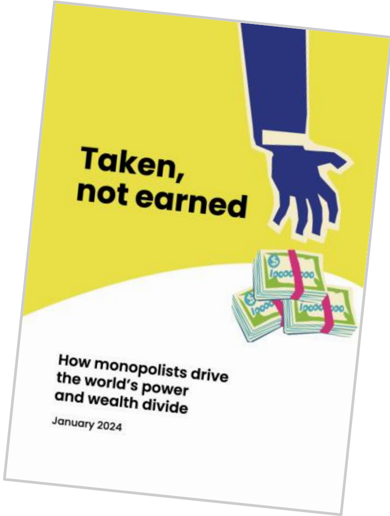
Case Study:
Monopoly Agriculture



Our food system is in crisis. While most people in the world are experiencing a cost of living crisis, and small food producers are struggling, the barons of the food industry are enjoying bumper profits. There is a causal link here: the profits of giant and extremely powerful food corporations are deeply interwoven with the crisis for producers and consumers.

Recent figures suggest that well over 50% of recent price rises in the UK, US and Australia have been driven by increases in profits. A 2023 report from Oxfam states that "not only are companies passing increased input costs on to consumers, but they are also capitalising on the crisis, using it as a smokescreen to charge even higher prices."[1] Its research shows a huge increase in the wealth of food and energy billionaires, with 62 'food billionaires' created between 2020 and 2022.

In this period, billionaires in the food and energy sectors saw their combined fortunes increase by a billion dollars every two days.[2] At the same time, 263 million people were at risk of being pushed into extreme poverty, with rises in the price of food a core driver. While our food system is succeeding at funnelling vast wealth into the banks of the super-rich, it is failing to provide the rest of the world with affordable, nutritious food.

These perverse outcomes are just one result of an industry that has become increasingly concentrated, with just a few large companies establishing monopolistic control over entire supply chains. What's increasingly clear is that the behemoths that control the food industry are not earning their crust – they're simply taking it – at whatever cost to people and planet.

The corporate takeover of our food system

Over three decades, there has been a huge concentration in the food industry as the big players have taken over hundreds of smaller companies, part of a broader trend of 'mergers and acquisitions' that has been a dominant feature of the neoliberal economy. While 25 years ago, ten corporations controlled 40% of the seed market, a series of mega-mergers means that today just four – Bayer, Corteva, Syngenta, and BASF – control more than half.[3] Together, they also control more than 60% of the world's agrochemical market. Another area of massive concentration is the trade in agricultural commodities, including grains, meat, and sugar, a process dominated by "the most powerful and least-transparent companies in the industrial food chain".[4] The top ten such commodity traders brought in more than half a trillion dollars in 2020. Within that, just four companies – ADM, Bunge, Cargill and Louis Dreyfus – control 70% of the world market in agricultural commodities.[5]

The problem of monopolisation is just as acute in the world of sales: in an already concentrated sector in the US, a merger currently on the table could see just three supermarkets controlling 70% of the grocery market across 167 cities, even further reducing the range of options available to consumers.[6]

As Krista Brown, policy analyst with the American Economic Liberties Project, put it: "We're at a point in our market concentrations that we haven't seen ever before."[7]

This concentration has had some serious consequences for our food system, allowing corporations to squeeze suppliers at one end and consumers at the other, as well as shaping farming practices that damage the environment, entrench unfair trade systems, and hold back smaller farmers from building more sustainable systems.

You might think that these corporations' market dominance is rooted in a substantial contribution to global food security, but many of their riches have been accumulated from operations that don't obviously deserve merit or represent useful forms of productivity. Many of the big agricultural corporations have benefited from unfair trade deals and laws that tilt power in their favour. Some of them have even helped to write those rules themselves. Meanwhile, many of the biggest players, especially commodity traders and supermarkets, have built their wealth from exploiting chokepoints in supply chains, using their power to squeeze producers and fleece customers. In a further move away from actually producing food, agricultural traders increasingly make a large chunk of their money through financial speculation. And as millions of people around the world have found to their cost, this imposing collection of giants is too often failing in its supposed mission to provide nutritious, affordable food to those who need it.

Monopolising chokepoints

One way in which big agriculture companies have built immense power in their dealings with both consumers and producers can be understood using the image of an hourglass. With over a billion farmers producing food at one end, and billions of consumers buying it at the other, commodity traders and supermarkets represent a handful of corporations dominating the middle.[8] Cory Doctorow and Rebecca Giblin argue that companies exploit these chokepoints to lock in customers, which in turn locks in suppliers, in a cycle that gives them more and more power over the whole system, while reducing the power, and the income, of everyone else.[9] Given neither producers nor consumers have anywhere else to turn, monopolies are able to push food prices down for farmers, while simultaneously pushing prices up for the public. As one food expert points, out, "[a] lot of people are making a huge amount of money out of food, but food producers [only] get about 8% of the £250bn a year we spend on food."[10]

Buying up the supply chain

Big agriculture companies have also expanded their control by using their immense financial clout to buy up multiple stages of the food value chain, from production through to processing and supply. This gives them the ability to shift resources around in order to maximise their own profits and crush smaller businesses, reducing the choices for both suppliers and consumers.

An example is soy production in Brazil, where Cargill, ADM, and Bunge not only provide over 60% of the total financing, they also supply the seed, fertiliser, and agrochemicals to the farmers, and manage the purchase, storage, and transport of the harvested soy in their own facilities and infrastructure.[11] It also undermines local economies: slowing the circulation of money among smaller businesses, and increasingly funnelling it into the bank accounts of these large corporations. Further, the crushing of smaller farmers and suppliers also limits diversity of production, a process which ultimately leads to higher prices.[12]

This broader process of concentration means food giants don't have to fear being outcompeted, leaving them with outsized power to set prices – this can in turn drive inflation. In fact, during 2022, the profits of food and commodities giants Archer-Daniels-Midland and Bunge rose much faster than the inflation fuelled by Russia's invasion of Ukraine.[13] While the system's defenders argue that food companies were simply accounting for increased costs across the supply chain, the bottom line of these companies told a different story. As we've seen in the main report, the biggest corporations are marking up their prices twice as much, on average, as smaller companies, ripping off consumers, workers, and citizens while suffocating smaller companies.[14] In 2022, the profits of food and energy companies more than doubled.[15]

Speculation

The outsized influence of these companies has had other perverse consequences too, for instance, some food corporations have become major speculators on financial markets, increasingly making money not from actually producing anything to eat, but gambling on food prices – a process which can itself increase costs.[16] In 2008, when food prices spiked dramatically and millions were plunged into hunger, financial speculation was considered a significant factor.[17] Then, in 2022 when food prices again went through the roof, researchers at Manchester University argued that increases in financial speculation in the years leading up to the crisis likely contributed.[18]

Unfair trade

This consolidation of agricultural monopolies has been an intensely political process, spurred on by the relentless drive of corporations to corner ever greater sections of the food market, but aided by policies that have tilted the balance of power away from local economies, and towards agricultural behemoths.

Neoliberal free trade agreements across the 1980s and 1990s favoured global north agriculture and big business, with uneven rules on subsidising that overall allow rich countries to give far more support to their farming industries than poor countries. Big agriculture company associates have even been involved in writing some of these international agreements (see box on Cargill). These trade deals allowed heavy subsidisation of agriculture in the global north, which led firms, especially in the US, to produce huge surpluses of food. Much of this was exported far below the cost of production. Meanwhile, global south countries were forced to slash import tariffs, leading to the mass dumping of cheap global north food on global south countries. This decimated domestic global south food markets across many sectors while bolstering forms of industrial farming.

Once almost self-sufficient in rice production, Haiti was forced to cut import tariffs on rice from 50% in to 3% in less than 2 years from 1994-95 if they wanted to participate in the global market.[19] Meanwhile, the US government was heavily subsidising its own rice industry—in 2003 it provided $1.3bn in subsidies, a whopping 72% of the total cost of production.[20] As a result, the country was flooded with US rice and Haitian rice production was destroyed, along with hundreds of thousands of jobs.[21] Up to 2023, Haiti was still importing 80% of its rice, while global rice prices have gone through the roof.[22] In this context, 44% of Haiti's population faces acute food insecurity, which is the fourth highest per-capita figure in the world.[23]

Intellectual property

Similarly, the drive by the US to establish globally enforceable intellectual property rights encourages agricultural companies to expand their ownership over ever greater swathes of the food chain. Long resisted by peasants' groups like Via Campesina, who argue that natural resources should not be privatised, this move allowed big agriculture firms to slap patents on seeds.[24] Driven on by the big four seed companies, this approach is increasingly pervasive. Over the past few decades big agribusiness companies have also been pushing for farmers to adopt GM seeds, with worrying effects.

In India, where Monsanto (bought up by Bayer in 2018 as concentration in the market deepened even further) controlled 90% of the cotton seed market, small scale farmers have been at the sharp end of Monsanto's activities. Unlike farmers' own seeds which can be saved and swapped freely, Monsanto's GM cotton seeds are patented which means farmers have to buy them every year. At a cost of up to four times more than traditional varieties, this increases farmers' costs considerably, creating indebtedness and threatening livelihoods.[25]

Further, the GM crops pushed by big agriculture firms are often designed to withstand increased use of specific herbicides.[26] Inevitably, this means more chemicals and more products that farmers must buy from the companies like Bayer. In some cases, this has led to the growth of herbicide-resistant weeds that require ever-more toxic chemicals to kill.[27] As well as contaminating water, soil and air, heavy pesticide use is a huge driver of biodiversity loss, at a time when we're experiencing the sixth mass extinction event: a human-led biodiversity crisis.

Damaging the health of people and planet

The industrial forms of farming that secure huge profits for the big agrochemical companies have had disastrous effects on our health, the conditions of workers and the environment. The heavy use of pesticides is linked to many chronic illnesses in humans, such as cancer, and heart, respiratory and neurological diseases. In perhaps the most high-profile case, Monsanto have faced tens of thousands of legal claims that their Roundup Ready pesticide caused people's cancer, with the company's new owners Bayer, settling cases to the tune of over $10 billion.[28]

Not only does the model pushed by monopoly agriculture corporations run on chemicals, but it contributes to climate change too, with this model of farming relying heavily on fossil fuel-based fertilisers. Between a quarter and a third of global greenhouse gas emissions come from food, and emissions from agriculture are on the rise, having increased by more than 20% since 1990.[30]

The trends driven by these giants of agriculture have also made our food system more vulnerable. It is estimated that around 75% of plant genetic diversity has been lost since the 1990s as farmers are encouraged to cultivate genetically similar high-yielding crops.[31] Around three-quarters of the food we consume now comes from only twelve plant and five animal species. This monocultural approach is dangerous, leaving us far more vulnerable to climate change or crop disease.

Digital domination to come?

The food industry has never been so concentrated in the hands of so few corporations, and these huge companies are now eyeing the next big frontier to help them consolidate their power: the digital economy. It's now possible to collect increasing amounts of data on farms – whether through advanced sensors on digital tractors or through simpler recordings on mobile phones – and this data could prove extremely lucrative.

Big agriculture companies have swarmed to take up the technology, with companies like Bayer having created or bought apps which they say will "help" farmers "take decisions on what to plant, how much to spray, [and] when to harvest."[32] Some of these companies market their apps as ways of helping farmers to be more 'climate smart', including through more precise use of chemical inputs and water. In almost every case, this means farmers have to give up their agricultural knowledge about a whole range of issues, including soil fertility and crops.[33] Inevitably, these apps heavily encourage farmers to buy tools and inputs from the same agricultural giants that control the app.[34]

Such technologies generate vast amounts of data, which will only set these agricultural giants even further apart from their smaller competitors. IT For Change argues that these firms benefit, not only from a "constant flow of profitable data and a bigger and better dataset, but also the emergence of a systemic dependency [on their services]".[35]

While data technology may have a role to play in responding to climate and environmental crises, it's worth remembering that Big Agriculture created many of the problems they are now claiming to solve. Understandably, there is huge scepticism around the 'precision' advice provided by the firms now hoovering up masses of data. Will an industry that makes its money from selling huge quantities of chemical inputs really prioritise what's best for farmers and their fields?

The system isn't working

Interviewed in 2021 about claims that Cargill's recent mega acquisition of Sanderson Farms had contributed to poultry price rises of 30%, Dave MacLennan, chairman and CEO of Cargill responded, "you can't have a bunch of small players delivering such an important food source to the nation's consumers. You have to have larger companies that can do it cheaply and can keep costs down."[36]

Even aside from this being a bizarre response to the question, given his company appeared to have just sent prices rocketing, the broader argument is clearly untrue: a system driven by monopoly corporations is not delivering food to the people who need it, nor is it helping to keep prices down.

Food prices have instead risen with the profits of the megarich, and the people who most need food aren't getting it. Just as the number of people using food banks surged in the UK and globally 735 million people faced hunger in 2022, the profits of big agriculture companies skyrocketed.[37]

We are allowing a handful of companies an unprecedented level of illegitimate and private control over one of our most fundamental resources for survival. Huge corporations make the decisions about everything we eat – what we eat and what is grown, and where, and by who. Decisions that should be democratic, open and transparent are being made by corporations who have proved time and time again that they value profits over people and planet, that they're willing to break the law, cut corners and exploit crises for their own gain.

A food system run by monopolists isn't working. It's time to build something new.

In Focus: The Cargills

> *"We are the flour in your bread, the wheat in your noodles, the salt on your fries. We are the corn in your tortillas, the chocolate in your dessert, the sweetener in your soft drink. We are the oil in your salad dressing and the beef, pork or chicken you eat for dinner. We are the cotton in your clothing, the backing on your carpet and the fertiliser in your field."*
>
> *Cargill brochure*

Cargill is the largest privately owned company in the U.S., with sales of $134bn in 2020, 155,000 employees and a presence in over 70 countries. The company's exact reach is almost impossible to measure, but it has penetrated nearly every possible aspect of the global food supply chain, from farm to table. Despite its enormous size and pervasiveness, and numerous scandals and controversies, it remains relatively unknown. In total, 88% of the company is owned by one family, which includes 12 billionaires, making them the fourth richest family in the U.S.[38] Private ownership allows the company to remain shrouded in secrecy, with high levels of control over how much information it shares publicly. You can't boycott something you can't see.

Cargill's ascendency has been marked by many of the usual tactics of monopolists. Founded in 1865 with a single grain flat house in Iowa, the business quickly expanded.[39] Cargill exploited a very early chokepoint: since it was often the only grain elevator at major train stations, it could force farmers, who had no other option, to pay high prices, which were sometimes fixed in backroom deals.[40] Quickly buying up multiple stages of the supply chain (in the tactic known as vertical integration), from farms to storage and transportation, Cargill was able to cut costs and further increase profits.

Cargill continued to expand aggressively, exploiting the turbulence of the first half of the 20th century to profit even while many people suffered in wars and crises. It raked in huge profits from high and fluctuating grain prices during World War I, and was accused of profiteering.[41] Then, in the 1930s, while the Dust Bowl was destroying crops and pushing thousands of farming families into poverty, the corporation was accused of trying to corner the grain market, and was banned from the Chicago Board of Trade.[42] Despite this the company continued to expand, especially during World War II, where the company's move into ship-building and transportation gained it valuable government contracts and further solidified its sector dominance. Between 1955 and 1965, the company's US grain exports increased by 400%.[43]

Cargill, and the other big commodity traders, have fundamentally shaped the global food system we know today. The four largest agricultural commodity traders, one of which is Cargill, today control huge portions of the trade in basic commodities, including up to 90% of the global grain trade.[44] Present at every stage in the global food supply chain, from supplying seeds and fertilisers, to processing food in a myriad of different ways, to transportation and storage, these firms have fundamentally transformed the global food production system into the complex, globalised and financialised business we see today.

In an interview with Greenpeace, Glenn Hurowitz from the environmental organisation Mighty Earth, said, "it used to be that if you were buying a chicken or some beef, you'd get it from farms within a hundred miles of your city. Now the meat and the feed can be shipped thousands of miles, with no visibility of how it's made... Cargill has built the modern agriculture system – with all its abuses."[45]

At the same time as shaping the global food system, these corporations have written their agricultural vision (and their power) into the very rules of the modern economy. When global trade rules (GATT) were being re-negotiated in the 1980s (for the first time since they were originally written after World War II) it was Dan Amstutz, former Cargill Vice-President, who wrote the original draft of the Agreement on Agriculture.[46] His draft included proposals such as prohibiting countries from establishing any import controls or regulations, banning all export controls, even in times of food shortages in a country, and restricting countries from enforcing strict food safety laws.[47] Not all of his proposals made it into the final draft, but the agreement was still markedly biased towards corporate interests, with huge tax breaks for corporations, and a deeply unequal subsidy system, which heavily favoured global north industry over the global south even in times of food insecurity in poor countries, all of which resulted in record low returns for farmers across the world.[48] Ultimately this deal spelled disaster for small family farms, while corporations raked in the profits.

Cargill has continued its tradition of crisis profiteering. During the global covid pandemic, against the backdrop of millions of deaths, crop failures, and a global hunger crisis that saw nearly a billion people going hungry, Cargill announced its biggest profits in its 156-year history, up 64% on the previous year.[49] As a result, the Cargill family, already rich, welcomed four new billionaires to their ranks, making a total of 12.[50]

Cargill's mission to make profits at all costs means its entire history is littered with scandals and controversies, from fatal meat contaminations, to deforestation, toxic waste dumping, pollution of water, air, and land, accusations of child labour in its supply chains, price fixing, union busting, and lying about its emissions.[51] What's more, they have used and abused their incredible size, market share and influence over political power to ride roughshod over the environment, workers and consumers. A systematic offender, Cargill has been ordered to pay over $220 million in penalties since 2000 alone, with the biggest offences being environmental violation and price-fixing or anti-competitive practices.[52] Over 200 offences to its name since 2000 suggest that fines are not a sufficient disincentive to prevent Cargill from continuing to flout regulations.

And while Cargill claims to acknowledge the urgent "need to make our food system more sustainable and resilient", in 2017 Mighty Earth revealed Cargill to be one of the two largest customers of industrial-scale deforestation.[53] Further research by Greenpeace and the Bureau of Investigative Journalism has implicated the corporation in massive deforestation in Brazil's crucial Cerrado region.[54]

Authors

This case study was written by Daisy Pearson and Nick Dearden (Global Justice Now)

Balanced Economy Project Global Justice Now SOMO LOBBY CONTROL

Endnotes

1. BP Survival of the richest p.18
2. https://www.oxfam.org/en/press-releases/pandemic-creates-new-billionaire-every-30-hours-now-million-people-could-fall
3. https://www.etcgroup.org/files/files/food-barons-2022-full_sectors-final_16_sept.pdf
4. https://www.etcgroup.org/files/files/food-barons-2022-full_sectors-final_16_sept.pdf
5. Agrifood Atlas: Facts and figures about the corporations that control what we eat, 2017, https://www.boell.de/sites/default/files/agrifoodatlas2017_facts-and-figures-about-the-corporations-that-control-what-we-eat.pdf (p. 26)
6. https://www.nytimes.com/2022/10/14/business/kroger-albertsons-merger.html#:~:text=If%20the%20merger%20went%20through,share%20would%20exceed%2090%20percent.
7. https://www.theguardian.com/business/2022/apr/27/inflation-corporate-america-increased-prices-profits
8. https://www.fao.org/newsroom/detail/almost-half-the-world-s-population-lives-in-households-linked-to-agrifood-systems/en
9. https://time.com/6219423/chokepoint-capitalism-doctorow-giblin/
10. https://www.theguardian.com/environment/2022/aug/24/food-price-rises-around-the-world-are-result-of-broken-system-say-experts
11. Milieudefensie/Friends of the Earth The Netherlands (2006) 'The Brazilian-EU Soy Chain Case Report on Agrifood. Permanent People's Tribunal Hearing on Neo-liberal Politics and European Transnational Corporations In Latin America and the Caribbean', 10–12 May 2006.
12. https://www.axios.com/2022/05/26/new-paper-finds-monopolies-contribute-to-inflation
13. https://www.theguardian.com/business/2023/dec/07/greedflation-corporate-profiteering-boosted-global-prices-study
14. https://www.globaljustice.org.uk/wp-content/uploads/2024/01/Davos-Taken-not-Earner-Report-2024-FINAL-1.pdf
15. https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621477/bp-survival-of-the-richest-160123-en.pdf
16. https://unctad.org/publication/trade-and-development-report-2023
17. https://reliefweb.int/report/world/financial-speculation-and-food-crisis
18. https://theconversation.com/inflation-how-financial-speculation-is-making-the-global-food-price-crisis-worse-191056
19. https://www.imf.org/en/News/Articles/2015/09/28/04/53/soint060608a
20. https://oxfamilibrary.openrepository.com/bitstream/handle/10546/114531/bp72-kicking-down-door-110405-en.pdf;jsessionid=5F2AF4A61D1B83CD627ECFCD7AF0F54A?sequence=1
21. https://www.oxfamamerica.org/explore/stories/haiti-no-longer-grows-much-of-its-own-rice/
22. https://reliefweb.int/report/haiti/haiti-price-bulletin-december-2023
23. https://docs.wfp.org/api/documents/WFP-0000153539/download/?_ga=2.130474573.398600149.1702487949-1058439866.1702487949

24. https://viacampesina.org/en/peasant-seeds-dignity-culture-and-life-farmers-in-resistance-to-defend-their-right-to-peasant-seeds/
25. https://www.globaljustice.org.uk/monsanto-taking-control-of-the-food-system/
26. https://www.greenpeace.org/usa/sustainable-agriculture/issues/gmos/
27. https://www.npr.org/sections/thesalt/2012/03/11/148290731/why-monsanto-thought-weeds-would-never-defeat-roundup
28. 'Bayer ordered to pay $3.5 million in latest Roundup weedkiller trial', *Reuters*, 6 Dec 2023, https://www.reuters.com/legal/bayer-ordered-pay-35-million-latest-roundup-weedkiller-trial-2023-12-06/; 'Bayer Hit With $1.5 Billion Roundup Weedkiller Verdict', 30 November 2023, *medtruth*, https://medtruth.com/articles/legal-developments/bayer-hit-with-1.5-billion-roundup-weedkiller-verdict/
30. 'How much of global greenhouse gas emissions come from food?', *Our World in Data*, 18 March 2021, https://ourworldindata.org/greenhouse-gas-emissions-food; 'Agriculture emissions worldwide - statistics & facts', *Statista*, 18 December 2023, https://www.statista.com/topics/10348/agriculture-emissions-worldwide/#topicOverview
31. https://www.fao.org/3/y5609e/y5609e02.htm
32. https://grain.org/en/article/6595-digital-control-how-big-tech-moves-into-food-and-farming-and-what-it-means
33. https://link.springer.com/article/10.1007/s10460-020-10161-2
34. https://grain.org/en/article/6595-digital-control-how-big-tech-moves-into-food-and-farming-and-what-it-means
35. https://projects.itforchange.net/state-of-big-tech/big-tech-and-the-smartification-of-agriculture-a-critical-perspective/
36. https://www.cnbc.com/video/2021/08/20/cargill-ceo-on-rising-inflation-fears-commodity-costs.html
37. https://news.un.org/en/story/2023/07/1138612
38. 'Cargill: the company feeding the world by helping destroy the planet', *Unearthed*, 25th November 2020, https://unearthed.greenpeace.org/2020/11/25/cargill-deforestation-agriculture-history-pollution/; 'America's Richest Families', Forbes, https://www.forbes.com/families/list/ (Accessed 14.01.24)
39. https://www.cargill.com/about/cargill-history-timeline
40. https://unearthed.greenpeace.org/2020/11/25/cargill-deforestation-agriculture-history-pollution/
41. https://www.cargill.com/about/cargill-history-timeline'; https://unearthed.greenpeace.org/2020/11/25/cargill-deforestation-agriculture-history-pollution/
42. https://www.forbes.com/forbes/2002/1125/158.html
43. https://unearthed.greenpeace.org/2020/11/25/cargill-deforestation-agriculture-history-pollution/
44. https://www-cdn.oxfam.org/s3fs-public/file_attachments/rr-cereal-secrets-grain-traders-agriculture-30082012-en_4.pdf
45. https://unearthed.greenpeace.org/2020/11/25/cargill-deforestation-agriculture-history-pollution/
46. 'WTO and Agriculture: The Next Round', *Institute for Agriculture and Trade Policy*, 2 July 1999; Blame it on the WTO? Sarah Joseph, Oxford University Press; etchttps://www.iatp.org/sites/default/files/2019-07/WTO%20Agriculture-

Next%20Round.pdf; also, Sophia Murphy, *Concentrated Market Power and Agricultural Trade*, August 2006 (Heinrich Boell Stiftung, Berlin, 2006) p. 30.
47. 'WTO and Agriculture: The Next Round', *Institute for Agriculture and Trade Policy*, 2 July 1999, https://www.iatp.org/sites/default/files/2019-07/WTO%20Agriculture-Next%20Round.pdf
48. https://www.globaljustice.org.uk/blog/2016/08/time-uk-agricultural-policy-doesnt-subsidise-rich/; https://www.theguardian.com/global-development/poverty-matters/2013/nov/27/farming-subsidies-distort-advantages-food-insecurity
49. FAO, IFAD, UNICEF, WFP and WHO, 'The State of Food Security and Nutrition in the World 2021: Transforming food systems for food security, improved nutrition and affordable healthy diets for all', 2021, p. xii: https://www.fao.org/documents/card/en/c/cb4474en; ETC Group, 'Food Barons 2022: Crisis Profiteering, Digitalization and Shifting Power', 20 September 2022, https://www.etcgroup.org/files/files/food-barons-2022-full_sectors-final_16_sept.pdf
50. https://www.bloomberg.com/news/articles/2021-05-24/cargill-heads-to-record-profits-on-booming-agricultural-markets
51. https://stories.mightyearth.org/cargill-worst-company-in-the-world/index.html#group-Timeline-tadcF32UdS
52. https://violationtracker.goodjobsfirst.org/parent/cargill
53. https://www.mightyearth.org/wp-content/uploads/2016/07/MightyEarth_MysteryMeat.pdf
54. https://unearthed.greenpeace.org/2020/11/25/cargill-deforestation-agriculture-history-pollution/