



SOWING HUNGER REAPING PROFITS

A FOOD CRISIS BY DESIGN

OUR BREAD
OUR FREEDOM
CAMPAIGN

 Navdanya
international

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Sowing Hunger, Reaping Profits

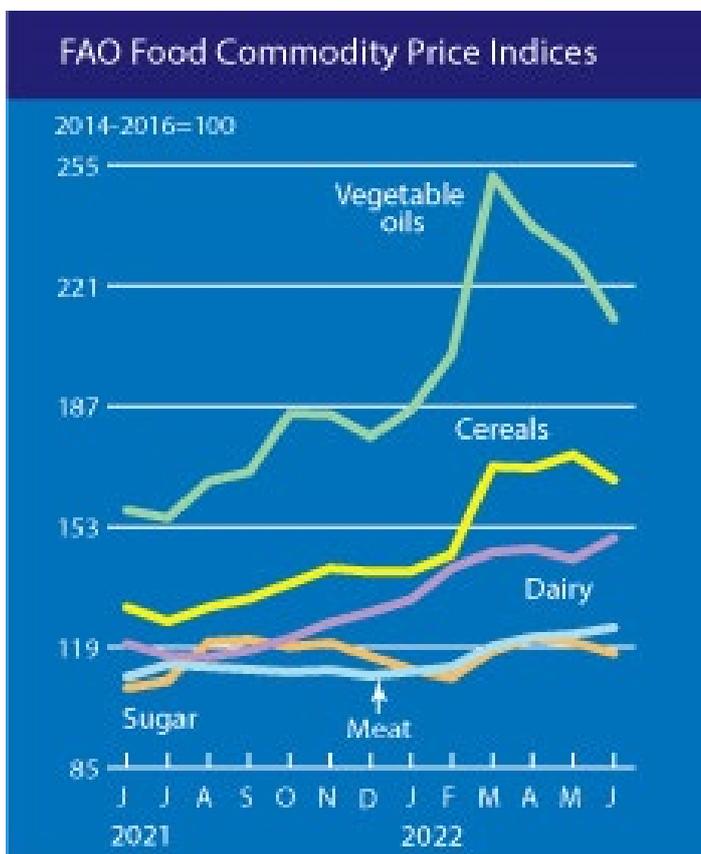
Since the Russian invasion of Ukraine, the headlines have been dominated by the warning of a food crisis on the horizon. According to the official narrative, due to Russia and Ukraine making up 25 to 30 percent of global trade in wheat and more than 50 percent of trade in sunflower oil, seed, and meal, the current invasion is putting pressure on both global supply and global food prices of staple goods. As of the pandemic, global inflation has been on the rise causing detrimental price spikes in some of the poorest regions of the world. According to the same narrative, we are facing a drop in global food supply with “Europe’s breadbasket” no longer able to produce for the foreseeable future. So, governments and international bodies are claiming they’re acting fast to solve the global production gap and remedy supply chains to avoid the worst of famine. But when examined more closely, is this really all that needs to be ‘solved’?

According to the [FAO](#), [the World Bank](#), and the [International Panel of Experts on Sustainable Food Systems](#) (IPES), **there is currently no risk of global food supply shortages**. This is thanks to a higher-than-normal global wheat stocks and a comfortable stock-to-use ratio at 26.7 percent. Which according to the FAO, indicates, “**a relatively comfortable supply level**”, regardless of the invasion of Ukraine. This is also due to the fact that according to the Ukrainian Ministry of Agriculture, the country was able to get its 2021/ 2022 harvests, which also were larger than average, out before the invasion. According to a recent [IPES report](#), any current gap in this year's wheat supply is also being made up by other countries with supply chains currently rerouting and adjusting shipments. So why are so many countries now facing an increased risk of food insecurity, and in worst cases famine?

What is crucially being overlooked by most diagnoses of the current food crisis is how **the problem does not lie in a lack of supply, or lack of market integration, but instead in how the food system is structured around power**. The fact is, the world has already been facing a food and malnutrition crisis long before the current conflict. From the colonial era which saw the beginning of extraction and exploitation of small farmers, to the advent of the Green Revolution, and the concretizing of the globalized free trade regime, we have seen the deliberate destruction of small farmers and food sovereignty in favor of corporate power. Therefore, it is no coincidence that today we are witnessing the third major food crisis in the last 15 years.

Moreover, **the globalized, industrialized agrifood system has itself set the precedent for these repeated food and hunger crises**, despite its reiterated proclamations that it is the best solution to global food security. A combination of historic and current conditions set by agribusiness has created a rigid globalized system based on industrial agriculture, financialization of the food system, hyper-specialization of commodity crops, free-trade agreements, and market concentration. These lock-ins, in combination with a failure to transform food systems after the previous two food crises, current over-speculation, and COVID preconditions are now pushing us toward a potential famine.

Worst of all, regardless of its evident unsustainability, international institutions, governments, and corporate actors are using the current crisis, as they have used every crisis, to further consolidate and push greater iterations of their failed model. False solutions and redundant calls for failed approaches abound in headlines and international responses, with a collective call to 'ramp up production at all costs'. But today we are reaching a breaking point. **The current price crisis and incoming hunger crisis is not a symptom of war, but a symptom of a system gone too far.** In our



current state of multiple overlapping crises, pushing further down this path will only continue to create ever worse global crises. Each time with a higher toll to pay. What the Russian-Ukrainian conflict has once again laid bare is just how fragile globalized food systems are, and how quickly a fluctuation in the market goes on to detrimentally affect the poorest.

Agroecology not only increases farmers' incomes, but also increases nutrition and health while rejuvenating soil, water, and biodiversity while mitigating climate change and enhancing resilience. **What we need are radically transformative strategies that recognize peoples' needs, accord dignity, respect nature, put people above profits, resist corporate capture, and work collectively towards a fair and decent food**

system for all. What we need is to create Local Food Systems, Biodistricts, and social and inclusive economy networks based on economic democracy, including educational programs and farmers' markets to link local organic farmers with the community. Governments, and regional and international institutions, must support these constituencies' pathways for transforming corporate food systems through agroecology and food sovereignty.

Behind the Headlines of a Food Catastrophe

The worst of the food crisis is now being felt by countries that directly rely on imports, along with vulnerable populations who had already been tremendously affected by COVID-induced economic hardships. What is at risk is a greater rise in hunger, malnutrition, and extreme poverty. And as movements have been pointing out for decades, **the problem is not one of production, but one of access and availability.** As food prices skyrocket, countries with lower foreign currency reserves, and increasing debt are less and less able to access food supply on the global market. With local supply and local food sovereignty having been systematically destroyed by the imposition of the Green Revolution, industrial agriculture, and the free trade regime, countries are left with nowhere to turn. But this crisis did not only appear after the invasion of Ukraine. In reality, **since the imposition of the globalized, industrialized food system, there has always been an underlying food and malnutrition crisis, as people have systematically been left evermore vulnerable thanks to the deliberate destruction of food sovereignty in favor of the global market.**

There is no supply problem, but there is an over-speculation problem

As previously stated, the current food crisis is not a problem of supply, but a problem of access in a dysfunctional global market. According to a statement issued by the World Bank, global stocks of rice, wheat, and maize are historically high, and well above 2007-2008 global food crisis levels. Also according to the [FAO Cereal Supply and Demand](#) report, updated in May 2022, **world cereal stocks stand at a historic high**, with an increase of up to 5.2 million tons up from the 2020/2021 season. Russian production, even in the wake of the war, has also not slowed down, with the FAO report stating, “[May’s] upward revision mainly reflects higher-than-expected exports from the Russian Federation based on continued shipments in April.” As also stated above, the Ukrainian Ministry of Agriculture reported on May 19, 2022, that over three-fourths of harvests were able to make it out before the start of the war. Their exports even saw an increase to 46.51 million tons of cereals versus 40.48 million for the previous year. ¹

But regardless of the adequate global supply, the week of March 7, 2022, food prices reached their highest price spike in the last 30 years.² **Since 2020, speculation in commodity and agriculture markets has been on the rise**, and coupled with mass supply chain disruptions, food shortages, and economic hardship caused by the Coronavirus pandemic, food prices were already up 20 percent from pre-pandemic times. This alone caused a rise in global food insecurity and malnutrition, with an increase in 40 million people facing food insecurity from 2020 to 2021³ and 811 million people experiencing hunger in 2020.⁴

As of the Russian invasion, speculation in the commodity market has been sharply rising, as massive amounts of capital are being moved into wheat futures and EFTs by investment firms looking to profit. Speculation increased some 600 percent from \$197 million in 2021 being invested in agriculture-linked “exchange-traded funds” (EFTs), to \$1.9 billion in 2022.⁵ In one week EFT prices rose over 40%, with trade volume also increasing 10 times the daily average by March.⁶

Speculation in cereal commodity futures has also soared, rising upwards of 54 percent nine days after the invasion⁷, causing market volatility to go up 20 percent the normal rate.⁸ Commodity

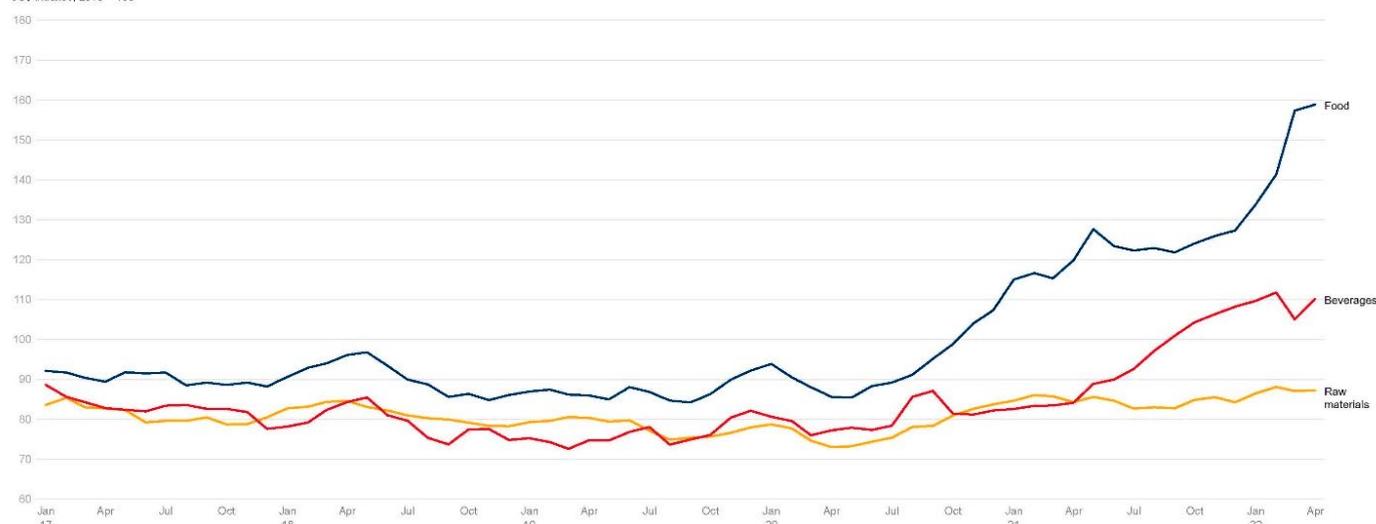
futures are the financial tool that helps determine the price of grain on the market, and go to affect every level of the supply chain– from growers to grain stores, retail stores, and food processing companies, to speculators who buy and sell futures contracts for profit. According to an [investigation by Lighthouse Reports](#) and [The Wire](#) (India), **this huge surge in commodity investment points directly to over speculation by investment firms, banks, and hedge funds wanting to profit off rising food prices.** This means that commodity future prices are no longer linked to actual supply and demand in the market but are based purely on speculation.

This is significant since the EU Commission is basing its response to the food crisis on looking at commodity futures to determine whether there will be supply gaps. A [communiqué issued by the EU Commission](#) on March 23, 2022, states, “The asymmetric jump in futures prices since the Russian invasion of Ukraine demonstrates that the wheat market is where global food security concerns are mainly concentrated. It is fundamental from a geo-strategic point of view that the EU contributes to covering the production gap to address the expected global shortage in wheat.” [emphasis added] This calls into question whether responses based on the financial market do anything to understand the root of this crisis and hence base policy decisions correctly.

Excess speculation, increased commodity future pricing, and increased volatility in the market, have meant bigger gains for financial players, and big agricultural firms, but overall skyrocketing real-world food prices. **While the big four companies that control global grain trade– Archer Daniels Midland (ADM), Bunge, Cargill, and Louis Dreyfus, have all made tremendous profit gains⁹, the price of bread has already nearly doubled in some Middle Eastern and African countries¹⁰.** The price of bread is up over 70 percent in Lebanon and Egypt alone.¹¹ The surge in wheat prices has also gone on to directly affect maize, rice, and soy, pushing all food prices to increase directly.¹² The World Bank estimates that 10 million people are thrown into extreme poverty for each percentage point food prices increase.¹³ Also [according to the World Bank](#), the Food Commodity Price Index has now increased to 80 percent higher than just two years ago. Signaling a troubling increase of extreme poverty worldwide.

Agriculture price indexes

US\$ indexes, 2010 = 100



Note: Last observation is April 2022.
Source: World Bank

Dr. Vandana Shiva: The finance casino behind the wheat crisis

The world has been shocked by the war in Ukraine. The food crisis, in particular the wheat crisis, has been indicated as a natural consequence of the war. Yet there are claims that financial speculation is also behind the crisis. President of Navdanya International Dr. Vandana Shiva explains how **"Every crisis in history was used by the wheat monopolies to increase their profits and control. The riots over bread in the Arab world, referred to as the 'Arab Spring', were the result of rising wheat and bread prices due to financial speculation. Food has been turned into a commodity, a financial asset. During the 2008 crisis, as Kaufman wrote in *The Food Bubble: 'Imaginary wheat bought anywhere affects real wheat bought everywhere. With around-the-clock electronic trading triggered by the algorithms of composite price indices and commodity derivatives, finances have grown along with the growth of hunger, as the Agribusiness Accountability Initiative has been pointing out since April 2008. Financial growth and money growth generated by the finance casino do not lead to real growth in the processes that support and sustain life. Deregulation has destabilized the global financial and food system. It created asset management funds like Blackrock and Vanguard. Index management funds can multiply finances, not food."***

All the while, politicians and industry lobby are trying to take advantage of the war. Several are pushing for the deregulation of new GMOs in Europe as a solution to the food crisis, for example. But Dr. Vandana Shiva challenges this abuse stating, **"Any disaster has been used as an opportunity by the GMO lobby, which represents the same conglomerate that also sells toxic agrochemicals. They tried to use the Haiti earthquake disaster to impose GMOs. The farmers there created a movement and resisted. When the super cyclone devastated Orissa in 1999, there was an attempt to impose GM maize and soya. We organized and our Ministry of Health banned GMOs."** Dr. Vandana Shiva instead calls on European citizens to rise and defend their freedom to eat GM-free food, and their right to biosafety. **"They must call the bluff of governments trying to use the war in Ukraine to dump untested and unregulated GMOs on European citizens,"** she says.

Today there is an international consensus on the need to create an alternative to industrial agriculture and the large-scale distribution model. Agroecology contributes to the protection of biodiversity and the well-being of farmers and citizens. Dr. Shiva affirms: **"From my 35 years of work in agroecology and biodiversity conservation on the Navdanya farm, I have developed the conviction that chemical-free agriculture, such as agroecology, is necessary to conserve and regenerate biodiversity and, through biodiversity, the wellbeing of farmers and citizens. Pesticides and insecticides are driving insects to extinction, and herbicides such as RoundUp/ Glyphosate are driving plants, insects, and the soil organisms that depend on them, to extinction. The destruction of biodiversity in soil and plants is leading to the destruction of biodiversity in our gut microbiome, which is at the root of the increase in chronic diseases. Agroecology based on biodiversity produces more food when measured in terms of nutrition per acre and not in terms of yield per acre. Farmers' net incomes are higher when they cultivate biodiversity for local food economies, instead of chemical-intensive monoculture products for global supply chains. Biodiversity, chemical-free and local food benefit farmers, citizens, and the Earth."**



Deregulation financialized the food system

This is not the first-time price spikes have occurred due to excessive speculation in the food market. **Since the 1980s, regulatory frameworks around commodity trading have been systematically weakened, fast-tracking the financialization of the food system.** The consequences of this steady deregulation were made apparent in the 2007-2008 food crisis, as during the 2008 financial collapse large investors such as hedge funds, pension funds, and investment banks started moving into the agriculture market in search of more 'secure' assets. Over-speculation and the creation of a market bubble created a price hike, ensuing a global price crisis and a wave of social unrest and food insecurity. And while many governing bodies made calls for greater controls on commodity speculation, **little to no reform has taken place since.** What legislation did pass in the US and EU, was quickly watered down by industry lobby. As revealed by [Lighthouse Reports](#), the European Securities and Markets Authority (ESMA) was successfully lobbied by the International Swaps and Derivative Association (ISDA)– which includes Goldman Sachs, BNP Paribas, Blackrock, and Citibank– to weaken regulatory limits on speculative commodity trading following the 2007-2008 crisis.

The Food System as a Means to Power: The current crisis is nothing new

In 1986 the World Bank redefined food security as the “ability to purchase food”¹⁴. In 1989, the US further reinforced the definition stating that, “self-sufficiency and food security are not one and the same. Food security—the ability to acquire the food you need when you need it—is best provided through a smooth-functioning world market.”¹⁵

This definition of food security has gone on to shape a system that *only* emphasized strategies of increasing commodity supply and global market integration, all based on industrial agriculture models. It is a global structure that, as we have seen with the COVID pandemic, the 2007-2008 food crisis, and others, always puts corporate power before people’s wellbeing, health, and livelihood. Poor countries, farmers, and vulnerable populations, having had their food sovereignty systematically destroyed in favor of this prevailing model, are now left at the mercy of the big financial and big agri-food firms. **Firms always end up profiting off hunger, just as we are seeing with the current price crisis.** It is a system that has led us to hyper-concentration of the market, created import dependencies, forced the switch to commodity industrial agriculture instead of real food farming, and increased financialization. What we are seeing now is how this inherently unsustainable system is not, in any way, meant to solve global hunger and malnutrition. Instead, historic precedents are colliding with the structural failures of this system, setting up the perfect storm for a global food crisis.

How the myth of the global market destroyed food sovereignty

For almost a century now, the myth of global trade equating to food security has worked to shape global food systems under a false belief. Discourses around how to achieve global food security have historically centered around how well integrated and developed markets are in countries and regions. Meaning, under their logic, the greater access to the global market a country has, the greater guarantee of food security. Global trade is argued to be the cornerstone of the ‘development’ process for “sustainable and inclusive” growth. Today, what few small farmers remain are seen as “missing out” on global value chains in comparison to commodity counterparts. International development agencies, hence, work toward integrating smallholder farms into the global market economy as a way to supposedly improve livelihood and food security.

Referencing the US and World Bank definitions of food security, these discourses and beliefs have defined food security as reliant on market mechanisms and showcase the underpinning logic of how agribusiness, governments, and international institutions have sought to shape the globalized food system since the 1980s and onto today. As the current Director-General of the FAO QU Dongyu [proclaimed](#), previous to the Russian-Ukrainian conflict, “*We need to rely on markets as an integral part of the global food system. This is all the more important in the face of major disruptions, whether they come from COVID-19, locust outbreaks, or climate change...Trade will continue to play an important role in global food security and nutrition, by moving food from surplus to deficit regions.*”¹⁶



These discourses reach back to colonial legacies of commodity plantations and colonial extraction by European and American corporations. Although some say we have moved past the era of explicit colonialism, the power structures set in place have never lost hold and have only continued to evolve.

During the 1990s, 123 states signed on to create the World Trade Organization (WTO) during the Uruguay Round of General Agreement on Tariffs and Trade rules (GATT) negotiations. As part of these negotiations, The WTO Agreement on Agriculture (AoA) formally institutionalized the free trade regime deemed necessary for “global food security”.¹⁷ These negotiations served to tailor the new outlining of international trade laws and trade liberalization to benefit large agribusiness and continue to piggyback off the implementation of the Green Revolution starting in the 1960s. **US lobby and trade negotiations were headed by former Cargill Investors Service CEO and Goldman Sachs executive, Dan Amstutz, who in 1988 was appointed Ambassador and Chief Negotiator for the Uruguay Round GATT by President Ronald Reagan.**¹⁸ **This ensured the enshrining of the logics and interests of agribusiness into the new rules that were set to determine not only the trade of global food but the next wave of industrial agriculture expansion in favor of global export markets.**

The AoA was to set the rules for how food was to be traded, produced, and profited off, by establishing three main pillars: domestic supports, which set countries to remove internal subsidies, and price supports, for all except the United States and the EU; Market access, set to greatly reduce

tariffs and nontariff trade restrictions effectively removing national protections of farmers from global market prices and fluctuations; and removal of export subsidies.¹⁹ The exceptions made for the United States and the EU to continue subsidizing, allowed the regions to maintain and even expand state subsidies to large agribusiness while removing subsidies and support to small farmers. The maintenance of these subsidies and the implementation of the free trade rules enshrined by the WTO caused farmers' grain prices to plummet. With the removal of state tariff protections and subsidies, small farmers were left destitute. The result has been a disparity in what farmers earn for what they produce, versus what consumers pay, with farmers earning less and consumers paying more as agribusiness middlemen take the biggest cut.

Structural Adjustment Programs also concurrently worked to restructure developing economies away from internal development, and toward export-led, private sector-driven economies open to foreign imports. This resulted in additional subsidies, and price supports being removed for small farmers as part of the loan conditions.

When food price minimums fall for farmers, they are pushed to seek ways to increase yields to maintain livelihood, which leads to more intensification of chemical inputs, or enlarging operations just to stay afloat. The need for more inputs, coupled with increasing input costs has increased cycles of debt, leading to the destruction of small farms and even suicides. Having created a ripple of agrarian crises throughout the world, by the second half of the 1990s, nearly 30 million peasants were dispossessed²⁰. Consequently, this has purposefully destroyed diverse, local food systems and small farmers in favor of corporate-owned monocultural commodity plantations meant for exportation, as the only ones able to expand operations are large agribusiness firms. **With a new lack of national food supply, and with cheap subsidized food coming from the US and the EU, countries were forced to allow cheap import dumping to fill the supply gap. This directly created the import dependencies that are resulting in today's crisis.**

Since then, a lack of national food sovereignty has resulted in some countries becoming heavily reliant, if not totally dependent, on food imports to maintain food security within their borders. The most vulnerable countries are the net importers who are also still highly indebted. The free trade and neoliberal regime have also created a vicious cycle, whereby indebted countries were encouraged to use export earnings, based in US dollars, to both service their debts and pay food import bills.²¹ **This need for foreign currency entrenches the need to ramp up cash crop production for exports, rather than growing needed staples domestically or diversifying internal production, thereby reinforcing import dependencies.**²² The opening up to global markets, also left farmers and food prices completely vulnerable to market fluctuations, resulting in 50 percent of farmers living below the poverty line.²³

Market concentration is big business

Privatization and the imposition of industrial agriculture have also led to hyper-concentration in all levels of the food system. Global agricultural commodity trade is dominated by four main transnational corporations: Cargill, Archer Daniels Midland Co. (ADM), Bunge, and Louis Dreyfus Company (who alone accounts for 10 percent of world agriculture trade).²⁴ From 1995 to 2020 global food trade, primarily done by these four corporations, has nearly doubled, totaling \$1.5 trillion in 2018, with the global south accounting for over one-third of trade.²⁵ This level of concentration has been achieved through a systematic shaping of global agrifood systems through policy, pushing of the ideologies of the market, and handpicking justifying discourse. **It is a concentration that is also reliant on an industrial agriculture system that has caused unprecedented ecological damage, biodiversity loss, destruction of livelihoods, malnutrition and ill health, and weakened food systems overall.**

Import-dependent countries, thanks to free-trade agreements, are also limited in their buying options from producer countries. **Seven countries, plus the EU make up 90 percent of world wheat exports.**²⁶ As previously stated, Russia and Ukraine together provide around 25 to 30 percent of global trade in wheat, and more than 50 percent of global trade in sunflower oil, seed, and meal. **The system has been built so that about 30 countries directly depend on Russia and Ukraine for at least 30 percent of their wheat imports, 26 countries depend over 50 percent, and at least 40 percent of all African wheat imports come from the region.**²⁷ For example, Lebanon and Egypt import up to 80 percent, Eritrea 100 percent last year, Somalia over 90 percent, the Democratic Republic of Congo over 80 percent, and East Africa as a whole imports up to 84 percent, all from the Black Sea Region.²⁸ Rigid markets, set by free-trade agreements, and cemented supply chains, make rerouting existing supply to these regions difficult. And with food prices out of reach for many of these countries, this type of market concentration has created dangerous dependencies.

The erosion of traditional diets

Due to the imposition of industrial agriculture, there has been unprecedented destruction and steady erosion of biodiversity caused by the mass planting of monocultures. Diversity has been replaced with genetic homogeneity all across our food system. **While farmers have bred hundreds of thousands of varieties of thousands of species, the Green Revolution has reduced the agriculture and food base to a handful of globally traded commodities, with only 30 plants supplying 95 percent of global food demand.**²⁹ Today only 9 species account for 66 percent of total crop production, and three species—maize, wheat, and rice—account for 60 percent of our daily calories.³⁰

Countries trapped in the vicious cycles of import dependencies have seen an unprecedented erosion of traditional diets and food which once provided nutritional security. The reduction of marketable crops and the overproduction of industrial varieties and GMOs have created an oversupply of commodities that work to keep prices low. This favors large export countries to continue to dump cheap, low-quality grains, while also making it more and more difficult for farmers to make a living.



Local production of adapted and biodiverse traditional crops has been systematically displaced by this system, only to be replaced with commodities destined for exportation, and import dependencies dependent on the market. It is no surprise then that globally traded commodity consumption has risen faster over the last 50 years than foods produced nationally.³¹

In the example of the current wheat crisis, the erosion of traditional cultivation and diets has caused some countries to completely depend on crops that they cannot grow. **For example, many countries in Africa, which have never traditionally grown and currently do not grow wheat, have made this crop the main food staple.**³² Many aid and public disruption systems only specialize and supply these low-quality commodity crops. Meaning that when external supply fails, no alternative exists to prevent food insecurity.

“We need to produce more food” is the lie that pushed the Green Revolution

The discourses around food security have always been punctuated with the stipulation that “we need to produce more food for our growing population”. If we don’t do everything possible to produce more, millions in the future will be left to starve due to a lack of supply. **It was under this excuse of increasing productivity that the Green Revolution was imposed throughout the world. Countries left ransacked from colonial violence and extraction were then sold the lie that their agricultural systems were outdated, unproductive, and obsolete. The Green Revolution and its following iterations have been seen since as the only way to increase and maximize crop yield.** Integration to global supply chains goes hand in hand with monocultures, which need artificial fertilizers, pesticides, GMOs, and increasing land use.

It is a system that has triggered several severely destructive and multi-dimensional effects. From the mass extinction of biodiversity, both in ecosystems and in agroecosystems, the degradation of genetic, seed and nutritional diversity, environmental destruction, pesticide contamination of soil, water, and foods, soil degradation, the decline in both human and environmental health and the perpetuation of hunger and malnutrition. On a global scale ecosystem collapse has caused climate change, severe drought, crop failures, and livelihood precarity for both farmers and the already vulnerable. The globalized food system contributes from 44 to 57 percent of all greenhouse gas emissions through deforestation, industrial inputs (such as chemical fertilizers, petrol, fertilizer, irrigation, and so on), animals in concentrated animal feeding operations (CAFOs), plastics, and aluminum packaging, long-distance transport, and food waste.³³ By its nature it is unsustainable, as it goes completely against natural cycles and actively destroys cycles of regeneration.

But despite this, it is discourse and a model which is never questioned and only pushed further along, even when its guiding excuse has been continuously proven wrong. According to a [research article published by the University of California Press](#) on food sustainability, "The current production of crops is sufficient to provide enough food for the projected global population of 9.7 billion in 2050, although very significant changes to the socio-economic conditions..." would need to be made. So where is all this food going?



Commodity crops are not food

Commodity crops do not feed people, regardless of agribusiness claims. Thirty-three percent of the crops produced by industrial agriculture is used for animal feed, agrofuels and other non-food uses.³⁴ For instance, the US alone uses 35 percent of the world cereal trade to produce ethanol.³⁵ The US produces around 400 million tons of corn on average, 40 percent of which (equivalent to 160 million tons) goes to ethanol production, while another 40 percent goes to animal feed, and only 10 percent is used as food.³⁶ Although it is known that ethanol production and use are even more carbon-intensive than gasoline³⁷, and regardless of the global food crisis, the US has recently mandated a further increase in ethanol production.³⁸

Globalized food systems also lead to tremendous amounts of food waste, with roughly one-third of the food produced, approximately 1.3 billion tonnes, getting lost or wasted each year.³⁹ For cereals, roughly 30 percent is wasted globally.⁴⁰ And even if just one-fourth of the food currently lost or wasted globally could be saved, it would be enough to feed 870 million hungry people in the world.⁴¹

Even in light of this extraordinary loss of food, in the wake of the current food crisis, the US, the EU, and various international institutions are calling on keeping trade open. Countries who wish to secure national food security and control price and supply are heavily condemned in the name of the market. This was the case with India, which issued an export ban on wheat, and was then heavily condemned and partially blamed for a further increase in food prices.⁴² **But India's supply of wheat on the global market is insignificant in comparison to the amounts used for non-food use at no more than 10 million tons projected for 2022-2023⁴³, compared to the 160 million tons the US diverts to ethanol production.** The call to keep trade open goes to show that the real priority is the continuation of corporate business as usual, and not securing global food supply.

Small farmers feed the world

These compounding factors have inevitably created and exacerbated multiple food crises by increasing vulnerability, deepening poverty, and destroying the very production systems that could allow for resilience. It is a system that creates crises by design. Two years ago, in the wake of the Coronavirus pandemic, the structural flaws of this system became all the more apparent. Triggered by global shutdowns, food chains began to collapse due to supply chain disruptions. Vast amounts of food were dumped and left to rot thanks to the rigidity of supply chains.⁴⁴ All while food shortages prevailed, already narrowing food access. In India, commodity farmers, laborers, and migrant workers were left to starve, all while their commodity crops rotted in their fields.⁴⁵ Since food security is determined by market access, and with incomes falling due to not being able to sell their crop, rural families were left even more food precarious, despite being farmers. These supply chain disruptions, coupled with the economic effects of the pandemic, triggered the beginnings of today's massive price inflations, and set the precedent for the wave of greater food insecurity we are seeing now.

But in parallel, during the pandemic, farmers who were able to reorient their supply to local demand flourished.⁴⁶ Community Supported Agriculture subscriptions, local farmers' markets, and local production soared⁴⁷, showing how flexible local supply chains and local food sovereignty provided more food security than long-distance, rigid supply chains. This is not surprising, as regardless of the tremendous obstacles put in place for small farmers, they still provide around 80 percent of global food using just 25 percent of the land that goes into agriculture.⁴⁸

The perfect example of how small farmers and local food systems are reliant, flexible, and able to provide food in times of crisis is the current [heroism of small farmers in Ukraine](#). Currently, in Ukraine where there is severe food insecurity happening due to the conflict, small farmers have stayed behind and are currently the ones feeding the country. **After a mass-exodus of the oligarch-controlled agribusiness operations, small farmers have started to quickly fill the gaps in their local areas.** Using 12 percent less farmland than their big business counterparts, they have always produced over 50 percent of domestic production. Currently, 4 million small farmers are producing around 98 percent of the total potato crop, 86 percent of vegetables, 85 percent of fruits, and 81 percent of milk production. But regardless of these farms directly feeding people, unlike large-scale wheat export operations, farmers under 100 hectares are not being recognized by the Ukrainian government and cannot, hence, qualify for financial aid. Instead, all state and international aid goes to large agribusiness. And while international institutions are calling for help in alleviating Ukraine's food insecurity, incoherent measures such as these only work in contradiction.



The Only Solution to a Failed System is the Same System

In spite of the many factors and realities laid out above, corporations, international institutions, governments, and others, are still beating the same drums of market integration, industrial agriculture and increasing productivity. These visions and discourses have become self-reinforcing conventions, never to be questioned and only taken as given regardless of their catastrophic consequences. Power, not concern for people, or the planet, hold them in place. **Instead of viewing the current price crisis and incoming global famine for what it is– the inevitable consequence of a global system designed to extract for the benefit of a small few– corporations are using it as an opportunity to consolidate this failed system further.** But since productivity and the global market must be maintained in the face of any crisis, the default solution is either to double down on the current system or to lean on more technology to help us ‘solve’ the problem. This has led us to a feedback loop of false solutions and technofixes which completely ignore the root of the issues they are supposedly trying to solve. **The lack of food systems transformation and the further strengthening of the globalized, industrialized model is only made possible by corporate interests and power dictating global governance.** Regardless of it being broadly established that there is a low risk of a global food supply shortage, the [EU](#), the [World Bank President](#), the [IFPRI](#), and several news outlets have all been calling on wheat, fertilizer, and edible oil producing countries to ramp up production. Under this panic, environmental policy is being rolled back, new GMOs and fake food are being pushed, and precision agriculture and deregulation of new gene-edited GMOs are being used as imperative ‘solutions’ to our current crisis.

GMO Wheat and GMO deregulation

Under the pretext of the current global food crisis and climate change-induced droughts causing supposed production deficits, calls are now being made to speed up the rollout of a new, untested GMO. HB4 wheat was developed by agtech company Bioceres and is claimed to be new wheat resistant to droughts, requiring less fertilizer and less pesticide use. In October 2020 it was conditionally approved for commercial sale and experimentation in Argentina and Brazil. While the new GMO wheat has only been approved for the initial stages of experimentation, [headlines are already starting to call](#) for the fast-tracking of approval as a solution to the supposed wheat shortage. [Brazil has already started to test plant](#) following the Russian invasion. And in May 2022, Australia and New Zealand fast-tracked approval for use in the sale of food products. Now, [Bioceres is pushing to be allowed planting](#) of the new GMO wheat in Australia by 2024, starting with field trials just next year.

But there is a reason consumer have never warmed up to GMO wheat prior, as recognition of the destructive nature of GMOs has gained more consciousness. Resistance has been robust, with the new GMO wheat already receiving various legal challenges by civil society in Argentina and Brazil. One legal suit supported by agroecological organizations and civil society resulted in the [full](#)

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NO AL TRIGO TRANSGÉNICO**



[ban of this new GMO in the Buenos Aires Province](#) of Argentina, the largest wheat-growing region in the country due to the lack of environmental checks done on the new GMO. This victory now calls into question the Argentinian conditional approval for export and domestic use, as civil society looks to extend the ban to the national level, due to the GMO wheats potential for irreversible genetic contamination.

But the push for this new GMO falls in line with agribusiness' twisted attempts to use every crisis as an opportunity to push their interests and profit margins further. The attempt also falls in line with a strong push for the deregulation of GMOs all over the world since the start of the pandemic. Both old GMOs, which have already been regulated or outright banned by countries, and new forms of GMOs, such as gene editing, New Breeding Techniques (NBTs), and 'precision technologies' are being heavily lobbied for by the industry.

In the EU there have been relentless attempts to both deregulate restrictions on old GMOs, as well as the continued lobbying to approve new GMOs as 'sustainable'. For example, in January 2021 Italy saw a quiet attempt to undermine its long-standing position against GMOs. Four bills were introduced by the agribusiness lobby alongside the Minister of Agriculture to permit the introduction of old GMOs and the supposed "New Breeding Techniques". Navdanya International, along with twenty-six farmers' organizations, environmental movements, and consumer associations collectively launched a [campaign](#) that prevented the government from passing the bills. The coalition is still active as another attempt took place in late 2021 but was stopped.

The UK has also been trying to deregulate new gene-editing technologies since 2021. Under the excuse of the war, [the government is now looking to introduce a bill](#) that will allow for so-called 'precision technologies' to be used in food and agriculture. They plan to start with plant breeding and synthetic food, and then move to animal breeding. Raising serious questions about biosafety and bioethics. The bill being pushed through parliament looks to allow gene-edited foods to be in supermarkets by next year. The UK Environmental Secretary stated in an [interview with the Telegraph](#) (UK), "Precision technologies allow us to speed up the breeding of crops that have a natural resistance to diseases and climate change, better use of soil nutrients so we can have higher yields with fewer pesticides and fertilisers...Water scarcity is a coming challenge with climate change, and this technology could therefore be imperative to global food security."

Let them eat...Fake Food

Hand in hand with the push for new types of GMOs has been the [greenwashing of new synthetic foods](#) as solutions to climate change, and now as solutions to the incoming food crisis. Under the fad for 'plant-based' alternatives, new, ultra-processed foods made using new biotechnologies such as gene editing, synthetic biology, and AI, have been making their way into supermarket. Now, the Russian-Ukrainian war is providing the next best excuse to push these fake foods further, as supposed wheat shortages are said to hit industrial animal agriculture.

Under the growing pressure to reduce the impact of industrial animal agriculture, along with animal feed prices on the rise, fake food advocates are now suggesting their technologies could be a solution to food insecurity. But as has been extensively covered by Navdanya International reports, "[Bill Gates & his Fake Solutions to Climate Change](#)" and "[The Corporate Push for Synthetic Foods](#)" these ultra-processed fake foods represent little more than a new era of corporate junk foods dependent on the very system they claim to solve.

One of the red flags that marks the push for 'plant-based' diets is the amount of agribusiness money invested into these alternatives. Almost all synthetic food companies have been substantially backed by billionaire investments or agribusiness investments such as meat industry giants like Tyson Foods, JBS, Cargill, Nestlé, and Maple Leaf Foods.

MAIN SYNTHETIC FOOD STARTUPS

- PLANT-BASED MEAT**
 - BEYOND MEAT
 - IMPOSSIBLE™
 - NotCo
 - THE VEGETARIAN BUTCHER™
 - redefine meat
- PLANT-BASED DAIRY & CHEESE**
 - THE ORIGINAL OATLY!
 - ripple
 - Dairy-Free. As It Should Be.™
- CUSTOM BUILT MICROBES**
 - motif
 - FOODWORKS
 - GINKGO BIOWORKS
- LAB GROWN OR CULTURED MEAT**
 - mosa meat
 - UPSIDE Foods
- LAB-GROWN DAIRY & CHEESE**
 - Perfect Day
 - BIOMILQ
 - Human milk for babies
- MICROBE BASED DAIRY & MEAT**
 - Formo
 - Fynd
- EGG**
 - JUST EVERY
 - ALL PROTEIN. NO ANIMAL.

KEY INVESTORS

- Cargill
- Nestlé
- Tyson
- PERDUE
- Unilever
- brf
- JBS FOODS
- MAPLE LEAF
- DANONE
- amazon
- BILL & MELINDA GATES foundation

Navdanya international

Moreover, high-profile big tech investors such as Microsoft founder and industrial agriculture advocate, Bill Gates, along with Amazon founder Jeff Bezos, have also joined in by [providing substantial financial backup](#) to startups and biotechnology companies pursuing innovations in the sector. Bill Gates alone has already invested 50 million dollars in Impossible Foods and actively finances Beyond Meat, Ginkgo Bioworks, BioMilq, Motif Foodworks, C16 Biosciences, and Memphis Meats (now Upside Foods) [through his Breakthrough Energy Ventures investment fund](#).

One of the key differences between conventional junk food products and these new synthetic foods is the use of new technological innovations such as synthetic biology and genetic engineering. Synthetic biology is a new type of biotechnology that is now creating entirely new organisms and microorganisms through the genetic modification or engineering of an organism's internal genetic parts to reconfigure them in new ways. By implanting pieces of other organisms' DNA into microorganisms, or reconfiguring internal genetic information, these new technologies trigger microorganisms, cells, or other forms of genetic material to 'ferment' and reproduce to trigger them to create new, completely synthetic chemical compounds.

Not to mention how these synthetic, fake foods rely on both industrial agriculture monocultures for their key ingredients, global supply chains, and even animal agriculture itself to be made. Filler ingredients for these products also still rely heavily on the extensive processing of conventionally cultivated and mostly GMO crops.

This false solution gets tangled in with calls to free up grains used for animal feed and instead shift toward 'plant-based' diets. **While industrial animal agriculture and the large number of commodity crops used to feed them are problematic on many levels, the solution does not come with greater reliance on corporate-backed technofix solutions reliant on untested technologies, industrial agriculture, billionaire and agribusiness investments, and more ultra-processed foods.**

Precision agriculture

One other major threat being highlighted as being triggered by the Russian invasion is the risk of fertilizer and agrochemical prices further increasing due to a lack of natural gas. Russia is the largest fertilizer exporter in the world, and along with Belarus, they provide 20 percent of the world's supply.⁴⁹ The Coronavirus-induced supply chain disruptions, along with sanctions being placed on Belarus in October 2020, 2020-2021 saw an increase in fertilizer prices of over 78 percent over 2019.⁵⁰ After the invasion, agrochemical prices have continued to rise, also fueled by increasing over-speculation and actual supply bottlenecks. And it's a shortage that is destined to last, becoming another factor in the argument for food supply shortages.

We are also seeing a year-by-year increase in synthetic fertilizer use, up 8.5 percent⁵¹ from 2002 to now, **indicating a greater reliance on agrochemicals due to ever greater soil fertility and topsoil depletion. While the logical response to this perceived shortage would be to implement**

regenerative agriculture practices and cut fertilizer and pesticide use, corporate actors are using this as an opportunity to push a new era of industrial agriculture- digital precision agriculture.

The dangers of agrochemicals, from being carcinogenic, endocrine-disrupting, environmentally polluting, and climate-change inducing, to killing soil microbiology, biodiversity, and fertility, has been widely proven all over the world. **There is global consensus on the need to cut agrochemical dependence for food systems to become sustainable.** And yet, the calls for digitalization and precision agriculture have only increased after the start of the conflict, under the false narrative of limiting and 'efficiently' using agrochemicals, and therefore reducing their use to 'sustainable' levels.⁵² This is being hailed as a possible tech innovation to be able to keep using agrochemicals in the wake of increasing input costs.⁵³ But there is one fact missing. **There is no 'sustainable' use of toxic agrochemicals.** In the end, precision agriculture is a false solution to maintain agribusiness-as-usual under the hijacked narrative of 'sustainable food production', while placating the very real concerns with increased dependence on agrochemicals and their health, and environmental effects.



The Takeover of Global Governance Structures

With the rise of globalization and corporate power laid out above, corporations have been able to carve out material conditions which give them great power to influence global structures. As we have seen this includes access and prices of food on a global scale, policy, regulation, public discourses on global systems, and material conditions such as the rearranging of whole regions' land use and culture. This concentration has made them the most heavy-weight players in determining governance decisions on the structures they created. **Leading us to the current situation where those who need to be regulated are writing the very laws and framing the very discussions needed to confront the problems they constructed. Through the pushing of these false solutions, we are seeing how power not only pursues interests, it also deliberately creates them.** This goes on to determine what alternatives are considered viable, and legitimate, before governance negotiations even begin, leading to a complete disregard for actual public opinion or common-sense solutions.

In other words, entertaining these false solutions by media outlets, politicians, international institutions, and the general public, is only made possible by the corporate power and interest subtly pushing how global governance structures face crises. **To sway discourse in their favor, corporate power mobilizes lobby pressure, deregulation strategies, media bombardment, and global 'experts' to frame discourses to their interests. They all work to tow the official line.** Underlying assumptions of how global food systems should be, and the myths that have led us to this present moment, are hence never brought out for proper questioning by those in power. This leads us to keep perpetuating the root cause of global crises with superficial and illogical solutions and assuming a false reality. This has been so since the beginnings of the extractivist, industrialized food system, where crises have always been used to their advantage to systematically roll back environmental and social regulations and seed more space for exploitation and market concentration.

This anti-life, corporate-backed cycle has been made most evident by the push for public-private partnerships in global institutions, the erosion of multilateralism in favor of multi-stakeholderism in the recent UN Food Systems Summit (UNFSS), and the EU response to the current food crisis.

FAO and CropLife International

For example, in October 2020, the [FAO signed a Letter of Intent](#) to strengthen a public-private partnership with agroindustry lobby group CropLife International. CropLife explicitly represents the interests of the largest industrial agrochemical corporations, including the 4 companies that control more than 60 percent of the global seed trade. CropLife has systematically tried to dilute practices such as sustainable agriculture, food systems transformation, and agroecology in favor of digital and 'precision' agriculture. During a speech to the CropLife Board of Directors, **FAO Director-General, Qu Dongyu, highlighted how digitalization was the future of food systems transformations, inviting the members of CropLife to work with the FAO in efforts**

to implement the International Platform for Digital Food and Agriculture. Ever since, the move by the FAO has received waves of public, expert, and civil society outcry. In [a response letter](#) to civil society and Indigenous People's movements, the FAO Director-General fails to address how the corporations represented by CropLife have created the conditions of pesticide over-dependencies and environmental degradation. Instead, he calls for a "spirit of inclusivity" which risks the brushing aside of legitimate civil society and indigenous concerns over the very players creating our current crises having a hand in pushing their false solutions.



The UN Food Systems Summit

The UNFSS saw the consolidation of the World Economic Forum developed public-private partnership model, and move toward multistakeholderism in replacement of traditional international multilateralism.⁵⁴ The model of multilateralism set by the UN has historically set international governance decisions to be made by States and democratically elected State representatives. The move toward multistakeholderism seeks to incorporate all who supposedly have a stake in a given issue— from corporate actors, lobby groups and business associations, policymakers, donors, academics, and civil society actors— to come together to all set globally policy and implementation. While multistakeholderism seems to provide open dialogue, it puts those that need to be regulated at a power asymmetry to those who are being affected by the power corporations wield. **Increased partnering of "public" with "private" interests over time has shifted the balance of power to the private sector, systematically leaving civil society, indigenous peoples, small farmers, and others completely out of policy discussions, and leaving them vulnerable to further detrimental impositions.** This system allows powerful transnational corporations, their platforms, and associations to direct international and national policymaking, financing, narratives and governance while promoting corporate-friendly, false solutions to food systems in crisis. In response to this corporate hijacking of global food systems, [grassroots organizations from all over the world](#), who advocate for a food systems transformation that centers on agroecological transformation and food sovereignty, mobilized [a counter-summit](#) in resistance.



Rolling back regulations in the EU

In the EU, rolling back previously passed environmental protections has already started. Under the European Farm to Fork Strategy and the EU Green New Deal, the EU was set to strengthen food and agriculture sustainability goals for the 2030 mark, as well as increase protected environmental zones. But under the pressure of the conflict and following the false concerns for a wheat supply gap, the agroindustry lobby has been using the rhetoric of 'food security' to weaken or even completely erase biodiversity and organic agriculture protections and incentives from the strategy. Included in the Farm to Fork Strategy, The New Common Agricultural Policy (CAP) was to set up steps to restrict pesticide use by March of 2022 and was due to come into effect in January 2023. But despite a large public outcry, the vote to include these restrictions was stalled. Instead, EU legislators, [heavily influenced by the agribusiness lobby](#), have agreed to suspend pesticide regulations and restrictions on planting in ecological conservation zones. **A setback that makes little sense if resilience to food supply fluctuations and lessening dependence on Russia's natural gas used to make agrochemicals, is the goal.**

Civil society in Europe, headed by the *Save the Bees and Farmers* European Citizens Initiative, which had collected over 1.6 million signatures by September 2021, has already reacted with [petitions and letters](#) protesting the incoherence of the EU reaction to roll back regulations.

Our Bread, Our Freedom: *Now more than ever we need Food Sovereignty*



In the wake of a history of the destruction of food sovereignty, and the new consolidation of false solutions, we can no longer be pushed deeper down this path of crisis. The system outlined has created the incoming food crisis and famine in some of the poorest countries and the most vulnerable populations, with rising food prices now affecting the whole globe. The implementation of false solutions and the perpetuation of false discourses and ideologies only risk a greater collapse with no real vision for a future based on food justice. **The current crisis should be a wake-up call to the imperative of building resilience in food systems through agroecology, local food chains, and strengthening small farmers.** Not only in the countries and regions now being directly affected by the current food crisis, but in all communities.

For millennia there has existed [an approach to food security](#) that is based on biodiversity, agroecology, and the knowledge of small farmers. It combines quantity and quality to maximize the benefits to the health and well-being of the planet and people. **It is an ecological paradigm of food, agriculture, nutrition, and health that recognizes that we are part of nature, and not separate from her and that working with the complex living**

processes of nature increases food resilience and therefore food security. It displaces the current trends toward degradation with policies, practices, and knowledge that ensures renewal, a revived reliance on natural food systems, working toward harmony with nature, food sovereignty, and seed resilience in the hands of farmers. Including mindfulness of the environmental impacts of food systems.

Now more than ever will the shift toward this ecological paradigm act as a lasting solution to hunger, building resilience among the most vulnerable through self-reliance and greater livelihood. **Only through local, agroecological food systems will systemic dependence on fertilizers, commodity farming, import dependencies, and systematic poverty be challenged.** The current crisis should be used as both an opportunity and a wake-up call to finally transform food systems to be in service to both people and the planet, and not to corporate power. Not doing so will only lead us further and further down an already suicidal path, as also shown by this greater and greater augmentation of crises.



We must instead now choose the path of resilience, and the path of life to [reclaim our daily bread](#). These crises do not need to keep getting worse. We must continue to resist all aspects of the globalization of our food systems by protecting our traditional diets, our local production systems, and our Breads of Freedom by practicing and promoting sustainable and ecological models in agriculture, food economies, and societies. This is the most powerful means to regain our agriculture, our territories, our food, our natural environment, and our future.

Diversity is the center of this paradigm, as the diversity of production and knowledge systems, crops, foods, and farmers are vital to the resilience of food systems. **Diversity and decentralization go hand in hand** as the opposite has shown us its fragility in the current crisis.

Short supply chains, as was shown during the COVID pandemic food crisis, are more flexible to sudden changes, while reducing the inefficiencies of large, globalized supply chains. This includes less food waste, better recycling of food waste, reducing carbon emissions, pollution, overall ecological footprints, and greater rural livelihoods. The power to control food security and nutrition stays within communities.

All over the world, many are following the path of [Poison-free Food and Farming](#), and are transitioning to an ecological and democratic path, putting the food system in the hands of communities, women, farmers, and consumers. **A huge variety of movements**– from organic farming, permaculture, biodynamic, regenerative farming, [Masanobu Fukuoka's](#) vision of natural farming, local/ zero kilometer food chains, cooperative models of production and consumption, community-supported agriculture (CSAs), farmers markets, [biodistricts](#), community and school gardens, urban farms, [community seed banks](#), slow food movements and [revival of traditional](#) and forgotten foods, as well as hundreds of thousands of local farming traditions– **are guiding the way toward a food system free of corporate control. They are creating resilience in the face of deepening ecological and economic vulnerabilities through reclaiming seed, food, and knowledge as commons.**

Biodistricts are also coming up as a model centered on the idea of territoriality, and the sustainable and ecological integration of economy, society, policy, and the environment. They were highlighted at the [FAO's second agroecology symposium](#) on agroecology as a promising practice to expand agroecology, as biodistricts represent a pact for the green development of a territory. While farmers and agricultural production are the backbones, biodistricts represent an innovative experiment that looks to dialogue with local authorities to change institutions at local, regional, national, and international levels. They reflect the diversity, and the realities of territories, and are propelled by direct democracy. As further described in Navdanya International's [Food for Health Manifesto](#), "The success of biodistricts depends on the active mobilization of citizens and the conscious participation of municipalities and local institutions. It is a sustainable development project that has made quality its field of experimentation: from the reduction of the environmental impact of industries to the collection and recycling of waste; from alternative energies to ecological tourism; from the rational use of water to zero soil consumption; from education in schools and households on the value of food to the active participation of citizens and producers; from the social value of culture to social agriculture; from the challenge of pesticides and the use of synthetic chemicals to clean and organic agriculture. Biodistricts are based on a pact between the productive world, local governments, and civil society to achieve together a sustainable governance of the territory." The first biodistrict or totally organic region was the [Indian state of Sikkim](#), which was declared 100 percent organic by 2018. [Sikkim has acted as a model](#) and functional example of the possibilities of greater food security, livelihood, and sustainability through a biodistrict.

The biodistrict model has also flourished in Italy, with currently [forty biodistricts already active](#) throughout the regions, with many more being formed. Among them, there is also the one in Chianti, almost purely wine-growing, which has become [a case study](#) of the three-year European

research project UNISECO, (Understanding and Improving the Sustainability of Agro-ecological Farming Systems in the EU). Internationally, the growth of these initiatives is relevant with the [birth of the global alliance of biodistricts](#). Biodistricts have now received official recognition in the country's [new national law on organic agriculture](#), which is now promoting the model at a regional level as a step toward an ecological transition.



These are the movements that need to be leaned on and spread to finally come back into harmony with the Earth. **Real food made through real farming is the direct result of a process of care for the land, animals, and fellow humans that celebrates the connection between food and life.** It protects the life of all beings on Earth while also nourishing our health and wellbeing. When we farm with real knowledge of how to care for the Earth and her biodiversity, **when we eat real food which nourishes the biodiversity of the Earth, our cultures, and our gut microbiome, we are then participating in real and living economies that regenerate the well-being of all.**

We [have a choice](#) to not go further down the path that has already destroyed biodiversity, farmers' lives, and rural economies and is now threatening to fully close off the future by destroying our planet. Especially as there are [other paths](#) that farmers across the world have walked for nearly 10,000 years, which have been continually rejuvenated through diverse agroecological systems. An agroecological path that can now show the way toward a more ecological future that brings in a new paradigm of living in harmony with nature.





A Call to Action and Transformation

Since the Russian invasion of Ukraine, the headlines have been dominated by the warning of a food crisis on the horizon. But, according to the [FAO](#), [the World Bank](#), and the [International Panel of Experts on Sustainable Food Systems](#) (IPES), **there is currently no risk of global food supply shortages.**

So why are so many countries now facing an increased risk of food insecurity, and in worst cases famine? Regardless of the adequate global supply, the week of March 7, 2022, food prices reached their [highest price spike in history](#). Excess speculation, increased commodity future pricing and increased volatility in the market, are all behind the crisis. Meaning bigger gains for financial players, and big agricultural firms.

What is crucially being overlooked by most diagnoses of the current food crisis is how the problem does not lie in a lack of supply, or lack of market integration, but instead in **how the food system is structured around power.**

The current price crisis and incoming hunger crisis is not a symptom of war, but a symptom of a system gone too far. In our current state of multiple overlapping crises, pushing further down this path will only continue to create ever worse global crises. Instead, we must listen to the international consensus on the need to create an alternative to industrial agriculture and the large-scale distribution model.

It is time to abandon our resource intensive and profit intensive economic systems that have created havoc in the world, disrupting the planet's ecosystems and undermining society's systems of health,

justice, and democracy. It has been clearly proven that Big Industrial Agriculture and food systems, based on large-scale monocultures, genetically engineered crops, and intensive use of chemicals, are major contributors to this collapse.

Once again, the crises that the civil society is facing, are being used to boost the corporate takeover of our seed, agriculture, food, global health systems, information, and democracy, and has emerged as a pervasive force, able to derail the international agenda, and push our future and the future of our planet towards extinction and ecological collapse.

In the last 30+ years, we have been defending Seed Freedom, Food Freedom, and Earth Democracy through Navdanya and the Seed Freedom network, and in coalition with many other civil society movements across the world.

From the 2nd to the 16th of October (and beyond...), we invite you to join people and communities around the globe, and work together to launch a Campaign for Our Bread, Our Freedom, to take back our Seed, Food, Democracy and Freedom, and celebrate our seeds, our soils, our land, our territories, to create an Earth Democracy based on Living Seed, Living Soil, healthy communities and living economies of care.

“Let us align our creative potential with the higher planetary laws and higher laws of humanity which make life and wellbeing possible for all” —Dr Vandana Shiva

The shift from fossil fuel driven corporate globalization to localization of our economies has become an ecological and social imperative. Economic localization implies that whatever can be produced locally with local resources should be protected to build a vibrant local economy so that both livelihoods and the environment are protected. This was Gandhi’s concept of Swadeshi.

Let us prepare for a Recovery where the health and wellbeing of all peoples and the planet are at the center of all government and institutional policy, community building and civic action.

Ecological food and agriculture systems that are fossil fuel free, and poison free have the potential to address the multiple crisis by working with nature, not against her laws, by working with our hands, heads, and hearts to create sacred economies based on care and compassion, not greed and disposability of people, especially farmers and artisans.

The creation of local ecological economies based on “bread labor” and co-creativity with nature is the only way to sustain the earth and human societies through rejuvenation of real work. We are creative intelligent beings given creative heads, hearts and hands. Every human being has a right to be creative to live to their full potential and evolve their intelligence in diverse ways. Creativity cannot be reduced to designing the next algorithm for living in virtual reality. Creativity is above all our co-creativity to join our intelligence with the intelligence of the earth and all beings. Through our common creativity we can say an effective “No” to the assumption of fossil fuel based throwaway economies which creates throwaway people.

Key Dates

2nd October 2022: Gandhi's birth anniversary – International Day of Non-Violence

16th October 2022: World Food Day

...more soon

Join us in a new series of events and actions from 2nd to 16th October (and beyond), to celebrate the Earth's biodiversity and add strength to the movement for poison-free, fossil-fuel free organic communities.

We invite you to **organize People's Assemblies**, wherever you are, to reclaim our food system – Our bread and Our freedom, to lay out and evolve a collective vision for food democracy principles and participatory planning at a local level for actions towards the GMO free, poisons free, fossil fuels free, patent free, "free trade"- free, corporate control free future we want and are shaping.

We'd love to hear from you...

Write to us, send us a photo of your garden or terrace, and let us know about your events, ideas and work, as well as issues, projects and actions in your community, and learn more on how to get involved. [Contact form](#)

Unleash your creativity! Hashtags [#OurBreadOurFreedom](#) [#PoisonFreeFoodFarming](#)

Ideas for Actions include:

- Promote and protect biodiversity richness in our forests, our farms and our food to stop the destruction of the earth and the sixth mass extinction.
- Promote local, organic, [healthy food](#) through [local biodiverse food systems](#) and cultures and economies of care (farmers markets, CSAs biodistricts).
- Practice sustainable agriculture based on integration of diversity of crops, trees and animals.
- Save, grow and reproduce [traditional seed varieties](#) to safeguard biodiversity. They need to be saved not as museum pieces in germplasm banks, but in living working seed banks as a basis of a health care system.
- Create [poison free](#) zones, communities, farms and food systems.
- Support, regenerate and strengthen communities.
- Create Gardens of Hope, Gardens of Health everywhere – in community gardens, institutions, schools, prisons, hospitals in the cities and countryside.
- Demand that your government stop subsidising industrial agriculture and unhealthy systems that create a burden of disease. Public subsidies should be redirected to systems based on [agroecology](#) and biodiversity conservation, which provide health benefits and protect common goods.

- Demand that your government halt subsidies and further investments in the fossil fuels sector, including fossil fuel based agricultural inputs, as real climate action.
- Demand that your local/national government, your municipality stop favouring industrial junk food and unhealthy food systems based on toxic and nutritionally empty commodities.
- Demand that your local/national government, your municipality put an end to monocultures, genetic manipulation of plants and factory farming of animals which are spreading pathogens and antibiotic resistance.
- Demand that your government stop deforestation, which is expanding exponentially through industrial monocultures for corporate interests. Forests are the lungs of the Earth.
- Demand that your government and international bodies introduce policies to assess the costs of damage to health and the environment caused by chemicals and enact the polluter pays principle.
- Demand that your government and international bodies put Health as priority over corporate interests with respect to chemical and pesticide use in food and agriculture. The precautionary principle must be enacted.
- Demand that your local/national government, your municipality transition from globalisation to localisation and make permanent deglobalisation. Stop the [corporate takeover](#) of our food and health.
- Demand that your local/national government, your municipality introduce local circular economies which increase the wellbeing and health of people.
- Demand that your government and international bodies stop using Growth' and GDP as measures of the [health of the economy](#). GDP is based on the extraction of resources from nature and wealth from society.
- Demand that your government and international bodies adopt citizens wellbeing as a measure of the health of the economy.

IMAGE CREDITS

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Page 3 - [FAO](#)

Page 6 - World Bank "[Food price indexes from January 2017 to April 2022](#)"

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Page 28 - [Biodistretto del Chianti](#)

REFERENCES

¹ Reuters. "Ukrainian Grain Exports This Month Much Lower than in May 2021 - Ministry." *Reuters*, 19 May 2022. [www.reuters.com](https://www.reuters.com/markets/commodities/ukrainian-grain-exports-this-month-much-lower-than-may-2021-ministry-2022-05-19/), <https://www.reuters.com/markets/commodities/ukrainian-grain-exports-this-month-much-lower-than-may-2021-ministry-2022-05-19/>.

² "The Hunger Profiteers." *Lighthouse Reports*, <https://www.lighthousereports.nl/investigation/the-hunger-profiteers/>. Accessed 21 June 2022.

³ *IPES Food | SPECIAL REPORT | FOOD PRICE CRISIS*. <https://ipes-food.org/pages/foodpricecrisis>. Accessed 21 June 2022.

⁴ *2.1.1 Prevalence of Undernourishment | Sustainable Development Goals | Food and Agriculture Organization of the United Nations*. <https://www.fao.org/sustainable-development-goals/indicators/211/en/>. Accessed 21 June 2022.

⁵ "A Global Food Crisis: Shortage Amidst Plenty." *Inter Press Service*, 30 May 2022, <https://www.ipsnews.net/2022/05/global-food-crisis-shortage-amidst-plenty/>.

⁶ "WEAT Price Soars above ETF's Underlying Value." *Financial Times*, 8 Mar. 2022, <https://www.ft.com/content/54a1c522-7141-4794-8b5c-1b5fdd47d968>

⁷ "War Pushes Wheat Prices and Threatens Supply." *NASDAQ*. 23 March 2022, <https://www.nasdaq.com/articles/war-pushes-wheat-prices-and-threatens-supply>. Accessed June 2022.

⁸ *Testimony of Chairman Rostin Behnam Regarding the "State of the CFTC" | CFTC*. <https://www.cftc.gov/PressRoom/SpeechesTestimony/opabehnam22>. Accessed 22 June 2022.

⁹ Anand, Asim. *The Big 4 of Agriculture Unlikely to Exit Russia despite Mounting Pressure*. 19 Apr. 2022, <https://www.spglobal.com/commodityinsights/en/market-insights/blogs/agriculture/041922-russia-ukraine-war-food-adm-bunge-cargill-louis-dreyfus>.

¹⁰ "The Hunger Profiteers." *Lighthouse Reports*, <https://www.lighthousereports.nl/investigation/the-hunger-profiteers/>. Accessed 21 June 2022.

¹¹ *IPES Food | SPECIAL REPORT | FOOD PRICE CRISIS*. <https://ipes-food.org/pages/foodpricecrisis>. Accessed 21 June 2022.

¹² *IPES Food | SPECIAL REPORT | FOOD PRICE CRISIS*. <https://ipes-food.org/pages/foodpricecrisis>. Accessed 21 June 2022.

-
- ¹³ "‘Betting on Hunger’: Market Speculation Is Contributing to Global Food Insecurity." *The Wire*, <https://thewire.in/economy/speculation-is-contributing-to-global-food-insecurity-significantly>. Accessed 22 June 2022.
- "The Hunger Profiteers." *Lighthouse Reports*, <https://www.lighthousereports.nl/investigation/the-hunger-profiteers/>. Accessed 21 June 2022.
- ¹⁴ Jarosz, L. (2009). The political economy of global governance and the world food crisis: the case of the FAO. *Review (Fernand Braudel Center)* 32, 37–60.
- Found in: Canfield, Matthew, et al. "UN Food Systems Summit 2021: Dismantling Democracy and Resetting Corporate Control of Food Systems." *Frontiers in Sustainable Food Systems*, vol. 5, 2021. *Frontiers*, <https://www.frontiersin.org/article/10.3389/fsufs.2021.661552> .
- ¹⁵ Quoted in: Ritchie, M. (1993). *Breaking the Deadlock. The United States and Agricultural Policy in the Uruguay Round*. Minneapolis, MN: Institute for Agriculture and Trade Policy, 239. fn. 35
- Found in: Canfield, Matthew, et al. "UN Food Systems Summit 2021: Dismantling Democracy and Resetting Corporate Control of Food Systems." *Frontiers in Sustainable Food Systems*, vol. 5, 2021.
- ¹⁶ *FAO - News Article: Global Trade in Food and Agricultural Products More than Doubles in Last Two Decades*. <https://www.fao.org/news/story/en/item/1309369/icode/>. Accessed 22 June 2022.
- ¹⁷ Shiva, Vandana. "W.T.O Agreement on Agriculture." *Afro-Asian Peoples' Solidarity Organization*, no. 87, <https://www.aapsorg.org/en/archive/development-magazine/82-issue-no-87/657-w-t-o-agreement-on-agreement-on-agriculture>. Accessed 5 July 2022.
- Shiva, Vandana. "WTO and Agrarian Crisis in India." *Indian Foreign Affairs Journal*, vol. 1, no. 4, 2006, pp. 8–18. *JSTOR*, <http://www.jstor.org/stable/45340589>. Accessed 5 Jul. 2022.
- Canfield, Matthew, et al. "UN Food Systems Summit 2021: Dismantling Democracy and Resetting Corporate Control of Food Systems." *Frontiers in Sustainable Food Systems*, vol. 5, 2021. *Frontiers*, <https://www.frontiersin.org/article/10.3389/fsufs.2021.661552>.
- ¹⁸ *Nomination of Daniel G. Amstutz for the Rank of Ambassador While Serving as Chief United States Agricultural Negotiator for the Multilateral Trade Negotiations | The American Presidency Project*. <https://www.presidency.ucsb.edu/documents/nomination-daniel-g-amstutz-for-the-rank-ambassador-while-serving-chief-united-states>. Accessed 5 July 2022
- ¹⁹ Shiva, Vandana. "WTO and Agrarian Crisis in India." *Indian Foreign Affairs Journal*, vol. 1, no. 4, 2006, pp. 8–18. *JSTOR*, <http://www.jstor.org/stable/45340589>. Accessed 5 Jul. 2022.
- ²⁰ Madeley, J. (2000). *Hungry for Trade: How the Poor Pay for Free Trade*. London: Zed Books.
- McMichael, P. (2013a). *Food Regimes and Agrarian Questions*. Halifax, NS; Winnipeg, MB: Practical Action Publishing. doi: 10.3362/9781780448794.000
- ²¹ *IPES Food | SPECIAL REPORT | FOOD PRICE CRISIS*. <https://ipes-food.org/pages/foodpricecrisis>. Accessed 21 June 2022.
- ²² Ibid.
- ²³ *Agricultural Wage Workers: The Poorest of the Rural Poor*. 23 Sept. 1996, http://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_008067/lang--en/index.htm.
- ²⁴ *Top 10 Global Commodity Trading Companies That Move Markets | Futures*. <https://www.futuresmag.com/2019/09/12/top-10-global-commodity-trading-companies-move-markets?page=9>. Accessed 8 June 2022.
- ²⁵ *FAO - News Article: Global Trade in Food and Agricultural Products More than Doubles in Last Two Decades*. <https://www.fao.org/news/story/en/item/1309369/icode/>. Accessed 22 June 2022.
- ²⁶ *USDA ERS - Wheat Sector at a Glance*. <https://www.ers.usda.gov/topics/crops/wheat/wheat-sector-at-a-glance/>. Accessed 22 June 2022.
- ²⁷ *IPES Food | SPECIAL REPORT | FOOD PRICE CRISIS*. <https://ipes-food.org/pages/foodpricecrisis>. Accessed 21 June 2022.

-
- ²⁸ "Wheat | OEC." *OEC - The Observatory of Economic Complexity*, <https://oec.world/en/profile/hs/wheat>. Accessed 23 June 2022.
- ²⁹ FAO 2010. *The Second Report on the State of the World's Plant Genetic Resources for Food and Agriculture*. Rome. <http://www.fao.org/3/i1500e/i1500e.pdf>
- ³⁰ FAO, and Commission on Genetic Resources for Food and Agriculture. 2019. In *The State of the World's Biodiversity for Food and Agriculture*, ed. J. Bélanger and D. Pilling. Rome: Food and Agriculture Organization of the United Nations. <http://www.fao.org/3/CA3129EN/CA3129EN.pdf>.
- Ceccarelli, Salvatore. 2019. Nurturing diversity in our guts and on our farms to reduce health risks and increase food system resilience. *The Future of Food*, 45–51. Rome, Italy: Navdanya International. <https://navdanyainternational.org/publications/the-future-of-food-farming-with-nature-cultivating-the-future/>.
- ³¹ Khoury, Colin K., et al. "Increasing Homogeneity in Global Food Supplies and the Implications for Food Security." *Proceedings of the National Academy of Sciences*, vol. 111, no. 11, Mar. 2014, pp. 4001–06. *DOI.org (Crossref)*, <https://doi.org/10.1073/pnas.1313490111>.
- ³² *IPES Food | SPECIAL REPORT | FOOD PRICE CRISIS*. <https://ipes-food.org/pages/foodpricecrisis>. Accessed 21 June 2022.
- ³³ "Food and Climate Change: The Forgotten Link." *Grain*, September 28, 2011. <https://www.grain.org/e/4357>
- ³⁴ M. Berners-Lee, C. Kennelly, R. Watson, C. N. Hewitt; Current global food production is sufficient to meet human nutritional needs in 2050 provided there is radical societal adaptation. *Elementa: Science of the Anthropocene* 1 January 2018; 6 52. doi: <https://doi.org/10.1525/elementa.310>
- ³⁵ "A Global Food Crisis: Shortage Amidst Plenty." *Inter Press Service*, 30 May 2022, <https://www.ipsnews.net/2022/05/global-food-crisis-shortage-amidst-plenty/>.
- ³⁶ "A Global Food Crisis: Shortage Amidst Plenty." *Inter Press Service*, 30 May 2022, <https://www.ipsnews.net/2022/05/global-food-crisis-shortage-amidst-plenty/>.
- ³⁷ Douglas, Leah. "U.S. Corn-Based Ethanol Worse for the Climate than Gasoline, Study Finds." *Reuters*, 14 Feb. 2022. www.reuters.com, <https://www.reuters.com/business/environment/us-corn-based-ethanol-worse-climate-than-gasoline-study-finds-2022-02-14/>.
- "A Global Food Crisis: Shortage Amidst Plenty." *Inter Press Service*, 30 May 2022, <https://www.ipsnews.net/2022/05/global-food-crisis-shortage-amidst-plenty/>.
- ³⁸ *Ethanol Explained - Supply of Ethanol - U.S. Energy Information Administration (EIA)*. <https://www.eia.gov/energyexplained/biofuels/ethanol-supply.php#:~:text=Total%20production%20capacity%20increased%20from,year%20from%201981%20through%202021>. Accessed 23 June 2022.
- ³⁹ "Worldwide Food Waste." *ThinkEatSave*, <http://www.unep.org/thinkeatsave/get-informed/worldwide-food-waste>. Accessed 23 June 2022.
- ⁴⁰ Ibid.
- ⁴¹ Ibid.
- ⁴² "US Hopes India Would 'reconsider' Its Decision to Restrict Wheat Exports." *The Economic Times*, 17 May 2022. *The Economic Times - The Times of India*, <https://economictimes.indiatimes.com/news/economy/foreign-trade/us-hopes-to-convince-india-to-reconsider-wheat-exports-curb-decision/articleshow/91610162.cms>.
- "*Beg India To Reconsider Wheat Export Ban As Soon As Possible*": IMF Chief. www.youtube.com, https://www.youtube.com/watch?v=cBuqdsK6h_o. Accessed 23 June 2022.
- ⁴³ "A Global Food Crisis: Shortage Amidst Plenty." *Inter Press Service*, 30 May 2022, <https://www.ipsnews.net/2022/05/global-food-crisis-shortage-amidst-plenty/>.

-
- ⁴⁴ Cagle, Susie. "'A Disastrous Situation': Mountains of Food Wasted as Coronavirus Scrambles Supply Chain." *The Guardian*, 9 Apr. 2020. www.theguardian.com, <https://www.theguardian.com/world/2020/apr/09/us-coronavirus-outbreak-agriculture-food-supply-waste>. Yaffe-Bellany, David, and Michael Corkery. "Dumped Milk, Smashed Eggs, Plowed Vegetables: Food Waste of the Pandemic." *The New York Times*, 11 Apr. 2020. *NYTimes.com*, <https://www.nytimes.com/2020/04/11/business/coronavirus-destroying-food.html>.
- ⁴⁵ Team, The Hindu Data. "Data | 80% of Urban Workers Lost Jobs during Coronavirus Lockdown: Survey." *The Hindu*, 12 May 2020. www.thehindu.com, <https://www.thehindu.com/data/data-80-of-urban-workers-lost-jobs-during-coronavirus-lockdown-survey/article61657697.ece>.
- ⁴⁶ Westervelt, Eric. "As Food Supply Chain Breaks Down, Farm-To-Door CSAs Take Off." *NPR*, 10 May 2020. *NPR*, <https://www.npr.org/2020/05/10/852512047/as-food-supply-chain-breaks-down-farm-to-door-csas-take-off>.
- ⁴⁷ Press, SIERRA DAWN McCLAIN Capital. "Record Numbers of CSA Customers Still Buying Direct from Farms This Fall." *Capital Press*, https://www.capitalpress.com/ag_sectors/smallfarm/record-numbers-of-csa-customers-still-buying-direct-from-farms-this-fall/article_21354294-027f-11eb-9215-339b618fb46e.html. Accessed 6 Oct. 2020. Gokee, Amanda. "In Mexico City, the Coronavirus Is Bringing Back Aztec-Era 'Floating Gardens.'" *Atlas Obscura*, 29:00 400AD. www.atlasobscura.com, <http://www.atlasobscura.com/articles/mexico-city-chinampas-coronavirus>.
- ⁴⁸ "Hungry for Land: Small Farmers Feed the World with Less than a Quarter of All Farmland." *Grain*, May 28, 2014. <https://www.grain.org/article/entries/4929-hungry-for-land-small-farmers-feed-the-world-with-less-than-a-quarter-of-all-farmland>
- ⁴⁹ Fertiliser and Food Prices Could Be High for Years. <https://dailybrief.oxan.com/Analysis/DB268415/Fertiliser-and-food-prices-could-be-high-for-years>. Accessed 27 June 2022. *IPES Food | SPECIAL REPORT | FOOD PRICE CRISIS*. <https://ipes-food.org/pages/foodpricecrisis>. Accessed 21 June 2022.
- ⁵⁰ Ibid.
- ⁵¹ FAO. World Fertilizer Trends and Outlook to 2022. FAO, 2019, <https://www.fao.org/3/ca6746en/ca6746en.pdf>.
- ⁵² "Letter on the Sustainable Use of Pesticides Directive to the European Commission." Greens/EFA, <https://www.greens-efa.eu/en/article/document/letter-on-the-sustainable-use-of-pesticides-directive-to-the-european-commission>. Accessed 27 June 2022.
- ⁵³ "Why Is the World Facing a Food Crisis? | The Development Podcast." *World Bank*, <https://www.worldbank.org/en/news/podcast/2022/06/10/world-food-crisis-security-hunger-supply-chains-war-ukraine-development-podcast>. Accessed 27 June 2022.
- ⁵⁴ Canfield, Matthew, et al. "UN Food Systems Summit 2021: Dismantling Democracy and Resetting Corporate Control of Food Systems." *Frontiers in Sustainable Food Systems*, vol. 5, 2021. *Frontiers*, <https://www.frontiersin.org/article/10.3389/fsufs.2021.661552>.