Seling Off THE BARM Corporate Meat's Takeover Through TTIP









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Foreword and acknowledgements

The United States' meat industry's political clout is phenomenal. It has been able to successfully obstruct any attempts to regulate its most egregious externalities, including common sense transparency measures to understand how much it pollutes, how many antibiotics it uses, which kind and on which animals. We decided to undertake the ambitious project to examine the current state of affairs in U.S. and EU regulations applicable to the meat industry because 1.) we are concerned about the negative impacts of industrial meat production and 2.) the Transatlantic Trade and Investment Partnership's (TTIP) regulatory "coherence" agenda is deeply problematic from a public interest perspective. Given the technical jargon associated with trade policy and the threat of this agenda in a new generation of trade agreements—we felt that it was critical to concretize what regulatory cooperation looks like when TTIP results in the expansion of trade of "factory farmed" meat. What we discovered was unexpected, though in retrospect, should not at all be surprising. We discovered that like the U.S. industry, the European meat industry has also successfully evaded labor and environmental regulations that should be created and enforced. We realized that there are a host of EU regulations still being deliberated that are likely to be undermined because the EU is negotiating TTIP. And we realized that the ongoing and earnest efforts of U.S. civil society groups to gain back local control and to break up the oligopoly in the meat sector will become a distant reality if agreements such as the Trans-Pacific Partnership and the TTIP are allowed to be ratified.

This first of its kind study compares EU and U.S. regulations aimed at the meat industry, including labor, the environment, animal welfare and public health. It is done with the hope that it helps policymakers and citizens concretize the impacts of TTIP's (de) regulatory agenda on an industry that requires drastic reform—an industry that is dramatically disconnected from citizen and consumer concerns about how meat is produced, who produces it and the long term negative impacts of this extractive model. There are a large number of people who contributed to this effort that IATP wishes to recognize. First, we would like to thank the co-producers of this report— Arbeitsgemeinschaft bäuerliche Landwirtschaft e.V. (ABL), Compassion in World Farming (CIWF) and PowerShift, who not only financially contributed to the report, but most importantly, also contributed to the thinking behind this study and to the very critical information contained in it. Olga Kikou (CIWF), Annemarie Volling (AbL), Berit Thomsen (AbL) and Peter Fuchs, thank you for your commitment, time, support, input and expertise. Second, without the research of numerous research assistants—we would not have been able to gather data for so many different sectors in two different continents. We cannot thank enough the hard work of Ginger Fletcher, Gwendolyn Jenkins, Tai Stephan, Liam McDonnell and Martin Fräulin. Thank you for your painstaking work of fact verification and reference checking and ordering. We also wish to thank Rebecca Varghese for her contribution to the early iteration of this report. We are grateful to Mishka Henner and his vivid art in exposing-- in full color, some of the most dramatic and hidden from public eye--impacts of confined animal feeding operations in the United States. Thank you for allowing us to use your images.

This project has been a year in the making—and for Sharon Treat's brilliance, meticulousness and hard work, we are truly indebted. Her experience as a former U.S. state legislator and expertise on regulatory issues has been phenomenally helpful. Thank you, Sharon, for agreeing to take on this project. Finally, but certainly not the least, IATP's talented Colleen Borgendale (as our communications manager and designer of this report) has been a gift! Her commitment and talent shine through in the end result!

—Shefali Sharma

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Corporate Meat's Takeover Through TTIP

EXECUTIVE SUMMARY

KEY FINDINGS OF THE REPORT:

TTIP will accelerate corporate concentration and expand industrial meat production or "factory farming" by increasing the power of meat-producing transnational corporations. Liberalizing tariffs will make EU meat products even less competitive, increasing pressure in the EU to adopt even cheaper, industrialised practices that largely shift environmental and health costs onto the public. Furthermore, it will disincentivise new regulations that seek to discipline the industry's worse practices, particularly if these rules raise the cost of production.

At the same time, regulatory "harmonisation" measures embedded in TTIP will directly or indirectly pressure governments on both sides of the Atlantic to reduce regulatory costs and "non-tariff barriers" to trade. TTIP will weaken and lower existing standards, particularly when it comes to animal welfare, genetically modified food, food safety and public health.

Labour and environmental regulations related to the meat industry are inadequate on both sides of the Atlantic and need to be strengthened. Trade unions and environmental campaigns have achieved incremental gains; however, TTIP is likely to make it difficult to improve regulations on these issues in the future if they are seen as trade restrictive. U.S. negotiators are unlikely to accept anything less than what was negotiated in the Trans-Pacific Partnership (TPP). That agreement makes zero tolerance on GMOs (including for animal feed) much more difficult, thereby undermining the EU's longstanding adherence to the precautionary principle.

Many new agricultural and food technologies are being developed or already utilized with limited or no regulation. TTIP will make rulemaking in the public interest much more difficult in the future for technologies such as gene editing and cloning.

The chilling effect of TTIP's (de)regulatory cooperation provisions will make it increasingly challenging in the future to effectively regulate impacts of the meat industry on climate change and other as yet unforeseen issues.

Investor State Dispute Settlement (ISDS) provisions in TTIP are likely to thwart efforts to effectively regulate the global meat industry's growing power and will exponentially expand the number of corporations empowered to use these provisions. With ISDS, transnational meat corporations such as JBS and Smithfield--present and expanding on both sides of the Atlantic--could be newly empowered to challenge regulations that hurt their bottom line, even if they are nominally headquartered in other countries such as Brazil and China.









EXECUTIVE SUMMARY

Citizens in both the European Union (EU) and the United States (U.S.) are demanding a healthier, more just and more sustainable food system. As parties negotiate the Transatlantic Trade and Investment Partnership (TTIP), proposed trade rules threaten to undermine the good food and farm movements on both sides of the Atlantic. The negotiations are taking place at a formative time: consumer interest in locally grown, organic and minimally-processed food is expanding in both regions, along with public policy supporting these consumer choices. At the same time, globalisation and an increasingly concentrated and vertically integrated agricultural sector are pushing food production, in particular the meat sector, toward increasing overall production through industrialised systems located where labour is cheap and environmental and animal welfare standards are weak or non-existent.

If agreed to, TTIP would be the largest and most comprehensive bilateral trade agreement ever signed, as well as a blueprint for future international agreements. Consequently, TTIP not only threatens current efforts in the EU and U.S. to build a healthier. more compassionate and more sustainable food system, but the trade deal could also expand factory farming worldwide by harmonising standards of two of the largest meat markets (U.S. and EU) and setting the terms for global standards in future trade deals. Eliminating all tariffs on agricultural products in the market-access chapter as proposed would favor ever cheaper production methods. Likewise, TTIP's focus on reducing or eliminating regulatory differences and protections-"regulatory harmonisation"—would promote cheaper industrialised practices prevalent in the U.S. and increasingly prevalent in the EU. As a result, TTIP is likely to stand in the way of much-needed regulatory reform in the U.S. as well as proposals in the EU that seek to address climate change, animal welfare and the role of GMOs in the food system.

CHAPTER 1: THE CURRENT U.S. AND EU MEAT INDUSTRIES

The U.S. is the largest producer of beef in the world at 11.4 million tonnes (over 12.5 million American tons), and large-scale industrial feedlots dominate the U.S. industry. Such facilities can hold more than 18,000 head of cattle at a time. In comparison, a feedlot with 200 head of cattle is considered "large" in the EU. The U.S. is also the largest exporter of pork, and both sectors have experienced a shift from family farms to large operations controlled by consolidated global corporations. Over the last two decades, 90 percent of the independent pig farms in the U.S. have been wiped out, leaving one company in control of over half of the pork production in the country and depressing prices paid to farmers. A similar story can be told about chicken production. In 2012, the average size of U.S. broiler chicken operations was 166,000 birds, a number that pales in comparison with the largest operations, such as in California, where the average broiler inventory per operation at any one time exceeded 1.7 million birds, making the U.S. the largest poultry meat producer and second largest exporter.

The expansion of industrialised farming in the EU has been slower than in the U.S. About 40 percent of the land area in the EU's 28 Member States (EU-28) is farmed, and family farms in the EU's 28 Member States were responsible for rearing 71.1 percent of all livestock in 2010. Organic farms are a growing share of EU agricultural holdings, comprising a significant percentage in some countries such as Austria. The family farm model is nonetheless threatened as the EU's meat sector becomes increasingly concentrated. Through mergers and acquisitions and expansions into additional countries, five producers now dominate in the major meat-producing countries.

Although the EU beef industry has contracted since the early 2000s, Europe remains third in global production of beef at over eight million tonnes. EU beef production is considered at a competitive disadvantage compared to the U.S., with higher costs and more regulatory restrictions. Three countries—France, Germany and the U.K.—accounted for roughly half of the total EU beef production in 2013. Instead of the feedlot system, pasture finishing of beef is common in Ireland and to a lesser degree in the U.K. and France, while silage systems predominate in the rest of Europe.

The EU is the second largest exporter of pork. With stagnating EU demand, the focus on export markets has driven overproduction, bigger farms and intense price pressures, ultimately lowering the prices pig farmers receive. While the sector is less consolidated than in the U.S., the industry has experienced similar structural change, including more vertical integration and increasing control by slaughtering firms. By 2012, 55 percent of the commercial value of pork in Germany was in the hands of the four biggest slaughtering companies operating in the EU—Danish Crown, Tonnies, Vion and Westfleisch. In fact, fully 42 percent of German pig producers went out of business between 2001 and 2009 during a period of rapid consolidation.

The European broiler business is currently a domestic-focused industry. Here as well, vertical integration of production and slaughtering, pushed by mergers and acquisitions, is increasing. According to the 2010 Farm Structure Survey, 18.5 percent of all European farms raised broilers. "Professional farms"—barely one percent of the total number of broiler farms are considered those with more than 5,000 birds. More than three-quarters of farms with more than 5,000 broilers were located in France, Spain, Poland, Italy, Germany and the U.K.

CHAPTER 2

Climate

The U.S. lacks binding regulations to cap methane and nitrous oxide emissions resulting from feedlots or livestock production, and government estimates may understate the amount of methane in the country's annual greenhouse gas inventory by as much as half. In the EU, agriculture has been deemed responsible for 40 percent of the EU's methane emissions, and the recently revised National Emissions Ceilings Directive includes a cap of 30 percent on methane emissions. Nonetheless, the agriculture-related provisions of the Directive have come under attack by the European livestock industry. Lobbyists specifically identified the TTIP negotiations as a reason not to cap agriculture-related emissions. Thus, the prospect of increased competition resulting from TTIP is already providing incentives for deregulatory harmonization, and new trade-based rules will make it even more difficult to effectively address climate change.

Labour

In both the U.S. and EU, meat operations exploit some of the most vulnerable workers who often lack full legal protections accorded employees in other sectors of the economy and who work in unsafe and dehumanizing conditions. In the U.S., animal agricultural operations are exempted from many wage, hour and other labour standards applicable to other industries, and many operations are located in states with weak environmental standards that also discourage collective bargaining. In the EU, agribusiness operations take advantage of the Posting of Workers Directive that allows them to skirt wage standards and collective bargaining protections available to other workers. These companies have also greatly expanded their operations into newer Member States in Eastern Europe, taking advantage of weaker economies and fewer environmental and other protections. Increased competition through TTIP would exacerbate these terrible labour conditions and diminish possibilities for trade unions to push for needed reforms on both sides of the Atlantic.

Animal Welfare

Significant disparities between the EU's modern-day animal welfare standards and those in the U.S. which are based on 19th century sensibilities and law, make this policy area ripe for agribusiness attacks through trade rules. The EU's enhanced animal welfare standards are already being blamed for higher production costs, and efforts to continue to improve are meeting resistance because of competition. TTIP negotiations will be a large "elephant in the room" if and when the Commission decides to embark on a new strategy on animal welfare based on its recent survey of public opinion, which demonstrated that an overwhelming majority of EU citizens support even stronger animal welfare protections.

Environment

Both U.S. and EU governments have failed to recognise and adequately address the environmental damage and climate impacts caused by industrialised agriculture. A UN Food and Agriculture Organisation (FAO) report found that livestock farming alone costs the environment \$1.81 trillion per year, equivalent to 134 percent of its production value. Our review of environmental regulations on air, water and soil governing the meat sector shows an urgent need to address the gross environmental externalities of industrial animal production on both sides of the Atlantic.

Cloning

The European Parliament resolution on the TTIP negotiations identified animal cloning for farming purposes as a policy area where the EU and U.S. have very different rules and where changes to the EU ban should be "nonnegotiable." Nonetheless, with cloning legal in the U.S., the TTIP negotiations appear to be adding pressure on the European Commission to accede to agribusiness interests and modify its policies. In 2013, following the initiation of TTIP negotiations, the Commission put forward two linked proposals that would ban farm animal cloning but allow the sale of meat and milk produced by descendants of cloned animals. To date, negotiations on the Commission proposals have been stalled, but this is an emerging policy

area that could be at risk under TTIP's regulatory cooperation provisions.

Public health and antibiotic resistance

Threats of increasing bacterial resistance to antibiotics have been recognised since the 1970s, yet antibiotic use in food animal production continues to rise. At least two million Americans are infected with antibiotic-resistant bacteria each year and a minimum of 23,000 die as a result. In the EU, infections from antimicrobial resistant bacteria kill 25.000 people annually. In response to this public health crisis, governments in 2015 agreed to launch the Global Action Plan on Antimicrobial Resistance led by the World Health Organisation. The U.S. currently has only voluntary restrictions on antibiotics use in animal production, and its SPS proposals encourage mutual recognition of its policies. The EU's proposed article in TTIP's SPS chapter on anti-microbial resistance suggests creating a technical working group and harmonising data collection on the use of antibiotics. However, it is highly unlikely that U.S. negotiators would agree to this weak proposal, given the power of the U.S. meat industry, which spent considerable resources to undermine even non-binding federal dietary guidelines suggesting eating less processed and red meat.

Traceability and accountability

A key requirement of EU food safety policy is traceability, which aims at tracking food and ingredients for human consumption at all stages of production, processing and distribution. This approach is based on the precautionary principle and incorporates food hygiene throughout the production chain, providing the legal and policy basis for restrictions on the use of antibiotics, hormones and other chemical inputs in meat production, as well as strict GMO regulation. The U.S. lacks both the authority and the capacity to insure traceability, and the U.S. meat industry has stressed that to be acceptable to the industry, participation in this system must be voluntary. In short, traceability is bad for the U.S. industry's bottom line.

Assessing risk-precaution versus cost-benefit

Both the EU and U.S. regulatory systems look to science to assess, manage and communicate risk, but there are key differences in how each government uses science in developing its regulations and how scientific uncertainty is dealt with. The EU uses the precautionary principle to prioritise public health and the environment, whereas the U.S. uses the

Undermining EU's zero tolerance for unapproved GMOs

The U.S. has proposed a new provision in TTIP concerning biotechnology based on language in the TPP, but even more biotech industry-friendly. The proposal would require the EU to participate in the Global Low Level Presence Initiative (GLI) whose goal is to ensure that contamination through inadvertent exports of unapproved GMOs does not result in rejection of such shipments. This would essentially undermine the EU's zero tolerance policy.

cost-benefit approach that tends towards regulating the safety of the end product rather than focus on preventing contamination throughout food production, processing and distribution. The U.S. meat industry continues to challenge the precautionary principle and expects convergence with the U.S. approach through TTIP.

Genetically modified (GM) feed and zero tolerance

GM risk assessment, approval and labeling issues have been highly contentious on both sides of the Atlantic. Policies of EU Member States and U.S. states have been inconsistent with central government decisions, often taking a more cautious approach and supporting more comprehensive labeling. The biotech and feed industries have made it clear that they see TTIP as a prime opportunity to speed up GM approvals and to centralize decision-making at the EU and U.S. levels of government. Even before the formal initiation of TTIP negotiations, the European Commission started relaxing its biotech rules under industry pressure. Europe's zero tolerance contamination policy was watered down in 2010 to allow for a low-level presence of GMOs in animal feed under certain conditions

In each issue area—be it climate and the environment, GMOs, antibiotics, animal welfare, food safety or social justice—citizens in both Europe and the United States are interested in seeing stronger, more effective regulations. And they are interested in reining in the excesses of transnational corporations. TTIP will take us in the opposite direction and set the global standard for other trade deals.

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CHAPTER 3: CORPORATE MEAT'S TAKEOVER THROUGH TTIP

Liberalised tariffs

Industrialised practices prevalent in the U.S. produce meat more cheaply than in the EU. Farm gate prices for beef, pork and poultry for U.S. and EU farmers in the last ten years demonstrate that U.S. farmers are paid consistently lower prices for their animals. Such cost-cutting is only possible with the extreme corporate concentration of the meat industry that allows for exploitation of farmers and workers and shifts environmental and public health costs onto the taxpayer. The EU lacks the reliable livestock supplies, low-cost feed and economies of scale that define the U.S. meat industry. Studies by the United States Department of Agriculture (USDA), European Commission, European Parliament, NGOs and farming interests all find that TTIP, as currently proposed, will increase meat imports to the EU from the U.S. and could seriously disrupt the meat sector and other agricultural sectors of Europe's economy. The EU meat industry will likely respond by further concentrating market power and in the process, price out many more independent and small producers.

While EU officials insist that the most sensitive agricultural products will be exempt from "complete tariff liberalisation," leaked documents demonstrate that negotiators' actions do not match the rhetoric. Live beef cattle, animal and dairy products, and animal feed products are all slated for tariff liberalisation, even up to zero tariffs over time. The EU has also indicated that although some tariffs will not be eliminated, tariff rate quotas for hormone-free beef are likely to be expanded. These market access offers alone will result in a "race to the bottom" for EU production as European meat processors compete with the U.S. However, combined with TTIP's deregulatory agenda, food and agriculture in the EU are likely to undergo their biggest industrial transformation yet.

Threats from regulatory cooperation

TTIP's goal to eliminate "non-tariff barriers" or "trade irritants" threatens sustainable farming regulations on the environment, public health and animal welfare. Where there are vast differences between regulatory regimes, those standards that are more protective (and usually, more costly to implement) are at significant risk. With TTIP envisioned as a "living agreement," future rulemaking processes at the EU and Member State levels (and likewise at U.S. federal, state and local levels) will be affected. Proposals on regulatory cooperation that would lower food and farming standards run throughout TTIP both in a "horizontal" chapter on domestic regulatory practices intended to apply across the entire agreement, and embedded in specific chapters.

These provisions would grant unparalleled influence to business as a key stakeholder, screening regulations to insure that only the "least trade restrictive" can go forward and shifting policy-making from open, democratic processes to informal, less accountable negotiations. Many civil society organizations have identified the real dangers presented by increased corporate influence on the development of public health and safety standards posed by both the U.S. and EU regulatory cooperation texts.

Examples of Corporate Meat and Dairy Investors in the EU and the U.S.

U.S. firms and subsidiaries in the EU:

- JBS—headquartered in Brazil and the world's largest producer of industrial meat. Has been aggressive in acquiring numerous meat operations in the U.S. and has made no secret about expanding into Europe.
- WH GROUP—a shell company for Chinese agribusiness Shuanghui/Shineway—the largest pork processor in China and now the world—acquired U.S. based Smithfield in 2013. Smithfield has plants in Poland and Romania with plans for further expansion.
- CARGILL MEATS EUROPE—has processing facilities in the U.K. and France and consistently ranks as one of the top three meat producers in the world.

EU Dairy Firms in the U.S.

- DANNON—U.S. subsidiary of the French giant Danone (third largest dairy producer in the world); is headquartered in New York and has plants in Ohio, Texas, Utah and Oregon.
- PARMALAT U.S.A.—Italian subsidiary of French Lactalis Group (second largest dairy producer in the world); filed for bankruptcy in the U.S. in 2004. Its products include the brand names Farmland Dairies, Skim Plus, Welsh Farms, Sunnydale, Beatrice Foods and Black Diamond.
- LACTALIS AMERICAN GROUP—subsidiary of Lactalis Group; has offices and plants in New York, Idaho and Wisconsin.
- SODIAAL—French firm advertising itself as France's largest dairy cooperative; has a 49 percent share of Yoplait SAS. U.S.-based General Mills owns a 51 percent share.
- ADVANCED FOOD PRODUCTS LLC is a subsidiary of French firm Savencia Fromage and Dairy (formerly Groupe Bongrain SA); has offices in Pennsylvania, Wisconsin and California.

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Taken together, these measures implement a deregulatory agenda that will:

- Prioritise trade effects over the public interest
- Undermine the precautionary principle
- Weaken protective standards through mutual recognition and harmonisation of standards
- Streamline "modern agricultural technology" approvals relying on confidential industry studies
- Heighten the burden of proof on regulators to make and defend regulatory decisions
- Delay protective regulations through "paralysis by analysis"
- Create a regulatory chokepoint by "managing" regulations
- Chill the development of new standards addressing changing circumstances and new data
- Institutionalize and expand corporate influence throughout the standard-setting process
- Limit more protective standards at EU Member State and U.S. state levels of government
- Create new possibilities for trade-based corporate legal challenges and new pools of data to support those challenges

State to state and investorstate dispute settlement (ISDS)

Combined with these provisions in the agreement, public interest regulations may be at serious risk when considered more trade restrictive than "necessary" and when they impinge on a corporation's expected profits. This has great significance for a number of rules that are being revised or created in the EU, such as the Posting of Workers Directive, cloning, Country-of-Origin-Labeling (COOL), climate legislation and future Animal Welfare rules, as well as policies adopted by U.S. state governments that go beyond federal standards, such as GMO and chemical labeling requirements. With transnational meat corporations such as JBS, Cargill and Smithfield present and expanding on both sides of the Atlantic, ISDS could newly empower these firms to challenge food and farming policies that hurt their bottom line-even if they are nominally headquartered in other countries such as Brazil or China

CONCLUSION

TTIP threatens citizen-led movements toward a healthier, more just and more sustainable food system in the EU and the U.S. It will promote the expansion of industrial meat production at a time when civil society is demanding the oppositemeat produced humanely, locally, free of harmful substances and benefiting rather than degrading the environment. Both by eliminating tariffs and through its regulatory cooperation provisions, TTIP will encourage a race to the bottom to achieve the cheapest methods of production and processing at the expense of other public goods. While undermining EU food policies that are strongly supported by consumers, it will also provide the framework for corporate attacks on U.S. state-level policies that go beyond federal minimum standards, undermining progress made by the U.S. food justice, farmer and consumer movement to regulate the meat industry and ultimately transform the U.S. food system. Negotiators' statements to the contrary, TTIP must be recognised for what it is: a multi-pronged strategy promoted by global agribusiness concerns on both sides of the Atlantic that will establish an ongoing mechanism for deregulation and meat industry consolidation. It is undemocratic; the policies it promotes are unsustainable; and it must be rejected by anyone who cares about good food and farming, human and animal rights and the future of our planet.

Full paper available at iatp.org/selling-off-the-farm.

References, endnotes, and bibliographic information can be found in the endnotes of the full paper.

Selling Off THE FARM INTRODUCTION

Food is more than sustenance. Food is at the heart of our cultural identity, and its production and trade have huge impacts on the world economy and environment. As the European Union (EU) and the United States (U.S.) engage in negotiations toward a potential trade agreement, the Transatlantic Trade and Investment Partnership (TTIP), food and agricultural issues are a significant focus.

The EU-U.S. trade negotiations are taking place at an interesting and formative time. Consumer interest in locally grown, organic and minimally processed food is expanding on both sides of the Atlantic, along with public policy supporting these consumer choices.¹ In the EU, "[r]egionally produced products are currently experiencing a boom, which is even more successful than the boom in organic products," and there is growing interest in plant-based diets.²

At the same time, globalization and an increasingly concentrated and vertically integrated agricultural sector are pushing food production in a completely different direction—toward increasing overall production through industrialised systems located where labour is cheap and environmental standards are weak. The debate over TTIP is exposing these conflicting trends. As UnternehmensGrün (German Federal Association of Green Business) states, there is "conflict in the TTIP debate between the industrial, growth-oriented agricultural model on the one hand and the regionspecific, sustainable production and food marketing model on the other."³

Nowhere is this disconnect between societal interest in healthy, local food and the global industrialization trend more apparent than in the meat sector. Pioneered in the U.S. over 50 years ago, industrial meat production has grown exponentially, now spanning a global complex of production, processing and marketing dominated by ever fewer and larger transnational food and agricultural corporations. Low prices at the supermarket do not reflect the enormous societal and environmental cost of factory-farmed meat. Evidence now clearly shows that industrial meat production is associated with an untenable use of natural resources, reduced biodiversity, significant greenhouse gas emissions, animal cruelty, destruction of local economies, horrendous working conditions and health risks to consumers.⁴ The U.N. has repeatedly stated that overconsumption of meat and dairy products in western countries is unsustainable.⁵

While agricultural intensification has been promoted as the key to feeding an ever-growing world population, we know that there is already enough food on the planet to feed the world's projected population. Agricultural intensification is unnecessary and threatens the collapse of planetary resources on which the food system depends. There is growing support for the proposition that a greater emphasis on plant cultivation and a plant-based diet is both a more sustainable environmental model and a better long term economic model.⁶

The voices of rural communities, farmers, consumers and a wide range of civil society groups calling for more sustainable and ethical production methods are starting to be reflected in public policies. Demand for organic products in Europe is rising, and recent Eurobarometer public opinion surveys show strong citizen support for reducing environmental impacts and improving animal welfare.7 New implementing strategies are being pioneered; in Germany, for example, farmers in conjunction with civil society have established projects to produce high quality regional dairy and meat with better consumer labels and higher producer prices in recognition of this improved quality.⁸ Even in the United States, where industrialised agriculture first took hold, policies such as local farm-to-school purchasing, support for farmers' markets, community supported agriculture, expanding local slaughtering and processing capacity and labeling locally-produced products are on the rise.9

The emerging policy shift favouring sustainability is being undermined, however, by international trade rules. Trade agreements have a profound influence on how regulations on animal food production are developed and implemented and whether they are enforced. There is every likelihood—based on prior trade agreements, publicly available TTIP text and the ubiquitous and powerful influence of agribusiness on our political institutions—that TTIP will further entrench the industrial model of meat production. If agreed to, it would be the largest and most comprehensive bilateral trade agreement ever signed, as well as a blueprint for future international agreements. Consequently, TTIP not only threatens current efforts in the EU and U.S. to build a healthier, more compassionate and more sustainable food system, but the trade deal also could expand factory farming worldwide by setting global standards in the future.

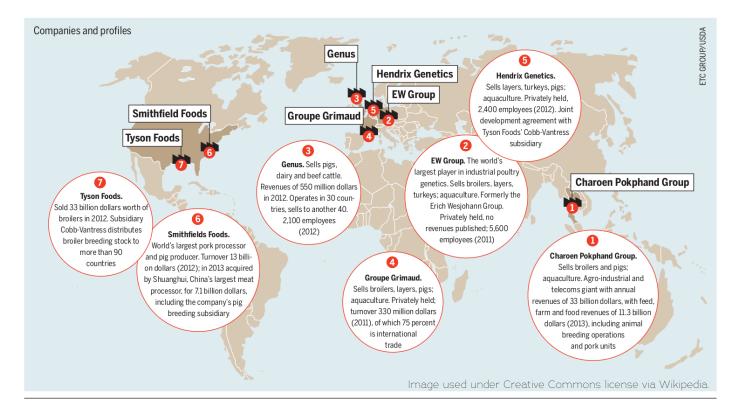
What is at stake is well illustrated by the sheer force of lobbying by agribusiness; analysis of numbers of lobbying encounters between industry groups and the European Commission's Directorates-General (DG) trade shows that agribusiness-related lobby groups by far outnumber all other sectors.¹⁰ For agribusiness, the goal is simple: to lower tariffs and weaken regulations that support farmers, consumers and rural communities in order to expand markets and increase profits through more trade and lower costs of doing business. Eliminating all tariffs on agricultural products would lead to more trade in agriculture on both sides of the Atlantic, increasing competition that would favour ever-cheaper production methods, including industrialised farming. For the EU, the resulting incentives for overproduction would further strain farmers who already struggle with lower farm gate prices and higher input costs.

With many tariffs already set at low levels, however, the most significant trade-related threat to sustainable farming lies with the agribusiness goal of eliminating "non-tariff barriers" or "trade irritants" represented by regulations protecting the environment, animal welfare and food safety, and promoting localization. Proposed mutual recognition and a shift to "risk based" cost-benefit analysis will chip away at differences in standards between the U.S. and EU, overriding the very real demands of citizens who have fought for effective protections. If agribusiness lobbyists and trade negotiators have their way, these regulatory convergence efforts will be institutionalised by means of the novel and sweeping TTIP chapter on "regulatory cooperation" and "good regulatory practices."

Regulatory cooperation would create a "living agreement" that would limit regulatory protections long after TTIP goes into effect and give unparalleled influence to business as a key stakeholder, permit the screening of regulations to insure that only the "least trade restrictive" go forward and shift policy-making from more open, democratic processes to informal and less accountable negotiations led by trade technocrats. A key demand of agribusiness, regulatory cooperation risks a race to the bottom for public health, the environment, producers, workers, consumers and animals.

This paper examines how TTIP will expand industrialised farming in Europe, delivering a significant blow to small independent and regional meat producers, while also undermining nascent campaigns in the U.S. to shift control of the food system away from powerful corporations toward a more just, humane and healthier way of food production. It provides an overview of key regulatory issues central to meat production, namely a.) labour policies and working conditions; b.) animal welfare; c.) environment; and d.) consumer protection and food safety, including GMO policies. Finally, it analyzes how both tariff liberalization and TTIP's focus on reducing "non-tariff barriers," especially its regulatory cooperation agenda, will undermine rather than support a stronger framework for a better farming model.

Selling Off THE FARM CHAPTER 1 Moving inexorably toward a global, industrialised model of meat production



The industrialised model of meat production has taken hold and is expanding rapidly. Globally, industrialised farms are the fastest growing system of farm animal production, accounting for 72 percent of poultry production, 43 percent of egg production and 55 percent of pork production worldwide.¹¹ This expansion has been driven by large corporations; today, as few as ten companies dominate global meat and animal feed production.¹² As few as four companies control animal genetics globally. These companies promote a production model focused on overproduction and export markets. This has led to structural changes in meat production including bigger farms, lower prices and regional concentration. While reaping big profits, these companies have largely avoided paying the true costs, aided by weak and decentralized regulation and public policy that directly or indirectly subsidizes industrial production. While minimizing corporate financial costs, this model has simply shifted the burden to the public, which is forced to cope with both the financial costs and the long term environmental and public health impacts of nitrogen runoff, methane, antibiotic resistance and other zoonotic epidemics such as avian flu.

In the United States, meat production and processing is virtually fully industrialised and very concentrated with a few global corporations controlling the industry. Although the EU has been slower to adopt this model, it is now on its way down the same path. Whether or how TTIP goes forward may well determine what that future of EU animal farming will look like.

1.1 Overview of the U.S. corporate model

The U.S. meat sector is characterised by an oligopoly where a few companies dominate the entire chain. Four companies—Cargill, Tyson Foods, JBS and National Beef—controlled 85 percent of beef slaughter in 2012, and just two of these companies—JBS and Tyson controlled more than half of beef production. To put this in perspective, some EU Member States, such as Romania, have a drastically different structure for slaughter; in 2015, non-commercial cutting accounted for 80 percent of the slaughter.¹³ In contrast, over twothirds of the U.S. pork slaughter business is controlled by Tyson, JBS, Cargill and Smithfield Foods, and Smithfield alone controls over half of the pork production in the country. The poultry sector is similar; Tyson and JBS control over half of the broiler slaughter in the country.¹⁴

Fig. 1 Four-Firm Concentration in Livestock Slaughter by Type
of Livestock, 2003–2012

Year	Total Value Purchases (%)	Steers & Heifers (%)	Cows & Bulls (%)	Hogs (%)	Sheep & Lambs (%
2003	69	80	44	64	65
2004	67	79	43	64	65
2005	67	80	48	64	70
2006	66	81	54	61	68
2007	66	80	55	65	70
2008	68	79	55	65	70
2009	71	81	54	63	70
2010	67	85	53	65	65
2011	67	84	53	64	59
2012	68	85	56	64	62

Fig. 1: Four-Firm Concentration in Livestock Slaughter; Reproduced from: GIPSA 2014, USDA https://www.gipsa.usda.gov/psp/publication/ar/2013_psp_annual_report.pdf (accessed on March 10, 2016)

American farming underwent a massive structural transformation in the 80s and 90s as the U.S. prepared for entry into the World Trade Organisation and the implementation of the Agreement on Agriculture that it helped craft. The resulting corporate concentration of the meat sector and increasing industrialization of farming operations has been accompanied by a systematic decline in small scale, family-owned, independent, ecological and humane farming.¹⁵

The major corporate players in the meat industry are now both concentrated and vertically integrated, often combining control of feed, production, slaughtering and even distribution and marketing. Between 2002 and 2012, the total number of livestock on the largest industrialised farms rose by 20 percent,¹⁶ as small and familyowned and operated farms went out of business. The total number of farmers in the U.S. continues to drop, decreasing by 4.3 percent between 2007 and 2012 alone.¹⁷ This shift to massive agribusiness operations is clearly illustrated by the latest census data: in 2012, while 75 percent of all farms had sales of less than \$50,000, together these farms produced only three percent of the total value of agricultural products sold. In contrast, farms with sales of \$1 million or more—four percent of all farms—produced 66 percent of the total value.¹⁸

While consumer interest in organic and more "natural" meat, such as grass-fed beef, is growing, U.S. organic livestock production is quite limited. Beef products from "alternative" production systems such as organic or grass-fed farms account for only about three percent of the market currently, although this percentage is growing.¹⁹ Of the \$5.5 billion in organic sales in 2014, 12 percent came from sales of organic livestock and poultry, up substantially from 2008.²⁰

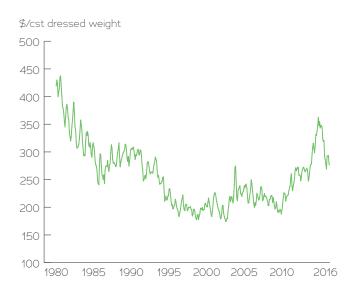
Beef industry

The U.S. is the largest producer of beef in the world at 11.4 million tonnes* (over 12.5 million American tons).²¹ Large-scale industrial feedlots that fatten beef cattle prior to slaughter now dominate the U.S. industry, even though in 2012 nearly half of these cattle were raised on ranches and farms with fewer than 100 head of beef cattle. These feedlots used to be smaller, family-owned operations but are now increasingly owned and operated by meatpacking companies such as Cargill and JBS and can hold more than 18,000 head of cattle at a time.²² In comparison, a feedlot with 200 head of cattle can be considered "large" in the EU. The oligopolistic character of the U.S. meatpacking industry results in payments to farmers well below the cost of production. For instance, R-CALF USA

^{* 1} tonne is equal to 1 metric ton; it equals 1,000 kg.

(a cattle producers' organisation), using United States Department of Agriculture (USDA) data, demonstrated that immense consolidation during the 80s and 90s resulted in a sharp decline of beef prices paid to farmers, except during the Canadian Bovine Spongiform Encephalopathy (BSE, popularly known as Mad Cow Disease) scare in 2003, and record-breaking short beef supplies in 2015.²³





Source: Dr. C. Robert Taylor, Professor Emeritus of Agricultural Economics & Policy, Auburn University. June 24, 2016.

Pork industry

The U.S. is also one of the biggest producers and exporters of pork. As in the beef industry, the concentration of factory farms in the pork sector has increased significantly in the last two decades. The average size of pig farms increased nearly 70 percent from 1997 to 2012; over a similar timeframe, the number of pig farms declined by 77 percent, from more than 240,000 in 1992 to fewer than 56,000 in 2012.²⁴ What is also significant is *who* these farmers are. Over the last two decades, 90 percent of the independent pig farms in the U.S. were wiped out leaving one company in control of over half of the pork production in the country today.²⁵

As in other sectors of the meat industry, vertical integration has played a key role in these changes, with meatpacking companies now exerting significant control over the entire pork market. In 1993, most pigs (87 percent) were sold at auction. Fast forward 20 years to 2013, and nearly all pork production (93 percent) was controlled by the meatpackers well before the time of slaughter, either because they owned the pigs outright (29 percent) or because they had already contracted to buy them (64 percent). The use of these contract arrangements has depressed the price paid to the farmers, which has exerted further financial pressure on independent producers; between 1993 and 2014, pig prices declined roughly 20 percent.²⁶

Broiler chicken industry

A similar story about increasing industry concentration and vertical integration can be told about chicken production. The U.S. is currently the world's largest producer of poultry meat and the second largest exporter.²⁷ There were 8.69 billion broiler chickens produced in the U.S. in 2015.²⁸ The number of broiler chickens on factory farms increased by nearly 80 percent between 1997 and 2012, with the average size of the operations increasing as well. In 2012, the average size of U.S. broiler chicken operations was 166,000 birds, a number that pales in comparison with the largest operations, such as those in the state of Nebraska, which exceeded half a million birds per operation, and in California where the average broiler inventory per operation at any one time exceeded 1.7 million birds.²⁹

The giant corporations that operate in the U.S. meat industry are global players, pushing out small producers, sourcing resources globally and externalizing financial and other risks. Much of the equipment, buildings and even feeder animals in factory-style operations don't come from the local community. Significantly, nearly all U.S. pork and poultry production is now conducted under contract, where the companies own the animals while the farmers take on the risk and cost of production. Unfair contracts are exemplified by the tournament system pioneered by Tyson (see box below) and adopted by all poultry giants including Perdue.³⁰ Combined with underfunded and weak government agencies assigned to ensure fair competition, an economic environment that benefits the big meat companies at the expense of a diminishing number of independent producers epitomizes the animal farming system in the U.S.

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The tournament system: a meat racket

Tyson has a major role in each of the poultry, pork and beef markets, and the company's tactics and practices are illustrative of the U.S. meat industry as a whole. In poultry, Tyson owns the breeding company that determines which birds are raised, the hatcheries where chicks are born and the chickens that it delivers to contract farmers who raise them. It owns the feed mills that fatten the birds up, the slaughterhouses where the birds are processed and the trucking lines that deliver the meat. This tightly integrated model has become the norm in U.S. pork production and has also allowed companies like Tyson to corner the U.S. beef market.³¹

While recording stellar profits, Tyson and the other major poultry companies in the U.S. are squeezing the farmer using a "tournament" system under which farmers are paid based on a nontransparent ranking system that compares each farmer's performance against his neighbours'. The winners are rewarded while the losers are paid so little that many go out of business. Farmers have no control over the main criteria for their success in the tournament—the health of the chickens and the quality of the feed that Tyson provides them-making the tournament more like a lottery and giving companies like Tyson the power to punish those who speak out for better conditions.³² As investigative journalist and author of The Meat Racket: The Secret Takeover of America's Food Business, Christopher Leonard says the tournament system is a "secretive system that ... consolidates information and power in Tyson's hands and pits farmers and communities against one another to earn a living."33

Efforts to address antitrust issues and to reform excesses in U.S. factory farming, including the tournament system, have been largely rebuffed as agribusiness has aggressively pushed back. An attempt by the Obama administration in the 2010 Grain Inspection, Packers and Stockyards Administration (GIPSA) rules to rebalance the power between farmers and food companies by banning the tournament payment scheme and beefing up antitrust authority has been largely blocked by aggressive industry lobbying. Only one reform has been implemented so far: allowing poultry farmers to sue meat companies in court for contract disputes.³⁴ At least one such lawsuit has been filed in Kentucky.³⁵ However, since 2011 the U.S. Congress has prevented implementing GIPSA rules that would curtail the most abusive practices of the industry, including limiting free speech, asserting that the "rules would harm the tournament system in the poultry industry."36

At the U.S. state level, similarly heavy-handed tactics have been used to prevent reforms. For example, in 2009, Ohio voters approved an initiative backed by major agribusiness interests that changed the Ohio state constitution to enable an appointed board to have unchecked power to set standards for livestock and poultry in the state.³⁷ Agribusinesses raised more than 5 million dollars to successfully pass the referendum and provide the industry with a way to regulate itself.³⁸ States are also being pressured to repeal antitrust laws that support family farm ownership and limit corporate ownership of livestock operations in order to prevent abusive contractual arrangements associated with the meatpacking industry. In February 2016, Nebraska, the last remaining U.S. state that banned corporate ownership of pig farms, repealed its law after heavy lobbying by Smithfield.³⁹ Only nine states prohibit or limit corporate farming: South Dakota, North Dakota, Oklahoma, Iowa, Minnesota, Wisconsin, Nebraska, Missouri and Kansas.⁴⁰ These laws, some of which were enacted in the 1930's, are increasingly threatened by the industry lobbying for repeal.⁴¹

"Right to Farm"

All 50 states have "right to farm" laws, originally meant to protect farmers and ranchers from nuisance lawsuits brought by individuals who moved to rural areas where traditional agricultural operations already existed.⁴² In the last decade, however, there has been a concerted effort by meat corporations to convert the "right to farm" into the right of corporations to farm the way they choose. Pushed by agribusiness, states are changing the scope of these laws and even amending their state constitutions to limit controls on intensive agricultural practices, including blocking animal welfare provisions, such as restrictions on gestation crates and battery cages. In 2012, North Dakota amended its constitution to include a broad right to engage in "modern farming practices," providing "No law shall be enacted which abridges the right of farmers and ranchers to employ agricultural technology, modern livestock production and ranching practices."43 This essentially provides a blank check to meat corporations to expand their factory farms and takes away control from local communities who may wish to regulate their practices. Promoted by a group called Missouri Farmers Care, whose members include Cargill and Monsanto, Missouri similarly amended its constitution in 2014.44 Constitutional amendments to guarantee the right to engage in farming and ranching practices and prevent new regulations without a "compelling state interest"



will be on the ballot in Nebraska⁴³ and Oklahoma⁴⁶ when voters go to the polls in November, 2016. Local Ordinances are often used by communities to prevent the establishment of large animal factory farms on the grounds of public health concerns. Sweeping new provisions such as "compelling state interest" would not only prevent a large number of regulations from being proposed at the state level, but would also

allow the state to override local control. New Mexico legislation enacted in 2016 to make it harder to lodge complaints about animal mistreatment, pollution and noise aligns with a model law promoted by the American Legislative Exchange Council, an industry-funded group that brings together large corporations and state lawmakers to write pro-business legislation.⁴⁷

1.2 Overview of the EU: Family farms going corporate?

The expansion of industrialised farming, spurred by the EU's export orientation, has been slower to take hold than in the U.S. Remarkably, about 40 percent of the land area in the EU's 28 Member States (EU-28) is farmed, which has implications for the natural environment and rural communities.48 The meat sector accounts for one quarter of the total value of agricultural production, and in 2010, nearly seven million holdings (6.92 million) reared livestock, representing 56.5 percent of EU-28 farms.⁴⁹ While family farms (defined as farms where over half the employees are family members) still make up close to 97 percent of all 12.2 million EU agricultural holdings, the trend in the livestock sector is toward fewer and less diverse farms. Since the 1980's "[s]mallholders on mixed farms have gradually given way to larger-scale, specialised livestock holdings" where a minimum of two-thirds of farm income is derived from livestock.⁵⁰

Even so, family farms in the EU-28 were responsible for rearing 71.1 percent of all livestock in 2010; only 21.8 percent of livestock operations were on farms with no family labour.⁵¹ In Romania, for example, 92 percent of the cattle is owned by family farms and only 7 percent belongs to corporations.⁵² Organic farms are a growing, although still small, share of EU agricultural holdings generally (six percent or less in most Member States) but comprise a significant percentage in some countries, such as Austria, where 12 percent of the farms were organic and nearly one-fifth of the cattle population was organically raised in 2009.⁵³

Despite the prevalence of family farms in the EU, the meat sector is becoming increasingly concentrated. Through mergers and acquisitions and expansions into additional countries, five producers now dominate in the major meat-producing countries. These producers are "capturing half of the production of beef and veal in France, nearly two-thirds in Germany and 60 percent or more in the U.K."⁵⁴ In 2010, fifteen companies controlled nearly 38 percent of the EU poultry market, 36 percent of beef and veal production and 37 percent of pork production.⁵⁵

Beef industry

Europe is third in global production of beef at over eight million tonnes.⁵⁶ Although a major exporter in the 1980's, the EU beef industry has contracted since the early 2000s with policy changes and reduced government supports, and today "most EU beef production can hardly be seen as competitive on international markets," according to a recent European Parliament report.⁵⁷ Three countries—France, Germany and the U.K.—accounted for roughly half of the total EU-28 beef production in 2013.⁵⁸

The average size of EU beef farms is small compared to the U.S., and production systems are dramatically different. Instead of the feedlot system, pasture finishing of beef is common in Ireland and to a lesser degree in the U.K. and France, while silage systems predominate in the rest of Europe.⁵⁹ The exceptions are Spain and Italy, where cattle are fed in feedlottype installations and either slaughtered as yearlings or increasingly finished for the internal European Market after transport from Ireland, Eastern Europe and other member states.⁶⁰ About two-thirds of the beef produced in the EU is from bull calves originating from the dairy industry, thus linking the fortunes of the beef sector to the dairy sector.⁶¹ As the dairy sector has contracted, there has been a shift to more "suckler cow" production.62 In contrast to the highly concentrated beef slaughter industry in the U.S., the EU beef slaughter industry is "very fragmented" and is experiencing a period of contraction with plant closures and fewer shifts. Rather than exercise significant control over cattle production, as is the case in the U.S., "slaughter plants are paying increasingly higher prices to attract cattle."63

Pork industry

Worldwide, the EU is the second largest exporter of pork (after the U.S.). With stagnating EU demand, the focus on export markets has been driving overproduction, bigger farms and intense price pressures, which have lowered the prices pig farmers receive. While the sector is less consolidated than in the U.S., the industry has experienced similar structural change, including more vertical integration and increasing control by slaughtering firms. Germany produces the most pig meat in the EU, about 25 percent, and production there is increasingly concentrated. By 2012, 55 percent of the commercial value of pork in Germany was in the hands of the four biggest slaughtering companies operating in the EU—Danish Crown, Tonnies, Vion and Westfleisch. In fact, fully 42 percent of German pig producers went out of business between 2001 and 2009 during a period of rapid consolidation.⁶⁴

These structural changes are also being experienced in Eastern Europe. The arrival of Smithfield Foods (now a U.S. subsidiary of the shell company WH Group, which represents the Chinese giant Shuanghui or Shineway Group, the world's largest pork producer and processor) in Poland and Romania contributed to a significant expansion of industrialised farming and a massive decline in the number of small farmers. For instance, there was a dramatic 90 percent decline in the number of pig farmers in Romania—from 477,030 in 2003 to 52,100 in 2007. Similarly, there were 1.1 million pig farmers in Poland in 1996, but by 2008 that number had fallen by 56 percent.⁶⁵

Broiler chicken industry

The European broiler business is currently a domesticfocused industry. Here as well, vertical integration of production and slaughtering pushed by mergers and acquisitions is increasing. According to the 2010 Farm Structure Survey, 18.5 percent of all European farms raised broilers. "Professional farms"-barely one percent of the total number of broiler farms—are considered those with more than 5,000 birds. More than three-quarters of farms with more than 5,000 broilers were located in France, Spain, Poland, Italy, Germany and the U.K.⁶⁶ In the countries with the most poultry production, the industry is more concentrated than in countries that produce less (mainly Eastern Europe). For example, the top five companies control 75 percent in of production in France, 66 percent in Germany and 60 percent in the U.K.⁶⁷

Selling Off THE FARM

CHAPTER 2

The true costs of industrialised meat production and the struggle for more humane and environmentally sensitive practices



To understand what is truly at stake in TTIP, we must look beyond tariff levels and consider the big picture—the societal and environmental costs associated with meat production and processing systems. If we accept the premise that TTIP will further accelerate the shift to industrialised meat production—and our review of the literature, discussed in Chapter 3 of this Report, indicates a consensus on this point⁶⁸—then it follows that TTIP also risks a significant increase in the negative externalities of that system. In fact, whether in the U.S. or the EU, large scale meat production and processing carried out by vertically integrated, concentrated agribusiness is accompanied by significant costs to farmers, slaughterhouse workers, consumers, the environment, animal welfare and indeed, the fabric of our communities.

Much attention has been paid to different food practices such as the use of growth promoters or chlorine rinses, which are a major component of U.S.-style industrialised meat production. While consumer food safety considerations are significant, other damaging consequences of a shift to more industrialised food systems have received less attention in the TTIP debate. In the following section, we address not only food sanitation and safety issues, but also wages, labour standards and working conditions, as well as animal welfare, environmental quality standards and oversight in industrialised farming systems on both sides of the Atlantic.

2.1 Labour standards and working conditions

While we can't completely generalize across all sectors of the meat industry, it is a fact that the largest transnational companies have located their operations to take advantage of regulatory loopholes and economic conditions that reduce labour and other costs of doing business. In both the U.S. and EU, these meat operations exploit some of the most vulnerable workers, such as immigrants and temporary labourers, who often lack full legal protections accorded to employees in other sectors of the economy.

In the U.S., agricultural operations are exempted from many wage, hour and other labour standards applicable to other industries, and operations are often located in states with weak environmental standards that also discourage collective bargaining. In the EU, agribusiness operations—some are even the same corporations operating in the U.S, such as Smithfield—take advantage of the Posting of Workers Directive that allows them to skirt wage standards and collective bargaining protections available to other workers. These companies have also greatly expanded their operations into newer Member States in Eastern Europe, taking advantage of weaker economies and fewer environmental and other protections.

2.1.2 U.S.: PROFITS MADE ON THE BACKS OF VULNERABLE PEOPLE

Wages in the U.S. meat industry

The U.S. national minimum wage of \$7.25 per hour— \$15,080 annually for a 40-hour week—is a poverty wage that "is not enough for single parents to reach even the most basic threshold of adequate living standards."⁶⁹ To put this in perspective, the U.S. government-established "poverty level" for a family of three in 2016 is \$20,160; for a family of four it is \$24,300.7° Over time, the value of the minimum wage has eroded, creating a huge wage gap between minimum-wage workers and the average American production worker. Today, a minimum-wage worker earns only 37 percent of the average wage.⁷¹ Shockingly, some livestock workers in the beef cattle industry do not even earn this federal minimum and lack other wage protections. Agricultural workers are exempted from overtime pay provisions; smaller operations, and those "principally engaged on the range in the production of livestock," are exempted from the federal minimum wage under the federal Fair Labor Standards Act (FLSA), which sets minimum wage, overtime, recordkeeping and child labour standards.⁷²

The federal Bureau of Labor Statistics (BLS) reported that in June 2015, 51,706 people were employed in the U.S. beef cattle farming, ranching and feedlot operations. Although average weekly wages in beef livestock operations exceed the federal minimum wage at \$662 per week, many operations paid far less, bottoming out at \$85 per week in Aibonito County, Puerto Rico. Weekly wages at beef farm operations in some counties in Oklahoma and Ohio averaged around \$230.⁷³ These wage figures, based on data from a single quarter, may actually overstate annual earnings as employment can be seasonal, and they may reflect either more or fewer hours than the 40-hour standard.

An estimated 526,000 workers are employed in the animal slaughtering and processing industry.⁷⁴ While wages generally exceed the federal minimum, earnings remain at or below poverty level for work performed under difficult and even dangerous conditions. The mean hourly wage for the sector is \$12.44; for a family of four, the annual income of \$25,880 is barely more than the poverty level.⁷⁵ Federal data does not distinguish between pork, beef and poultry operations. Poultry processing wages are even lower than for other slaughtering and meatpacking jobs, averaging around \$9 per hour with few benefits; annual income for most is near or below the poverty line, ranging from \$20,000 to \$25,000.⁷⁶

2.1.3 WORKPLACE CONDITIONS AND SAFETY

The meatpacking and slaughtering industries have very high rates of injury and illness. The federal Occupational Safety and Health Administration (OSHA) reports that workers in food manufacturing are more likely to be fatally injured and experience nonfatal



Exposed workers report chest tightness; sneezing; blurry vision; and burning, itchy, or dry eyes. Peracetic acid, an antimicrobial agent used to kill bacteria on poultry carcasses, may also be harmful to workers.

injuries and illnesses than those in private industry as a whole.⁷⁷ In 2013, there were an estimated 7.8 injury cases per 100 full-time workers in meat slaughter and 5.4 cases for meat processing and an estimated 4.5 cases specifically for poultry slaughter and processing. Both injury and illness rates are higher than for other manufacturing jobs; in 2013, the Bureau of Labor Standards categorized the poultry industry and animal slaughtering as high-rate industries for illnesses because these industries had the highest incidence rate of total illness cases compared to other industries.78 A recent review of occupational injury data from just one company, Tyson Foods, revealed 34 reports of amputations and hospitalizations over a nine-month period. Of the 17 amputations, 7 occurred at beef-processing plants and another 7 at poultry-processing plants. Tyson has more than 400 facilities in 30 U.S. states; the data did not include information from 10 states that operate their own OSHA programs.⁷⁹

In the poultry industry, in an effort to produce ever more chickens per hour, line speeds have doubled since 1979 and often exceed maximum limits leading to many workplace accidents.⁸⁰ Workers in poultry facilities are also exposed to chemicals such as chlorine and chlorine byproducts from anti-microbial rinses sprayed on chicken carcasses and ammonia, which is used as a refrigerant. Exposed workers report chest tightness; sneezing; blurry vision; and burning, itchy, or dry eyes. Peracetic acid, an antimicrobial agent used to kill bacteria on poultry carcasses, may also be harmful to workers; exposure to the chemical is suspected as the cause of death for a USDA inspector in 2012.⁸¹

A shocking new report from Oxfam America details the inhumane conditions prevailing in poultry processing plants across the country, where workers are routinely denied toilet breaks and face retaliation for seeking to exercise basic human rights. The report states:

Workers struggle to cope with this denial of a basic human need. They urinate and defecate while standing on the line; they wear diapers to work; they restrict intake of liquids and fluids to dangerous degrees; they endure pain and discomfort while they worry about their health and job security. And it's not just their dignity that suffers: they are in danger of serious health problems.⁸²

A survey of 266 workers in Alabama conducted by the Southern Poverty Law Center found nearly 80 percent said they are not allowed to take bathroom breaks when needed. Enforcement data and worker surveys make clear that significant violations are occurring in plants associated with the largest poultry producers in states across the country including in Arkansas, Minnesota, Mississippi, North Carolina and the Delmarva region.⁸³ While OSHA's sanitation standard clearly prohibits such conditions, which may also violate U.S. anti-discrimination laws, inspection and enforcement is lacking, and workers face retaliation when they complain.⁸⁴

Because of workers' reluctance to file complaints or report injuries due to retaliation threats and the companies' own underreporting, official reports fail to accurately reflect the scope of workplace safety and health violations in the slaughtering and meatpacking industries. A 2013 report by the Southern Poverty Law Center and the Alabama Appleseed Center for Law and Justice, Unsafe at These Speeds: Alabama's Poultry Industry and Its Disposable Workers, found that of 302 current or previously employed workers interviewed, 45 percent were sent back to their job without any treatment or time to heal. Forty percent of injuries went unreported to the company, and about a quarter of all injuries discussed in the interviews went unreported because of the worker's fear of being fired or disciplined for reporting the injury, missing work to heal or seeking medical treatment.⁸⁵

OSHA's own inspections do not make up for underreporting by industry; the agency is understaffed and underfunded. The agency has enough personnel to inspect just one percent of all workplaces in the U.S. each year.⁸⁶ As a result, companies either escape fines due to lack of government oversight, or when they are fined, the amount of the penalty is not commensurate with the seriousness of the violation. In 2015, the average federal penalty issued by OSHA for a "serious violation"—health and safety hazards that pose significant risk of injury or death—was just \$2,148.87 Further, a poor workplace safety record doesn't limit payments and other benefits to the companies. For example, while Tyson has faced more than \$500,000 in fines for safety violations in the last six years, at the same time the company has been able to secure \$4.2 billion in federal contracts since 2000.⁸⁸

State-level enforcement is also inadequate. While OSHA is the primary monitor of workplace safety for meat processing workers, 22 states operate their own safety and health programs and enforce federal workplace safety standards instead of OSHA.⁸⁹ The effectiveness of state programs varies; although data shows states conduct more inspections and issue more violation notices than OSHA, in most states the penalties assessed for violations are even less than OSHA's minimal fines.⁹⁰

2.1.4 COMPENSATION FOR INJURY AND ILLNESS SUSTAINED ON THE JOB

There is no federal compensation system for workplace injuries and illnesses. State workers' compensation programs vary widely, are often difficult for injured workers to navigate and generally impose strict limits on eligibility and the amount of compensation available.⁹¹ This approach to providing care and compensation has resulted in a patchwork of inconsistent policies from state to state, encouraging a race to the bottom as states seek to be "business friendly." A recent investigative report found that since 2003, 33 states have passed laws that reduce workers' compensation benefits or make it more difficult for those with certain injuries and diseases to qualify, effectively "dismantling" the system "with disastrous consequences for many of the hundreds of thousands of people who suffer serious injuries at work each year."92 These deficiencies are exacerbated by inadequate access to medical care. Many employers fail to provide health insurance benefits and workers may be excluded from alternative health insurance coverage provided through the Affordable Care Act (ACA) because they live in a state that has refused to participate in the program. With the notable exception of California, many of the states with major meat sector operations have refused federal funding to expand access to health care for low-income workers under the ACA.93

2.1.5 COLLECTIVE BARGAINING AND UNION ORGANIZING

The right to organise unions and collectively bargain is protected by the National Labor Relations Act (NLRA).⁹⁴ Unfortunately, farm workers have been excluded from the protections of the NLRA since its passage in 1935, and not surprisingly, workers on feedlots and other concentrated animal production operations are generally not unionized.⁹⁵ Workers enjoy stronger union representation in beef (about 62 percent union density), and pork packing and processing (about 71 percent union density), but only about one-third of an estimated 250,000 poultry processing workers belong to a union. Unionized workers are generally better compensated and may have negotiated relatively better safety protections.⁹⁶



Members of the United Food & Commercial Workers International Union.

One reason for the minimal rates of unionization within the chicken processing industry may be the use of the contracting system and recruitment of workers who are particularly vulnerable to intimidation and least able to advocate for better treatment or for collective bargaining. As Oxfam reports in its 2015 study, Lives on the Line: The Human Cost of Chicken, the poultry industry uses labour contractors to find and recruit vulnerable workers, including migrants and refugees. Labour contractors pay wages to the workers, and these wages are usually less than what the plant would directly pay its own employees.97 Most of the poorly paid slaughterhouse labourers who work in chicken factories are minorities, according to federal figures cited by The Washington Post: 39 percent Hispanic, 16 percent black and 7 percent Asian.⁹⁸ Examples of poultry facilities employing refugee labour include a Tyson plant in Wilkesboro, North Carolina (refugees from the Karen tribe in Burma), the Tyson plant in Noel, Missouri (immigrants from the Sudan and Burma), plants in Albertville, Alabama (refugees from Eritrea and other Africans displaced by war and conflict are working at Wayne Farms through a labour broker), and a Pilgrim plant in Nacogdoches, Texas that employs "a couple hundred" refugees from Burma. The report further found that prison labour is also used to do jobs within some poultry plants.⁹⁹

The two largest meat industry associations—the National Chicken Council and the North American Meat Institute—actively oppose strengthening labour and food safety laws. Agribusiness associations and

corporations also have supported right-to-work legislation, which has been enacted in the territory of Guam and 26 states, including all of the southern states, where many meat facilities are located.¹⁰⁰ While these laws do not directly prevent workers from unionizing, they allow workers to opt out of paying union dues even where those dues are limited to paying for collective bargaining and providing direct assistance, such as representation in arbitration. These laws, which critics dub "right to work for less laws," are intended to weaken unions and they have effectively done so, reducing union membership and at the same time, reducing leverage when negotiating wages, health and safety, health care and retirement in contracts. As contracts become less effective, more workers opt out, and this cycle continues into a vicious spiral that further weakens the contracts and worker protections.

The negative impacts of this downward spiral can be seen most dramatically in the poultry sector, which is predominately located in the right-to-work South. The average worker in states with right-to-work laws makes 12.2 percent less annually than workers in other states when all other factors are removed. Median household income in states with these laws is 11.8 percent less than in other states, and 25.9 percent of jobs are in low-wage occupations, compared with 18.0 percent of jobs in other states.¹⁰¹

2.1.6 EU: COMPANIES ARE PLAYING OFF THE REGULATORY FRAMEWORK

While on paper, the EU appears to have higher labour standards than the U.S., in reality the meat industry has been able to *legally* underpay workers and limit their rights. These companies (sometimes the same U.S. or global corporations, such as Smithfield) have fully exploited loopholes in otherwise more protective EU regulations and, as in the U.S., have relied on subcontracting and recruiting migrants from economically disadvantaged regions. These corporations have also greatly expanded their operations into newer Member States in Eastern Europe, taking advantage of weaker economies and fewer environmental and other protections. The ability to "cherry-pick" between different regulatory frameworks allows management to reduce labour and other costs by avoiding regulations, including those governing minimum wages and collective bargaining, and has increased contingent, insecure employment situations.¹⁰²

EU-wide labour standards apply to both farm production and meat slaughtering workers. These cover general obligations regarding health and safety at the workplace; specific risks and vulnerable workers; equal treatment and opportunities for women and men; maternity and parental leave; protection against discrimination related to sex, race, religion, age, disability and sexual orientation; and part-time work, fixed term contracts and work hours.

This recitation of protective workplace standards fails to tell the whole story, however. First, wages generally are low in the meat sector, and the industry has used its political muscle to get favourable treatment. Setting statutory minimum wages is at the discretion of national governments, and only 22 Member States of the EU-28 even have a national minimum wage designated in legislation. Some Member States have minimum wages laid down in collective bargaining agreements, and some Member States with a high trade union coverage have the potential to avoid exploitative low wages through the use of collective action. Based on January 2016 data, monthly minimum wages vary widely, from 215€ in Bulgaria to 1,923€ in Luxembourg.¹⁰³ In Germany, the meat industry agreed to implement a sectorial minimum wage beginning in January 1, 2015 starting at 7.75€. This is less than the general minimum wage in Germany, which also went into effect January 1, 2015. Reflecting the power of the meat sector, it was permitted to pay less than the national minimum until 2017.¹⁰⁴ Even this reduced minimum wage, however, represented a significant increase in pay for meat workers, particularly in the east, indicating that prior wages were quite low, especially in comparison with other industries.¹⁰⁵ Low wages for meat processing workers is a key reason that meat giants such as Danish Crown relocated their packing plants to Germany and transformed it into the largest pork producer in Europe.¹⁰⁶

Second, the meat industry has managed to circumvent both the 1996 Posting of Workers Directive and the social security regulation 883/2004 through the extensive use of subcontracting chains. This allows them to skirt wage standards, social security costs and collective bargaining protections extended to other workers.¹⁰⁷ Ironically, the enlargement of the EU in 2004 and 2007, which might have been expected to reduce exploitation of Eastern and Central European workers, actually facilitated and expanded the use of contracted labour in the meat sector. Policies adopted to protect the German labour market from increased immigration made it easier to hire workers from Central and Eastern Europe through subcontractors.¹⁰⁸ So-called posted workers are supposed to be sent by their employer temporarily to work in another Member State. Instead, workers are employed by a subcontracting company; the usual practice is for German sub-supplier companies to further contract with Eastern European enterprises. The meat processing company avoids legal obligations to the worker and, along with the subcontracting company, greatly reduces its labour costs and pockets the profits.¹⁰⁹ Of the 30,000 employees in the slaughtering industry, every third worker is employed through subcontracting arrangements.¹¹⁰

Labour abuses continue, including excessive work hours, failure to provide promised housing and meals, wage theft through deductions related to equipment costs and irregular and shorted payments, and even cases of trafficking in human beings.¹¹¹ Although the European Commission recently proposed changes to the posted worker directive to address the wage disparities it causes, national parliaments in 11 Member States are pushing back and may succeed in halting the reforms.¹¹²

A similar subcontracting system is also prevalent in the U.K., where meat and poultry processors use agency workers to maintain the lowest possible price. In the larger meat processing firms, 10 to 50 percent of workers are subcontracted agency workers.¹¹³ Overall, migrants make up 70 percent of agency workers.¹¹⁴ A study by the Equality and Human Rights Commission found that these workers are frequently treated worse than directly employed workers including less pay, doing the least desirable jobs, inadequate or no toilet breaks, physical and verbal abuse, poor-quality personal protective equipment and inadequate overtime pay and holiday pay (if they are able to get holidays).115 Wage issues include receiving less pay than required by being paid fewer hours than the number of hours worked, being paid less than the national minimum wage, having wages withheld, having amounts above the legal rate deducted for housing and being charged unreasonable amounts for transport.¹¹⁶ These practices have been flagged as violations of human rights by civil society groups and member unions of the European Federation of Food, Agriculture and Tourism Trade Unions (EFFAT), who have some made headway in remedying the situation.

CONCLUSION

It is clear from this analysis that labour conditions in the meat industry are particularly egregious relative to many other sectors. Limiting labour and animal welfare protections are the industry's primary cost-cutting measures, which governments all too often enable because of the economic and political clout of the meat industry. Chapter 3 shows how increased competition through TTIP would exacerbate these terrible labour conditions for some of the most marginalized populations and diminish possibilities for trade unions to push for urgently needed reforms on both sides of the Atlantic.

2.2 Animal welfare

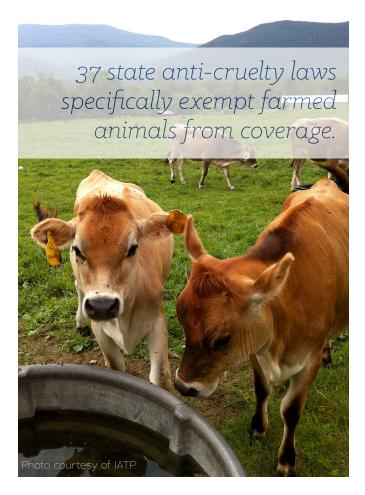
Fifty percent of pigs, 70 percent of chickens and 80 percent of all livestock are produced in intensive, industrial systems.¹¹⁷ "These so-called factory farms are at the heart of growing worldwide meat consumption"¹¹⁸ and the rearing, transportation and slaughter of farm animals associated with them have significant consequences for animal welfare. Treated as commodities with the emphasis on "efficient" production, industrialised meat operations cram animals together in barren pens, crates or cages, preventing normal behaviors such as nesting or foraging. This often causes the animals to inflict injuries on each other out of sheer boredom, frustration and stress. To reduce these injuries, mutilation, usually carried out without pain relief, has become commonplace. In addition, each year millions of live farm animals around the world are transported thousands of kilometers for slaughter or to places where they will be fattened for slaughter. This causes enormous suffering, including injury and death due to overcrowding, dehydration due to extreme temperatures, and excessive stress.¹¹⁹

Farm animals are sentient beings with intricate social relations and sophisticated psychological patterns.¹²⁰ Indeed, one of the founding documents of the EU, the Treaty on the Functioning of the European Union (2009), recognises this fact.¹²¹ Over the years, animal welfare standards have been developed to limit suffering, and a template for sustainable animal management is now well-established. Animal welfare groups believe that recognising farm animals as sentient beings means they should be treated with compassion, care and respect and to ensure that farmed animals have a decent quality of life and as humane a death as possible. Livestock farming can and should be carried out in a way that is appropriate for that species and allows animals to exhibit natural behavior. For example, animals should be kept in herds or flocks that allow them to develop their natural ranking and social relationships. Animals should be able to move around without hindrance, not kept in stalls without daylight or fresh air.122

Nonetheless, farm animals on both sides of the Atlantic continue to suffer. Despite the legal recognition of animal welfare as a priority by the EU, actual practices and enforcement still fall short. In the United States, legislative recognition of animal welfare values is extremely limited, with farm animals excluded from even the most basic federal protections.

2.2.1 ANIMAL WELFARE IN THE U.S.: HARKENING BACK TO THE 19TH CENTURY.

The U.S. lags well behind the EU on animal welfare, with no federal law governing the treatment of live farm animals and with the limited progress being made at U.S. state level jeopardised by agribusiness lobbying.¹²³ The nearly complete absence of welfare requirements for live farm animals is a boon for the U.S. meat industry's bottom line but completely out of sync with consumer and public expectations about a satisfactory level of protection.¹²⁴





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Animal welfare laws in the U.S. are both outdated and ineffective. The only federal law regulating animal welfare, the Animal Welfare Act of 1966, specifically excludes farm animals from its purview.¹²⁵ The Humane Slaughter Act of 1978, enacted to decrease suffering during slaughter, requires animals to be completely sedated and insensible to pain. However, this law applies only to cattle, pigs and sheep but not to chickens, turkeys, fish, rabbits or other animals routinely slaughtered for food.¹²⁶ Regarding the transport of animals, the applicable law–enacted in 1873– requires only that animals not be transported without food, water or rest for more than 28 hours within the U.S. This can exclude journeys starting or ending in Canada or Mexico which have become much more frequent since the North American Free Trade Agreement (NAFTA) and ignores differing needs between species and stages of development.127

Specific to beef cattle, there are only the voluntary welfare guidelines outlined in the national Beef Quality Assurance (BQA) program meant to improve the handling of more than 90 percent of feedlot cattle. The voluntary Transportation Beef Quality Assurance standard provides guidelines for handling cattle during transport.¹²⁸ The situation is barely better at the state level; 37 state anti-cruelty laws specifically exempt farmed animals from coverage.¹²⁹ A few states have attempted to ban the worst practices of factory farms.¹³⁰ For example, there is ban on tail docking for dairy cows in California, Ohio and Rhode Island, and California does not allow forced feeding of birds for foie gras. Nine states ban or are phasing out the use of gestation crates, battery cages are banned or restricted in four states (California also has banned the sale of eggs from battery cages), and eight states ban veal crates.¹³¹

Other state initiatives have been overturned through legal challenges, however. A California law banning the sale and slaughter of livestock unable to walk was struck down by the U.S. Supreme Court in 2012 on the grounds that the state could not supersede federal rules on meat production.¹³² In addition, so-called "ag-gag" whistleblower suppression laws banning photography and filming of animal production facilities and limiting animal abuse litigation have proliferated at the state level, although at least one of these laws has been struck down as unconstitutional by a federal judge.¹³³ Agribusiness interests are powerful at all levels of government, and as the New York Times recently stated in a hard-hitting editorial opposing "ag-gag" laws, "Factory farm operators believe that the less Americans know



The EU's enhanced animal standards are already being blamed for higher production costs, and efforts to continue to improve animal welfare standards are meeting resistance.

about what goes on behind their closed doors, the better for the industry. That's because the animals sent through those factories often endure an unimaginable amount of mistreatment and abuse."¹³⁴

2.2.2 EU'S ANIMAL WELFARE PROTECTIONS INCONSISTENTLY ENFORCED.

The EU's animal welfare protections are superior to the regulations in many other countries, including the United States. Council Directive 98/58/EC is the basis for the protection of farm animals, requiring Member States to establish regulations on suffering, freedom

of movement, accommodation, diet, inspection and reporting.135 The EU has specific laws regarding the farming of calves, pigs, hens and broiler chickens and bans some of the worst forms of cruelty, many of which are common practices in the U.S. The EU currently lacks a specific Directive on dairy cows and beef cattle. There are, however, EU-wide bans on veal crates (2007), battery cages (2012) and a partial ban on sow stalls (2013), which applies after the first four weeks of pregnancy.¹³⁶ Legislation includes all stages of animal production including at the farm level and transport.¹³⁷ Slaughter rules make it an offence to cause or permit an animal to suffer avoidable excitement, pain or suffering, and animals must be handled, stunned and killed using specific methods by licensed slaughterers.¹³⁸ Space constraints, additives in feed, water supply, veterinary care, stocking density and the ability to exhibit natural behavior are all features of European legislation with Member States expected to go beyond the EU level. Even market standards are being developed based on these legal standards.¹³⁹

Animals are recognised as sentient beings in European law, and the foundational treaties of the EU require that the welfare of the animals must be a consideration in lawmaking.¹⁴⁰ The EU's comprehensive body of law relating to the welfare of farm animals reflects the "Five Freedoms."¹⁴¹ The Five Freedoms have been adopted by professional groups including veterinarians and organisations such as the World Organisation for Animal Health, the Royal Society for the Prevention of Cruelty to Animals and the American Society for the Prevention of Cruelty to Animals.

Five Freedoms – 5 aspects of animal welfare under human control

- Freedom from hunger or thirst by ready access to fresh water and a diet to maintain full health and vigour
- Freedom from discomfort by providing an appropriate environment including shelter and a comfortable resting area
- Freedom from pain, injury or disease by prevention or rapid diagnosis and treatment
- Freedom to express (most) normal behaviour by providing sufficient space, proper facilities and company of the animal's own kind
- Freedom from fear and distress by ensuring conditions and treatment which avoid mental suffering

. . 20

Animal welfare rules and enforcement in the different Member States vary. In parallel with the European legislation, all Member States must enact their own national legislation, which must at least conform to the minimum EU regulations but which may be more protective.¹⁴² Sweden, Austria and the U.K.¹⁴³ have taken the lead on animal welfare legislation with stricter regulations for all farm animals covered by EU regulations. In other countries including France, Italy, Spain or Hungary, the regulations are at the level of European standards.¹⁴⁴

These protective animal welfare standards are not always complied with nor properly enforced, however. The EU animal welfare strategy for 2012-2015 found that a number of provisions failed to deliver intended benefits, because "[s]ome Member States do not take sufficient measures to inform stakeholders, to train official inspectors, to perform checks and to apply sanctions."¹⁴⁵ A 2011 Commission report found implementation of the EU's animal transport regulation has also lagged, and "severe animal welfare problems during transport persist. Most of these problems appear to be related to poor compliance of some requirements of the Regulation." The report found that enforcement "remains a major challenge" and that adequate monitoring data to assure Member State compliance is also lacking.¹⁴⁶

CONCLUSION

The significant disparities between the EU's modern-day animal welfare standards and those in the U.S., which are based on 19th century sensibilities and law, make this policy area ripe for agribusiness attacks through trade rules. The EU's enhanced animal standards are already being blamed for higher production costs, and efforts to continue to improve animal welfare standards are meeting resistance.¹⁴⁷ For instance, the EU has backed away from adopting high standards for chicken welfare in the face of cheaper imports.¹⁴⁸ As we detail in Chapter 3 of this report, the deregulatory approach pushed by TTIP is likely to compromise the welfare of animals. The mere fact of the continuing TTIP negotiations will be a large "elephant in the room" if and when the Commission decides to embark on a new strategy on animal welfare based on its recent survey of public opinion, which found that an overwhelming majority of EU citizens believe in animal welfare, and a large majority believe that stronger protections are needed.¹⁴⁹

2.3 Environmental failure on both sides

Environmental regulations don't comprehensively address industrialised meat impacts

Whether in the U.S. or the EU, governments have failed to recognise and adequately address the environmental damage and climate impacts caused by industrialised agriculture. A 2010 report for the Food and Agriculture Organisation of the UN found that industrialised farming practices cost the environment about \$3 trillion *a year*. With specific regard to meat, the report found that livestock farming alone costs the environment \$1.81 trillion per year, equivalent to 134 percent of its production value.¹⁵⁰ Agriculture, and in particular meat and dairy products, account for 70 percent of global freshwater consumption, 38 percent of the total land use and 19 percent of the world's greenhouse emissions.¹⁵¹ Indeed, industrialised meat production is a major cause of climate change.

Combining these land-use changes for feed production, the long-distance transport of feed, animals and meat products and rapidly rising populations of livestock who flatulate and defecate in concentrated conditions, industrial livestock production contributes almost one-fifth of all anthropogenic greenhouse gas emissions.¹⁵²

The vast quantity of manure generated by industrialfarmed animals is the primary source of the water, air and soil pollution caused by these operations. Small, diversified farms that raise animals and other crops have always used manure as fertilizer without polluting water.¹⁵³ The difference with industrialised farms is scale. They produce so much waste in one place that it must be applied to land in quantities that exceed the soil's ability to incorporate it. Large-scale commercial livestock and poultry operations in the U.S. produce an estimated 454 million tonnes (500 million tons) of manure each year-more than three times the sewage produced by the entire U.S. population.¹⁵⁴ Additionally, these operations "can also contaminate water supplies with chemicals present in pesticides, antibiotics, hormones and heavy metals, as well as pathogens and antibiotic resistant genes."155

In the U.S., lack of regulation and weak environmental oversight has led industrialised farms to almost entirely externalize their environmental costs, and

"the food animal production industry remains excused from the same scrutiny faced by other industries."156 Weak federal laws and delegation of significant implementation and enforcement authority to state government means that industry and environmental groups are battling at the state level over environmental regulation.¹⁵⁷ In the EU, comparatively stronger regulation at the central level of government is being undermined by weak implementation at the Member State level, where powerful farm lobby groups clearly reject stronger environmental standards as "unaffordable." Attempts by Member States to introduce stronger environmental regulations have come under repeated corporate attacks. Though farmers are blamed for this state of affairs, they are most often trapped in a contractual relationship with meat corporations that, along with discount retailers, determine their farm gate prices, scale and mode of operations. These corporations continue to pay producers below the cost of production, thereby shifting the onus of their survival and all public environmental costs onto governments.

2.3.1 AIR QUALITY REGULATION IN THE U.S.

There are no binding regulations to cap methane and nitrous oxide emissions resulting from feedlots or livestock production generally in the U.S., data collection is limited and scientific critiques have emerged that the Environmental Protection Agency (EPA) is underestimating the amount of methane emissions in the country's annual greenhouse gas inventory by as much as half the actual amount.¹⁵⁸

Although technically air pollution caused by industrialised farms is regulated under the federal Clean Air Act,¹⁵⁹ in practice the EPA does almost nothing to prevent these operations from releasing dangerous air pollutants. The agency requires no permitting or emission prevention measures, claiming that it does not have sufficient data on emissions from factory farms to enforce any regulations.¹⁶⁰ This necessary data is lacking because of the power of the livestock industry. Although a 2008 law establishing the EPA's Greenhouse Gas Reporting Program required reporting of emissions from the largest concentrated animal feeding operations,¹⁶¹ implementation of this program has been continually stymied by the U.S. Congress. This ban on collecting emissions data from livestock facilities was recently renewed in the December 2015 appropriations legislation.¹⁶² Forty-one other sectors of the U.S. economy must file air emissions reports, making the meat sector the only remaining major source of these emissions that is essentially allowed to pollute.¹⁶³ Agricultural operations are also a major source of particulate emissions. Even though the EPA has made no attempt to regulate farm dust, Congress has nevertheless sought to preemptively prevent its regulation.¹⁶⁴ Three lawsuits brought by residents and public interest organisations are under way challenging the EPA's failure to regulate air pollution emitted by factory farms.¹⁶⁵

2.3.2 AIR QUALITY REGULATION IN THE EU

The European Union is in the process of revising its National Emissions Ceilings Directive-the upper limits for air pollutants in each EU member state.¹⁶⁶ Agriculture is responsible for 40 percent of the EU's methane emissions. For the first time, the European Parliament voted to include a cap of 30 percent on methane emissions for binding targets for 2025, effective post-2020.¹⁶⁷ However, the agriculture-related provisions in particular have come under attack by the European livestock industry, with the powerful farm lobby group Copa Cogeca, among others, asserting that proposed emission limits will severely damage the sector. Lobbyists specifically identified the TTIP negotiations as a reason not to cap agriculture-related emissions.¹⁶⁸ Member States with large livestock industries also lobbied in opposition.¹⁶⁹ Under this intense pressure, the European Parliament kept the agricultural sector in the Directive but did modify the regulations to target methane emissions from industrialised farms while exempting pasture-based livestock raising. It also voted to keep the ammonia ceiling at more ambitious levels.¹⁷⁰ With the European Council, in effect, voting to take methane out of the Directive and to weaken ammonia ceiling levels, these differences between the Council and the Parliament must be negotiated. It remains to be seen whether effective air emissions controls will survive.¹⁷¹ The lack of competitiveness with the U.S. meat industry is a major reason the European meat industry is resisting regulation of greenhouse gas emissions. As long as the U.S. ignores methane and nitrous oxide emissions from its factory farms, there will be little incentive for the European industry to accept climate regulations. Thus while the EU continues to push for the inclusion of agriculture as part of the solution to climate change in the post-2020 scenario, the Council is doing little to regulate the meat industry. The prospect of increased competition resulting from TTIP, in that sense, is already providing incentives for deregulatory harmonisation and future abdication of government regulation of industrial agriculture's climate emissions.

2.3.3 SOIL PROTECTIONS LACKING IN BOTH THE U.S. AND EU

In spite of its essential role in farming, both regions lack proper soil protections to prevent nutrient loss, contamination and topsoil erosion. In the U.S., soil protection activities are largely guided by voluntary "best management practices" and technical assistance provided by university cooperative extension programs and water and soil conservation districts managed with differing degrees of effectiveness and funding by the states under the dust bowl-era federal Soil Conservation Act.¹⁷² The Soil and Water Resources Conservation Act of 1977 added federal data and reporting requirements.¹⁷³ These statutes lack direct federal enforcement authority for soil measures and are overseen by the USDA.¹⁷⁴

In the EU, the Common Agricultural Policy (CAP) addresses soil protection through weak conditions linked to farm subsidies. Since 2006, the European Commission has been seeking to extend to soil the same basic protections that now apply to air and water. The draft soil framework directive was defeated in 2014 after eight years of lobbying by large farmer organisations in various member states.¹⁷⁵ The U.K.'s National Farmers' Union (NFU) welcomed the decision, stating, "From the early stages of the negotiations on the draft Soils Directive, and since the halt on its progress at the end of 2007, the NFU has actively called for these proposals to be thrown out. Our long held and firm belief has been that there is no need for additional legislation in this area—soils in the U.K., and across the EU, are already protected by a range of laws and other measures."176

2.3.4 WATER QUALITY REGULATION IN THE U.S.

The federal Clean Water Act (CWA) of 1972 governs regulation of water pollution from industrialised farm operations. In the U.S., state governments have a major role implementing and enforcing the Act's provisions; 46 states have been authorized by the EPA to issue permits under the National Pollutant Discharge Elimination System.¹⁷⁷ In 2003, the EPA began requiring water pollution discharge permits for larger industrialised animal operations known as "confined animal feeding operations" (CAFOs).¹⁷⁸ (See the Appendix for an overview of the EPAs regulations on livestock and poultry operations.) Subsequent rule changes, some in response to lawsuits filed by the National Pork Producers Council, limited required permits to large operations which discharge manure directly into waterways, exempting waste stored in lagoons and disposed of through application to cropland and essentially granting CAFO operators themselves the discretion to determine whether they were required to apply for a permit.¹⁷⁹ This approach has yielded predictable results; according to 2011 EPA data, only an estimated 41 percent (approximately 7,600 out of 18,500) of CAFOs that should be required to have water pollution discharge permits actually have them.¹⁸⁰

While 38 states have delegated authority to oversee water pollution discharge permits for CAFOs, regulations vary widely, with some state regulations falling short of meeting federal minimum standards enacted a decade ago—even though under the federal law, delegation of primary regulatory authority is premised on meeting or exceeding federal standards. Thirteen states report requiring permits for fewer than ten percent of their CAFOs, including Iowa, Illinois, North Carolina, Arkansas and Oklahoma, all of which have large numbers of these facilities. State enforcement is often inadequate, made difficult by lack of enforcement personnel or obstruction by the companies, as in the case of Smithfield, which denied access by an independent water consultant to one of its North Carolina plants.¹⁸¹

There is no central database of CAFOs, a prerequisite for insuring that these operations are properly permitted. Incredibly, in 2012 the agribusiness lobby, including the American Farm Bureau, National Cattlemen's Beef Association and National Pork Producers Council, succeeded in pressuring the EPA to withdraw proposed regulations that would have required reporting basic information about CAFOs, including their location, number and type of animals, permit status and a contact.¹⁸²

Without the most basic data on these operations, the full scope of CAFO pollution isn't known. The reluctance of regulators to require water discharge permits



clearly does not reflect a lack of polluting discharges from these industrial operations. States have identified animal feeding operations as specific sources of pollution in "20,000 miles of rivers and over 250,000 acres of lakes, reservoirs and ponds," but this estimate almost certainly understates the scope of the problem.¹⁸³ We know that a single CAFO can cause huge amounts of damage. For example, the operator of Freedman Farms in North Carolina intentionally released over 1.2 million litres (324,000 gallons) of untreated pig waste into a stream over the course of a few days.¹⁸⁴ Partial information available through another environmental program, the Toxic Release Inventory, reveals that Tyson Foods and its subsidiaries dumped over 47 million kilograms (104 million pounds) of pollutants into waterways from 2010 to 2014—the second highest volume of toxic discharges reported by any company, exceeding toxic pollution by volume discharged into U.S. waters by companies including Exxon and Dow Chemical.¹⁸⁵

While attempts to strengthen regulation of industrialised farming operations at the U.S. state and local levels have been challenged by agribusiness through litigation and preemptive legislation, lawsuits brought by environmental groups have in some instances succeeded in upholding or even increasing regulatory authority over factory farms.¹⁸⁶ A recent court decision affecting Washington state found nitrate pollution from CAFOs to be in violation of the Resource Conservation and Recovery Act, the federal law regulating solid and hazardous waste handling and disposal,¹⁸⁷ potentially setting a precedent for future use of this law to combat CAFO pollution.¹⁸⁸

2.3.5 WATER QUALITY REGULATION IN THE EU

Despite water quality measures enacted to address agricultural pollution in 2000, the agricultural sector remains the primary source of diffuse pollution in Europe, significantly affecting 90 percent of river basin districts, 50 percent of surface water bodies and 33 percent of groundwater bodies throughout the EU.¹⁸⁹ The Water Framework Directive of 2000, the cornerstone regulation of modern water management in Europe, gave Member States 15 years to bring their waters into "good status."190 This deadline expired at the end of 2015 and few of the Member States are in compliance, instead delaying plan submission and proposing weak measures. Half are delaying completion of current River Basin Management Plans that are supposed to give a picture of the status of national waters and the planned or adopted measures intended to improve water quality and quantity.



SELLING OFF THE FARM: CORPORATE MEAT'S TAKEOVER THROUGH TTIP

If the quality of the draft plans subject to public consultation in 2015 is representative, it is highly unlikely that many water bodies in Europe have achieved "good status." A European Commission screening of the draft plans found only "limited improvement in aquatic ecosystem health has been achieved" since the first cycle of required management plans.¹⁹¹ Rather than selecting the most appropriate measures to improve water quality, such as changing to more sustainable farming practices, many Members States opted for the status quo. These inadequacies at the Member State level of government have been compounded by the failure of the central EU government to include compliance with the Water Framework Directive in its conditions for receiving agricultural subsidies under the CAP-payments that account for almost 40 percent of the EU budget.

The linked Nitrates Directive adopted in 1991 seeks to protect water across the EU from nitrate pollution from agricultural sources and to promote good farming practices.¹⁹² All Member States are obliged to designate areas vulnerable to nitrate pollution, and they are required to adopt measures to reduce nitrogen pollution in those areas. The requirements include, for example, closed periods when manure and chemical fertilizers cannot be disposed of, a six month capacity for storing liquid manure when it cannot be spread and limitations on fertilizer application. This directive has effectively been introduced in CAP cross compliance and has led to several improvements for some Member States, such as an 80 percent reduction in ammonia emissions from manure spreading in Flanders, Belgium between the 1990s and today.¹⁹³

The EU's Industrial Emissions Directive (formerly known as the EU's Integrated Pollution Prevention and Control Directive) addresses all environmental impacts of large-scale industrial activities, including waste management and emissions to air and water.¹⁹⁴ This Directive specifically includes large-scale pig and poultry rearing. The environmental benchmarks are laid down in the "Best Available Techniques Reference Documents (BREF) that set out a minimum list of regulated pollutants to air and water and other environmental requirements, which must be met within four years of publication. The Commission's draft BREF for Intensive Rearing of Pigs and Poultry was published in 2015 and includes environmental standards only for the largest scale pig and poultry operations. A final version should be published following a vote by the Member States in 2016. $^{195}\,$

CONCLUSION

The comparison of environmental regulations governing the meat sector in the U.S. and EU shows an urgent need to address the gross environmental externalities of industrial animal production. Though the EU has typically been more vocal about climate action, it is clear from this analysis that corporate competition in this sector continues to drive Member States towards inaction. The powerful meat lobby in the U.S. has helped stymie every basic common sense law and enforcement of potentially useful regulations that could dramatically improve environmental health of rural communities impacted by large scale animal production facilities. EU meat corporations continue to ensure that future environmental regulations do not disadvantage them compared to their North American counterparts. As Chapter 3 discusses in detail, TTIP's (de)-regulatory agenda will ensure that environmental campaigns to hold agribusiness accountable for this long term environmental destruction face insurmountable challenges against and in subordination to the trade regime.

2.4 Precaution: Food, feed and consumer labels

2.4.1 FOOD SAFETY SYSTEMS AND PRINCIPLES DIFFER SIGNIFICANTLY BETWEEN THE EU AND U.S.

The European Union and the United States have

remarkably different approaches to regulating food safety and sanitation, chemical inputs into the food system, genetically modified organisms and cloning. These differences are both institutional and cultural, and have great significance in the context of the TTIP negotiations. The Lisbon Treaty, a foundational EU accord, enshrines respect for animal welfare as a core governing principle. It also incorporates the "Precautionary Principle" from the earlier Maastricht Treaty. Subsequent legal and policy interpretations by the European

Much attention has been paid to different food practices such as use of growth promoters or chlorine rinses, which are a major component of U.S.-style industrialized meat production. While consumer food safety considerations are significant, other damaging consequences of a shift to more industrialized food systems have received less attention in the TTIP debate.

Following this approach, the EU legal framework has had "the goal of guaranteeing food safety and hygiene along the food production chain and ensuring sufficient transparency towards consumers, and thus facilitating free trade of safe and high-quality products and protecting human health."¹⁹⁸ A key requirement of EU food safety policy is *traceability*, which aims at tracking food and ingredients for human consumption

> at all stages of production, processing and distribution—a policy called "farm to fork."¹⁹⁹ This means that in the EU. food business operators, including importers, "must be able to identify from whom and to whom" products have been supplied, with special rules applicable to beef and products containing GMOs.²⁰⁰ As we detail below, this approach, based on the precautionary principle and traceability, incorporates food hygiene throughout the production chain and has also provided the legal and

Commission and the European judicial system have made clear that this principle applies in the fields of environmental protection and human, animal and plant health, including food safety and sanitation.¹⁹⁶ According to the Commission's 2000 Communication providing guidance on how the principle should be interpreted and applied, the Precautionary Principle

enables rapid response in the face of a possible danger to human, animal or plant health, or to protect the environment. In particular, where scientific data do not permit a complete evaluation of the risk, recourse to this principle may, for example, be used to stop distribution or order withdrawal from the market of products likely to be hazardous.¹⁹⁷ policy basis for restrictions on the use of antibiotics, hormones and other chemical inputs in meat production, as well as strict GMO and pesticide regulation.

In general, the U.S. does not follow the precautionary principle.²⁰¹ While the U.S. Constitution provides broad authority for the government to regulate to protect public health, safety and welfare, specific concepts such as the Precautionary Principle or animal welfare are absent. In general, the U.S. relies on a balance of risks and costs in its standard-setting, with an emphasis on "science" as the deciding factor. U.S. regulators and agribusiness refer to the U.S. regulatory approach as "science-based," with the implied or directly stated corollary that the EU's regulations are *not* based on science. For example, in 2013, 47 agribusinesses wrote

to the U.S. Trade Representative Michael Froman in the context of ongoing TTIP negotiations that precaution in the EU "has become a pretext for import protectionism under the pretense of consumer safety" and that precautionary measures are based on "public perception and political considerations" and are "nonscience-based measures."²⁰² U.S. government positions are in alignment with industry statements. Agriculture Secretary Tom Vilsack sums up the prevailing view: while discussing GMOs and chemically-treated meats, he called on both sides to have the common goals of opening markets and eliminating "non-scientific barriers" and "working towards making sure that whatever agreements are reached, they are consistent with sound science."²⁰³

In fact, both the EU and U.S. regulatory systems look to science to assess, manage and communicate risk, but there are key differences in how each government uses "science" in developing its regulations, and, in particular, how scientific uncertainty is dealt with.²⁰⁴ As Amsterdam Law School professor Marija Bartl explains, these are grey zones, "...the vast lands where science has no responses, either because we lack research, or because the questions are matters of value and political choice (the way in which we decide on the acceptable level of risk).²⁰⁵ While in the EU, the precautionary principle weights the scale in favour of protection of health and the environment where data is lacking or unresolved, "in the U.S. the same scientific uncertainty would be often considered as an impediment to progress and a reason *not* to act."²⁰⁶

The approach to regulating risk in the U.S. has tended to regulate the safety of the end product rather than focus on preventing contamination throughout food production, processing and distribution.²⁰⁷ This encourages a system in the U.S. that is prone to end-of-the-chain solutions, such as meat decontamination treatments, and which allows for hormones and growth promoters and rapid approval of new varieties of GMOs.²⁰⁸The U.S. lacks the traceability requirements that are central to the EU food system, and "U.S food companies have very poor food traceability capacity."209 This means that timely recalls of contaminated food cannot be effectively carried out.²¹⁰ In any event, the USDA does not have legal authority to require recalls of contaminated meat, egg and poultry products from retail outlets; such recalls are currently voluntary.²¹¹

Government inspection of meat processing facilities is limited. The USDA's New Poultry Inspection System "allows poultry processors to inspect their own products with a near absence of government oversight."²¹² As reported by IATP, "[i]n lieu of robust testing of poultry for pathogens and visible defects, the USDA believes that computer modeling of microbial testing rates ... will 'modernize' the inspection process."²¹³ After four years of operation in the poultry industry, an audit by the USDA's Inspector General found this "modernized"



In any event, the USDA does not have legal authority to require recalls of contaminated meat, egg and poultry products from retail outlets; such recalls are currently voluntary. data system incomplete and inaccurate.²¹⁴ Nonetheless, the USDA is poised to expand this reduced inspection regime into the pork sector. The USDA's action has prompted members of Congress to assert that the "rules are being pushed by the industry to increase profits at the expense of public health" and to request delaying adoption until food safety, as well as worker and animal welfare concerns, can be addressed.²¹⁵

Structurally, U.S. food safety oversight is inefficient and uncoordinated. While the EU's food safety oversight is centrally located in the European Food Safety Authority, in the U.S., a hodgepodge of over 15 agencies including the federal Food and Drug Administration (FDA), USDA and EPA, as well as state and local

regulatory agencies, oversee different aspects of the food system. Oversight responsibilities are poorly coordinated; a recent report of the U.S. General Accountability Office (GAO) found that the Food Safety Working Group, which was supposed to have coordinated food safety management across U.S. federal agencies, no longer meets, and GAO's past recommendations to better coordinate food safety among all agencies remain to be implemented.²¹⁶

Further, conflicts of interest

are inherent in a regulatory framework that places significant oversight duties in the very agency with responsibility for promoting agriculture (USDA) and that has long had close ties to agribusiness interests. Both the USDA and the FDA are subject to significant conflicts of interest including former agribusiness lobbyists serving in high-level positions, so called "government-industry partnerships," and industryfunded scientists serving on supposedly objective scientific panels.²¹⁷

Implementation of the 2011 federal Food Safety Modernization Act (FSMA),²¹⁸ intended to improve food safety and product traceability and to respond more quickly to food contamination outbreaks, has lagged. Funding has not been provided, rulemaking has been delayed and recommendations resulting from food-product-tracing pilot projects mandated by law have been ignored.²¹⁹ As we discuss below, these differences in the EU and U.S. approaches to food safety have led to widely divergent standards and claims that more protective policies in the EU are discriminatory and serve as barriers to trade.

2.4.2 ANIMAL BYPRODUCTS IN LIVESTOCK FEED CAUSE DISEASES

Animal byproducts are any animal part unfit for human consumption. Byproducts can include chicken feces; poultry feathers; cow blood; miscellaneous parts of pigs, horses, fish and cattle;²²⁰ and animal digest

In fact, both the EU and U.S. regulatory systems look to science to assess, manage and communicate risk, but there are key differences in how each government uses "science" in developing its regulations, and, in particular, how scientific uncertainty is dealt with. from dead, dying, diseased or disabled animals.²²¹ Dumping animal byproducts in livestock feed is a convenient way for producers to dispose of the waste²²² while also providing proteins to their livestock.²²³

Animal byproducts used in massive quantities of industrial feed have caused outbreaks of animal diseases such as swine fever, foot and mouth disease, human cases of salmonella and BSE.²²⁴ In the late 1980s and early 1990s, Europe and in particular the U.K., experienced a BSE

epidemic with more than 185,000 cases of BSE in cattle confirmed. Epidemiological studies suggest that the source of this disease was cattle feed prepared from BSE-infected animal tissues, such as brains and spinal cords; however, this conclusion remains contested.²²⁵ In response to the BSE crisis, which turned into a global problem that even today affects acceptance of Europegrown beef and exports into the U.S.,²²⁶ the EU instituted a series of food safety measures that have evolved into the comprehensive "farm to fork" approach. These measures include a ban on using animal protein in feed given to animals farmed for food production, a comprehensive monitoring system (including post-mortem testing of healthy and at-risk animals over certain ages) and the traceability measures detailed above.²²⁷

In the U.S., the FDA partially banned animal proteins from being used in cattle feed in 1997 but continued to allow those proteins in other animal feed. An updated rule in 2008 banned the entire carcass of BSE-positive cattle, as well as the brains and spinal cords of cattle 30 months of age or older, from all animal feed. This approach does not remove all cattle tissue from the feed system regardless of age of the animal or BSE status, an approach that would be safer for consumers.²²⁸ The USDA's program of testing cattle for BSE was scaled back in 2006 by over 90 percent.²²⁹

The EU's animal byproducts rules are more protective of public and animal health than those in the U.S., an issue raised by the American Feed Industry Association which has objected to the EU's restrictions on animal byproducts used in feed and pet food. The Association represents 75 percent of feed manufacturing in the U.S. In its testimony on TTIP, the Association complained that EU food safety rules unduly limit U.S. exports of pet food, livestock and poultry feed, mixed feed, and feed ingredients, resulting in a 62 percent drop in exports in ten years.²³⁰ The Association asserted that requiring a stipulation that the animal byproducts used in these products are fit for human consumption "is onerous and costly and is not science-based" and "adds cost where there is no benefit of safety;" instead, byproducts from animals "showing no signs of illness or disease should be acceptable for inclusion in feed and pet food even if they are not fit for human consumption."231

2.4.3 ANTIBIOTIC USE IN LIVESTOCK IS RAMPANT IN THE U.S. AND LOOPHOLES IN THE EU ALLOW MISUSE

The U.S. Centers for Disease Control and Prevention (CDC) warns that antibiotic resistance is one of the top five threats to public health, yet 70 percent of medically important antibiotics sold in the U.S. are for livestock use.²³² Antibiotics in livestock rearing are used primarily to stave off infections in overcrowded and unsanitary animal living conditions and as growth promoters. Threats of increasing bacterial resistance to antibiotics have been recognised since the 1970s.²³³ In 2013, the CDC reported that at least two million Americans are infected with antibioticresistant bacteria a year and a minimum of 23,000 die as a result.²³⁴ In the EU, infections from antimicrobial resistant bacteria kill 25,000 people annually.²³⁵ In 2013 the World Economic Forum described antibacterial resistance as "arguably the greatest risk ... to human health."236 The United Nations explicitly addresses the need to combat growing antimicrobial resistance in its agenda for the 2030 Sustainable Development Goals.²³⁷ Last year, governments agreed to launch the Global Action Plan on Antimicrobial Resistance, led by the World Health Organisation.

Antibiotics may be necessary to treat animal diseases, but they should not be used routinely to stave off infections due to the inhumane conditions animals are subjected to in industrial food animal production. A dramatic change in the animal production model is required to fundamentally address the threat of antibiotic resistance due to livestock. Recognising the dangers of antimicrobial resistance, the FDA tried to regulate or ban routine use of penicillins and tetracyclines in animal feed but was thwarted by agribusiness and pharmaceutical industry lobbying in 1997.²³⁸ Decades and many studies later, the agency finally issued Guidance 213 in December 2013 intended to limit sales of medically important antibiotics for use in the meat and poultry industry.²³⁹ Unfortunately, this voluntary measure will do little to curb the risky, routine use of antibiotics in meat and poultry production.²⁴⁰ The policy is based on voluntary drug label restrictions and does not ban the use of antibiotics for disease prevention, significantly undermining its effectiveness. Producers can "continue to use the same drugs, at the same doses and same durations that they had been using for growth promotion, but now for 'disease prevention.'" Guidance 213 also fails to set antibiotic-use reduction goals or collect the data needed to track progress.²⁴¹ The fact is that the sheer number of animals produced, fattened and slaughtered at the pace that the industrial system requires creates a dependence on antibiotics to keep these animals alive; animals which are single-mindedly bred for fast growth, and are hence much weaker than their relatives outside the intensive system. It is no surprise, therefore, that the meat industry continues to find loopholes and thwart real regulation.

With federal action both delayed and potentially ineffective, some U.S. state legislatures are acting. In 2015, California became the first state to ban the routine use of antibiotics in livestock.²⁴² This move is consistent with growing consumer awareness of antibiotic use and increasing interest in purchasing organic and antibiotic-free meat. U.S. sales of meat and poultry raised without antibiotics were up 25 percent in 2012 over the previous three years. Poultry industry giant Perdue and fast-food chains McDonald's, Chick-Fil-A and Chipotle have responded to U.S. consumer concerns by announcing they are phasing out chickens raised with antibiotic growth promoters, although some of these commitments fall short on global reach, enforceability and transparency grounds. $^{\rm 243}$

The EU started banning the use of antibiotics as growth promoters in 2006, but continues to allow antibiotics for disease prevention. While not voluntary as in the U.S., this nonetheless is a less-than-comprehensive approach that is more effective on paper than in practice.²⁴⁴ Allowing antibiotics for some "non-therapeutic uses" has created a loophole that EU meat producers often capitalize on and that EU consumer advocates are seeking to close.²⁴⁵ With many drugs approved for disease prevention being the same as those previously approved for growth promotion, producers can and do continue to use antibiotics largely as they had before the policy was adopted.²⁴⁶ In fact, a recent investigation by the British newspaper the Independent says fluoroquinolones, a class of antibiotics of last resort, are "being used in significantly increased quantities by the British poultry industry." These drugs were banned on U.S. chicken farms a decade ago over links to the spread of potentially deadly bacteria in humans. According to unpublished figures compiled by the British Poultry Council, which represents about 90 percent of the U.K. poultry industry, member operations have increased their use of the drugs 59 percent from 2013 to 2014, meaning that "at least 20 million more chickens were given a dose of the antibiotics in 2014."247

Some EU Member States are going beyond the EU regulation and are enforcing more effective rules on the routine use of antibiotics. In Denmark, tougher rules have demonstrated a remarkable reduction in antimicrobial resistance related to pig farming. The effectiveness of antibiotics regulation in the Netherlands includes imposing fines for overuse and close tracking of drug sales and use. However, even where antibiotics use is down, as in Denmark, problems with resistance continue through imports of meat raised with antibiotics—pointing to the urgent need for strong international standards to address this pressing public health problem.²⁴⁸

To address this growing concern, late last year the EU proposed to include an article in TTIP's Sanitary and Phytosanitary (SPS) chapter on anti-microbial resistance (see Chapter 3 below).



2.4.4 U.S. RELIES ON INTERNATIONALLY BANNED GROWTH PROMOTER IN LIVESTOCK PRODUCTION

Growth hormones are commonly used in livestock production in the U.S. Since the 1950s, the FDA has approved a number of steroid hormone drugs for use in beef cattle, including natural estrogen, progesterone, testosterone and their synthetic versions.²⁴⁹ Around 30 growth promoting products are marketed in the U.S.²⁵⁰ Two-thirds of all cattle are administered some form of hormones with 90 percent of all feedlots and 100 percent of large-scale commercial feedlots using growth promoters.²⁵¹

Both cattle and pork producers currently rely heavily on a class of drugs called "beta-agonists." These drugs have effects similar to adrenaline; they get an animal to put on more muscle instead of fat, add weight more quickly on less food and significantly boost profits. For example, using the drug Zilmax for 20 days before slaughter, "cattle could gain an extra 24 to 33 pounds, netting operators an estimated \$15.69 more per heifer and an additional \$24.24 per steer."²³² This is big business not only for meat corporations but also the pharmaceutical industry; in 2012, Merck's annual sales of the drug in the U.S. and Canada were roughly \$160 million.²⁵³

The most commonly used growth agent in the U.S. is the beta-agonist ractopamine, first approved by the FDA for use in pigs in 1999. Ractopamine is fed to 60 to 80 percent of pigs in U.S. meat production.²⁵⁴ Pigs fed the drug in the last weeks of their life produce an average of ten percent more meat, compared with animals on the same amount of feed not receiving the drug, raising profits by \$2 per head, according to the drug's manufacturer, Elanco, a division of Eli Lilly.²⁵⁵ A 2012 study by Consumer Reports analyzing 240 pork products found that one in five tested positive for residues of ractopamine.²⁵⁶ Beta-agonists are also believed to be widely used in as much as two-thirds of the beef industry. However, given that meat products lack labeling requirements for growth promoters, it is difficult to get an official estimate.²⁵⁷

Despite widespread use in the U.S. and the FDA's safety approval, these drugs pose risks to both animal and human health. Zilmax, which is banned in the EU and other countries, was withdrawn from the market by Merck after reports were made public that some cattle fed Zilmax were losing their hooves, rendering them unable to walk. Researchers from Texas Tech University and Kansas State University, looking at 722,704 cattle across nine feedlots, found the incidence of death was 80 percent greater in animals administered the active ingredient in Zilmax than the comparative control cohort.²⁵⁸ Ractopamine is banned in 160 countries including the EU, both because of its impacts on animal health and because of human health concerns including the potential that the accumulated consumption of ractopamine in meat could interfere with the control of asthma by other medications.²⁵⁹ Like other beta-agonists, ractopamine has a questionable animal safety record; it has resulted in more reports of sickened or dead pigs than any other livestock drug on the market, according to an investigation of FDA records by the Food & Environment Reporting Network.²⁶⁰

In contrast to the U.S. approach, the EU has enacted a series of bans on meat and meat products that contain growth-promoting hormones. These include testosterone, progesterone, estradiol, zeranol, trenbolone acetate and melengestrol acetate, all of which are widely used in U.S. beef production. The EU also continues to ban ractopamine in meat production. The hormone bans went into effect in 1989.²⁶¹ The divergent regulatory treatment of growth promoters in the EU and U.S. clearly illustrates both the precautionary principle at work in the EU and the flaws in the "risk-based" U.S. food safety system. For instance, the FDA's approval of ractopamine for use in pigs relied heavily on studies from the drug manufacturer that did not include testing on humans.²⁶² David Gortler, a former FDA Medical Officer, has strongly criticized the approval when the short term and long term pharmacological and physiological effects on humans "are completely unknown."²⁶³

These regulatory differences have already resulted in the U.S. winning a trade-based challenge before the WTO concerning the EU's ban on beef produced with hormones. The WTO dispute resulted in a memorandum of understanding that allows the U.S. to export 48,200 tonnes (53,131 tons) of "high quality beef" (hormone free) to the EU at zero tariffs. However, the U.S. meat industry successfully negotiated a requirement for 62 percent of these imports to be grain fed or concentrate fed in the last 100 days before slaughter, a provision that favours meat industry-controlled feedlots over independent producers who raise grass fed beef. ²⁶⁴ In essence, "high quality" beef is simply hormone free beef but produced mostly within a system that is cruel to animals and which threatens public health and the environment—all of which lowers costs below more humanely and sustainably produced grass fed beef in both the U.S. and the EU. 265

Despite numerous new studies reinforcing the health and animal welfare concerns associated with these drugs, the U.S. continues to challenge the scientific basis for the EU's ban on beef raised with hormones.²⁶⁶ The USDA has identified the EU's ban on hormones as a "non-tariff measure" restricting trade in beef.²⁶⁷ The EU ban on ractopamine has also been identified by U.S. agribusiness as a trade barrier. Gina Tumbarello, director of international policy and trade at the American Feed Industry Association, insists the EU's ractopamine ban is neither scientifically justified nor compliant with international standards and says the U.S. pork industry will push to lift the ban through TTI.²⁶⁸ The North American Meat Association, the National Pork Council, the American Meat Institute and other industry lobby groups have also weighed in, seeking to use the TTIP negotiations to lift the ban.²⁶⁹

As we discuss below in Chapter 3, the significant differences between EU and U.S. policy on growth promoters makes these bans especially vulnerable under various TTIP provisions, and progress on tightening up standards is also subject to delay or even reversal as the parties seek to bridge differences in the negotiations.

2.4.5 CHEMICAL RINSES SUBSTITUTE FOR GOOD HYGIENE IN EARLIER STAGES OF PRODUCTION

Contaminated poultry is frequently the source of food poisoning from bacteria *Salmonella* and *Campylobacter*.²⁷⁰ As detailed above, to combat such infections, food safety in the EU is approached in a comprehensive manner, "farm to fork," relying on hygiene measures throughout the food production chain. In poultry production, these stipulations include dedicated clothing and footwear for farm workers to avoid bringing bacteria into poultry houses, proper transportation conditions and hygienic slaughtering and processing practices.²⁷¹

Since 1997, the EU has required that only water may be used to wash poultry carcasses for sale in the European market.²⁷² Other treatments, including peroxyacids and chlorine for poultry, have not been approved to date due to insufficient evidence of their efficacy and a lack of conclusive evidence that their use would not result in increased risk of antimicrobial resistance.²⁷³ This policy is consistent with consumer demands; European consumers have expressed a clear preference for meat that has not undergone any chemical treatments.²⁷⁴



Spraying, rather than dipping, chicken carcasses with an antimicrobial rinse is the decontamination method favoured by U.S. poultry facilities to save time on fast-moving production lines.

In contrast, chemical rinses for poultry, pork and beef are an end-of-the line procedure necessary for the U.S. approach to food safety because there are limited safeguards earlier in production. In fact, there are no require*ments* for farm-level control measures that would help reduce salmonella contamination in chickens before they arrive at slaughter facilities.²⁷⁵ Chemical rinses are also entrenched in the U.S. meat production system because they are the only way to maintain the relentless line speed of processing facilities. Spraying, rather than dipping, chicken carcasses with an antimicrobial rinse is the decontamination method favoured by U.S. poultry facilities to save time on fast-moving production lines.²⁷⁶ Not only are poultry rinses hazardous for poultry workers, as discussed above, but because they are sprayed on carcasses, rather than on cut poultry parts, they are ineffective in combatting pathogens.²⁷⁷ Before rules were finally adopted in February 2016 by the USDA, the U.S. lacked any limits for microbial contamination in chicken parts, the most common type of poultry product that Americans eat.²⁷⁸ Even with this rule, sanitation control in U.S. slaughterhouses is getting worse, not better. Under a 2014 USDA rule to privatize poultry carcass inspection, "plant employees would have only about a third of a second to 'inspect' the carcass for fecal matter and deformities that are not classified as 'contaminants' under USDA rules."279

The U.S. approach has not translated into effective consumer protection. From 2013 to 2015, three major outbreaks of foodborne illness were linked to poultry products contaminated with Salmonella. Each year, more than 1 million Americans are sickened by food contaminated with Salmonella, and approximately one-third of those illnesses are tied to USDA-regulated products.²⁸⁰ In 2013, Consumer Reports tested for six pathogens on 316 chicken breasts purchased in 26 states, including chicken from four major chicken processing companies. According to the report, [e]nterococcus was the most common bacterium we found, occurring in 79.8 percent of our samples. Next was E. coli, in 65.2 percent of them; campylobacter, 43 percent; klebsiella pneumoniae, 13.6 percent; salmonella, 10.8 percent; and staphylococcus aureus, 9.2 percent.

About half of the sampled breasts "tested positive for at least one multi-drug resistant bacterium."²⁸¹ The EU's farm to fork approach to sanitation has been dismissed by U.S. agribusiness as both protectionist and not "science-based," and lifting the remaining EU restrictions on chemical rinses is a top priority for the meatindustry. Trade associations representing the U.S.

poultry industry have asserted that the EU chemical wash restrictions are simply the EU acting "aggressively to overly-protect its domestic poultry producing industry." Indeed, according to these groups, the restrictions are just one of a long line of "non-scientific and unjustifiable non-tariff barriers that have prohibited U.S. poultry from the European market for the past 17 years."282 The National Pork Council is pushing for EU approval of lactic acid washes for pork and views TTIP as the way to get there saying: "TTIP offers a once in a life time opportunity to address, in a systematic way, non-tariff measures imposed by the EU that are not based on science."283 U.S. government officials also dismiss EU sanitary policies as unreasonable. One USDA researcher considers a policy of zero tolerance for Salmonella "the expression of a regulatory preference for the precautionary principle [that] has little to do with food safety and human health."284

Under industry and U.S. government pressure, and likely influenced by its own interest in making progress in the TTIP negotiations, the EU is changing its policies. The 2013 European Commission decision allowing use of lactic acid to decontaminate beef carcasses, halfcarcasses and beef quarters in the slaughterhouse²⁸⁵ followed an official U.S. request and agribusiness lobbying.²⁸⁶ Despite repeatedly asserting that it will not make significant changes to EU food standards in response to TTIP, the Commission is moving toward doing just that, even before the trade agreement is fully negotiated. With the Commission's prior efforts to permit the sale of chicken and other meat treated with chlorine washes blocked by EU Member States, it is currently processing an application to allow imports of chickens rinsed in a different wash, peroxyacetic acid, which as we have seen has been associated with health and safety concerns in the U.S.²⁸⁷

A word of caution: even as the EU's approach comes under severe criticism for being too onerous by the meat industry, there is much room for improvement. For instance, cases of food poisoning due to the campylobacter bacteria continue to be a major problem—particularly in the U.K. The EU lacks any regulation on the bacteria, and each year, 100 deaths and 280,000 cases of food poisoning are reported due to "campy" poisoning in the U.K.—as a result of large scale poultry operations.²⁸⁸ The EU appears to be set to issue standards on the presence of this bacteria in poultry this autumn, but it remains to be seen how this issue unfolds in the context of TTIP.



Without required pre-market approval or labeling for cloned animal products, and absent any tracking of cloned animals by the USDA or FDA, it is impossible to know if cloned animals or their byproducts are in fact entering the U.S. food supply or exports.

2.4.6 CLONING RULES ILLUSTRATE STARK DIFFERENCES BETWEEN EU AND U.S. APPROACHES TO FOOD SAFETY AND ANIMAL HEALTH AND WELFARE

The cloning of farm animals can involve great suffering and health problems leading to short and painful lives, including for the surrogate mothers used to develop the embryos.²⁸⁹ In the EU, food from cloned animals is regulated under the Novel Food Regulation, which requires food products from cloned animals to undergo pre-market approval based on a safety risk assessment and be subject to specific labeling requirements. To date, no requests for approval of cloned animal products have been submitted under this regulation and as a result, these products are banned from sale whether produced in the EU or imported.²⁹⁰ Should cloned products be approved for sale, they would be required to be labeled as such.²⁹¹ However, there are as yet no rules for food products from the descendants of cloned animals, and in the absence of labeling, it is unknown how many products from offspring of cloned animals and reproduction material are imported into the EU.

In a 2008 resolution, the European Parliament stated

[t]he cloning of animals for food supply has not adequately been studied, it poses a serious threat to the image and substance of the European agricultural model, which is based on product quality, environment-friendly principles and respect for stringent animal welfare conditions.²⁹²

This view is in accord with public opinion in the EU; according to a 2008 Eurobarometer survey, 58 percent said that cloning for food production could never be justified, 84 percent agreed that we don't have enough experience to know the long-term health and safety effects of using cloned animals for food, and 75 percent agreed that cloning animals for human consumption could be seen as unacceptable on ethical grounds. Respondents did not view products from the offspring of clones any more favourably than the products of clones themselves, and nine out of ten EU citizens considered it important that, should food products from the offspring of cloned animals become available, these products should be clearly labeled.²⁹³

In sharp contrast, the U.S. does not have binding regulations for animal cloning, marketing or labeling. In 2008 the FDA completed a study of cloning risks and concluded that dairy and meat from the offspring of cloned cows, pigs and goats was as safe as from conventionally-bred animals and that further regulation was unnecessary. Nonetheless, the agency requested the industry continue a voluntary moratorium on putting cloned animals in the market.²⁹⁴ Without required pre-market approval or labeling for cloned animal products, and absent any tracking of cloned animals by the USDA or FDA, it is impossible to know if cloned animals or their byproducts are in fact entering the U.S. food supply or exports.²⁹⁵

In 2013, following the initiation of TTIP negotiations, the European Commission put forward two linked proposals that would continue the ban on farm animal cloning but allow the sale of meat and milk produced by descendants of cloned animals. To date, the Commission proposals have been stalled, with the European Parliament voting in 2015 to strengthen the Commission's proposal by extending the ban to cover descendants of clones including those from imports. Since then, however, the European Council has made little progress because not all Member States agree that the ban should be extended to descendants and/or to imports.

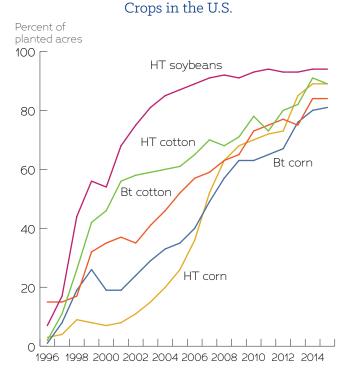
Consumer organisations and members of the Parliament are concerned that the TTIP negotiations could lead to allowing the sale of cloned meat products in the EU and that the Council's failure to extend the cloning rules to descendants is linked to trade negotiations with the U.S.²⁹⁶ This is a reasonable supposition in light of a so-called "non-paper" issued by then-EU Trade Commissioner Karel de Gucht, in which he warned in the strongest possible terms that measures to restrict or prohibit the import of cloned products would "be very hard to defend" in a trade-based challenge and risked "a more immediate backlash in our trading relations that would wreck our trade with the U.S. and the rest of the world."297 The U.S. dairy industry has been clear about the failure of both sides to adequately monitor products derived from cloned offspring and justifies this lack of monitoring as a reason to allow unimpeded exports under TTIP:²⁹⁸

Even if the U.S. wished to honor future EU demands for products that are not derived from the offspring of clones, NMPF [National Milk Producers Federation] and USDEC [U.S. Dairy Export Council] cannot currently conceive of how the U.S. government could certify to the product being from a certain group of animals that neither producers nor the government has tracked and are by now intermingled with both U.S. and EU herds. In its 2015 resolution intended to guide the TTIP negotiations, the Parliament identified animal cloning for farming purposes as a policy area where the EU and U.S. have very different rules and where changes to the EU ban should be "nonnegotiable."²⁹⁹ Nonetheless, with cloning legal in the U.S., the ongoing TTIP negotiations appear to be increasing pressure on the EU government to accede to agribusiness interests and modify its policies.

2.4.7 THE TRUE COST OF LOW-PRICED FEED: GENETICALLY MODIFIED INFILTRATION OF THE FOOD SYSTEM AND INDUSTRIALISED FARMING

Overview of GM feed use, production and labeling in the U.S. and EU

The movement away from traditional pasture-raised livestock to factory farms has been fueled by the ready availability of vast quantities of cheap feed. For close to 30 years, U.S. federal farm policies have promoted overproduction of feed crops such as corn and soybeans, driving prices down and indirectly subsidising industrial farms.³⁰⁰ A salient characteristic of U.S. grain crop is that most of it is genetically modified (GM). The U.S. is the largest producer of GM commodity crops. Soy and maize are widely used as a key crop for animal feed, with GM produce composing 93 percent of U.S. soybean cultivation and 81 percent of maize cultivation in 2015.³⁰¹



Adoption of Genetically Engineered (GE)

Source: USDA. "Recent Trends in GE Adoption." July 9, 2015. http://www.ers.usda.gov/data-products/adoption-of-genetically-engineered-crops-in-the-us/recent-trends-in-ge-adoption.as px (accessed: July 06, 2016).

More than 60 percent of all processed foods in the U.S. contain ingredients from engineered soybeans, corn or canola.³⁰² Most people in the United States don't know they are eating GM foods because there is no federallyrequired GM labeling in the U.S. Public awareness of GM products is starting to change, however. Ninetythree percent of Americans want GM ingredients to be identified.³⁰³ U.S. states are leading the way requiring labeling, with Vermont poised to implement its GM law starting July 1, 2016.³⁰⁴ In late 2015, Congress banned the sale of a genetically modified salmon approved by the FDA as safe for human consumption until the agency finalizes rules about how it should be labeleda process that could take years.³⁰⁵ This was a surprise development. The FDA has consistently approved GM foods as safe, the USDA and industry lobbyists have strongly opposed labeling of GM foods and Congress has been trying to enact legislation-the so-called "DARK Act"—to prohibit both federal and state-level mandatory labeling laws.306

In the EU, only one GM maize is authorized for cultivation, and it is grown in an insignificant quantity in Spain and Portugal.³⁰⁷ Nonetheless, there are nearly 60 GM crops approved for use in the EU, mainly for animal

feed, and the EU imports more than 70 percent of its feed requirements, importing soybeans and soybean meal in vast quantities, followed by much lower but varied levels of corn, rapeseed and other grains. Almost all soy-based and corn-based feed in the world is genetically modified.³⁰⁸ In 2013, the U.S provided 16 percent of EU soya imports.³⁰⁹ It is likely no coincidence that meat, dairy and eggs produced with GM feed are not required to be specifically labeled in the EU, unlike all other food products with GM ingredients.³¹⁰ There is widespread support for labeling of animal products made with GMOs; for instance, in 2007, Greenpeace collected a million signatures calling on the Commission to close the labeling gap.³¹¹ Because of this gap, voluntary labeling schemes for animal products that do not use GM feed have emerged in countries including Germany, France and Austria, and the demand for GM-free soy is steadily rising.³¹² Many organisations that promote voluntary labeling are calling for uniform European standards.



Voluntary U.S. non-GMO label.

2.4.8 DIFFERING FOOD SAFETY AND PRECAUTIONARY PRINCIPLES IN THE U.S. AND EU AFFECT APPROVAL PROCESSES AND OUTCOMES

The EU authorisation system is based on the precautionary principle; "since potential risks of GM foods are not completely known, regulatory decisions err on the side of caution and require a high burden of proof for product safety."³¹³ Before GM food, feed and seeds can be marketed in the EU, they must pass a threestep authorisation procedure for premarket approval. The European Food Safety Authority (EFSA) conducts scientific risk assessments with risk management and authorisation the remit of the European Commission and Member State representatives.³¹⁴ There is zero tolerance for any unapproved GMOs, and any animal feed and food that contains more than 0.9 percent of an approved GM ingredient must be labeled as containing GM.³¹⁵

The U.S., in contrast, does not require pre-market approval of GM foods, routinely approves GM seeds and feed ingredients, does not require labeling of GM feed or anything else derived from or containing GM ingredients, and permits "low level presence" (LLP) of unapproved GMOs in feed and other products.³¹⁶ The framework for regulating GM foods was set in 1986 during the Reagan administration, which concluded that foods made with genetic engineering techniques are not fundamentally different from conventional foods, so specific legislation addressing their approval was unnecessary.³¹⁷ The GM review process is split between several agencies; in the feed context, the USDA's focus is on potentially invasive new plants, while the EPA determines the risks of pesticides and chemicals, whether the substances are applied traditionally or expressed by the GM crop.³¹⁸ The risk assessment process used in GM and other regulatory decisions is generally based on what risk managers and assessors judge to be "reasonably available and relevant" scientific data, which can and does include industry-funded and other studies that have not been peer reviewed and are not available to the public.³¹⁹ The independence of the scientific review of GM has been strongly questioned; a recent issue brief from Food & Water Watch details numerous financial ties to the biotech industry and other conflicts of interest at the National Research Council, part of the National Academy of Sciences.³²⁰

The EU's GM approval system is already under pressure from biotech industries and agribusiness on both sides of the Atlantic. A spokesperson for Monsanto Europe summed up its view of the EU's current regulatory environment as "nearly impossible hurdles, starting with a regulatory review system that is highly political with no guarantee of market success."321 The U.S. biotech and feed industries have been pushing for faster approvals of new seed varieties used for feed, particularly new GMOs with multiple traits in one seed. Currently, if several traits are stacked together in a new variety, the EU requires a separate approval process for the variety even if the individual traits have been approved. The biotech industry wants to see products "stacked" with multiple traits to have automatic approval if individual traits have already been approved, as is the practice in the U.S. At the very least, the industry wants these multiple traits to be approved at the same time or more quickly.³²²

The grain and feed industry also objects to the EU's zero tolerance policy, which requires that food and seeds be entirely free of contamination from unapproved GMOs. U.S. companies are pushing to use the TTIP negotiations to relax this requirement. In its comments to the United States Trade Representative (USTR) at the start of the TTIP talks, the U.S. Grains Council called for a

comprehensive strategy for a low level presence policy for EU unauthorized GM products in feed, food and seed. The policy should consider practical approaches to unauthorized products, discontinued events, off-license products and products not submitted for approval in the EU.³²³

The Biotechnology Industry Organisation called on negotiators to address low level presence arising from "asynchronous" approval processes, such as GM corn or soy that is approved in the U.S. but not yet in the EU.³²⁴

Agribusiness interests have also called on negotiators to eliminate GM labeling requirements through TTIP. The American Soybean Association (ASA) doesn't mince words, stating "[f]irst and foremost, the EU's mandatory traceability and labeling policies for products containing biotech ingredients must be replaced with a non-discriminatory GMO free labeling policy," such as voluntary labels, as in the U.S. The U.S. National Confectioners Association "would like to see the US-EU FTA achieve progress in removing mandatory GMO labeling and traceability requirements."³²⁵ These interests are also targeting policies of EU Member States and U.S. states. The ASA called for the "removal" of Poland's law which would ban the use of biotech ingredients in animal feed starting in 2017, which it says is "discriminatory and unjustified" and "has no basis in science, is trade restricting and contravenes the EU's WTO commitments."³²⁶ The United States Council for International Business says "[s]ubsidiary political units, such as EU Member States or U.S. States should be prohibited from seeking to impose separate requirements for approval or local restrictions on sale or use."³²⁷

GM risk assessment, approval and labeling issues have been highly contentious on both sides of the Atlantic. Policies of EU Member States and U.S. states have been inconsistent with central government decisions, often taking a more cautious approach to GM approval and related pesticide policies (almost all of the commercialized GM traits approved by government authorities are for herbicide and insect-tolerance and various combinations of these traits) and also supporting more comprehensive product labeling. The biotech and feed industries have made it clear that they see TTIP as a prime opportunity to speed up GM approvals and to centralize decision-making at the EU and U.S. levels of government. Even before the formal initiation of TTIP negotiations, in response to intense industry lobbying, the European Commission started relaxing its biotech rules. Europe's zero-tolerance contamination policy was watered down in 2010 to allow for a lowlevel presence in animal feed under certain conditions (the so-called "technical solution").³²⁸ In 2015, ten new genetically modified organisms for food and feed use and seven renewals for previously authorized GMOs were approved for import into Europe.³²⁹

While a 2015 Commission Directive allowed Member States to restrict or prohibit the cultivation of genetically modified organisms into their territory, and more than half of them have acted to do so, such divergences are threatened by TTIP's regulatory harmonisation provisions, discussed below.³³⁰ A subsequent Commission proposal to allow Member States to individually determine whether to ban imports of GM food and animal feed³³¹ was shot down by the Parliament; news reports specifically referenced the TTIP negotiations as a factor in its rejection of the proposal.³³²

2.4.9 COUNTRY OF ORIGIN AND NUTRITIONAL LABELING OF MEAT IN THE EU AND THE U.S.

Food labeling schemes differ in a number of respects between the two regions. As detailed above, the EU and U.S. have differing rules on the labeling of GM foods and feed, animal welfare and marketing claims such as "wholesome" and "all-natural." The EU has nutritional labels and rules to address fraudulent or misleading claims.³³³ Special rules apply to meat, including identifying fresh meat, meat preparations that include additives and processed meat products such as hot dogs.³³⁴ European consumers have been especially concerned with food traceability and proper labeling of meat since the 2013 horsemeat scandal when products in several European countries labeled "100 percent beef" were found to be 80 to 100 percent horsemeat.³³⁵ A December 2013 report by the European Commission found that 90 percent of EU consumers want to know where their meat comes from.³³⁶ The EU instigated Country of Origin labeling (COOL) of beef in 2002 after an outbreak of BSE incited public fear.³³⁷ The COOL regulations were expanded in 2014 to include fresh, chilled and frozen meat from sheep, goats, pigs and poultry.³³⁸ In January 2015, the European Parliament passed a resolution calling for mandatory provision of COOL for meat in processed food, and the region is waiting on the European Commission to put forth an accompanying legislative proposal.³³⁹

The U.S. labels food for nutritional content and recently unveiled new labels designed to impart information more clearly to consumers.³⁴⁰ Unlike in the EU, however, traceability is not a primary consideration in U.S. food labeling law.^{341 342} Driven largely by consumers, the 2002 and 2008 U.S. Farm Bills introduced COOL laws for lamb, fish, poultry, goat, muscle cuts of beef and pork and other perishable agricultural commodities sold in the U.S.³⁴³ COOL went into effect for meat in 2013 and required that packaging indicate the country or countries where animals were born, raised and slaughtered.³⁴⁴ An overwhelming majority of farmers and ranchers favoured implementing COOL,³⁴⁵ and a public opinion poll in May 2013 found that more than 90 percent of U.S. consumers supported the policy.³⁴⁶

Unfortunately, this popular meat labeling program was repealed by the U.S. Congress in December 2015 after the WTO issued a decision imposing a \$1 billion retaliatory import tariff against the U.S. if the rule



Top: A European meat label. Bottom: A U.S. meat label

was not overturned. Challenged by Mexico and Canada under "technical barriers to trade" (TBT) rules, the WTO ruled that U.S. COOL laws unfairly discriminated against meat imports and gave an advantage to domestic meat products. In reality, the suit was brought on by the meat industry which uses Canada, Mexico and the U.S. to transport cattle and pigs across borders for raising, fattening and slaughtering as cheaply as possible. COOL favoured local producers by showing that the animal was born, raised and slaughtered in the same place. The U.S. COOL law was not significantly different from the current EU regulation. The U.S. required country of birth to be labeled for all types of fresh meat, while in the EU, the birth country was required only for beef, with country of rearing and slaughter labeling required for pig, poultry, sheep and goat meat. Similar labeling regimes are in effect in 70 other WTO countries.³⁴⁷

COOL has been vehemently opposed by the U.S. meat industry since it first emerged. The lobby spent over \$5 million a year between 2009 and 2012 to convince Congress to repeal this law even as the WTO deliberated on a decision.³⁴⁸ It would thus not be at all surprising if the U.S. pushes the EU to rescind its COOL program.

CONCLUSION

From chemical rinses to cloning and GM approvals to the Precautionary Principle itself, it is clear that the U.S. and the EU have starkly different systems for food safety and a different understanding of the role of science in policymaking. Agribusinesses on both sides are interested in harmonising these rules in order to cut the costs of doing business and expanding their market share. Chapter 3 discusses in detail how TTIP is likely to weaken these standards and prevent future standards from effectively protecting public health and benefitting the consumer



Corporate Meat's Takeover Through TTIP



Satellite photo of the Tascosa Feedyard, a cattle feedlot in Texas. Photo by Mishka Henner/Bruce Silverstein Gallery, New York

Liberalising tariffs will undermine 3.1 sustainable farming practices and advantage cheaper, industrialised meat

Today, the EU and the U.S. are roughly in trade balance in beef, pork and poultry products. While the U.S. meat industry is a global leader in low-cost meat production and exports, the EU focuses its exports on certain niches that exploit a strong reputation for high quality.³⁴⁹ That could change dramatically if proposed TTIP tariff cuts go into effect, causing significant disruption of the EU meat sector. Economists agree: studies by the USDA, European Commission, European Parliament, NGOs and farming interests all find that TTIP, as currently proposed, will increase meat imports to the EU from the U.S. and could seriously disrupt the meat sector and other agricultural sectors of Europe's economy. ³⁵⁰ Simply put, industrialised practices prevalent in the U.S. produce meat more cheaply than in the EU. Arbeitsgemeinschaft bäuerliche Landwirtschaft e.V. (AbL), the German member of the international farmers' movement La Via Campesina, has compiled farm gate prices for beef, pork and poultry for U.S. and EU farmers for the last ten years (see Appendix B). It is clear from this data that U.S. farmers are payed consistently lower prices for their animals as compared to the EU. But such cost-cutting is only possible with the extreme corporate concentration of the meat industry, which exploits farmers through low farm gate payments that may not even meet the cost of production and shifts environmental and health costs onto the public by suppressing regulations. The EU lacks the reliable livestock supplies, low-cost feed and economies of scale that define the U.S. meat industry. Should TTIP ease barriers for imports, the EU meat industry may likely respond by further concentrating market power and in the process price out many more independent and small producers.³⁵¹ The current dairy crisis in the EU is already forcing a drop in beef prices and raising beef stockpiles as dairy farmers are forced out of their livelihoods, and a surge in cow slaughter has followed from dropping milk prices.³⁵²

Although average tariffs on goods traded between the U.S. and EU are quite low, averages obscure substantial tariff differences for key products. Some of these currently protect vulnerable farming sectors already suffering from low prices and unstable markets. While European Trade Commissioner Cecilia Malmstrom has vowed to exempt the most sensitive agricultural products from "complete tariff liberalization,"353 leaked documents demonstrate that negotiators' actions do not match the rhetoric. TTIP tariff offers leaked in May 2016 show the EU offering to liberalise more agricultural products, in terms of both tariff lines and value, than proposed by the U.S. While the U.S. is waiting for the "endgame" of the negotiations before offering to liberalise more tariff lines, particularly for car parts, chocolate and olive oil, what is clear from the leaked text is that live beef cattle, animal



A port on the eastern U.S. coast.

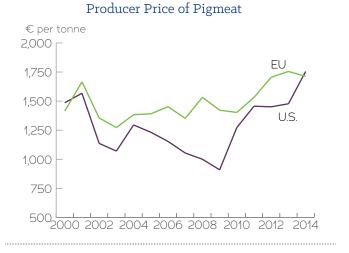
and dairy products, and animal feed products are all slated for tariff liberalization, even up to zero tariffs over time.³⁵⁴ An earlier leaked EU memorandum describing negotiators' offers notes the shared goal with the U.S. to eliminate tariffs on 97 percent of goods and describes substantial, and in many cases abrupt, proposed changes in tariffs on farm goods.³⁵⁵ The EU has also indicated that although some tariffs will not be eliminated, tariff rate quotas (whereby only a limited volume of a particular product can be imported for a lower tariff) for beef raised without the hormones that are banned in the EU are likely to be set.³⁵⁶

These tariff and quota changes will mean much more pressure on the EU's meat and livestock sector. A study by the European Parliament's Directorate-General for Internal Policies found that TTIP "may create some serious imbalances in particular EU agricultural markets where the current EU tariff protection is high and where U.S. production has a cost advantage." ³⁵⁷

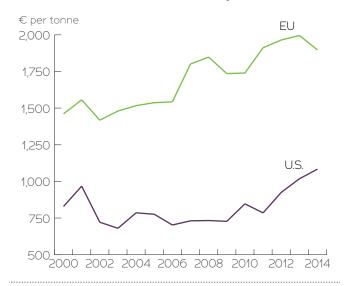
This perfectly describes the beef sector. While U.S. tariffs are relatively low at 26 percent for beef outside of the large tariff rate quota (and substantially lower for pork and poultry), EU tariffs are high, ranging from 40 percent to over 100 percent for most products. The European Parliament study stated, "[i]f beef is not treated as a sensitive product, the consequences on the EU sector could be considerable," finding in particular that "significant consequences" are in store for the EU beef sector if tariffs are lifted, especially for the suckler cow sector (cows bred especially for beef), consequences that will be exacerbated if food safety measures are changed as well. The report states, "[s] o far, imports of beef from the U.S. have been limited by high EU tariffs and by the ban on hormone-treated beef."358 U.S. government economists agree with these assessments. A USDA report found that if tariff rate quotas and tariffs are removed, "U.S. exports of beef to the EU increase 685 percent annually," a "not surprising" outcome given that beef has the highest tariffs. The report further finds that EU beef production will decline overall while U.S. production will increase.

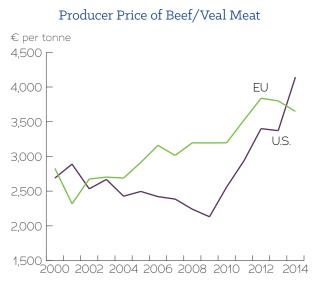
According to Farm Europe, tariff elimination would create major challenges, estimating that a 20 percent reduction in tariffs could result in an increase in EU imports of approximately 100 percent, citing DG Agri data.³⁵⁹ In fact, any Commission estimate is likely understated due to the inability of general equilibrium models to accurately capture the complexity of the beef market.³⁶⁰ The key point to underline here is that tariff reduction alone will result in a "race to the bottom" for EU production as European meat processors compete with the U.S. This is

irrespective of any regulatory changes as a result of TTIP.









Source of data (Producer price): OECD-FAO Agricultural Outlook 2015-2024. Database published July 2015

3.2 Regulatory cooperation and food industrialised agriculture and risk precautionary standards

As significant as these tariff-related impacts could be, they are as nothing compared to what will happen if TTIP eliminates or restricts "non-tariff measures" through its regulatory, food safety and technical chapters. Negotiators for both the EU and the U.S. have made clear that addressing non-tariff measures is a primary goal. If TTIP either directly or indirectly changes policies such as bans on meat additives and pathogen treatments, animal welfare protections, food and feed labeling, stricter oversight of pesticides or the application of the precautionary principle, the consequences of tariff liberalization will be dramatically amplified. Not only will U.S. products be advantaged, but there will be tremendous pressure on EU producers to adopt the same industrialised production practices and weak environmental and labour rules prevalent in the U.S. In short, "TTIP, in its proposed form, strengthens the position of the large agri-food companies, which already overcome trade barriers through the location of their production centres."³⁶¹

Beef production in the EU, already considered "uncompetitive," could be dealt a knockout blow if TTIP harmonises or provides for mutual recognition of U.S. and EU food safety and sanitation measures. The German Federal Association of Green Business warns, "[a]ny further opening up of the markets for beef through the removal of (precautionary) standards as set out in TTIP would quickly threaten the livelihood of specialist farmers. There would be no notable significant export opportunities to the USA for meat products."³⁶²



A USDA inspector checking the temperature of a meat product.



Workers in the Midwestern U.S. cleaning farm equipment in the personal protective gear that does not leave the premises.

The largest, most industrialised U.S. poultry and pork producers would also be advantaged. A USDA study determined that the impact of the EU's food safety regulations applicable to pork (banning ractopamine and pathogen reduction treatments and requiring trichinae testing) is equivalent to an additional tariff of 62 to 81 percent on top of the 25 percent monetary tariff now in effect.³⁶³ Eliminating tariffs and quotas would increase pork exports from the U.S. annually by \$0.3 billion; eliminating the ractopamine and other restrictions as well would increase these exports by an additional \$2 billion annually. Put another way, the USDA estimated that in 2011, "foregone levels of trade" due to the ractopamine ban amounted to more than \$1.8 billion.³⁶⁴ With respect to poultry, the USDA found that the EU's restriction on microbial rinses-so called chlorine chicken-imposes an effective tariff rate of 95 to 102 percent and "a de facto ban on U.S. products." Eliminating tariffs could increase poultry exports from the U.S. to the EU by 197 percent, a not insignificant figure. But if food safety measures are lifted as well, exports would increase 33,505 percent.³⁶⁵ The European Parliament report comes to a similar conclusion; it found that should the EU allow currently banned pathogen reduction treatments, while also eliminating tariffs, "this may lead to significant extra imports and to new economic difficulties for EU producers," with U.S. poultry exports into the EU reaching \$200 million to \$300 million.³⁶⁶

Despite the seemingly lopsided trade impacts of eliminating non-tariff measures, which might appear to mostly benefit U.S. companies, corporations on both sides of the Atlantic see food safety, animal welfare, labour and environmental standards as barriers to trade. This is an obvious outcome once we understand the extent to which the EU meat industry has shifted to many of the industrialised practices common in the U.S. and the transnational character of the corporations controlling and profiting from the meat industry, as documented in Chapters 1 and 2 of this report. Taking advantage of weaker regulations, the industrialised factory farm system in the U.S. produces meat far more cheaply than in the EU. Thus, even if tariffs are not completely liberalised, there is strong incentive for European agribusiness to seek cost advantages by undermining the existing EU food safety systemand TTIP provides the opportunity to achieve this. This transatlantic alignment of corporate interests is perfectly expressed in the complaints of Monsanto Europe about the EU food safety system and the joint regulatory cooperation proposal of CropLife America and the European Crop Protection Association.³⁶⁷

The European Commission insists that TTIP will change nothing of significance in the EU's agricultural and food systems—the Precautionary Principle will stay intact; animal welfare won't be undermined; and food will continue to be safe, tasty and labeled. The Commission has asserted that EU food standards "simply aren't up for negotiation," there will be "no weakening of EU's high food safety standards—absolutely none," and that "the way we regulate things like genetically modified organisms (GMOs) and food safety will stay just like it is." Moreover, the Commission insists it is committed to "upholding the Precautionary Principle."³⁶⁸ Indeed, without providing any evidentiary support for its proposition, the Commission goes so far as to claim "more compatible EU and U.S. regulations can lead to *safer* products and increased consumer choice."³⁶⁹

The European Parliament's resolution on the TTIP negotiations instructs negotiators to achieve fundamentally incompatible goals. These include reducing non-tariff barriers, enhancing the compatibility of regulatory regimes and developing common rules while simultaneously recognising that

where the EU and the U.S. have very different rules, there will be no agreement, such as on public healthcare services, GMOs, the use of hormones in the bovine sector, REACH and its implementation, and the cloning of animals for farming purposes, and therefore not to negotiate on these issues.³⁷⁰

Unfortunately, the Commission's assurances and the European Parliament's negotiating instructions fly in the face of reality. It simply isn't possible to align existing and future rules and procedures in the EU and the U.S. to "reduce unnecessarily burdensome, duplicative or divergent regulatory requirements affecting trade or investment"³⁷¹ while simultaneously making sure that "food safety will stay just the way it is" and even improve. In fact, we know from leaked documents and the Commission's public textual proposals that EU and U.S. negotiators include sweeping and enforceable mechanisms that will fundamentally alter food and agriculture, and precautionary practices, on both sides of the Atlantic.³⁷² Regardless of the European Parliament's "red lines" and negotiators' comforting assurances, several proposed TTIP chapters will directly or indirectly reduce or eliminate current protections. In the following section, we discuss how these provisions, working together, will undermine healthy food policy and protections in the EU and emerging policies in the U.S. that go beyond minimum U.S. federal regulations.

3.2.1 OVERVIEW OF TTIP'S REGULATORY COOPERATION PROVISIONS INTENDED TO ALIGN REGULATORY STANDARDS AND LOWER TRADE BARRIERS

Proposals on regulatory cooperation that would lower food and farming standards run throughout TTIP, in a "horizontal" chapter on domestic regulatory practices intended to apply across the entire agreement and embedded in specific chapters, including those addressing food safety and labeling.³⁷³ Many civil society organisations have identified the real dangers presented by increased corporate influence on the development of public health and safety standards posed by both the U.S. and EU regulatory cooperation texts.³⁷⁴ Taken together, these measures implement a deregulatory agenda that will:

- Prioritise trade effects over the public interest;
- Undermine the precautionary principle;
- Weaken protective standards through mutual recognition and harmonisation of standards;
- Streamline "modern agricultural technology" approvals with secret science;
- Heighten the burden of proof on regulators to make and defend regulatory decisions;
- Delay protective regulations through "paralysis by analysis;"
- Create a regulatory chokepoint by "managing" regulations;
- Chill the development of new standards addressing changing circumstances and new data;
- Institutionalise and expand corporate influence throughout the standard-setting process;
- Limit more protective standards at EU Member State and U.S. state levels of government; and
- Create new possibilities for trade-based corporate legal challenges and new pools of data to support those challenges.

Although several versions of a horizontal regulatory cooperation chapter have been proposed by the EU and U.S. positions must be surmised from leaked text and previously negotiated agreements, the general approach has remained consistent since the start of negotiations. The intent is to implement through TTIP several mechanisms to bring EU and U.S. standards into alignment and to identify the preferred "least trade restrictive" regulatory approach. These mechanisms would institutionalise new procedures on both sides of the Atlantic, including:

- An early warning mechanism to ensure that the other side can become involved in the preliminary stage of decision-making, typically in the drafting phase;
- Requiring 'impact assessments', including special attention to the effects of a proposal on trade;
- Dialogue at any point in the decision-making process, if the interests of the other side are at stake;
- A common institutional structure to implement long-term strategies for regulatory coherence;
- Establishing working groups to elabourate detailed strategies on particular topics such as impact assessments or for sectors such as agriculture; and
- Involving "stakeholders" in developing regulations.³⁷⁵

To the extent that the EU and U.S. may have started negotiations with different approaches to regulatory cooperation, at this stage of the negotiations it appears that negotiators are coming closer to agreement. The leaked EU "Tactical State of Play" memorandum describing negotiating positions as of March 2016 notes "good progress" in the regulatory cooperation negotiations and states that the EU and U.S. texts are "complementary in many respects."³⁷⁶ That the parties are coming together on this shouldn't be surprising. The EU's public regulatory cooperation proposals are in alignment with the joint EU-U.S. 2013 "Final Report, High Level Working Group on Jobs & Growth," which set the stage for the TTIP negotiations and was endorsed by both parties.³⁷⁷ Many deregulatory elements of the High Level Working Group recommendations have already been incorporated into the European Commission's so-called "Better Regulation" Agenda.³⁷⁸ Although publicly U.S. negotiators have been cool to the regulatory cooperation body proposed by the EU, the reality is that the U.S. is already harmonising regulatory approaches with Canada across multiple agencies through the similar Regulatory Cooperation Council (RCC) under NAFTA.³⁷⁹ The RCC goal in the food safety area includes "reciprocal recognition of each other's food safety systems" with a major focus on reducing regulatory requirements for meat inspection and re-inspection.³⁸⁰

We can also look to the text of the recently negotiated Transpacific Partnership (TPP) between the U.S. and 11 other Pacific Rim nations. The TPP contains a Regulatory Coherence chapter with a focus on cost-benefit analysis and regulatory impact statements, assessing alternatives to regulation, reliance on "the best reasonably obtainable existing information" and coordinating regulation across government, as well as SPS and TBT chapters with regulatory cooperation provisions.³⁸¹

3.2.2 PROMOTING "REGULATORY COMPATIBILITY" THROUGH MUTUAL RECOGNITION REALLY MEANS SUBSTITUTING WEAKER U.S. RULES FOR MORE PROTECTIVE EU FOOD AND FARMING STANDARDS.

One of the biggest threats to food safety and environmental protections will be through mutual recognition—recognising laws across the Atlantic as equivalent. This is a key component of the EU's regulatory cooperation proposals, and according to a leaked "Tactical State of Play" memorandum, negotiations with the U.S. to develop a framework for mutual recognition agreements are making progress. Of particular concern, the leaked memo states that the U.S. has "confirmed its ambition of going beyond its existing practices including TPP" which, as IATP and others have reported, already threaten food safety.³⁸²

We have detailed how in most instances, most U.S. food and farming standards simply can't compare to the scope and protectiveness of EU regulations, and that in several areas of food animal and feed production, EU citizens are demanding even stronger and more comprehensive rules. The U.S. lacks the capacity to trace food products back through the production chain to insure sanitary conditions or to recall contaminated products; its animal welfare policies are based on nineteenth century sensibilities and science; food labeling is limited and confusing; pesticides, novel foods and products including GMOs are routinely allowed on the market; and use of antibiotics and growth promoters is routine and pervasive. The goal of the EU's Regulatory Cooperation proposal is to promote "compatible regulatory approaches and reduce unnecessarily burdensome, duplicative or divergent regulatory requirements" between the EU and U.S., to be achieved through "mutual recognition of equivalence or harmonisation" among other methods.³⁸³ The vast differences between EU and U.S. food and farming standards, and their significant impact on trade, make it highly likely they will be targeted in a regulatory cooperation initiative seeking "compatibility." The most likely scenario, which apparently is "making progress" in the negotiations, would weaken regulations through a mutual recognition agreement.³⁸⁴

While initially mutual recognition would not directly change EU standards—an outcome officials insist will not and cannot happen—in fact, mutual recognition is simply an indirect path to that same result. As the European Environmental Citizens Organisation for Standardisation (ECOS) explains, mutual recognition "means that each partner legally accepts the products sold domestically in the other partner's market" based on a presumption that standards and procedures in the other country are acceptable. "Once the validity of each partner's standards and procedures is accepted, no oversight or double-checking procedure is meant to interfere in this new and unrestricted trade flow."³⁸⁵ ECOS warns of significant risks with this policy, including jeopardising the openness and inclusiveness of the standardisation system in Europe, "incompatible and inequivalent standard content or ambition level," and increased difficulties policing a less transparent market, all of which lead to "defective implementation" of health and environmental standards.³⁸⁶

The goal of mutual recognition and the preference for international standards in the regulatory cooperation and other chapters of TTIP will also weaken health protections such as allowable pesticide and GM residues. ECOS warns that the "voluntary nature and the industry domination" of the international standardisation process "make them unsuitable to replace legally-binding measures in areas of public interest."³⁸⁷ For example, the Center for International Law has detailed how Codex Alimentarius standards for pesticide residues on foods are generally significantly less protective than EU and sometimes even U.S. standards.³⁸⁸



The entire EU food safety system is at stake

In the food systems context, the safety of livestock growth promoters, animal parts in feed or different sanitation methods might be recognised as "equivalent," perhaps on a case-by-case basis, such as allowing chicken treated with antimicrobial rinses to be sold in the EU. While technically, such an agreement would not change EU food standards, in effect consumers would be able to purchase foods not otherwise permitted by EU law. This would not only negate consumer protections, it would undercut European meat producers on price and lead to intense pressure to bring EU standards down. Ultimately, as a report for the European Parliament put it, "the whole EU conception of consumer and environmental protection could be at stake."389 The European Parliament report provided an example of how regulatory cooperation is already affecting EU food standards: the recent decision by the Commission to lift the ban on imports of U.S. beef treated with lactic acid "meant de facto that the EU modified its own standards" and that "such gradual changes could undermine the current EU strategy to ensure safe food, which is based on controlling every step of the food chain."390

EU's proposal on antibiotics in TTIP

The fact that the EU has proposed an article in TTIP's SPS chapter on anti-microbial resistance does nothing to allay concerns that TTIP's mutual recognition and regulatory convergence focus will exacerbate anti-microbial resistance by allowing the sale of U.S.produced meats that don't comply with EU sanitary standards and prohibition on chemical treatments. The proposal merely suggests creating a technical working group on the issue and harmonising data collection on the use of antibiotics.³⁹¹ While data collection is indeed sorely lacking on both sides of the Atlantic, the insertion of this public health issue into an agreement that places the primacy of trade over other concerns is highly problematic. Rather, such cooperation should be undertaken immediately by the public health authorities of the two regions outside of the TTIP negotiations. In any event, it is highly unlikely that U.S. negotiators would agree to this modest proposal, given the power of the U.S. meat industry, which spent considerable resources to undermine the approval of scientific recommendations for even non-binding (emphasis added) federal dietary guidelines that suggest eating less processed meat and red meat.³⁹² They will not sit quietly on this issue and allow U.S. trade negotiators to accept this article unless it benefits them. As EU negotiators' internal report on the status of the antibiotics discussion benignly states: "Many detailed questions were asked about the proposed Article on anti-microbial resistance. No text brackets were removed."393 In layman's terms, this simply means that the U.S. has not agreed to any of the text.

No more double-checking for food safety violations

Promoting mutual recognition and the focus on eliminating duplication will eliminate "double-checking" of standards. The EU's proposed SPS chapter in TTIP, and also the provisions the U.S. agreed to in TPP, explicitly adopt this approach. Under the EU's proposed TTIP Article 8, "Elimination of redundant control measures," re-inspection of food and agriculture products at the port of entry, a traditional food safety management tool, would be banned as "redundant" except in illdefined "exceptional circumstances."³⁹⁴ Instead, import inspections would mostly consist of reviewing documentation, and Article 11.2 requires these and other SPS procedures to be no "more trade restrictive than necessary." The U.S. approach is consistent with these proposals. Several provisions in TPP would limit independent audits and inspections of imported foods, with no requirement for adequate enforcement resources.³⁹⁵ With the U.S. unable to trace food products through

the production chain to insure sanitary conditions and safe and legal agricultural inputs, these provisions make food safety even less effective in the U.S. than it already is and open up a huge risk that EU consumers will be newly exposed to unsafe imported agricultural and food products.³⁹⁶ Nonetheless, EU and U.S. officials recently announced they are working on reaching a food safety systems recognition agreement that would rely on the other party for inspections of food facilities.³⁹⁷

Aligning vastly differing standards will harm farm animals

The EU's SPS proposal includes a section on animal welfare. It provides that the Parties "recognise that animals are sentient beings" and will "undertake to exchange information, expertise and experiences in the field of animal welfare with the aim to align regulatory standards related to breeding, holding, handling, transportation and slaughter of farm animals."398 Unfortunately, this language is unlikely to lead to animal welfare improvements.³⁹⁹ The text proposes only non-binding language promoting good animal welfare practices, and the reference to "science-based" standards further undermines this weak text. In the leaked consolidated SPS chapter, all of the animal welfare text is bracketed, meaning the U.S. has not yet agreed to it, and it is unlikely that the U.S. meat industry would agree to introduce new rules in order to align the U.S. system with higher EU standards.

Even if the EU's animal welfare language were included in the TTIP, it would be completely undermined by the "Science and Risk" provisions discussed below, with their emphasis on "quantitative and qualitative data," risk assessment and least trade restrictive policies.400 These requirements will not provide additional support for stronger animal welfare policies but instead will tend to undermine any policy, such as animal welfare, that takes into account ethical considerations and consumer preferences. The SPS animal welfare proposals are notable for what is missing. There is nothing to suggest that products from animals raised under significantly lower welfare standards (e.g. eggs from battery hens) will be barred from import. There are also no requirements that either party comply with animal welfare laws of the partner with the highest levels of protection as a condition for trade. ⁴⁰¹

3.2.3 HARMONISING TECHNICAL STANDARDS LIMITS CONSUMER INFORMATION AND THREATENS FOOD LABELING

The EU is seeking "global harmonisation of technical requirements" in the TBT chapter, the goal being to "ensure that products originating in the other Party that are subject to technical regulation can be marketed or used across all the territory of each Party on the basis of a single authorisation, approval or certificate of conformity."⁴⁰² In addition, "Marking and Labeling" is targeted for special attention and would impose what trade lawyers term a "necessity test." This requires that labeling or marking requirements "shall not be more trade restrictive than necessary to fulfill a legitimate objective" and further that

compulsory marking requirements, while continuing to provide the necessary information to the user or consumer as well as to public authorities regarding compliance of products with specific requirements, should be limited as far as possible to what is essential and to what is the least trade restrictive to achieve the legitimate objective pursued.⁴⁰³

In another words, when consumers demand certain information on food labels and governments agree, they must ensure that the labels are satisfactory to the corporations of both parties as "least trade restrictive" or risk a challenge through TTIP through the state to



An EU organic label

Image used Creative Commons license via Wikipedia.

Legal scholars suggest that such a necessity test is "burdensome" and could make it difficult to justify even public health measures.⁴⁰⁴ Professor Alberto Alemanno of New York University School of Law has written about food industry objections to health warning labels on prepackaged food based on the necessity test, where those labels go beyond international standards on nutrition such as the Codex Alimentarius.⁴⁰⁵ Under this standard, improving food labels in response to consumer preferences to include more detailed animal welfare information, such as a "method of production" labeling, could be especially vulnerable.⁴⁰⁶ Companies are using claims of "animal-friendly" and "natural" practices to market their products with little oversight. Yet, if public health-based rules may be difficult to justify under the necessity test, how will labels notifying consumers of animal welfare conditions fare? 407

Without public access to U.S. textual proposals, we can only look to past agreements and leaked documents to piece together likely U.S. positions. The TTIP documents leaked in May 2016 do not include separate U.S.proposed labeling provisions. The TPP does include special labeling rules for certain products, including wine, prepackaged foods and organic products.⁴⁰⁸ The TPP annex on "Proprietary Formulas for Prepackaged Foods and Food Additives" establishes new rights for companies to keep ingredient lists of processed foods secret as Confidential Business Information (CBI).⁴⁰⁹ This would make it more difficult to gather sufficient information to develop standards for junk food warnings or other detailed labels about "proprietary" food additive formulas.⁴¹⁰

In the EU, efforts are underway to increase transparency and knowledge about how food on supermarket shelves is produced. Campaigns such as "Labelling Matters" (see *labellingmatters.org*) focuses particularly on meat and dairy methods of production. TTIP would greatly undermine such initiatives. The necessity test and junk food labeling provisions not only threaten EU labeling requirements but also food regulations in U.S. states, such as mandatory labeling of food with GM ingredients in Vermont, notice of cancer-causing ingredients in consumer products and packaging in California, and proposed sugary drink warnings in New York and other states. All of these labels are considered unnecessary by the U.S. federal government, which actively opposes GM labeling. The government has also challenged a proposed pre-packaged food labeling law in Chile asserting that it constitutes a barrier to trade.⁴¹¹ Establishing that state-level mandatory label rules are "essential" and "necessary" could prove to be a daunting and ultimately impossible task, especially where those rules differ from or exceed U.S. government minimums. $^{\rm 412}$

3.2.4 REGULATORY COOPERATION INITIATIVES WILL INCREASE INDUSTRY INFLUENCE AND PROVIDE THE BASIS FOR LOWERING STANDARDS IN EVERY POLICY AREA AND AT ALL LEVELS OF GOVERNMENT

The TTIP is envisioned as a living agreement that will go far beyond merely facilitating exchanges of information and technical studies between regulators. The scope of these provisions is extraordinarily broad. The EU's proposed regulatory cooperation and regulatory practices texts would cover virtually all policy areas, reach even draft legislation submitted by members of Congress, extend to internal agency rules and apply to "measures which are not legally binding but which have a de facto impact on rights and obligations of entities subject to regulations," which could include interpretive guidance documents and much else.⁴¹³ There are many provisions intended to identify and implement focused initiatives targeted at aligning specific policy areas or regulations. The U.S. has proposed giving corporations the "right to nominate a piece of legislation or regulation to be amended, proposed or scrapped on various grounds, including that it is too burdensome."414 The EU would also give corporations on both sides of the Atlantic opportunities to submit proposals targeting particular regulations for mutual recognition or harmonisation.415

The EU envisions an "institutional mechanism for cooperation" with the U.S. to oversee and guide this ongoing harmonisation exercise, and both parties have proposed sector-specific regulatory cooperation or technical committees in the SPS and TBT chapters to increase rules compatibility.⁴¹⁶ As discussed, the U.S. already has a bilateral cooperation mechanism seeking to align regulations between the U.S. and Canada, and the TPP includes committees with similar purpose and authority in the SPS and TBT chapters, among others. As described by Amsterdam Law School professor Marija Bartl:

Once implemented, the bilateral exchange offers a space where regulators can demand explanations and justifications from other parties with regard to a planned regulation. In particular, they may demand justification if such planned regulation diverges from the U.S./EU adopted or planned regulation, request justification concerning the diverging methodologies, use of knowledge and economic assumptions, and engage in exchange that aims to ensure coherence between these assumptions.⁴¹⁷

This bilateral mechanism raises many concerns, not least of which is that past experience with such "cooperation" initiatives has repeatedly led to a businessdriven deregulatory agenda. The report *Dangerous Regulatory Duet* details six case studies of past EU-U.S. regulatory cooperation initiatives resulting in substantially weakened and/or delayed regulations in response to the intervention of U.S. trade regulators and businesses. Examples include regulations to improve hazardous substance protections, data privacy, animal testing, ozone protections, aviation emissions controls and rules to avoid financial

sector meltdowns.⁴¹⁸

European While the Commission's explanamaterial emphatory sizes that these regulatory exchanges "do not prescribe particular а outcome" and, as they apply to U.S. state and EU Member States, will be based on "voluntary cooperation based on common interest," TTIP's regulatory coordinating entities will nonetheless have enormous power to influence regulations at all levels in Europe as well

as the U.S. ⁴¹⁹ Professor Bartl suggests that a paradoxical effect of limiting the *direct* legal authority of the cooperation body could be to "favour those recommendations that may be implemented without many formalities, without the involvement of legislators," including decisions that certain regulations should not be adopted or by modifying economic assumptions or how science is used.⁴²⁰ For the EU, there is a significant risk that pressure from a bilateral U.S.-EU regulatory cooperation body will result in the weakening of implementing and delegated acts. In this case it would be practically impossible for changes to be reversed by the European Parliament or other democratically elected institutions. In the U.S., where state-level regulations often go beyond federal rules including food safety, labeling and animal welfare protections, regulatory cooperation threatens to target state regulations for "technical exchanges" aimed at harmonising downward to a federal or international standard, with state policymakers uninvited and ill-equipped to defend their policies.⁴²¹

3.2.5 REGULATORY COOPERATION WILL CREATE A CENTRALIZED REGULATORY CHOKEPOINT

Both the EU and U.S. want TTIP to require internal centralized coordination and review of regulations

Studies confirm that internal centralized coordination in the U.S. has created a oneway downward ratchet resulting in delayed, weakened, and withdrawn protections – with health, food and environmental regulations disproportionately targeted for review and revision.

across all of government.⁴²² The U.S. has forty years of experience with a version of this regulatory cooperation element, where proposed federal regulations must go through а centralized review, including additional regulatory and cost-benefit impact assessments, before being finalized. Studies confirm that this process, carried out by the Office of Information and Regulatory Affairs (OIRA), ⁴²³ has created a downward ratchet resulting in delayed, weakened and

withdrawn protections with health, food and environmental regulations disproportionately targeted for review and revision. Moreover, the influence of big business and regulated industries in the development (and defeat) of regulations has been enhanced, conflicts of interest increased and transparency decreased, with an end-run around the public record.⁴²⁴

In the U.S., this system is a major contributing factor to the weak industry-influenced environmental, labour and sanitary rules that apply to food and agriculture. For example, OIRA internal review caused lengthy delays in the adoption of the EPA's 2015 regulations to require online reporting of water pollutant discharge information, including industrial animal facilities or CAFOs. As reported by the Coalition for Sensible Safeguards, this rulemaking was initiated in 2002. The EPA took five years merely to complete a draft policy statement and then three more years to finalize the policy. The rule drafting process took another three years to complete, with a proposed rule published in July 2013. The proposal

then fell into the regulatory abyss that is the White House Office of Information and Regulatory Affairs (OIRA). Instead of proceeding through the normal public comment period, during which the EPA responds to reasonable comments, the rule was hijacked by OIRA and held up for almost a year and a half.⁴²⁵

During the time the rule was "sitting in bureaucratic purgatory," the agribusiness lobby sought to weaken the rule, and it succeeded in doing so, and "many of the most important changes made directly benefitted animal feeding operations."⁴²⁶

3.2.6 THE CHILLING EFFECT: COST-BENEFIT AND TRADE ASSESSMENTS WILL LEAD TO "PARALYSIS BY ANALYSIS" AND WEAKEN STANDARDS

We have demonstrated that in key areas of food animal production—such as labour and the environment—rules on both sides of the Atlantic are inadequate and must be strengthened. TTIP would undermine such efforts. Before new regulations could be adopted, the EU's regulatory proposals would require additional trade impact assessments on top of issue-specific cost benefit analysis already undertaken by regulators who developed the rule in the first place and have expertise in the subject.⁴²⁷ The U.S. regulatory coherence proposal would require additional cost-benefit analysis and examining alternatives including not regulating at all.⁴²⁸ These provisions will likely result in prioritizing trade considerations over the primary policy objectives and "paralysis by analysis" as regulations are repeatedly delayed in order to complete additional studies. Particularly where regulations are currently weak in both the EU and U.S., these procedures will have the effect of chilling initiatives to improve standards.

Onerous cost-benefit requirements are also imposed in other TTIP chapters. The U.S.-proposed "Science and Risk" article in the SPS chapter would forbid regulators from adopting a food or plant safety regulation unless and until they have evaluated "any alternatives to achieve the appropriate level of protection being considered by the Party or identified through timely submitted public comments, including where raised, the alternative of not adopting any regulation."⁴²⁹ This paragraph would enshrine the U.S. practice of allowing an exhaustive process of "timely submitted public comments" by industry to slow down or even stop new regulations, including regulations to protect public and environmental health.⁴³⁰

Besides delaying regulations, cost-benefit analysis skews decisions in favour of deregulation or no action. Time and again, cost-benefit studies have been shown to undervalue health and environmental harms while over-estimating industry compliance costs. The fact that the regulated industries control access to key information needed to assess compliance costs—by claiming CBI-further skews this supposedly "scientific" and "objective" exercise.⁴³¹ Cost benefit analysis also "places efficiency first," a preference that "is at odds with the precautionary principle, which takes as a starting point the plurality of values and interests, which need to be balanced."432 In just one example of U.S. cost-benefit requirements essentially shutting down the public health regulatory process, a court found in 1989 that the EPA did not present sufficient evidence of costs and benefits to justify its ban of asbestos, and in the quarter century since the court's decision, the EPA has exercised its authority to ban or limit the production or use of an existing chemical only one other time.433

In essence, the U.S. proposes to export the "guilty until proven innocent" burden imposed on U.S. agencies seeking to enact new rules to the European Commission and EU Member States. European NGOs have rightly recognised that this SPS proposal and other regulatory cooperation proposals in TTIP would essentially result in the corporate takeover of the EU regulatory process.⁴³⁴

3.2.7 SECRET SCIENCE WOULD BE USED TO STREAMLINE "MODERN AGRICULTURAL TECHNOLOGY" APPROVALS

The deregulatory impact of requiring additional costbenefit analysis will be compounded by U.S. proposals in the SPS chapter that would export to the EU a flawed system based on risk assessments that rely on inadequate, secret data.⁴³⁵ Risk assessments for imports of products not already approved in the importing Party would be based on "available data." The U.S.-proposed Article X.5 of the leaked text declares that "each Party shall ensure that it takes into account relevant available scientific evidence, including quantitative or qualitative data and information." This is a near repetition of the standard of evidence that the U.S. successfully included in the TPP's food safety chapter.⁴³⁶

Leaving aside the question of what are qualitative data, the key loophole in this provision lies in what scientific evidence is "available" for a risk assessment. In the U.S. experience, this means that regulatory approvals are not based on the weight of evidence in publicly available and peer-reviewed science, but on the basis of what risk managers and assessors—often in response to CBI claims-judge to be "reasonably available and relevant" scientific data.⁴³⁷ In the U.S., it is routine for commercial applicants to claim CBI status for evidence in an application to deregulate a product, and the CBI claim is seldom, if ever, denied. As a result, commercial applicants get to determine what data and information to submit, thus preventing a robust and independent risk assessment prior to commercial release. This approach would undermine the EU's reliance on the Precautionary Principle-under which commercialization applications can be rejected when the science is not yet settled or when data are insufficient to enable a risk assessment—and has particular implications for risk assessments of cloning, gene editing and other emerging techniques.

3.2.8 REGULATORY COOPERATION IN TTIP WILL UNDERMINE THE PRECAUTIONARY PRINCIPLE

Taken together, TTIP's regulatory practices and cooperation provisions—including the required risk assessments, cost benefit analyses, trade impact assessments, alternatives analysis and reliance on secret industry data—are inconsistent with the precautionary principle and will lead to its demise. The Precautionary Principle has long been under attack by corporations on both sides of the Atlantic.⁴⁴⁵ As early as 2003, the Bush Administration refused to recognise the doctrine on the basis that it was a protectionist trade ploy.446 At every WTO TBT meeting since, the U.S. has questioned the EU's chemical policy on the grounds that its standards "pose unnecessary obstacles to trade."447 In 2013, 12 CEOs from large chemical, technology and agricultural companies sent a letter to the presidents of the European Commission, Council and Parliament asking to replace the precautionary principle with an "innovation principle" in a move to increase acceptable risk levels in their respective industries. "The principle is simple-that whenever precautionary legislation is under consideration, the impact on innovation should also be taken into full account in the policy and legislative process," they wrote.448 Emerging precautionary policies at the U.S. state level have not escaped attack; the American Chemistry Council, a trade association that promotes the interests of chemical companies, attempted to launch a campaign to subvert the precautionary principle in California.449

CASE STUDY: Hindering effective regulation of new technologies: Gene Editing

On April 13, 2016, the USDA informed the developer of a genetically engineered (GE) mushroom, developed with the CRISPR Cas-9 gene editing technology that, based on information provided by the company, it would not regulate the GE mushroom.438 Gene editing is a new technology that is currently unregulated in most countries. The USDA, rather than performing a risk assessment to determine unintended effects resulting from the CRISPR Cas-9 techniques, simply trusted the information presented by the product developer as the basis for deregulating the GE mushroom. This deregulatory rationale is similar to that of the proposals from the transatlantic biotech industry group New Breeding Techniques Platform to exempt new agricultural technologies from regulation under EU law.439 Under this logic, if the genetic modification of a plant or animal does not result from the insertion of foreign genetic material, it is unnecessary to regulate it.440

The deregulatory impact of this flawed risk management model would be compounded by the requirement that regulators consider alternatives to regulation—including those presented in industry comments. In essence, every step of regulation is subject to revision or reversal as a result of industry comments, and industry will be able to pick and choose which studies and data it presents for deregulation of its products. In sum, the "Science and Risk" approach, incorporated into the leaked provisions, increases the already steep burden of proof on governments to justify SPS rules while placing no burden on industry to demonstrate that its products, including novel foods and agricultural products, are safe.

Negotiators won't directly change the precautionary principle in the TTIP agreement or directly rewrite the overall framework for regulations based on the principle. But make no mistake, the regulatory cooperation chapter and related provisions in the SPS and TBT chapters will undermine the precautionary principle nonetheless. As Professor Marija Bartl of Amsterdam Law School writes:

[t]he main argument of the European Commission that the TTIP would not change the status quo in Europe relies on the fact that no changes to the legislative framework of various legislative (such as REACH) acts will take place. Yet, the same argument cannot be made at the level of implementation. There are, in particular, three pathways in which the TTIP's regulatory cooperation framework may substantively shape the political reasoning that is associated with the implementation of measures based on the precautionary principle. These pathways are 'sounder science,' impact assessments (cost-benefit analysis) and international standardisation—as operationalized in the institutional framework of the TTIP.⁴⁵⁰

Lesson from the Trans-Pacific Partnership (TPP): Undermining the EU's Zero Tolerance on GMOs

The U.S. has also proposed a new provision specific to these novel products, "Regulatory Approvals for Products of Modern Agricultural Technology."441 This misleadingly titled provision would actually impose additional burdens on the EU to justify regulating novel and biotech products without requiring the U.S. to change its current practice of voluntary and confidential consultations with industry lobbyists.⁴⁴² The leaked U.S. proposal for TTIP is similar to, but actually goes beyond, language the U.S. pushed for and was successful in getting included in the market access chapter of the TPP between the U.S. and 11 other countries.⁴⁴³ The U.S.-proposed TTIP article would require the EU to participate in the Global Low Level Presence Initiative (GLI) "to develop an approach or set of approaches to manage low-level presence [of GMOs] in order to reduce unnecessary disruptions affecting trade."444 The goal of the GLI is "to establish protocols that ensure small amounts of unapproved seed varieties that end up in export markets don't result in rejections of such shipments." The U.S. text elevates the goal of unimpeded GM imports ahead of the importing country's authority to control for GM contamination. It would undermine the EU's current zero tolerance policy for unapproved GMOs by incorporating policy proposals that allow for contamination.

Two trade lawyers hostile to the precautionary principle writing in *The European Journal of Risk Regulation* reinforce the credibility of Bartl's analysis. Recognising that attacking the Precautionary Principle head-on would be politically unwise, the lawyers counsel, "No doubt these discussions may be tough and clever drafting will be required to avoid subsequent challenges, as the regional differences in regulatory science and related decision-making procedures are among the most publicly controversial nontariff barriers. But the prize is worth the effort..."⁴⁵¹ In this context, "clever drafting" means harmonising the methodology for cost-benefit anaylsis, compatibility and equivalence. The authors explain:

[t]o render procedures for regulatory convergence effective, the PP [precautionary principle] itself must be subjected to risk-based and cost-benefit analysis, so that its adverse and paradoxical effects can be identified and neutralized. ... Fortunately, as the

elusive PP leaves much discretion, the Commission has ample space for agreeing to regulatory processes that are fit for the twenty-first century.⁴⁵²

The German Federal Environmental Agency's report on TTIP agrees that the impact statements required in the EU's Regulatory Cooperation proposal risk elevating U.S. trade and investment interests above environmental objectives, contrary to sustainable development principles. The agency warned that "the risk of this happening is considerable," and specifically identified the threat to the precautionary principle, especially where "any indication of the fundamental importance of the precautionary principle is also missing."453 These conclusions are buttressed by legal analysis commissioned by the Vienna Chamber of Labour. Reviewing publicly available TTIP proposals, the analysis concluded that the text lacks effective language supporting the Precautionary Principle, while at the same time endorsing international standards that rely on the risk-based model that is antithetical to the precautionary approach. The legal analysis concludes "[p]recautionary measures taken that are not based on scientific risk assessment would, according to this approach, be at most only temporarily permissible."454 New text in the EU's regulatory proposals released subsequent to these legal analyses do not effectively address these deficiencies.455

3.3 investor challenges to food and agricultural policies in corporate arbitration TTIP will set the stage for corporate arbitration forums

Under Investor-State Dispute Settlement (ISDS), or the similar EU-proposed version of corporate arbitration under discussion for TTIP,456 transnational corporations could sue for anticipated lost profits they attribute to food and farm regulations, such as tougher CAFO water discharge limits, animal welfare standards, GM contamination and disclosure rules, or sugary drink warning labels. EU Member State and U.S. state-level regulations, particularly those that exceed international or U.S. minimum standards, are also subject to challenge. The U.S. soybean industry has already objected to the EU's current GM labeling requirements on this basis, blaming GM labeling for a significant drop in U.S. exports of soybeans and soy products.⁴⁵⁷ These investment-based cases are in addition to potential state-to-state disputes, such as the challenges by Mexico and Canada to U.S. country of origin (COOL) labels.

Numerous ISDS cases around the world have succeeded based on the vague notion that public interest laws are arbitrary or violate the "fair and equitable treatment" of their investments. A number of ISDS tribunals have interpreted this standard to require a predictable business climate, potentially limiting the authority of governments to change policies in response to new data on the scope or impact of environmental threats, such as greenhouse gas emissions, or changing ethical norms, such as animal welfare.⁴⁵⁸

TTIP's regulatory cooperation requirements could lend support to ISDS challenges. The proposed trade impact, alternatives analysis and cost-benefit requirement for new rules would create new possibilities for challenges and new pools of data that could be used as evidence in investor-state cases. Investors might point to a failure



These investment-based cases are in addition to potential state-to-state disputes, such as the challenges by Mexico and Canada to U.S. country of origin (COOL) labels.

Photo courtesy of IATP.

to adopt a less "trade restrictive" measure proposed in bilateral cooperation discussions to support a claim of arbitrary treatment.

TTIP would also greatly expand the number of agribusiness corporations that could take advantage of these special arbitration rights. An increasingly consolidated and vertically integrated group of agribusiness firms controls the majority of industrial meat production and processing in the world and is pushing for further expansion.⁴⁵⁹ With transnational meat corporations such as JBS, Cargill and Smithfield present and expanding on both sides of the Atlantic, ISDS could newly empower these firms through their subsidiaries in the U.S. and in EU Member States to challenge food and farming policies that hurt their bottom line-even if they are nominally headquartered in Brazil or China.⁴⁶⁰ As Public Citizen reports, 19,000 U.S.-based corporations own more than 53,000 subsidiaries in the EU, and about nine out of ten of these corporations would be newly empowered by TTIP to launch investor-state cases against the EU government. TTIP would also newly empower more than 5,000 EU parent corporations, which own more than 27,000 U.S. subsidiaries, to launch investor-state cases against the U.S. government. Only 21 EU parent corporations currently have this power under existing U.S. trade pacts.⁴⁶¹

Examples of Corporate Meat and Dairy Investors in the EU and the U.S.

U.S. firms and subsidiaries in the EU:

- **JBS**—headquartered in Brazil, is the world's largest producer of industrial meat. It owns U.K. based food processing giant, Moy Park (formerly owned by Brazilian firm Marfrig). JBS has been aggressive in acquiring numerous meat operations in the U.S. in the past decade and has made no secret about expanding into Europe.⁴⁶²
- WH GROUP—a shell company for Chinese agribusiness Shuanghui/Shineway—the largest pork processor in China and now the world—acquired U.S. based Smithfield in 2013. Smithfield has plants in Poland and Romania with plans for further expansion.⁴⁶³
- CARGILL MEATS EUROPE—has processing facilities in the U.K. and France. It consistently ranks as one of the top three meat producers in the world.⁴⁶⁴ U.S.-based Cargill is a vertically and horizontally integrated transnational agribusiness that is also one of the world's top seven grain traders.

EU Dairy Firms in the U.S.

- DANNON U.S. subsidiary of the French giant Danone. Danone ranked number three in Rabobanks Global Dairy Top 20 in 2015.⁴⁶⁵ Dannon is headquartered in New York and has plants in Ohio, Texas, Utah and Oregon.⁴⁶⁶
- PARMALAT U.S.A. Italian subsidiary of French Lactalis Group. Parmalat filed for bankruptcy in the U.S. in 2004. The Lactalis Group claims to be the largest dairy corporation in the world and ranked number two in Rabobank's Global Dairy Top 20 in 2015. Its products include the brand names Farmland Dairies, Skim Plus, Welsh Farms, Sunnydale, Beatrice Foods and Black Diamond.
- LACTALIS AMERICAN GROUP—subsidiary of Lactalis Group. It has offices and plants in New York, Idaho and Wisconsin and specialises in a range of European cheeses.
- **SODIAAL**—French firm which advertises itself as France's largest dairy cooperative has a 49 percent share of Yoplait SAS (producer of fresh dairy products) and is 51 percent owned by U.S.-based General Mills. Advanced Food Products LLC is a subsidiary of French firm Savencia Fromage and Dairy which was formerly Groupe Bongrain SA) The company has offices in Pennsylvania, Wisconsin and California.
- ADVANCED FOOD PRODUCTS LLC is a subsidiary of French firm Savencia Fromage and Dairy which was formerly Groupe Bongrain SA)⁴⁶⁷ The company has offices in Pennsylvania, Wisconsin and California.

Selling Off **THE FARM** CONCLUSION

TTIP threatens citizen-led movements toward a healthier, more just and more sustainable food system in the EU and the U.S. It will promote the expansion of industrial meat production at a time when civil society is demanding the opposite-meat produced humanely, locally, free of harmful substances and benefiting rather than degrading the environment. Both by eliminating tariffs and through its regulatory cooperation provisions, TTIP will encourage a race to the bottom to achieve the cheapest methods of production and processing at the expense of other public goods. Even if meat sector tariffs are not fully liberalised, TTIP will nonetheless encourage an industrialised model of farming in both the EU and the U.S. that is unsustainable, cruel to animals, exploitive of workers, harmful to the environment and destructive of local farm economies.

At a time when Europeans are demanding stronger animal welfare standards; a ban on glyphosate; a stop to climate change and stronger environmental, labour and consumer standards, TTIP's sweeping regulatory

provisions will effectively undermine these efforts in favour of corporate interests. These provisions will indirectly, yet successfully, attack the Precautionary Principle and the very framework of the EU's "farm to fork," environmental and animal welfare policies. While undermining EU food policies that are strongly supported by consumers, it will also provide the framework for corporate attacks on U.S. state-level policies that go beyond federal minimum standards, undermining progress made by the U.S. food justice, farmer and consumer movement to regulate the meat industry and ultimately transform the U.S. food system. Negotiators' statements to the contrary, TTIP must be recognised for what it is: a multi-pronged strategy promoted by global agribusiness concerns on both sides of the Atlantic that will establish an ongoing mechanism for deregulation and meat industry consolidation. It is undemocratic, the policies it promotes are unsustainable, and it must be rejected by anyone who cares about good food and farming, human and animal rights and the future of our planet.



Laws and Regulations from the U.S. Environmental Protection Agency (EPA) that Apply to Agricultural Operation by Farm Activity

LIVESTOCK, POULTRY AND AQUACULTURE (INCLUDING BEEF, DAIRY, SWINE, POULTRY, AQUACULTURE)

Торіс	Type of Farm or Ranch Activity	Link to Program Area Information	Requirements of Farm
Aquaculture	Criteria to determine which aquaculture discharges require an NPDES permit.	National Pollutant Discharge Elimination System (NPDES) Concentrated Aquatic Animal Production (CAAP) facilities	Permit required if meet specific conditions
Livestock and Poultry Production	Concentrated Animal Feeding Operations that discharge to a water of the U.S.	National Pollutant Discharge Elimination System (NPDES) Concentrated Animal Feeding Operation Rule	NPDES Permit required if CAFO discharges to a water of the U.S.
Livestock and Poultry Production	All Large Concentrated Animal Feeding Operations that land apply manure.	National Pollutant Discharge Elimination System (NPDES) Concentrated Animal Feeding Operation Rule	Large CAFOs that land apply manure must meet nutrient planning requirements. Permit required if CAFO discharges to a water of the U.S.

LIVESTOCK, POULTRY AND AQUACULTURE (INCLUDING BEEF, DAIRY, SWINE, POULTRY, AQUACULTURE)

Торіс	Type of Farm or Ranch Activity	Link to Program Area Information	Requirements of Farm
	Livestock facilities with manure management systems for livestock manure that emit equal to or greater than 25,000 metric tons CO2e per year. EPA's analysis of this emission source estimates 100- 110 of the largest livestock facilities would be required to report. A manure management system stabilizes or stores livestock manure in one or more of the following system components: Uncovered anaerobic lagoons Liquid/slurry systems (with and without crust covers, and including but not limited to ponds and tanks) Storage pits Digesters, including covered anaerobic lagoons Solid manure storage Drylots, including feedlots High-rise houses for poultry production (poultry production without litter) Poultry production with litter Deep bedding systems for cattle and swine Manure composting Aerobic treatment	Greenhouse Gas Reporting	Very large livestock facilities with emissions over the threshold would be required to report emission estimates.
	If aggregate of non-fugitive emis- sions of any regulated pollutant exceeds 100 tpy. Also, generally, sources that are major under Section 112, Section 302, or Part D of title I are also considered major under title V and required to obtain a title V permit.	Title V Permit	Apply for permit
	The source must apply for a permit if aggregate of non- fugitive emissions of any regulated pollutant exceeds a certain threshold amount depending on the attainment/non-attainment status of the area and on the pollutant. This requirement applies to new sources as well as to major modifications of sources.	New Source Review / Preven- tion of Significant Deterioration permit	Apply for permit

Agriculture: Laws and Regulations that Apply to Your Agricultural Operation by Farm Activity. https://www.epa.gov/agriculture/agriculture-laws-and-regulations-apply-your-agricultural-operation-farm-activity#LivestockPoultryAquaculture

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69. "Economic Policy Institute Briefing Paper 357",http://www.epi. org/publication/bp357-federal-minimum-wage-increase/. (accessed January 26, 2016) The \$15,080 figure likely overestimates what a minimum wage earner actually earns on an annual basis, because most of these jobs lack paid sick days and many do not guarantee forty hours a week or are seasonal or temporary positions.

70. "2016 Poverty Guidelines". U.S. Department of Human Services. https://aspe.hhs.gov/poverty-guidelines (accessed May 18, 2016)

71. Cooper, David and Doug Hall. "Economic Policy Institute Briefing Paper No. 357". Economic Policy Institute. March 13, 2013. http:// www.epi.org/publication/bp357-federal-minimum-wage-increase/ (accessed January 26, 2016). The federal minimum wage has not been increased in over five years, and its purchasing power has been eroding steadily since its peak in the late 1960s. Today's minimum wage would have to be well above \$10 per hour to equal the purchasing power of the minimum wage in 1968. See also Elwell, Craig K. "Inflation and the Real Minimum Wage: A Fact Sheet" Congressional Research Service. January 8, 2014 http://fas.org/sgp/ crs/misc/R42973.pdf (accessed January 26, 2016) 72. The Fair Labor Standards Act of 1938, as amended 29 U.S.C. 201, et seq. http://www.dol.gov/whd/regs/statutes/FairLaborStandAct.pdf. See also, U.S. Department of Labor Wage and Hour Division, Fact Sheet #12 on Agricultural Workers. http://www.dol. gov/whd/regs/compliance/whdfs12.html (accessed January 26, 2016). The Migrant and Seasonal Agricultural Worker Protection Act as amended, 29 U.S.C. 1801, et seq. also applies to employers and contractors and has additional provisions establishing employment standards related to wages, housing, transportation, disclosures and recordkeeping. See, U.S. Department of Labor Wage and Hour Division, Fact Sheet #49: The Migrant and Seasonal Agricultural Worker Protection Act, http://www.dol.gov/whd/regs/compliance/ whdfs49.pdf.

73. "Quarterly Census of Employment and Wages, Beef cattle ranching, farming and feedlots" Bureau of Labor Standards, U.S. Department of Labor. 2015. Second Quarter, all establishment sizes, accessed at: http://www.bls.gov/cew/apps/table_maker/v4/ table_maker.htm#type=1&year=2015&qtr=2&own=5&ind=11211&supp=0. The counties with the most livestock workers –California, Colorado, Idaho, Kansas, Nebraska and Texas – ranged from a high of \$936 a week in Potter County, Texas to a low of \$636 a week in Jerome Country, Idaho.

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75. Information on wages of slaughterhouse and meatpacking workers from U.S. Bureau of Labor Statistics, 2014 data: http:// www.bls.gov/oes/current/oes513023.htm. For example, in North Carolina, which has 18.8 percent of the total number of hog and pig farms in the U.S., within the meat sector, the animal slaughtering segment, except poultry, has the highest average annual wages at a 2012 average of \$34,446. In the pork sector in North Carolina, the overall average annual wage is \$35,204. The highest wages are in the rendering and meat byproduct processing (\$43,462) and meat processed from carcasses (\$35,309) and the lowest are in hog and pig farming (\$30,186). In 2012 the top three states paying the highest wages in the animal, except poultry, slaughtering industry were: South Dakota (\$40,412); Kentucky (\$38,550); and Minnesota \$38,346. Data from North Carolina in the Global Economy project at Duke University. http://www.ncglobaleconomy.com/hog/workers. shtml#overview (accessed January 25, 2016)

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81. "Additional Data Needed to Address Continued Hazards in the Meat and Poultry Industry". U.S. Government Accountability Office. April 2016, p.23-24 http://www.gao.gov/assets/680/676796.pdf. See, also Suppan, Steve, Tom Fritzsche, Camille Perrin, Robert Pederson "Trade rules for poultry and pork: safe for whom?" IATP Webinar, May 20, 2014. http://www.iatp.org/video/trade-rules-for-poultry-andpork-safe-for-whom#sthash.gEXDRIzM.dpuf http://www.iatp.org/ video/trade-rules-for-poultry-and-pork-safe-for-whom.

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