



The Perils of the Global Soy Trade

Economic, Environmental and Social Impacts



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Food & Water Watch works to ensure the food, water and fish we consume is safe, accessible and sustainable. So we can all enjoy and trust in what we eat and drink, we help people take charge of where their food comes from, keep clean, affordable, public tap water flowing freely to our homes, protect the environmental quality of oceans, force government to do its job protecting citizens, and educate about the importance of keeping shared resources under public control.

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This report was prepared for release at an event in the Parliament of the European Union on February 8, 2011. Therefore, measurements used throughout the report are in the metric system. Please see the conversion chart below for standard American measurements.

1 kilo = 2.2 lbs
1 hectare = 2.5 acre
1 metric tonne = 1.1 tons
1 square mile = 259 hectares

Executive Summary

Globalization has fundamentally changed agriculture across Europe. The idyllic image of small farms with sustainable agriculture has been replaced with agricultural cogs producing food-ingredient inputs for international industrial agribusinesses. The pork chops and chickens on European tables begin their lives far away on soybean plantations in Latin America, where the feed for European livestock is harvested.

The international tentacles of the food chain tie deforestation in Brazil and Argentina to factory-farmed livestock in Europe. International trade agreements like the World Trade Organization (WTO) facilitated the global corporate agribusiness network that delivers soybeans and maize from Latin America to giant pig and chicken holdings in Europe and finally to a handful of supermarket chains. In every link of the new global food chain, agriculture has become more intensive, larger in scale, and more environmentally and socially unsustainable. The beneficiaries of deregulated trade in agricultural goods have been the international grain traders, the investors in Latin American plantations, and the largest meatpacking and supermarket chains.

European consumers are at greater risk from obesity, European farmers are more vulnerable to global price shocks, and polluting factory-farmed livestock holdings have replaced sensibly sized farms. This paper connects the dots between the global agricultural commodity trade and the real-life impacts on consumers, rural communities in Europe and Latin America, and the environment. Findings include:

- **European feed imports surged since the WTO went into effect.** Since 1995, soy meal imports from outside the European Union to the 15 member states prior to 2004 (EU-15) grew 57.1 percent to 20.2 million metric tonnes in 2007. Total maize imports nearly doubled to 21.6 million metric tonnes.
- **Soy exports from Latin America fueled deforestation.** Four-fifths of EU soymeal imports came from Brazil and Argentina. The demand for more soybeans has been a key catalyst for clearing 44.5 million acres of forests in these two countries.
- **Powerful soy interests drive small farmers off the land.** Soybean plantations in Argentina and Brazil average about 1,000 hectares, but can be between 10,000 and 50,000 hectares. These large farms concentrate the land in the hands of a cadre of powerful investors and landowners, hurting indigenous farmers. There have even been reported cases of exploitation and enslavement of soy workers in Brazil.
- **Industrial soy plantations feed European livestock genetically modified (GM) feed.** In 2009, Brazil and Argentina were the second- and third-largest cultivators of GM crops (herbicide-tolerant or insect-resistant engineered seeds), growing 42.7 million hectares of GM soybeans, maize and cotton combined.
- **Soybean imports supersized European pig and chicken farms.** Low-priced soybean meal has helped reduce the number of European pig and chicken farmers and expand the scale of the remaining farms to gargantuan proportions. In 2007, 74 million pigs were fattened on the largest 1 percent of holdings — half of all pigs in the EU.

None of this is inevitable. Just as we created these changes, we can fix the problems with a few straightforward steps. Agriculture should be removed from the binding strictures of international trade agreements; nations should pursue farm policies that promote sustainable production, food sovereignty and food security for their populations; and food should be labeled to show the full life cycle of its production, including GM feed labeling for meat and dairy products. These are concrete steps we can take immediately to address the problems raised by the international soy and feed industrial complex and move toward improved food sovereignty in the EU and in countries that supply our food.



Introduction

Over the past two decades, European consumers and farmers have become dependent on a tidal wave of imported soybeans and maize. The imported grain and soy meal have fed millions of pigs and chickens raised on industrial-scale farms and have infiltrated the food system and the kitchens of Europe. Global trade agreements like the World Trade Organization made soybean imports cheaper and directed the European Union to restructure the Common Agriculture Policy to deter cultivation of soybeans and other feed crops. Cheap imported feed and dwindling European-grown feedstocks have transformed pig and poultry holdings into giant livestock factory farms.

This transformation has harmed consumers, farmers and the environment. Meat consumption has been fairly steady, but is still projected to grow by 3 percent between 2006 and 2015.¹ What Europeans are eating is changing dramatically. The proliferation of cheaper meat products has made it easier for European consumers to eat more processed, industrialized, American-style fast food. The rise of chains like McDonald's in Europe drew sharp criticism a decade ago, but by 2009, McDonald's earned more revenue from Europe (41 percent) than the United States (35 percent).²

Already, this dietary shift has contributed to rising obesity levels in Europe. By 2009, half of McDonald's European revenue came from the United Kingdom, France and Germany.³ Those three countries are also at the center of another American trend, the expanding waistband. The obesity rate in the UK more than tripled between 1980 and 2007, France's obesity rate nearly doubled between 1990 and 2006, and almost half (49.6 percent) of Germany's population was obese or overweight in 2005.⁴ The World Health Organiza-

tion Europe reports that fast food consumption may be linked to obesity, with its concomitant health risks — higher levels of diabetes, coronary disease and other related diseases.⁵

The giant agribusiness and food industries that dominate the economic and social landscape push this over-processed food. Enormous supermarket chains have seized control of Europe's food sales. In 2005, less than 1 percent of food wholesalers had more than 250 employees, but these large firms captured more than half of the profits.⁶ These giant retailers have driven the family-owned grocers, butchers and fishmongers that used to spend money locally out of business. Instead, big retailers siphon money out of local communities back to their headquarters and shareholders.

Farmers and consumers also lose when supermarket giants get too big. The retail chains squeeze concessions out of meatpackers and food manufacturers, which in turn pay farmers less. These savings don't generally show up in consumers' grocery receipts; powerful corporate middlemen

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pocket the savings. As a result, smaller and medium-sized farmers are working harder and earning less. The pig and poultry industry has become dependent on cheap imported feed to increase the size and intensity of livestock holdings. Farms are rapidly disappearing, the biggest pig and chicken farms are getting even bigger, and farmers are receiving less for their livestock and crops. These expanding industrialized pig and chicken farms cram thousands of animals into cramped conditions and produce mountains of manure that pollutes the land, water and air.

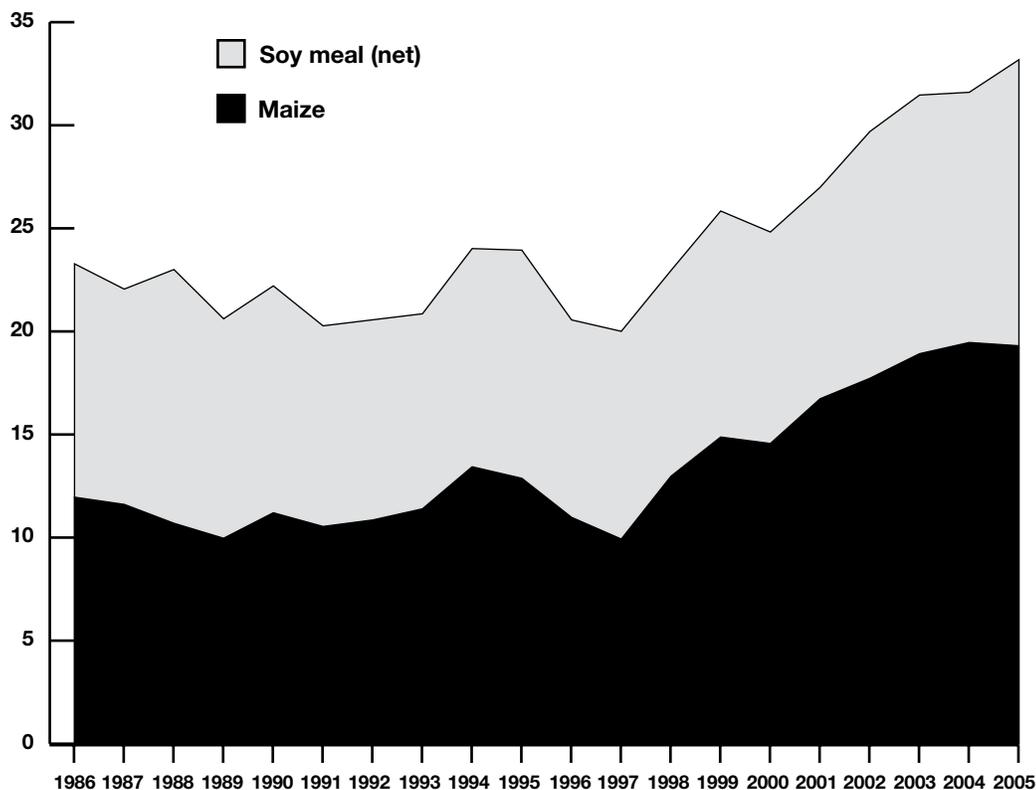
South America captured the lion's share of the EU soybean imports, but this global trade triumph came at a tremendous environmental and social cost. European demand for low-cost feed encouraged South American landowners and global investors to expand soybean cultivation on vast plantations. The added land pressure for soybean planting significantly contributed to deforestation. In some places, soybean operations were cut into forested land, but in most places, the added demand for soybean cultivation pushed cattle ranchers and other farmers to clear additional forestland and encroach on other fragile ecosystems like the cerrado. These operations grow expanses of genetically modified soybeans and maize reliant on heavy applications of pesticides and herbicides. Large-scale landowners and investors have reaped the benefits of the growing trade in raw materials. These dominant owners coerce small farmers to sell or rent their land to expand large soy operations. Rural poverty has remained persistent even amid booming soybean production

and increased profits for landowners.

The international feed complex primarily benefits a handful of companies that buy, ship, process and sell the raw agricultural inputs (soybeans and maize), as well as the investors and landowners that rent their land for soybean production. Soybeans and maize are the basic building blocks of the industrialized food system and the primary ingredients in the livestock feed. Partially hydrogenated vegetable oil, made largely from soybeans, is a key shortening in processed desserts and frozen foods, and high fructose maize syrup sweetens candies and soft drinks. Both ingredients are the subjects of intense debate over their dubious nutritional merits. International grain traders buy soybeans in Latin America, dominate the soybean processing industries, and ship the processed soybeans and maize to industrial food processors and factory farms in Europe and the growing market in China.

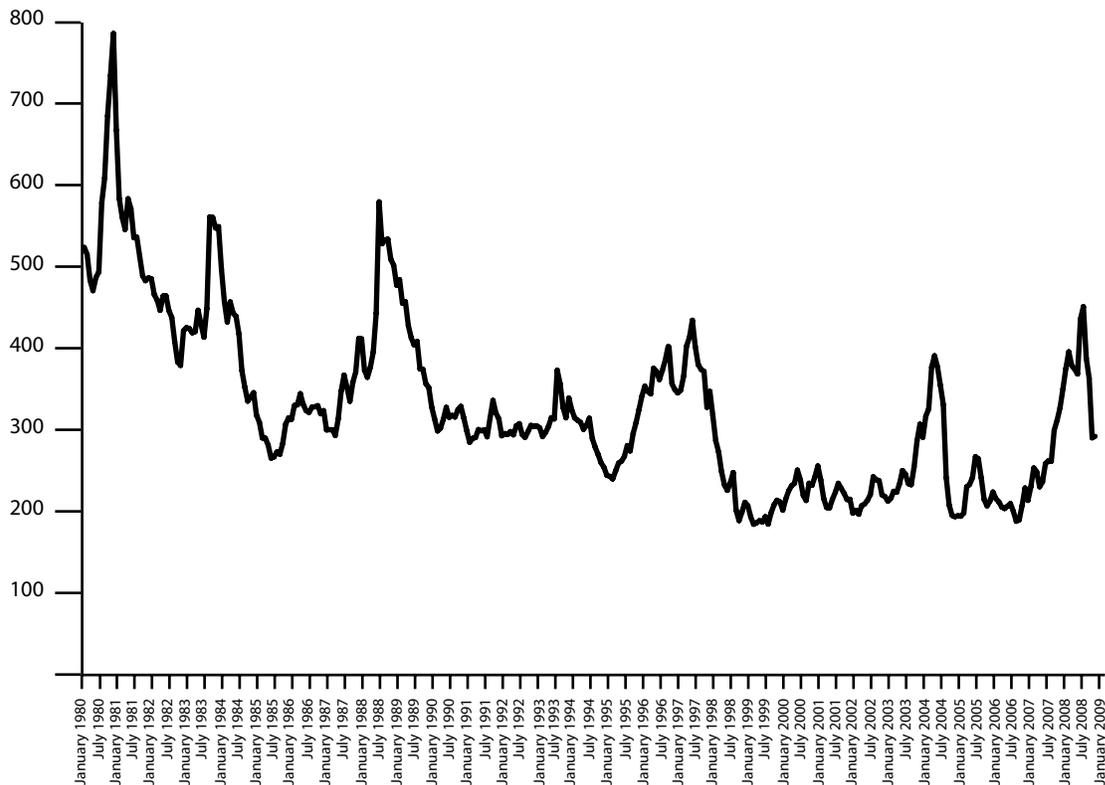
This white paper examines the globalization and agriculture policies that enabled transnational grain-trading companies to gain a stranglehold on the European farm and food system. The resulting soybean industrial complex does not benefit farmers in Europe or South America, consumers or the environment, it benefits only the global monopolies that promote globalized food trade and weaker safety nets for family farmers. There are better ways to produce our food, and we need to develop and enact policies to move towards a more just and sustainable food system.

EU-15 Soy and Maize Imports (in millions of metric tonnes)



Source U.N. Food and Agriculture Organization.

Real Global Soy Meal Price (in 2009 dollars per metric tonne)



Source: International Monetary Fund.

The Global Soy and Feed Trade

Corporate-driven globalization in the mid-1990s facilitated the international network of soybean traders, factory farms and food manufacturers that hijacked the world's food supply. The agriculture provisions of international trade agreements were designed by big agribusinesses to make it easier to buy and ship raw farm products. The establishment of the World Trade Organization (WTO) in 1995 transformed global food trade by encouraging transnational agribusinesses to buy and sell bulk agricultural commodities on a global marketplace. It also encouraged the buyers of raw agricultural products — like industrial livestock operations — to switch from domestic feeds to lower-priced imported feeds like soybeans.

The WTO required countries to lower their barriers to agricultural imports, like import taxes known as tariffs, and eliminate farm programs that stabilized prices. As a result, an international grain-trading company could buy and process soybeans in South America and ship unlimited raw agricultural products to distribution centers in Europe at lower tariff rates. Since European farm safety nets were shredded, commodity prices fell and discouraged domestic production, which encouraged European farmers to abandon soybean cultivation.

These two changes allowed agribusinesses like grain traders, processed-food companies and meat companies to chase the cheapest prices for the raw products they use to manufacture food products. This race to the bottom encourages exporting countries to rely on the most extractive and often ecologically destructive production of raw agricultural materials. These companies shop for the cheapest raw commodities worldwide, import them cheaply and export processed “value-added” food.

European soybean imports surged after the WTO-mandated changes went into effect, which displaced more sustainable grain production and left Europe dependent on imported livestock feed (including soy and maize). Since 1995, the 15 European Union member states' (EU-15) net soy meal imports (not counting shipments within the EU) grew 57.1 percent from 12.9 million metric tonnes in 1995 to 20.2 million metric tonnes in 2007, according to UN Food and Agriculture Organization figures.⁷ Total maize imports rose faster since the WTO went into effect, nearly doubling (rising 94.8 percent) from 11.0 million metric tonnes to 21.6 million metric tonnes.⁸

Pigs and chickens got fat eating this imported soy meal and maize. The volume of livestock feed consumed in the EU-15 member states increased by half between 2003 and 2007.⁹ By 2008, the EU imported about 32 million metric tonnes of

livestock feed ingredients, or over 63.5 kilos for every man, woman and child living in the EU.¹⁰ Soy meal for EU livestock feed alone rose more than a third (36.8 percent), from 11.2 million metric tonnes of protein content between 1993 and 1994 to 15.3 million metric tonnes between 2007 and 2008.¹¹

The vast majority of the soy meal imports have gone to the countries with the largest pig and poultry production. The biggest pig and poultry meat producing countries, Denmark, France, Germany, Netherlands, Poland, Spain and the United Kingdom, imported more than three-fifths of EU-27 soy meal imports over the past decade.¹² Soy meal imports to these countries were fairly steady prior to the WTO, at about 11 million metric tonnes annually between 1980 and 1994. But after the WTO went into effect, soy meal imports rose by 75.3 percent, from 12.5 million metric tonnes in 1995 to 21.9 million metric tonnes in 2007.

These millions of tonnes of soy are invisible on our plates. A study by the Dutch Soy Coalition found that producing one kilo of Dutch pork requires 963 grams of soy.¹³ Chicken meat is almost 62 percent soy by weight.¹⁴ Even beef is 31 percent soy, and every liter of milk contains 28 grams of soy.¹⁵ In effect, average EU consumers, who eat 41 kilos of pork, 22 kilos of poultry and 9 kilos of beef annually, consume almost 56 kilograms of hidden soy.¹⁶

The surging imports were facilitated by ramped up global soybean production outside the EU and a steady decline in the price of soy meal. The real, inflation-adjusted global soy meal price fell by nearly a quarter from \$426 dollars a metric tonne in the 1980s to \$297 a metric tonne in the 1990s (in 2009 dollars).¹⁷ Between 2000 and 2008, average soy meal prices fell further, to \$259 per tonne, even with the sharp price increases in 2008.¹⁸ This decline in prices made soy meal imports more attractive for large pig and chicken operations than European production of other protein crops like dry beans, lupins and dry peas. The consumption of imported feed pushed the social and environmental costs of industrial soy and maize production overseas, where the impacts of large-scale production would occur under weaker environmental and labor protections.

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European Soy Imports Fueled by Unsustainable Industrial Soy Production in Argentina and Brazil

The increased volume of imported soy entering Europe primarily comes from Argentina and Brazil. In 2007, Argentina and Brazil supplied nearly four-fifths (79.3 percent) of the 32.3 million metric tonnes of imported feed going to the EU.¹⁹ While these two countries are the key exporters, a large share of the exported soybeans grown in Paraguay and Uruguay are shipped through the soybean export terminals in Argentina. The rapid expansion of soybean cultivation in Latin America to feed European livestock has come at tremendous environmental and social costs. The endless fields of soybeans have put intense pressure on rural communities, indigenous people, watersheds and the environment.

The lucrative soybean production on large plantations has concentrated farmland in the hands of a few investors and giant landowners, pushed small farmers off the land and encouraged the exploitation of workers — even slavery in Brazil.²⁰ In many cases, South American as well as global investors have concentrated the control of land they rent from medium- and small-scale farmers. These investors press one small farmer after another to rent their land for soybean cultivation, creating large soybean operations by renting many smaller parcels of land. These large operations replace smaller, diversified farms with industrial-scale, agrochemical-dependent cultivation of genetically modified soybeans. The giant soybean operations push other farmers — especially

beef cattle producers — to clear forests for ranching or farming, adding to deforestation.

Brazil and Argentina are not just exporting soybeans and maize; they are exporting the water it takes to produce these crops. Global trade in agricultural products — and the fresh water it takes to produce these commodities and food products — can exert even more pressure on watersheds. The water withdrawals used to cultivate the global agriculture trade are known as “virtual water.” Approximately one-seventh of worldwide agricultural water consumption goes toward exports.²¹

It takes a lot of water to cultivate soybeans and maize. The most intense soybean cultivation occurs in what is known as the United Soy Republic (Argentina, Brazil, Paraguay and Uruguay), atop the Guarani aquifer, one of the largest in Latin America.²² In 2007, the total maize crop in Brazil and Argentina contained 80 trillion liters of virtual water, and the soy crop contained 115 trillion liters of virtual water.²³ Almost all of that was exported, much of it to Europe. In 2007, Brazil’s soybean exports to EU-15 countries contained 11.6 trillion liters of virtual water and Argentina’s contained 14.9 trillion liters.²⁴ These exports effectively put pressure on Argentinean and Brazilian watersheds. Brazil and Argentina alone withdrew over 58 cubic kilometers — one trillion liters — of water in 2000 for irrigation, the latest figures available.²⁵ Since then, Brazil and Argentina have increased total

cultivated land area by over one-fourth (26 percent) — meaning that irrigation withdrawals have likely increased as well.²⁶

European consumer and environmental groups have decried the unsustainable importation of soy produced in Latin America under ecologically and socially destructive conditions.²⁷ The vast majority of genetically modified (GM) imports are hidden from European consumers, since the meat from livestock fattened on GM feed is unlabeled. Consumers, who have widely opposed GM foods,²⁸ have been duped into believing these products have been withdrawn from the food chain. Instead, customers have been unwittingly supporting the GM industry.

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Soybean-Driven Deforestation

Soybeans are largely planted on land that was once covered in pristine forests and grasslands. Soybeans were either the culprit or the driving force for others to clear forests. In some cases, forests were cleared to expand soy cultivation. In the Brazilian state of Mato Grosso, which has the fastest growth in soybean production and deforestation in the country, over half a million hectares of forest were converted to cropland between 2001 and 2004.²⁹ The large swaths of forests that were cleared for soybeans left the remaining forest more fragmented, which further undermined diverse ecosystems and forest health.³⁰ In most other cases, soy plantations displaced land that was previously cleared for cattle or other farming, which pushed cattle ranchers to clear still more forests.³¹ In time, soybean interests can push ranchers off these lands as well, restarting the cycle of ecological destruction. Once these ecosystems are lost, they are gone forever.

Rising European demand for soybeans sparked a stunning increase in soy cultivation in Latin America. During the 1990s, Brazil cultivated about 11 million hectares of soybeans, but soy plantings doubled to over 21 million hectares by 2008.³² Argentina’s soy cultivation increased even faster, more than tripling from 5.0 million hectares in 1990 to 16.4 million hectares in 2008.³³ Soy cultivation in neighboring Uruguay has surged over *fifteen-fold* in less than two decades, from 28,500 hectares in 1990 to 461,900 in 2008.³⁴ In all, since



1990, Brazil, Argentina, Paraguay and Uruguay planted an additional 23.4 million hectares of soybeans, enough to cover all the farmland in the United Kingdom and Bulgaria combined.³⁵

The expansion of soy has accelerated deforestation. Although cattle producers are directly responsible for much of the deforestation, it is the pressure from soybean plantations that has forced ranchers and other farmers to relocate into forested land. Much of the new land dedicated to soybeans over the past two decades effectively came from the 44.5 million hectares of forest cleared by the two countries between 1990 and 2005.³⁶ Argentina and Brazil have burned or cut down forests at a rate of between 4 and 5 percent per decade since 1990.³⁷ Brazil cleared 3.1 million hectares annually between 2000 and 2005, an area larger than Belgium each year.³⁸ Much of that deforestation can be attributed to the need to grow crops, especially soybean-based livestock feed for the export market.³⁹

For example, an unapproved Brazilian soybean export terminal built by U.S.-based Cargill near a heavily forested area encouraged plantation owners to clear rainforests in order to easily access Cargill's export facility.⁴⁰ In 2007, the Brazilian government forced Cargill to close down its port. Pressure and boycotts from both Greenpeace and European purchasers, including McDonald's, led Cargill and other major soy traders agreed to a worldwide moratorium against the purchasing of any soybeans from recently deforested land.⁴¹

While the moratorium has slowed down deforestation, it has not come close to stopping it. Indeed, monitoring by the Brazilian Oilseed Processors Association (ABIOVE) found that deforestation is continuing apace. During the 2008/2009 season, ABIOVE found that soy was being illegally cultivated on 0.8 percent of the cleared land it monitored, but during the 2009/2010 season, soy was cultivated on 2.1 percent of the land it monitored.⁴² While the land ABIOVE monitored doubled, the cultivation of soybeans on illegally cleared land increased nearly five-fold from 1,384 hectares to 6,300 hectares.⁴³ Importantly, the illegally cultivated soybeans enter the soy marketplace. While major companies may not buy them right off the land, they may purchase them further downstream.

This deforestation has been mirrored and, in some ways, eclipsed in the wooded grasslands known as the cerrado and the Gran Chaco. These dry forests and savannahs are the second-largest biome in South America, smaller only than the Amazon.⁴⁴ In the Brazilian cerrado, there is twice to triple the amount of deforestation as in the Amazon itself.⁴⁵ Mato Grosso is largely cerrado, produces more soy than any other region in Brazil. Similarly, the semi-arid Chaco in Argentina has seen expanding deforestation, with soybeans as the most important crop.⁴⁶

The agriculture-driven deforestation has devastating effects on the global environment. Deforestation accounts for a quarter of global greenhouse-gas emissions that contribute to global warming, nearly double the 14 percent attributable to transportation and industry.⁴⁷ Rainforests also help mitigate global climate change by consuming carbon dioxide, encouraging cloud formation and increasing evaporation.⁴⁸ Clearing Latin American forests and jungles drives indigenous people from their ancestral homelands and imperils a host of species from medicinal plants to unique animals.⁴⁹

Soy Plantations Concentrate Power in the Hands of the Few

Soybean plantations dominate Argentina and Brazil's agricultural sectors. Soybean cultivation represented about a third (32.5 percent) of Brazil's crop cultivation and over half of Argentina's crop cultivation in 2007.⁵⁰ Soybean plantations in Argentina and Brazil average about 1,000 hectares, but newer operations can be between 10,000 and 50,000 hectares.⁵¹ These large farms concentrate the land in the hands of a cadre of powerful investors and landowners. The unequal distribution of land is significantly higher in Brazil and Argentina than either France or Germany.⁵²

In Argentina, small operations under 200 hectares represent 70 percent of all farms but less than 6 percent of the land.⁵³ As soybean cultivation expanded and the big plantations gained a stranglehold on Argentinean production, smaller farms and the jobs they provided evaporated. Between 1988 and 2002, over 100,000 farms and 230,000 agriculture jobs disappeared in Argentina.⁵⁴ These displaced people were driven off the land and into urban or landless poverty.

In Brazil, the largest 1 percent of farms larger than 1,000 hectares controlled nearly half the land (46 percent) in 1995, according to the World Bank.⁵⁵ Over the past decade, the number of very large farms increased, the number of medium-sized farms fell and small farms cultivated a declining share of the land.⁵⁶ Despite the significant jump in Brazilian soybean and cattle production, rural income inequality has risen over the past decade — the poorest have gotten poorer and 60 percent of the rural population persistently lives below the poverty line.⁵⁷

In Brazil, some of the soy production relies not on low-priced labor, but enslaving the desperate landless population. Using a combination of physical and financial restraint, some Brazilian plantations have used bonded or forced labor. In 2004, Brazil created a government registry of agricultural operations found to be using slave labor, and the most recent list included seven soy operations cited for 108 instances of slavery.⁵⁸

GMO Cultivation and Agrochemicals

The industrial-scale soy production in Argentina and Brazil relies on genetically modified (GM) seeds and the tailored agrochemicals that are applied to GM fields. The vast majority of commercial biotech crops are either herbicide-tolerant, which allows farmers to apply herbicides to kill weeds without damaging the crops, or insect-resistant, which theoretically protects the plants from destructive pests.⁵⁹ In 2009, Brazil and Argentina were the second- and third-largest cultivators of GM crops. The 42.7 million hectares of GM soybeans, maize and cotton grown in the two countries were nearly a third (31 percent) of the global GM crops.⁶⁰ These figures from the pro-biotechnology International Service for the Acquisition of Agri-biotech Applications are a likely overestimation of GM cultivation. For example, these figures count each GM trait separately, so a crop with more than one GM trait would be double-counted in these figures.⁶¹

Argentina introduced commercial GM soybeans in 1996 and within three years was planting 6.8 million hectares of GM crops.⁶² A decade later, Argentina's GM cultivation had more than tripled to 21.3 million hectares.⁶³ GM soy now dominates Argentina's crop, comprising 99 percent of the nation's harvest in 2008.⁶⁴ In Brazil, GM seeds had been illegally imported from Argentina and widely illicitly cultivated for years prior to GM's official approval.⁶⁵

Brazil first permitted commercial GM planting in 2003 and immediately planted 3 million hectares of herbicide-tolerant soybeans.⁶⁶ Six years later, GM planting had grown sevenfold to 21.4 million hectares.⁶⁷ While exact amounts of GM soy are difficult to calculate, as the tracking is largely done

through self-reporting and biotechnology trade associations, estimates of GM soy as a portion of all Brazilian planting range from 50 to 60 percent of the 2007/2008 crop to more than 70 percent in 2010.⁶⁸ GM seeds also accounted for more than half (53 percent) of maize cultivation in 2010.⁶⁹

Most of the GM production is designed to withstand generous applications of herbicides that are tailored to the GM seeds. In 1996, farmers in Argentina applied 13.9 million liters of glyphosate (sold by Monsanto as Roundup) to combat weeds on GM soy plantations.⁷⁰ By 2008, although GM cultivation nearly tripled, glyphosate applications surged *fourteen-fold* to 200 million liters.⁷¹ For Monsanto, this reliance on glyphosate has been a goldmine. In 2008, Monsanto made a gross profit of almost \$2 billion on Roundup and other glyphosate-based herbicides — about a third of the company's \$6.2 billion in gross profits.⁷²

Widespread glyphosate application has led to weeds that are resistant to glyphosate, which can lead to higher herbicide applications and lower yields.⁷³ At least 15 weed species worldwide have developed resistance to glyphosate.⁷⁴ A 2010 study by the respected U.S. National Research Council found that herbicide-tolerant weeds in GM fields were a problem that is "growing and going to get worse."⁷⁵ When weeds develop a widespread tolerance to the affiliated GM herbicide, it diminishes any benefit of the biotech crop.⁷⁶ For example, U.S. cotton farmers have increased herbicide applications and abandoned conservation tilling practices to counter glyphosate-resistant weeds.⁷⁷

In part because of the growing weed resistance, other her-





bicides are still in wide and expanding use. Argentine soya fields were also sprayed with an estimated 30 million liters of the herbicides such as 2,4-D, atrazine and the pesticide endosulfan in 2006.⁷⁸ As herbicide applications in Argentina have risen, acute pesticide poisonings of workers and people living near plantation areas have increased, and there has been a marked increase in genetic abnormalities in children.⁷⁹ Moreover, a 2009 Argentine scientific study found that even low-level exposure to glyphosate could mutate amphibian embryos.⁸⁰

These concerns have led an appellate court in Argentina to block farmers from spraying agrochemicals near populated areas. The court found that farmers “have been indiscriminately using agrochemicals such as glyphosate, applied in open violation of existing laws [causing] severe damage to the environment and to the health and quality of life of the residents.”⁸¹

Farmer, environmental and consumer advocates have opposed the commercial cultivation of GM crops. In Brazil, environmentally conscious urban consumers believe that the environmental and social costs of widespread soybean production outweigh any benefits.⁸² Farmer advocacy group Via Campesina, the Green Party, the Brazilian Consumer Defense

Institute and other organizations have opposed the commercial cultivation of GM crops since they were approved without the constitutionally required environmental impact studies.⁸³

The shift to GM seeds has undermined the traditional practice of saving and sharing seeds from harvested crops to plant the next season.⁸⁴ Small-scale and landless peasant groups have opposed commercialized GM cultivation because it would make it harder for small farmers to save seeds.⁸⁵ The biotech companies zealously pursue anyone that may be infringing on their patents for seed piracy. In 2009, Brazil established fines up to 125 percent of the cost of GM seeds purchased from informal seed dealers and stepped up enforcement against illegal “seed trafficking.”⁸⁶ In the first half of 2009, Brazil’s agriculture ministry and state officials of Mato Grosso made 230 raids on seed smugglers — more than one a day — and seized 660 tons of illegal seeds.⁸⁷ This crackdown protects international seed companies like Monsanto, but hurts small farmers that have relied on seed saving and sharing as part of their production strategy. These farmers are forced to either purchase high-cost seeds or resort to lower-quality seeds.

Global Soy Trade Enriches Transnational Grain Traders and Meatpackers

Four international firms and a few Latin American firms that grow soybeans dominate the global oilseed trade. These firms buy and process soybeans in Latin America, own oilseed elevators and shipping terminals, and transport the soybean products from South America for distribution to industrial pig and poultry farms in Europe. The major players, or “ABCDs,” of the international soybean complex are the U.S.-based Archer Daniels Midland (ADM), Bunge, Cargill and the French company Louis Dreyfus.⁸⁸ These firms were four of the top six exporters of soybeans from Argentina in 2009.⁸⁹

ADM is one of the leading companies buying and shipping soybeans from South America.⁹⁰ It operates 21 oilseed-crushing plants outside the United States, including in Bolivia, Brazil, England, Germany, the Netherlands, Poland and Ukraine, and over 100 international oilseed elevators, including port terminals in Bolivia, Brazil, Germany, the Netherlands, Paraguay and Poland.⁹¹

Bunge originates most of its soybeans from Argentina, Brazil and the Midwest of the United States and operates 56 oilseed-processing plants worldwide.⁹² In Argentina, Bunge’s three soybean-crushing plants process more than 13,000 metric tonnes each day.⁹³ Subsidiary Bunge Alimentos is the largest agribusiness and food company in Brazil.⁹⁴ Bunge is one of South America’s largest exporters of soybeans and soy meal, destined for industrial livestock operations and food-processing companies.⁹⁵

Cargill is probably the largest grain trader in the world and a world leader in the trading and processing of oilseeds.⁹⁶ Cargill operates hundreds of interior silos as well as grain elevators, terminals and ports worldwide that purchase and store grains and oilseeds.⁹⁷ Cargill operates eight soybean facilities and three soybean terminals in Brazil and four soybean-crushing plants and five export terminals in Argentina.⁹⁸ The company also operates a fleet of cargo ships that can connect their global network of storage facilities.⁹⁹

Louis Dreyfus is one of the world's largest oilseed distribution companies.¹⁰⁰ In Argentina, Louis Dreyfus owns two soybean-crushing plants and two export terminals. In Brazil, it operates a network of oilseed storage and export facilities as well as several soybean-crushing facilities.¹⁰¹

Homegrown Latin American soybean interests, in part financed by the International Finance Corporation, a member of the World Bank group, have joined giant international grain traders. Since 1997, the World Bank made \$365 million in direct loans and indirectly helped finance almost \$1.2 billion in soybean-processing investments in Argentina and Brazil.¹⁰² These investments helped some of the largest Latin American companies consolidate their control of the global soybean trade.

Brazil's Amaggi is the world's largest soybean-growing operation.¹⁰³ Blairo Maggi, who also served as governor of Mato Grosso, heads the Amaggi Group.¹⁰⁴ Maggi has been called the King of Soy and received Greenpeace's Golden Chainsaw prize for his firm's destruction of the Amazon rainforest.¹⁰⁵ In the mid 1990s, Maggi received financing from the governor of the state of Amazonas and Brazil's National Development Bank to build a river terminal to ship soybeans from Brazil's interior to coastal seaports for international shipment.¹⁰⁶ Maggi then leveraged the soy terminal to secure two \$30 million direct loans from the World Bank's International Finance Corporation and \$95 million from commercial banks to expand the company's facilities.¹⁰⁷ The IFC's own ombudsman reported that one Maggi loan was given despite IFC's failures to adequately consider any damaging environmental and social impacts of the project.¹⁰⁸

Global livestock companies, including American pork and poultry companies, also benefit from a global marketplace awash in cheap feed. Plentiful, low-cost feed allows livestock companies to locate their production facilities where labor costs and environmental safeguards are weaker. U.S.-based meat company Smithfield has already entered Eastern Europe to take advantage of cheaper land and labor and effectively exported some of America's worst industrial livestock practices to the EU (see Food & Water Watch's 2008 report, *The Trouble with Smithfield*).

Soy Imports Fuel European Industrial Livestock

The flood of imported soybeans has helped to transform European pig and chicken farmers into industrial-scale livestock producers. Instead of raising pigs and chickens on locally cultivated feeds, low-priced imported soybean feed encouraged pig and chicken producers to specialize in livestock production, expand in size and transform European livestock holdings into factory farms.

Low-priced soybean meal has been essential to supersizing pig and poultry farms. Commercially raised chickens and pigs are dependent on soya for two-thirds of their protein needs.¹⁰⁹ Even beef cattle and dairy cows, whose stomachs are designed to eat mostly grass, eat some soy-based feed. Dairy and beef cattle are often fed 2 kilos of soybeans or soybean products each day.¹¹⁰ And the soybean industry is completely dependent on the industrial livestock industry, with specially bred animals that rely on high-protein feeds to produce maximum weight gain. Almost all soybeans are processed into meal and oil, and 98 percent of soybean meal is used for livestock feed.¹¹¹ Cheap imported soy helped increase the soy meal share of EU livestock feed from 57.1 percent between 1993 and 1994 to 67.0 percent between 2007 and 2008.¹¹² As imported soy became a larger share of feed for pigs and poultry, feed costs declined by more than a third (38 percent) between 1990 and 2003.¹¹³



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These pig and chicken farms concentrate more animals in small facilities, and the waste manure from these animals pollutes local waterways, land and air. And while the EU has taken steps to mitigate the effects of factory farming on livestock animals, cruelty remains a part of the growing process. For example, battery cages, which constrict hens to a floor area smaller than a sheet of paper, are being phased out, but are still in use the EU, as are gestation crates for hogs, which keep sows hemmed in and unable to move before weaning young pigs.¹¹⁴ While both are being phased out, they remain in use until the bans go into effect.

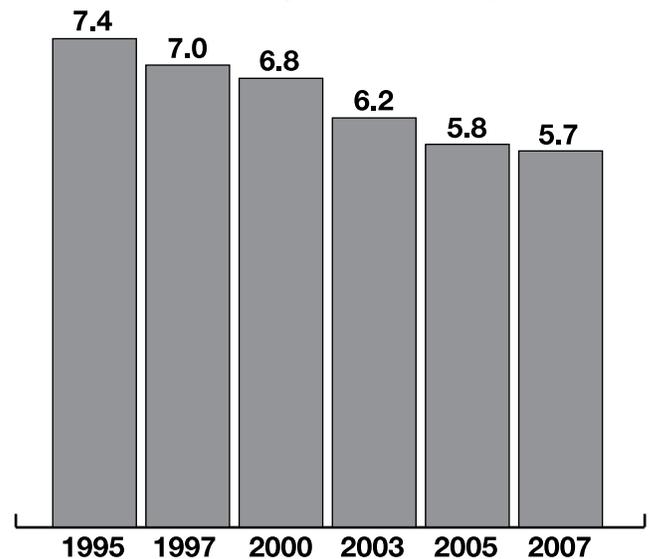
Over the past two decades the number of livestock animals has grown, the number of farms has fallen, and the scale of pig and chicken farms has exploded. Farm income per livestock animal has been declining for the past few decades.¹¹⁵ Facing declining incomes, smaller commercial farms are giving up farming altogether, and the remaining farms are getting bigger to compensate for lower per-animal revenues.¹¹⁶

More Animals on Fewer, Larger Farms

The total number of farms in the EU has been steadily and sharply declining. Between 1995 and 2007, the EU-15 member nations shed 1.7 million farms — nearly a quarter of all farms.¹¹⁷ The number of farms feeding livestock fell much faster. Over the past two decades, the number of pig-fattening and broiler chicken farms in the EU-12 members fell by two-thirds (excluding Germany, which lacks comprehensive data because of reunification).

In 1990, there were 2.4 million broiler and pig-fattening holdings, but by 2007, the number had fallen to 795,000.¹¹⁸ Most of the farms that were eliminated were medium- and smaller-sized operations; the holdings that remained have grown to hold thousands of pigs and over a hundred thousand chickens.

Number of EU-15 Agricultural Holdings (in millions)



Source: Eurostat.



Meat Chickens: Broiler production has grown slowly but steadily in the EU. The number of chickens on EU-15 farms rose 10.0 percent from 923 million in 1995 to 1.0 billion in 2008.¹¹⁹ Poultry meat production rose slightly (0.9 percent) from 11.5 million metric tonnes in 2005 to 11.6 million metric tonnes in 2008.¹²⁰ In 2003, there were 1.5 million farms with broiler chickens in the EU-27 member states, but the overwhelming number were small, with an average of 730 broilers (only measured in EU-25 countries).¹²¹ The largest 1,500 broiler holdings had an average of over 197,000 broilers each in 2003.¹²²

Pig Fattening: Pig production in the EU has become more industrialized, more integrated and grown in scale. In 2004, there were 158.7 million pigs in the EU-27 countries; within two years, the EU added nearly 3 million more totaling 161.5 million pigs by 2006.¹²³ The scale of pig operations has grown considerably. A European Commission study found that the pig industry's "underlying phenomenon is one of concentration, i.e. an increase in the size of the largest herds together with the disappearance of the smallest."¹²⁴

Small pig farms in the EU are disappearing, but the number of the largest farms has grown, and the number of pigs on these large farms has grown by one-sixth (16.4 percent) between 2003 and 2007. The number of hogs on the largest farms doubled in the new member states.¹²⁵ In four years, the number of pig farms in the EU-27 fell by almost one-third, dropping from 5.1 million in 2003 to 3.5 million in 2007.¹²⁶ While the total number of pig farms fell, the number of the largest pig holdings, with more than 1,000 pigs, grew by 4.8 percent between 2005 and 2007, and the number and share of pigs on these biggest farms grew as well.¹²⁷ In Poland, Romania and Lithuania, the pig sector is restructuring with smaller operations disappearing, as elsewhere in Europe, but with medium- and large-sized holdings rapidly growing in size.¹²⁸ These changes may be in part related to the U.S.-based pork producing giant Smithfield's hog production and slaughter facilities in Poland and Romania.¹²⁹

As the number of pig-fattening farms declined, the average size of pig farms rose and the very largest holdings swelled to enormous proportions. In 1990, EU-12 pig-fattening farms averaged 63 pigs, but by 2007, the average-sized holding more than quadrupled to 291 pigs (excluding Germany).¹³⁰ Much of this growth is driven by the largest pig holdings. Less than 1 percent of farms raised more than 1,000 pigs, but nearly half of pigs were on these giant farms — and more pigs are on these farms all the time. In 2005, there were 68.5 million pigs raised on giant holdings, more than two-fifths (45.8 percent) of all pigs. Two years later in 2007, 73.6 million pigs were on these large farms, nearly half (49.2 percent) of all pigs.¹³¹

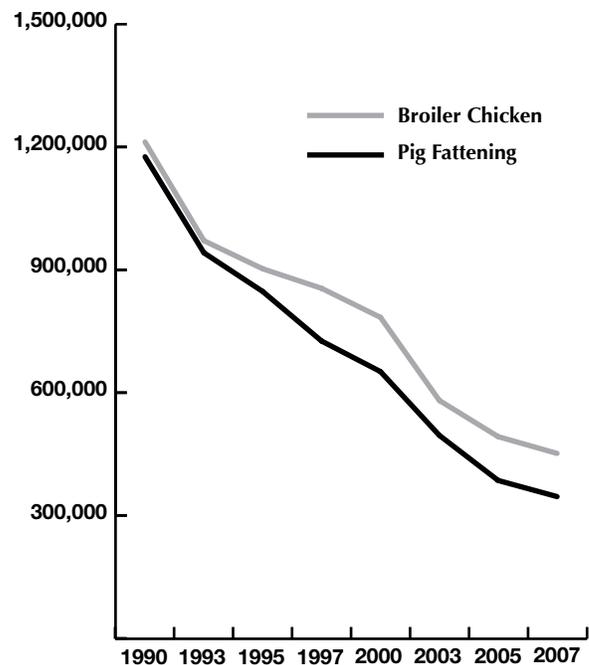
European Factory Farms Contribute to Environmental Degradation

More pigs and poultry on fewer farms generate mountains of waste — phosphorus- and nitrogen-laden manure — that requires disposal. The production of pigs and poultry is concentrated in a few countries that bear the majority of the environmental and public health burdens of concentrated livestock production. Two-thirds (68.9 percent) of the pigs in the European Union are in Denmark, Germany, France, Spain, the Netherlands and Poland.¹³² Since a single pig produces as much waste as four people, a single factory farm can produce as much waste as an average-sized town.¹³³

The industrial pig and poultry farms in the European Union produce at least 240 million metric tonnes of solid manure and manure slurry each year (215.8 million tonnes of pig waste and 23.1 million tonnes of poultry waste).¹³⁴ This concentrated livestock waste can pollute and endanger water systems and contribute to greenhouse gas emissions.¹³⁵ Agriculture produced about a tenth (9.3 percent) of EU-15 greenhouse gas emissions, mostly from livestock manure.¹³⁶

These wastes are typically applied to cropland as fertilizer, but the colossal volumes can exceed the capacity of the land to absorb the nutrients. The highest nutrient balances were largely in countries with high levels of pig and poultry

EU-12 Pig Fattening and Broiler Holdings, 1990-2007



Source: Eurostat; excludes Germany.

Since a single pig produces as much waste as four people, a single factory farm can produce as much waste as an average-sized town.

concentration — in the Netherlands it exceeded 200 kilos of nitrogen per hectare, in Germany it exceeded 100 kilos per hectare and in Denmark it approached 75 kilos per hectare in 2000.¹³⁷ A joint World Health Organization and European Commission report noted that in some places soil had been oversaturated with phosphorus from “spreading excessive manure from animal husbandry,” and that this had overwhelmed the benefits of other agricultural efforts to reduce excess nutrient runoff.¹³⁸ Excess nutrients can generate algae blooms of fast-growing plants that deplete oxygen levels in the water, making it impossible for most other aquatic life to survive.

Industrial pig and poultry operations can also emit high levels of dust and particulate matter that can be dangerous for farmers and workers. Studies have found that workers in industrial pig and poultry operations in the EU have a high prevalence of symptoms of chronic bronchitis, and that working in pig barns is associated with acute and chronic decline in workers’ lung function.¹³⁹ The odor from industrial pig and poultry operations has reduced the quality of life for rural communities. Livestock odor and airborne emissions have been tied to chronic headaches, runny noses, sore throats, diarrhea and affected mucosal immune function for nearby residents.¹⁴⁰ The pungent factory farm aroma can push down property values in the surrounding areas, as people are loath to buy homes near the industrial livestock stench.¹⁴¹

Industrialized Livestock Does Not Fatten Farm Incomes

Farmers add ever more pigs and poultry to their holdings to try and eke out a living in an unforgiving occupation. Most farmers have a tenuous economic security. The European Commission noted that “[c]ontrary to popular belief, farming

is not a money spinner.”¹⁴² Livestock farms are purported to be profitable holdings, but the income and financial returns are not always lucrative. Pig and poultry farms often receive low prices for their livestock, have high input and overhead costs and face cyclical downturns, and there are vast income disparities between the largest factory farms and smaller pig and poultry holdings. Feed is the largest cost for these farms, and without low-priced imported soybeans, the financial viability of these holdings would be even more uncertain.

The prices farmers received for livestock fell sharply in 2008 and 2009, but prices have been flat or uneven for pigs for the past decade. Real livestock prices declined by 8.2 percent during 2009.¹⁴³ In 2009, pig prices fell by 7.8 percent, or €12 to €141 per 100 kilos.¹⁴⁴ The price of pigmeat between 2005 and 2008 remained below the price farmers received in 2000.¹⁴⁵

The weak earnings from low prices were compounded by high production and capital costs to raise pigs. In 2006, European farmers received €121 per pig, but the cost of piglets, feed and other inputs amounted to €111, leaving farmers with a net €10 per pig.¹⁴⁶ Feed costs rose sharply starting in 2007 — rising 50 percent higher than 2000 — but pigmeat prices hovered 10 percent below 2000 prices.¹⁴⁷ Although feed prices began to fall in 2008, the EU’s Eurostat noted that falling costs “cannot compensate for these difficult years.”¹⁴⁸

Low prices and high costs have made it hard for farmers to earn a living. Farmers faced “a remarkable decrease in agricultural income” in 2009 as higher input costs and lower prices for crops and livestock drove farm incomes down by 11.6 percent.¹⁴⁹ Although pig and poultry holdings have higher financial returns than other farms, returns for these holdings declined slightly between 1990 and 2003, the only subsector aside from wine to have declining incomes.¹⁵⁰ When the cost of family labor, rent and land costs, paid wages, depreciation, and other non-pig-specific costs are taken into account, the average European pig farmer’s margin is *negative* €13 per pig.¹⁵¹

The majority of the earnings in the pig and poultry sector go to the largest industrial farms. Pig and poultry farms in Europe exhibit some of the widest disparities in income of any type farm. The top fifth of pig and poultry farms with the most animals earned almost two-thirds (63 percent) of the sector’s earnings, the highest income inequality in the European Union’s agriculture sector.¹⁵² In 2003, nearly two out of five (38 percent) pig holdings earned less than €20,000 per full-time worker (including the farmer), but one out of eight farms (13 percent) earned more than €60,000.¹⁵³ One in nine (11 percent) pig and poultry farms had *negative* earnings during that year (beyond those with incomes below €20,000).¹⁵⁴ Pig and poultry farms had the largest share of holdings with negative incomes in 2006 of any agricultural subsector.¹⁵⁵



Rising European Soybean Imports Facilitated by the World Trade Organization

The World Trade Organization (WTO) largely facilitated the rise of socially and environmentally destructive soy plantations in Latin America and factory-farmed livestock in Europe. International trade deals sharpened the focus on global, manufactured food production. The agricultural provisions of the trade agreements of the 1990s were largely designed by the negotiators from industrialized countries at the behest of their largest agribusinesses. These companies used trade deals like the WTO to make it easier to ship agricultural commodities like soybeans worldwide to accelerate the shift to factory-farmed pigs and chickens. At the same time, the trade agreements were used to dismantle or restructure the farm safety net programs in the EU and United States that ensured farmers got a fair price for their crops.

The WTO, which went into effect in 1995, was the first large-scale trade agreement to cover agricultural products. The WTO included an Agreement on Agriculture (AoA) that required countries to both lower barriers to imports and reduce government support for agriculture programs. The WTO AoA directed countries to reduce tariffs on agricultural products (taxes on imports) and prohibited setting any limits

on agricultural imports (either import quotas or outright bans on imports).¹⁵⁶

The agreement also required countries to reduce government support for farmers that was tied to production (payments per metric tonne of production), it barred policies tied to prices (policies that acted as price floors), and it prohibited the use of export subsidies.¹⁵⁷ While industrial countries still maintain farm programs and payments, the structure of the programs no longer provides a safety net for farmers; instead the farm policies provide agribusinesses access to low-priced agricultural inputs. These two free-trade principles turned food into an industrial commodity. International grain traders sought the cheapest soy production to export to factory farms on a global marketplace.

The impacts of these trade deals not only benefit the largest agribusinesses but also have far-reaching ramifications for people worldwide. The international trade rules that encouraged financial speculation on food commodities also prohibited countries from setting aside food reserves or maintaining policies that promote domestic food security or food sovereignty. For example, the Argentine government blamed the “soybean economy” for diverting agricultural capacity towards soy exports, which forced the country to import crops that Argentina used to produce domestically.¹⁵⁸ When

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severe price shocks in the food market occurred in 2008, the world faced a food crisis caused in part by a globalization model that puts commercial interests ahead of the needs of the people.

Blair House

The AoA requirements to allow more agricultural imports and reduce domestic farm programs represented a radical departure from previous trade agreements. Prior to 1995, global trade rules allowed countries to set limits on agricultural imports and allowed governments to maintain domestic farm safety net programs.¹⁵⁹ The new framework for agriculture was highly contentious. A dispute over soybean trade and farm policy between the European Union and the United States was the most controversial. Prior to the WTO, European soybean production had jumped dramatically, nearly tripling between 1980 and 1990. The U.S. Department of Agriculture contended that the EU's farm policy increased soy production and contributed to a 53 percent decline in U.S. soybean exports to Europe.¹⁶⁰ Although EU trade negotiators worried that cheap maize, wheat, soybeans and rapeseed imports would swamp European farmers, U.S. trade negotiators demanded that the EU reduce both soybean and oilseed trade barriers and European farm programs that supported soybean farmers.¹⁶¹ This had clear implications for European food sovereignty, the impacts of which are still being felt.

To break the logjam, U.S. and European negotiators met in Washington at the U.S. presidential guest residence known as the Blair House. The resulting 1992 Blair House agreement both settled the long-standing oilseed trade dispute and set the conditions for the EU and United States to accept the overall WTO AoA framework. The deal established a favorable "base year" (1994) for implementing the trade deal's reduced trade barriers and agricultural programs that allowed both the EU and United States to begin phasing in the reductions from a year with high prices, high production and vast cultivation.

Negotiators used the elimination of European oilseed policy in the Blair House agreement as the template to establish broader agricultural trade reform goals as part of the AoA. The Blair House provisions on EU oilseeds were buried in the EU's WTO commitments in a special oilseed annex. The Memorandum of Understanding on Oilseeds banned any oilseed program support that exceeded the 1994 level of cultivation (the base year), required at least 10 percent of the base year acreage to be idled (known as a "set aside") each year, and prohibited any support of oilseeds for human or livestock consumption above 1 million metric tonnes of soybean meal.¹⁶² The agreement permitted cultivation of industrial or biodiesel oilseeds on set aside acreage.¹⁶³

The Blair House accord ushered in the WTO AoA and paved the way for surging soybean imports. The EU had completely



Blair House, the U.S. presidential guest residence in Washington, D.C. Photo by Ben Schumin.

eliminated its tariffs on oilseeds and oilseed meal in the 1961 global trade negotiations, which helped to make soy meal a key livestock feed ingredient to replace European cereals like oats and barley.¹⁶⁴ The EU only consented to the AoA if it could reestablish some import tariffs on oilseeds and grain substitutes.¹⁶⁵ In the WTO commitments, the EU kept oilseed imports duty-free, but it set a base tariff on soybean meal of 7.0 percent to be reduced to a target 4.5 percent.¹⁶⁶ By 1999, the EU had eliminated its applied tariffs on soy meal.¹⁶⁷

WTO-Directed Changes to the EU Common Agricultural Policy (CAP) Oilseeds Programs

Before the WTO AoA went into effect, the EU's Common Agricultural Policy (CAP) programs supported the price of field crops like wheat, maize and oilseeds through government purchases at guaranteed prices.¹⁶⁸ The AoA directed agricultural program payments to be "decoupled" from price or production factors, which effectively required the EU to restructure its agriculture programs.¹⁶⁹

In 1992, the EU reformed the CAP to bring it into alignment with the AoA dictates even before the agreement was finalized. The reform, named after Agriculture Commissioner Ray MacSharry, reduced price supports and replaced these programs with new direct payments.¹⁷⁰ This provided oilseed producers a transition from the pre-AoA agriculture programs, but they were based on the lower area and production targets established through the Blair House agreement.¹⁷¹ As a result, oilseed transition payments were higher than to other grain and cereal farmers to compensate farmers for the sharply reduced CAP support under the Blair House agreement.¹⁷²

The MacSharry compensatory oilseed payments were considered partially decoupled transition payments under the WTO AoA strictures (known as "Blue Box" in WTO lingo). Partially decoupled programs were related to base production levels (like the Blair House oilseed base acreage) and could remain in place if the programs reduced overall production. Fully decoupled programs that were unrelated to production or price and had minimal impact on trade (designated "Green Box") were permitted under the WTO.

The EU restructured the CAP again in 1999 and 2003 to make its agriculture programs more WTO-compliant. In 1999, the EU decided to reduce direct, compensatory payments to oilseed farmers by a third over the following three years to align the payment with other grain farmers.¹⁷³ In 2003, the CAP was transformed into a program of direct payments to farmers (known as "Pillar 1") combined with investments in rural communities ("Pillar 2").¹⁷⁴ Farmers receive a direct payment under a "Single Payment Scheme" based on the historical hectares of registered agricultural land.¹⁷⁵ The shift to a single farm payment was to be phased in gradually by 2007 for EU-15 member states and by 2010-2011 for new

members.¹⁷⁶ The European Commission noted that "[t]he link to production has been severed,"¹⁷⁷ making the programs WTO-permissible upon full implementation.

The Blair House accord, MacSharry reform and subsequent CAP modifications fulfilled the demand of U.S. agribusinesses to eliminate European support for soy production, and soybean cultivation in Europe plummeted. Between 1980 and 1990, soybean cultivation in the EU-15 member states exploded from 15,000 hectares to 674,000 hectares.¹⁷⁸ After the MacSharry reforms went into effect, soybean cultivation fell by half, from 300,000 hectares in 1993 to 151,000 hectares in 2008. The demand for soybeans did not evaporate with declining European production; the demand was just sated by imported soy.

Conclusions and Recommendations

The World Trade Organization undermined the EU's farm safety net programs, fostered a dependency on low-priced imported feed that accelerated the expansion of factory-farmed pigs and chickens, and encouraged rapacious cultivation of GM soybeans in Latin America. These factors combined with other policies have helped dramatically drive down the number of farms in the EU. Many pig and chicken holdings have since consolidated into giant industrial livestock operations. In Latin America, global investors and large-scale landowners have tightened their stranglehold on farmland, displacing smaller farmers and indigenous people.

Consumers have not benefitted from these changes either. Instead, large multinational corporations have replaced the local farmers, grocers and butchers that once recirculated their earnings in the local economy.

Current policies repeat and reinforce the trade and agriculture agenda that furthers the interests of agribusinesses like international grain traders and factory farm operators. To create a more sustainable, equitable and viable farm and food economy that serves consumers and farmers in the EU and Latin America, these policies must change. None of these policies are inevitable. Just as we created these changes, we can fix the problems with a few straightforward steps and concerted action in different areas to address different aspects of the problem. For more information about these issues, see www.foodandwatereurope.org.

To reduce Europe's current dependence on unsustainable imported animal feed commodities, encourage more sustainable trade, and improve food sovereignty in the EU and worldwide, Food & Water Europe recommends the following steps to realign current policy toward food sovereignty and away from practices which support big business at the expense of consumers and the environment:

Remove Agriculture from the WTO and other EU Trade Deals:

The WTO's Agreement on Agriculture should be abandoned and the agricultural trade model of the WTO and other regional trade deals should not be used as a template for other trade negotiations. Food is not like other manufactured goods like carburetors or tennis shoes; it is required to sustain life. Governments should be free to establish policies that promote sustainable production at fair prices for farmers and ensure that volatile international markets do not undermine food security or food sovereignty. The promise of exporting raw agricultural material from developing countries to industrial countries has not provided prosperity for farmers in the developing world or the industrial world. Currently, proposed regional trade deals between the EU and other trading partners, including those in soy-producing Latin America, contain the same misguided agricultural trade regimes.

Withdraw from the Blair House Soybean Concessions: The European Union should withdraw its soybean commitments under the current WTO Agreement on Agriculture. Although the single farm payment scheme means that the Blair House agreement does not currently apply, if the EU were to change the CAP in a way that contradicted these WTO commitments, the Blair House agreement would snap back into force. The EU should be able to reassess and reestablish farm programs without the Blair House accord limiting its policy options.

The EU Should Shift from Imported Soy to Domestic Protein Crops: There are a variety of alternatives to the hegemony of imported soy that can be grown domestically. The EU could cultivate more soybeans, as happened in the early 1990s, and return to cultivating pulses, field peas, lupins and field beans for livestock feed. There are a variety of substitutions that can be made to enhance the environmental sustainability of livestock feed while lowering the importation of soy. This shift to domestically produced feed should apply to all livestock feed, including industrial fish farms.

Implement CAP Reform Policies to Reduce Industrial Livestock Production and Encourage Sustainable Production: Pillar II of the CAP is designed to invest in rural communities, promote sustainable agriculture and diversify rural economies. Industrial livestock holdings fail to advance the CAP Pillar II goals. The next CAP reform should clearly promote more sustainable livestock production by considering the full life cycle impact of industrial-scale livestock fed entirely on imported feed from Latin America. CAP Pillar II should promote smaller-scale, economically viable livestock holdings that can provide local jobs and growth without endangering the environment. CAP II payments should focus on protecting the EU from the damage from farm runoff and effluent, as well as protecting smaller, more sustainable farms. Factory farming is a choice; the EU policies must chart a better course.



Redirect current support for mega farms to small and family farms and research into breeds and feeds less dependent on high-protein imports. Industrial soya receives support directly and indirectly from government, school, military, hospital, prison and other official sources. This support is badly out of sync with sustainable practice. The considerable purchasing power of our public institutions and research investments should be moving us forward rather than holding us back by reinforcing the status quo.

End direct and indirect political support for industry efforts to greenwash the environmental harm of global, industrial agriculture: Trade associations representing the agribusiness and food industry have been promoting misleading efforts to make the global soy trade appear sustainable, including the Round Table of Responsible Soy (RTRS) and the Roundtable on Sustainable Consumption. These and other voluntary industry attempts to rebrand current business models as appropriate or genuinely sustainable are self-serving efforts that will ultimately mislead consumers.

Empower EU Consumers with Understandable Food Labels: Europeans are increasingly concerned about the impact of their lifestyle on the environment and other people, and the EU Parliament has repeatedly tried to provide better information about the foods they eat. Consumers do change their buying behaviour when they have sufficient information on

labels, as evidenced by the rise in sales of fair trade, organic and non-GM products. However, some aspects of current labeling regulations are less helpful than they could be, others disguise industrial food practices and in other cases necessary information is simply not available to consumers. In particular, European consumers need mandatory labels, including on processed foods, which clearly show:

The source of the meat products: Labels on meat products should clearly demonstrate where the animals providing meat were born, reared and slaughtered. Currently, most labels only indicate the country where the food product was most recently processed or underwent “significant change,” even if this is primarily repackaging. For example, a “Wiltshire ham, Product of the UK” may in fact be meat from pigs raised in Denmark but processed and packaged in the UK. Such Country of Origin Labels (or COOL) applied by the processor, importer or retailer would better permit consumers to support local farmers and buy meat from places they know uphold high standards and avoid cheap, often adulterated, imports.

Label Meat Raised without GM Feed: Europeans overwhelmingly reject genetically modified foods and feed, but consumers cannot determine whether the livestock that provides their meat was fed without GM feed. Consumers want to be

able to choose whether they eat GM food products and clear “no GM feed” labels have been extraordinarily successful when recently introduced in several EU countries.

Clear “Eat By” Dates on Packages: Currently, food in the EU is labeled with a variety of confusing “best before,” “display until” and “use by” dates that studies show contribute to perfectly edible food being thrown away. This wastes money and artificially increases demand on all aspects of the food chain. A clear, universal “eat by” label would eliminate this confusion.

Uphold the law by ensuring companies pay their taxes, follow animal welfare regulations and obey environmental laws. The EU and EU member states must also enforce laws that prohibit monopoly power and economic collusion and prohibit anticompetitive practices, especially by supermarkets, but also by grain traders. When bigger firms are able to evade laws, it distorts the playing field and can harm smaller, more sustainable farms that are doing the right thing.

Finally, we all must play our part by shopping wisely, ending food waste in our homes, and choosing a healthy, balanced diet, high in fresh foods and low in processed foods, that meets our needs without consuming more than we should.

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