes, and genitalia removed with no pain relief—and newborns are often removed from their mothers soon after birth, leading to documented psychological distress.<sup>18</sup>

The interlinked inhumane conditions for humans and animals alike, and the indifference of "big ag" to both, were brought out in sharp detail by the COVID-19 pandemic. In 2020 and 2021, meat-processing facilities became hotspots for COVID-19 infections and deaths in the United States, Brazil, and Germany. In the United States, the Trump administration forfeited its role in enforcing COVID-19 worker safety measures, deemed meat processing an essential activity, and left personal protective equipment, social distancing, masking, hand washing, and testing to the processors. Despite protestations that worker safety was their top priority, including in a statement by Cargill that acknowledged the "tragic impacts" of COVID-19, most of the big producers—for example, Tyson, JBS, Smithfield, and Cargill—were slow to act on providing personal protective equipment, social distancing protocols, sanitary measures, and testing.<sup>19</sup>

The consequences were dire for the rights to health and life for the workers, who are overwhelmingly Black, brown, or recent immigrants. According to Deborah Berkowitz of the US-based National Employment Law Project, more workers in the meat packing industry died of COVID-19 in the 12 months between April 2020 and April 2021 than from all other work-related hazards combined *over the last 15 years*.<sup>20</sup>

COVID-19's disruption of the institutional supply chain also led in the United States to the "depopulation" (culling) of millions of piglets, chicks, and calves who could not be slaughtered before

they grew too large due to COVID-19-related staff shortages in processing facilities.<sup>21</sup> Vast amounts of milk, meat, and vegetables were thrown away.

### Antimicrobial resistance

Another urgent challenge posed by industrial animal agriculture is its role in the emergence of antibiotic-resistant diseases. Antibiotics are used routinely by large-scale livestock producers to prevent and treat diseases that, not surprisingly, can spread easily in the crowded, dirty conditions of a factory farm. According to the World Health Organization, drug-resistant diseases lead to 700,000 deaths a year and could rise to 10 million by 2050 if antibiotic resistance is not combatted.<sup>22</sup>

Yet an astounding 65% of antibiotics that are sold each year in the United States are for use in food production.<sup>23</sup> Indeed, one recent study found that 44% more antibiotics by volume are administered to cows and pigs than for treatment of infections in people.<sup>24</sup> Globally, as industrial animal agriculture expands, antibiotic use in farmed animals is expected to skyrocket. Researchers project that the indiscriminate use of antibiotics in farmed animals will increase 67% by the year 2030, with “almost twice this increase in countries such as China, Brazil, India, South Africa and Russia.”<sup>25</sup>

One might have imagined that the COVID-19 pandemic would have spurred an immediate reckoning within big ag concerning its misuse of such a vital component of public health. That doesn't seem to be the case, and antimicrobial resistance is only one of big ag's threats to public health revealed by the COVID-19 crisis. The Western diet, high in saturated fat from the oversupply of meat and dairy, sugars, oil, salt, and highly processed and fast foods, exerts a heavy toll. Noncommunicable diseases such as obesity, diabetes, and heart disease linked to unhealthy food ecosystems affect millions of people in industrialized countries, as well as developing regions. Noncommunicable diseases also pose a grave risk to those who contract COVID-19. A study cited by the National Institutes of Health found that in the United States “nearly two-thirds

of COVID-19 hospitalizations ... could be attributed to obesity, diabetes, hypertension, and heart failure.”<sup>26</sup> Here, too, racial and ethnic minorities have borne a disproportionate burden, as they have in many aspects of the pandemic.<sup>27</sup>

Clearly, such a systemic breakdown in public health requires more expansive and systemic thinking. “To respond to the [COVID-19] pandemic we need to broaden our political imaginations,” write theorists and activists Astra Taylor and Sunaura Taylor, adding that “our conception of solidarity must cross the species barrier.”<sup>28</sup> That applies to recognizing that COVID-19 was only one in a series of zoonotic diseases that have occurred. Indeed, zoonoses make up 70% of all emerging infectious diseases.<sup>29</sup> Zoonoses occur because of increasing human encroachment on the natural habitat of wildlife, as well as breeding, confinement, and consumption of animals, whether wild or domesticated. The bush meat trade (widely thought to be the origins for Ebola and Lassa fever outbreaks in West and Central Africa) and global traffic in live, wild animals have been enabled by incursions into forested areas to extract timber and minerals or to produce palm oil, graze cattle, or grow feed crops for animals used in food production. Deforestation, and resulting displacement, have sped COVID-19 in Brazil: for each kilometer of forest lost, a 9.5% rise in COVID-19 cases among Indigenous peoples has been documented.<sup>30</sup>

Even as COVID-19 has ravaged countries around the world, avian and swine flu have also broken out in the United States and Europe. Additionally, there have been continued outbreaks of African swine fever in East Asia, which in 2019 led to the death via culling of up to 200 million domesticated pigs in China alone.<sup>31</sup> “The thing is, the next pandemic is already on its way,” writes UK-based academic and activist Alex Lockwood.<sup>32</sup> “But its causes are certain to be the same: animal agriculture, trafficked animals, destruction of animal habitats, weakened wild animals. It is up to us to act, and leverage this moment to save animal and human lives.”<sup>33</sup>

## Acting now, not when it's too late

A report on preventing the next pandemic published by the UN Environment Programme and the International Livestock Research Institute declares, “Pandemics such as the COVID-19 outbreak are a predictable and predicted outcome of how people source and grow food, trade and consume animals, and alter environments.”<sup>34</sup>

Consider this statement for a moment. What it is saying is that a commodity-based, just-in-time, globalized food system that denies basic rights to its workers and animals, disregards fundamental principles of public health, and ignores precautionary measures to prevent pathogen transmission (zoonotic or otherwise) has shown itself to be a global threat; and it's one that is likely only to intensify as the climate crisis deepens. COVID-19 has revealed industrialized animal agriculture to be rigid, flawed, and, despite its size and political and economic power, profoundly vulnerable.<sup>35</sup> And it has also shown that it is impossible to grapple with these interlinked issues without acknowledging race, class, and our disregard for or destruction of the natural world.

What is infuriating is that, by one estimate, preventive measures, such as additional protections for intact forests and wild animals, would cost a paltry 2% of the financial damage attributed to COVID-19.<sup>36</sup> Advancing other-than-human rights by cutting drastically the amount of land given over to support meat and dairy production could lessen deforestation, lower antibiotic use, reduce pollution, and conserve water and topsoil. A localized, human-scale, and diversified agricultural system, meanwhile, could secure land rights for those, such as Indigenous peoples, who were disinherited and who offer foodways and practices that might foster greater resilience as droughts lengthen, floods grow more intense, wildfires rage, and sea levels rise. Likewise, promoting environmental justice and access to rights to a healthy work environment, livable communities, and decent wages could orient land use away from extraction and exploitation toward restoration, reforestation, and biodiversity protection and resilience.

## Dismantling the silos

The intertwined realities laid bare by COVID-19 offer an opportunity for new interdisciplinary collaborations across environmental and climate policy, agriculture and food systems, biodiversity and forest protections, public health, human rights, and animal welfare and rights. Through these collaborations, powerful and practical forms of exchange and solidarity can emerge to inform praxis.

That praxis would mean dismantling the monocultures and monoliths of a broken food system and siloed priorities that assumes that “big” always means “better.” It would also forge joint policy frameworks for preparing for and preventing future pandemics that span human societies and the nonhuman world. Such collaborations could occur within and among academic institutions (faculty, researchers, and students), international bodies (such as the World Health Organization and the UN Environment Programme), policy makers (at global, national, and subnational levels), and civil society organizations.

An existing framework with relevance for a post-COVID-19 world is One Welfare, which builds on the more widely known One Health concept. As described in the *Animals' Manifesto: Preventing COVID-X*, published in December 2020, “One Welfare further eliminates silos by recognizing that linkages between human wellbeing, animal welfare and the environment affect more than just health, and indeed impact issues as diverse as food security, food safety, livelihoods, climate change, and biodiversity.”<sup>37</sup> While not specifically rights oriented, by spanning disciplines that still often don't work together, One Welfare offers some guidance for envisioning more rights-based strategies as well.

The manifesto's ambit goes beyond calling for One Welfare to detailing additional policies and actions for pandemic prevention. These include transforming farming and changing food consumption habits; ending the unnecessary exploitation of wildlife; increasing efficiencies in vaccine development; ensuring the well-being of companion and working animals; and calling for “visionary, prudent, and necessarily bold leadership



by global institutions at the center of the COVID-19 response,” including UN bodies and international financial institutions.

Other interesting frameworks are emerging from further analysis of the origins and impacts of COVID-19 and what lessons should and must be learned. One of these was incubated by the Harvard T.H. Chan School of Public Health, which convened a set of global experts for a Scientific Task Force for Preventing Pandemics at the Source. This group’s report was released in August 2021.<sup>38</sup> Its recommendations include strengthening health care systems and One Health “to jointly advance conservation, animal and human health, and spillover prevention” and to invest “in sustainable intensification of agriculture and in the prevention of crop and food waste ... to reduce biodiversity losses, conserve water resources, and prevent further land use change while promoting food security and economic welfare.”<sup>39</sup>

Another framework is a push for a formal global treaty, which would be led by the World Health Organization, to prevent future pandemics. Environmental and animal welfare researchers are working with public health experts to advocate for a focus on prevention and preparedness, not solely improving preparedness. That’s necessary, but also insufficient, as this essay has sought to argue. Four Paws, an animal welfare organization based in Vienna, convened a group of experts in the lead-up to the 2021 World Health Assembly to review the lessons from the COVID-19 pandemic and how future pandemics could be prevented. The group, of which I was a member, concluded that “zoonoses are a clear symptom of the serious crisis between humans, animals, and the environment,” pointing to live animal markets, factory farming, and fur farms as leading risk spots for the emergence of future pandemics. The Four Paws-organized *Future Study* urges policy makers to take animal welfare seriously as part of pandemic prevention plans and the “paradigm shift” required post-COVID-19. While not a rights-based instrument, this concept of a global pandemic treaty links prevention and preparedness, animal welfare, environmental protections, health care systems, justice, and equity in

provocative and yet eminently pragmatic ways.<sup>40</sup>

Realizing the potential of these three frameworks, and this moment, which is also freighted by a growing global awareness of the urgency of the climate and biodiversity crises, and the deep inequalities and infringement of rights embedded in them, will require an openness to new thinking, research, and action. Success likely depends on useful disruptions in, and a bridging of, the divides that have separated human and nonhuman rights and have limited the intersections between public health, the environment, and animal welfare and rights.

Some of this will be destabilizing for sure, but the urgency of resolving the staggering scale of the ecological crisis and advancing justice and rights demands new theory and praxis *this decade*, as climate scientists tell us, or it will be too late to avoid catastrophic planetary warming. It is a daunting challenge—perhaps unprecedented in human history. But is there another option? As Wangari Maathai, the first environmentalist and first African woman to be awarded the Nobel Peace Prize, wrote in her memoir, *Unbowed*:

*Those of us who witness the degraded state of the environment and the suffering that comes with it cannot afford to be complacent. We continue to be restless. If we really carry the burden, we are driven to action. We cannot tire or give up. We owe it to the present and future generations of all species.*<sup>41</sup>

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