

THE RISE OF BIG MEAT:

Brazil's Extractive Industry

EXECUTIVE SUMMARY



Brazil is the world's leading exporter of soybeans, the second largest exporter of maize and the world's largest beef trader. It has overtaken the United States in becoming the biggest exporter of poultry in the world, close to 39 percent of total global exports. With China drastically increasing its pork imports in the last two years, Brazil has also stepped in to meet this demand. The massive expansion in production has made Brazil increasingly dependent on these commodities to maintain a trade surplus and has had dramatic impacts on Brazilians linked to the supply chain and on Brazil's prized environment.

In the early 2000s, U.S. and European transnational corporations (TNCs) dominated Brazil's meat and feed grain industry. In the last ten years, however, the Brazilian government's support of certain companies has successfully led to the rise of not only national, but also global giants in the global meat complex. As these corporations have consolidated their global power, Brazilian production and exports of meat and feed grains have grown commensurately.

Skewed heavily in favor of corporations owned by wealthy families, Brazil's socio-economic structure already yields widespread inequality. Support from the Brazilian National Development Bank, Banco Nacional de Desenvolvimento Econômico e Social (BNDES), to create "national champions" in the mid-2000s has further empowered a handful of corporations. They now play a central role in the national economy.

By Shefali Sharma

JBS and BRF: The rise of national champions

From 2007 to 2013, BNDES implemented the so-called "national champions" policy. The idea was to select certain companies and transform them into large TNCs that bring home significant revenues. The beneficiaries included some of the largest Brazilian meat packing corporations, as well as oil and mining corporations, and absorbed two-thirds of the allocated BNDES resources. These "champions" included JBS-Friboi (known globally as JBS), Marfrig and Brasil Foods (BRF). They received large volumes of resources, not only through subsidized loans, but also through the purchasing of debentures and company shares through BNDES' investment arm BNDES Participações (BNDESpar).

The strategy has paid off. JBS is now the world's largest producer and exporter of meat, selling to over 150 countries.¹ Its key strategy has been mergers and acquisitions across key producing and consuming countries. In 2009, BNDES financed the merger of Sadia and Perdigão—two Brazilian giants of the meat processing and frozen foods sector—to form BRF. BRF's

largest shareholders are pension funds of two large state enterprises. The company is now the largest international exporter of chicken.² Unlike JBS, BRF's key strategy entails acquisition of small companies in emerging economies that have significant potential for increasing meat consumption. For instance, its recent acquisitions in the Middle East and Turkey have allowed it to become a major processor of halal meat for Islamic markets.

The success of the national champions policy is clearly visible today: JBS has left all other meat processors behind, making USD\$20 billion more in food sale profits in 2016 than the second largest meat TNC in the world—the U.S. giant, Tyson Foods. BRF leapt from ninth place globally in 2011 to the fourth most profitable meat TNC in 2012, more than doubling its food sales.

Brazil's trade policy already contributes to a path of dependency on exporting land-based, natural resource intensive commodities, while importing much more expensive value-added products with high technology content. BNDES' use of public resources to exacerbate this trend makes

little sense to many Brazilian civil society organizations (CSOs). While the national champions policy has delivered massive profits to chief executives and shareholders of major corporations, many feel that taxpayers have gained little from large sums of public money diverted to these large conglomerates. Instead, their dramatic increase in economic and political might has enabled them to operate above the law. For instance, last year, JBS chairman Joselely Batista was charged with corruption by Brazil's independent public prosecutor in connection to JBS' holding company, J&F Investimentos SA. In February of this year, federal prosecutors mandated that Batista's assets be frozen in connection to fraud related to J&F's involvement with state owned pension funds. Things continued to get worse in the course of the year (see Tainted meat and reputations).

Tainted meat and reputations

JBS had plans to move its headquarters to Ireland in 2016 before BNDES quashed them. The move would have helped JBS avoid taxes in addition to consolidating its presence in the European food market. It then announced plans to launch USD\$1 billion of shares in New York and move the management of its international operations to the Netherlands, while retaining its beef operations in Brazil. In March 2017, all four Brazilian beef majors—JBS, BRF, Marfrig and Minerva—were embroiled in a major food safety scandal that reverberated around the globe. "Operation Weak Flesh"—as the Brazilian probe was called—revealed that these global

players had bribed health officials into approving the sale and exports of contaminated meat.³ It was reported food safety inspectors were bribed to allow exports of tainted meat products—including practices such as adding chemicals to meat to conceal rotting odor, adding pigs' heads to sausages, and adding cardboard to processed poultry as filler.⁴

Several regions, including China and the EU, temporarily banned products entering their markets and company shares took a dive. Even as JBS was struggling to move past this scandal, in May 2017, JBS's controlling shareholders Josely and Wesley Batista reportedly admitted to Brazilian special prosecutors that they paid bribes to

nearly 1,900 politicians (including the current and past Brazilian presidents) to acquire companies worth up to 20 billion USD in assets. They reached a record breaking leniency deal agreeing to pay 3.2 billion USD in fines.⁵ In the ensuing months, JBS sold its assets in Paraguay, Uruguay and Argentina to pay for the fines, while Brazilian producers saw the biggest decline in cattle prices in 20 years.⁶

In September of this year, the two Batista brothers were arrested because they were found to have engaged in insider trading in the run up to the leniency deal. JBS has since named Jose Batista, the 84 year old founder and father of the two implicated in the crimes, as the new CEO.

Slave labor and injustice in the meat supply chains

The prevalence of slave labor in Brazil's agriculture sector has been well documented. The NGO Repórter Brasil, founded by journalists and social educators in 2001, has consistently publicized human rights violations related to the meat industry. They have sought to explicitly demonstrate the link between the exploitative supply chain to very well-known North American and European supermarkets (Walmart, Tesco, Rewe, Lidl, Aldi), fast food chains (McDonald's, Burger King and others) and processed meats consumed by Americans and Europeans.⁷

The group reported that from 2003 to 2010, more than 10,300 workers were released from slavery by cattle owners supplying to major meat processors.⁸ The cattle ranching sector was responsible for nearly 60 percent of all slave labor cases recorded during that seven-year period.

According to the Global Slavery Index that tracks modern slavery across the globe, 161,100 Brazilians were trapped in modern slavery in 2016.⁹

Companies such as JBS sign the National Pact for the Eradication of Slave Labor, which supposedly bind them to avoiding such suppliers. However, monitoring whether these companies live up to these promises and exposing them has become more difficult since December 2014: the Brazilian Supreme Court ordered the Ministry of Labor to stop producing the "dirty list" of violators of Brazil's anti-slavery laws. Using Brazilian Access to Information laws, Repórter Brasil has been publishing a Transparency Register since 2015, highlighting the name of employers caught by federal inspectors for using practices analogous to slavery. The list compiles the names of all persons and companies held liable for this crime in the previous two years. In its last update, 26 percent of the employers listed were cattle owners.¹⁰ In addition to such conditions on farms, the beef industry also subjects workers to poor working conditions in slaughterhouses and meatpacking plants. In 2014, for example, JBS was fined for forcing employees to work up to 20 hours a day and serving maggot-infested meat to them.¹¹ Thus far, major retailers of meat have been successful in keeping these stories from European and American consumers.



Cover Repórter Brasil

Menace of contract farming, modern slavery and inhumane work

Contract farming is dominant in both chicken and pork production in Brazil. In pork, the presence of independent producers is greater; however, both the pork and poultry sectors are characterized by increasing concentration in Brazil. Only three companies—BRF, JBS and Aurora—control 50 percent of all of Brazil's slaughtered pork, while only two companies—BRF and JBS—control 52 percent of Brazilian poultry slaughter and two-thirds of Brazilian poultry exports. The states of Parana, Santa Catarina and Rio Grande do Sul accounted for 62 percent of the broiler chicken production in 2015¹² and nearly 60 percent of pork production in 2016.¹³

There are more than 130,000 family farmers that produce chicken in Brazil.¹⁴ Most of these small producers (integrated into a supply chain of a major meat processing corporation through a contract) are concentrated in the south of the country. In this model, the farmer bears all the risk and investment costs, buying all inputs from the "integrator" and selling the animals back to the company once they are ready for slaughter. Ventilation technologies (which typically require higher financial investment) seem to be a key factor in keeping a large number of broilers alive in the Brazilian climate. Many small producers simply lack the financial resources to invest in these and maintain them. The high costs ensure that much larger facilities with more than 25,000 birds (in states such as Minas Gerais, Mato Grosso

and Goiás) have larger profit margins compared to producers with less than 5,000 birds who earn barely a fraction of their costs.

In 2010, the Public Prosecutors' Office (PPO) on Labor Affairs of the state of Santa Catarina found that 73 percent of producers who worked on contract with BRF's Sadia meat processing unit actually "paid to work,"¹⁵ in fact, "They fund the operations of Sadia S.A. with their own impoverishment, loss of health, and indebtedness with financial institutions."¹⁶ The PPO cited several irregularities including failure of farmers to meet their full costs of production; pressure on farmers to invest more in their infrastructure, despite low prices that made that infeasible; abusive clauses in their contracts; exhausting workdays without a weekly day of rest with pay; failure to comply with health and safety norms; and other issues.

In addition to the exploitation of family farmers, slave labor is also endemic in the poultry industry. A minimum of 15 million chickens are daily transported in boxes containing seven to ten chickens. Workers tasked with catching these chickens and transporting them from farms to slaughterhouses suffer egregious working conditions. A team of about ten workers catches more than 50 thousand chickens a day—often working 12 to 17 hours traveling from location to location. In both JBS and BRF supply chains, Repórter Brasil found slave-like conditions including withheld wages and/or horrendous living conditions. For example, one middleman housed workers in a disused mine "whose conditions 'cannot be described in words,'" according to one labor inspection report. Many of these workers did not have contracts and the legality of the middlemen contracted by JBS or BRF has also been called into question.¹⁷

Finally, working conditions in meat processing plants resembles problems in the U.S. and elsewhere. Repórter Brasil documented worker abuse in slaughterhouses owned by the top three Brazilian meat processors (JBS, BRF and Marfrig) in 2011. According to the group, 750,000 direct jobs were linked to the meat industry that year.

They note:¹⁸

In Brazil, health damages resulting from slaughtering and processing of meat are distinct from the average of other industries. High levels of trauma, tendonitis, burnings and even mental disorders are found there. To face such problems, it is urgent to redesign tasks, introduce breaks, and in some cases to slow down the pace of production lines. Those measures, however, face resistance from the industry's business.



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Seventy-six percent of all processed and salted poultry from Brazilian slaughterhouses heads to Europe—nearly half of which goes to the Netherlands, followed by Germany and the U.K.¹⁹ The German organization Christlich Initiative Romero (CIR) started a campaign in 2016 on chicken nuggets targeting major German supermarkets, such as Rewe, Edeka, Lidl, Netto and Aldi. They highlight the slave like conditions of poultry "catchers" in JBS' and BRF's supply chain.



Infographic: Lieferkette von Chicken Nuggets, aus "Skavenarbeit in Chicken Nuggets",©CIR.

Public health costs of production

In August 2016, Scientist Magazine reported the appearance of Colistin-resistant bacteria that led to a foot amputation of a 60-year-old Brazilian man. Colistin is a last-resort antibiotic for human illnesses, but bacterial resistance is being discovered in Asia, Europe and North America. Its presence is heavily linked to the prolific use of antibiotics in industrial meat production (for poultry, pork and beef).

Brazil increased its use of antibiotics by 68 percent from 2000-2010—coinciding with the large increase in meat production. The country does not ban the use of antibiotics as growth promoters (similar to the U.S.) and was the third largest consumer of antibiotics in livestock in 2010—China and the U.S. being the two largest. Alarming, Brazil is expected to double its use by 2030. This poses a serious risk of antibiotic resistance in the Brazilian population.

Land, land and more land

The massive expansion of hectares planted for soy and corn have dramatically changed the Brazilian landscape. Soy is expected to cover 33.9 million hectares and corn, 16.7 million hectares in Brazil in 2017.²⁰

Together, that is the equivalent of nearly 506,000 square kilometers (~196, 912 square miles), an area slightly larger than Spain.

Soy and corn are expected to cover nearly 506,000 square kilometers this year, an area slightly larger than Spain.

Produced with large-scale monocultures, proprietary seeds, and chemicals, these feed grains have caused widespread deforestation and land degradation. And yet, production of both soy and corn is expected to grow this year with an increase of planted area for soy by 1.6 percent and another 3.2 percent for corn.²¹ In 2015, though Brazil's agricultural exports declined in value (due to low soy and maize prices), they were exported in record volumes. This not only made up for low prices but also increased the share of agriculture in Brazil's trade balance to a record 46 percent.

According to Brazil's Ministry of Agriculture (MAPA) estimates in 2015, soybean production will continue to expand more than all other Brazilian crops. MAPA predicts that by 2025, soybeans will cover a territory of 41.2 million hectares—an increase of more than 30 percent in just ten years.

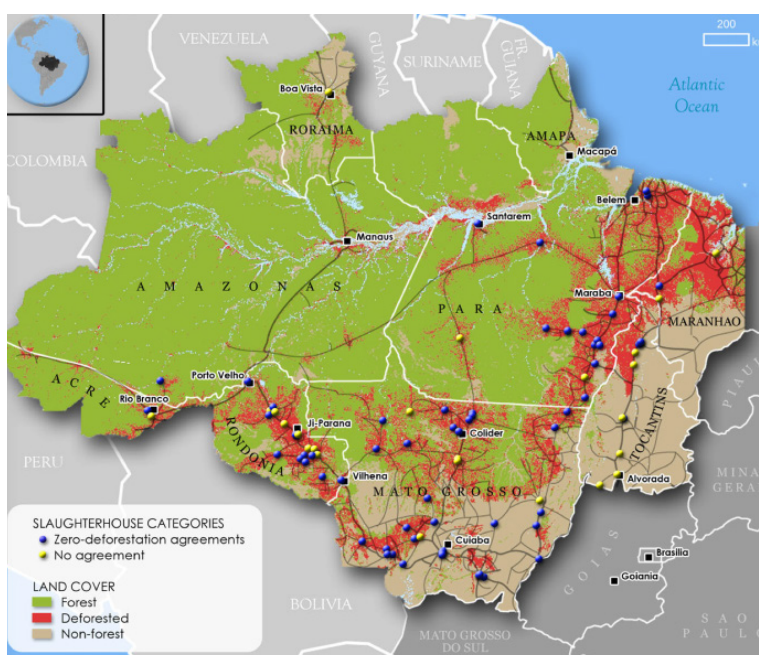
The area used to plant soybeans will increase by expanding into regions where land is still supposedly “available,” by occupying existing pastureland and by replacing other crops with soy on existing agricultural land. Notably, the areas cited for highest expansion are the eastern sub-region of the Cerrado, known as “Mapitoba” for the four states of Maranhão, Piauí, Tocantins and Bahia.

Deforesting the Amazon, degrading the land

Brazil's National Institute for Space Research (INPE) estimated that 7,898 square kilometers (more than 3,000 square miles) were deforested from August 2015 to July 2016.²² This represents a 29 percent increase in deforestation from the previous year (2015-2014). Yet in 2015, deforestation had already risen by 24 percent from the year before (2013-2014). This marks a dramatic departure from the significant decreases in deforestation rates that were witnessed in years prior. The global rise of Brazil's meat and feed grain industry has resulted in a massive transformation of the entire Brazilian landscape—from severe intensification and expansion of feed grain production in the Southeast and the Cerrado, to the displacement of cattle grazing into and then spreading out of the Amazon Rainforest. Two initiatives to curtail this damage are analyzed here: zero-deforestation agreements with meat companies and the Soy Moratorium with grain traders.

Zero-deforestation agreements and the scope for conservation

A first-of-its-kind, peer-reviewed study tracked purchasing behavior of JBS slaughterhouses before and after signing zero-deforestation agreements in the state of Para. Through these agreements, companies would be required to enlist with the Rural Environmental Register, which tracks properties through satellite technologies. The researchers found that while enlisting into the Register increased significantly and the rate of deforestation decreased dramatically from registered suppliers, the overall scope of these agreements for conservation was limited.²³ Problems with implementation and leakage through illegal and non-compliant suppliers resulted in continued deforestation. Cattle would be transferred from non-compliant to registered suppliers for slaughter or be directly supplied to slaughterhouses that did not fully monitor the supply chain.²⁴ A 2015 case study by Repórter Brasil also corroborates such practices. It found that JBS continued to source from a supplier that not only practiced slavery, but who was also cited by the Ministry of Forests and the Environment for environmental crimes, including deforestation.²⁵ To continue both of these illegal practices, this supplier simply transferred the property to relatives not on any of these government's “dirty” lists.



Reproduced from Gibbs et al 2015.²⁶

Flying Rivers, the Cerrado and the Soy Moratorium

Twenty billion tons of water evaporate every day in the Amazon. In the summer months, the clouds that form through evaporation drift at a height of 3,000 meters to the West, where they are blocked in the Andes and diverted to the South. These currents, known as the “flying rivers of Amazonia” bring rain to southern Brazil, Paraguay, Northern Argentina and Uruguay—carrying moisture from the North to the South of Latin America.



Reproduced from Gibbs et al 2015.

A square meter of the Amazonian rainforest floor offers eight to ten times the evaporation compared to the same area of pasture. For instance, a tree evaporates up to 300 liters of water a day, compared to a small fraction of that from pasture or cleared land. In the past 40 years, an average of three million trees have been cut daily in the Amazon, a jaw-dropping total of 42 billion trees—essentially damming the “flying rivers.”

The result: drought in southern Brazil and less rain in central and eastern Brazil—the Cerrado.

The size and central location of the dry Cerrado region are critical for several ecosystem functions. Ten of the twelve most important water catchment areas in Brazil are found in the Cerrado.²⁷ The region therefore serves as the “rain filter” of Brazil, fed by the Amazon’s flying rivers that rain down in the Cerrado and are absorbed into groundwater. The reservoirs of groundwater in the South and Central Brazil are filled through this critical geological filter. Given the dramatic land use change in the region—the Cerrado’s soil structure is changing so that both evaporation and erosion

rates are increasing. This is decreasing groundwater intake as water is leached off the plateau. The result: sinking groundwater levels, reduced aquifers, sinking rivers and water deficits.

A critical hydrological system (that of the flying rivers and Cerrado absorption) threatens to collapse, which would affect Brazil, Paraguay, Northern Argentina and Uruguay.

The Soy Moratorium, a voluntary agreement signed in 2006 by industrial players, intended to stop sourcing from suppliers that deforest or use slave labor and led to a dramatic drop in the deforestation rate in the Amazon. However, it has had spillover effects on other parts of Brazil where no moratoriums exist.

At the start of the moratorium in 2006, soy continued to expand—thirty percent of it by cutting down Amazon forests. But by 2013, that number had dropped to nearly one percent. However, soy expansion continued to take place in the Cerrado, with 11-23 percent of new farmland cleared from native vegetation each year. The expansion was even more pronounced in the four states of Maranhão, Piauí, Tocantins and Bahia (Mapitoba region)—where 40 percent of new farmland was cleared from native vegetation.

Land use change, climate change

Deforestation and land use change in the Amazon and the Cerrado biomes are responsible for a significant part of Brazil’s green house gas emissions.

When accounting for both the direct and indirect emissions due to land use change, the meat and feed grain sector are responsible for 67 percent of Brazil’s net emissions. This places Brazil amongst the top ten countries with the highest emissions and the second highest emitter of agricultural emissions in the world.

Brazil is already suffering from the impacts of climate change and becoming more vulnerable to natural disasters of greater intensity. According to the Brazilian Agricultural Research Corporation (Embrapa), food production in Brazil and in other countries could be affected significantly by global warming, thereby compromising food security:

“Areas where maize, rice, beans, cotton, and sunflowers are grown will face a sharp decline in the Northeast region, and significant losses of production. The entire area corresponding to the dry region in the Northeast, which is currently responsible for the majority of the maize production in the region, and the region of the Northeastern savannas - the south of Maranhão, the south of Piauí and western Bahia - will be hit hardest. Soybean and coffee have to deal with the losses.”

Point of no return?

Despite numerous environmental and social problems, Brazilian meat and feed grain production is expected to increase further between 2016 and 2025. In 2015, OECD-FAO predicted that Brazil's expansion in meat production will come from a strong increase in domestic consumption (of poultry more than other meats), rising exports, and considerable increase in prices.ⁱ These estimates did not take into account the political upheaval in Brazil since 2015 and the resulting fluctuation of the Real's value. Nonetheless, Brazil is projected to continue producing significant quantities of meat in the next decade—perhaps outpacing the U.S. in poultry production and remaining a leader in beef and pork production. Much of this growth will be due to rising exports.

Using the latest OECD-FAO projections, IATP has compared the total rise in Brazilian poultry, beef and pork consumption to the total rise in exports in a ten-year period (2015-2025). The below table shows that in 2025, both poultry and beef exports are projected to rise 40 and 39 percent respectively compared to 2015. This is a dramatic rise in exports. The increase in domestic consumption—though extremely large in absolute numbers—is less, relative to the rise in exports and is projected to be 14 percent and 17 percent for poultry and beef, respectively. The increase in pork exports and consumption are roughly the same, though even here, the rise in exports is slightly higher at 29 percent.

Soy and maize also experience a significant rise in both exports and production. Soy exports increase another whopping 33 percent, while maize exports increase by 26 percent. The production of soy also increases by 40 percent and maize by 25 percent, indicating that exports play a key role in the expansion of feed grain production—for maize, nearly all of it.

If OECD-FAO projections are actualized, the total hectares of soy and maize will expand to 56.77 million hectares or 567,710 square kilometers (219,194 square miles)—an area much bigger than France. Land use change of an additional 61,710 square kilometers (more than 23,826 square miles) means further deterioration of the Cerrado and displacement of cattle in the Amazon. This should be major cause for global concern.

Dataset: OECD-FAO Agricultural Outlook 2016-2025, by commodity

		2015	2016	change in 10 years	percent increase in 10 years
Poultry (rtc)	Exports	4,229	5,977	1,749	41%
	Consumption	7,173	8,198	1,025	14%
Beef and veal (cwe)	Exports	2,099	2,922	823	39%
	Consumption	9,297	10,865	1,568	17%
Pork (cwe)	Exports	515	663	148	29%
	Consumption	2,986	3,753	767	26%
Soy	Exports	51,451	68,316	16,865	33%
	Production	96,806	135,456	38,650	40%
Maize	Exports	24,923	31,458	6,535	26%
	Production	81,062	101,200	20,138	25%

Data compiled by IATP Europe

Room for Change

According to the civil society network, Climate Observatory Brazil, "if there is no increase in the efficiency and the intensification of production in areas already occupied by livestock, the tendency is for the additional herd to be located in the states in the Amazon biome." Yet further intensification of largescale livestock production will only incentivize further expansion of the industry rather than reign it in—reducing further the cost of meat through economies of scale and through the continued externalization of the environmental, human and public health impacts of meat and grain production. It will also worsen cruelty to animals, increase dependence on proprietary chemical inputs and technologies that take agriculture further away from its agroecological alternative. Pretty et. al 2014 define sustainable intensification as "a process or system where agricultural yields are increased without adverse environmental impact and without the conversion of additional non-agricultural land." Given the impacts, export flows and current consumption patterns linked to Brazil's industrial meat chain—a redirection rather than further intensification is urgently needed. Effective and timely government regulations, sound international trade and investment policy, public awareness and action can lead to significant shifts in production, exports and consumption.

The Role of Trade Agreements

In addition to mergers and acquisitions, the meat industry uses trade agreements as an instrument to expand markets and push for deregulation—even if the rules and laws in question may be good for the public. These could be rules eliminating antibiotics as growth promoters in meat production, or rules against deforestation or labor laws.

The EU is now eager to conclude the EU-Mercosur free trade agreement which has been stalled for several years. A key issue will be Brazilian TNCs' access to the EU beef market. EU Trade Commissioner Cecilia Maelstrom has responded to concerned beef farmers in the EU by saying that without Mercosur getting any improved access to the EU beef market, concluding a deal will be difficult.²⁸ This has been one of the many contentious issues in the U.S.-EU free trade negotiations and between the EU and Canada. European beef producers, who also primarily raise cattle on grasslands, are economically vulnerable and have a higher cost of production than their Brazilian counterparts. The EU-Mercosur deal would hasten their crisis. The deal would further restructure the European market towards ever increasing concentration—further marginalizing European farmers and workers in the meat chain. The same is true for small Brazilian farmers who are increasingly integrated into the corporate chain.

In 2016, the U.S. opened its market to Brazilian fresh and frozen beef exports, previously only canned or cooked beef was allowed. Under the shared quota with Argentina, Uruguay, Nicaragua and Costa Rica,²⁹ JBS, Marfrig and Minerva started exporting unprocessed beef to the U.S. However, the tainted meat scandal resulted in the U.S. banning these imports in June. The ban is likely to be lifted early next year. In the meantime, JBS continues to be a dominant meatpacker based in the U.S.

The Way Forward

Changing Brazil's productive matrix is a complex matter due to the dominant political and economic classes that see its production and exports as synonymous to progress and development. The social movements and people affected by the expansion of this model either have no visibility or are perceived as remnants of the past and resistant to development. Despite those challenges, there are some next steps that could support efforts for reform of Brazil's meat sector:

- Filling important research gaps that paint a clear picture of the impacts of this sector and its value chain on people's lives would be an important first step in raising awareness and changing mindsets. For instance, further studies on climatic changes, drought and food security due to this value chain and its impacts on Brazil and the world would be a critical contribution.
- Comparing how these TNCs treat producers and workers integrated into their supply chains across different countries is necessary in building pressure to adopt strong standards.
- Stopping free trade deals that further incentivize deregulation and/or prevention of urgently needed social and environmental regulations is critical. Such agreements incentivize cheap exports and more production at the expense of producers, workers, animals and the environment.
- Civil society must begin to think concretely about divestment campaigns targeting these oligopolies that deplete and degrade land and water resources, increase climate risk, impoverish small producers and exploit animals and workers. The limitations of both the soy moratorium and the zero-deforestation agreements make this clear. Last autumn, leading institutional investors pressed U.S. meat companies to assess water pollution risks of their operations as a major financial liability.³⁰ This is a good first step.

In September 2015, Federation of Organizations for Social and Educational Assistance (FASE), the Brazilian Network for the Integration of the Peoples (Rebri), Heinrich Böll Stiftung Brazil, Bröt für die Welt and IATP held a workshop in Rio de Janeiro bringing together different parts of Brazilian civil Society to address these problems and trends. Since then, Brazil has entered a particularly turbulent period of political transition. Even so, some key conclusions emanating from the meeting merit repeating here, particularly for Europeans and Americans. It is hoped that follow up action can begin to take shape in importing countries, even as Brazilian civil society reorganizes itself to respond to their new political reality.

EU and the U.S. civil society and citizens can:

- 1) Support and organize campaigns in close collaboration with Brazilian groups on the impacts of meat production and meat and feed grain exports.
- 2) Develop new partnerships with a cross-section of groups working on different social, environmental and public health impacts of this production and trade.
- 3) Organize targeted corporate campaigns in close collaboration with Brazilian groups to contest the double standards of TNCs. This could include campaigns targeting transnational retailers, such as McDonald's and Burger King, and supermarkets. Retailers must begin to pay fair prices and require that their suppliers establish fair and transparent production contracts; enforce international labor standards; eliminate prophylactic use of antibiotics in food animals; and end the destruction of ecosystems, including through deforestation, land degradation and the use of dangerous agrochemicals.
- 4) Demand that their governments:
 - implement and enforce strict regulations of methane and nitrous oxide from factory farms and include emissions from imports of meat and feed in their own accounting of greenhouse gas emissions (especially from direct and indirect land use change resulting from expanded meat and feed operations);
 - establish strong labeling requirements for raw and processed meat and feed in terms of country of origin and additives used;
 - close loopholes on the use of antibiotics for disease prevention with the aim to eliminate all routine use of antibiotics in food animal production.

Meeting participants concluded that Brazilian organizations should:

- 5) Raise public awareness and mobilize public opinion by:
 - Organizing public debates on the role of BNDES and the state enterprise pension funds in using public money to support corporations such as JBS, BRF and Marfrig.
 - Promoting campaigns on the impacts of meat production and seeking to develop new partnerships with other sectors of civil society. Warning people about the harm to health from excessive meat consumption and making people aware of the

power of marketing used by these TNCs thereby giving greater value to the cultural dimension of food.

- Denouncing slave labor and other precarious working conditions in the meat supply chain, including meat plants where migrants work in conditions of extreme poverty and with no social organization to represent them or guarantee their rights.
 - Promoting dialogue with international networks, including raising awareness on how key provisions in trade agreements further expand markets and the power of transnational meat and feed corporations. Addressing the harmful impacts of these TNCs on climate change and setting up a regional and international North-South coordinating body to address these issues.
 - Identifying information gaps on the impacts of the Brazilian meat supply chain. For example, how many family farmers left milk production in recent years? How many meat processing plants have been closed? What condition are Brazilian rivers in and how is the ecosystem (including fisheries) affected? What are the impacts of agrochemicals on the rural population?
 - Seeking to win support of urban consumers. A communication strategy is needed, especially since a large majority of Brazilian news agencies have close ties to agribusiness, which provides significant revenue through advertisements.
- 6) Demand changes in government policies that expand industrial meat and feed production by:
 - Eliminating all public forms of subsidies for agribusiness corporations and remove the state as a shareholder of their capital. Encouraging careful use of public resources. Public funds should be directed to agroecological family farming.
 - Supporting meat production by family farmers and small meat processing plants and stimulating their potential to produce healthier food that promotes human rights and is free from animal cruelty. Defending changes to sanitary inspection rules that unjustifiably exclude small producers from the market.
 - Establishing a roundtable with representatives from civil society, the government and, perhaps, the agriculture industry to debate these issues.
 - 7) Create an effective civil society mechanism that builds on the insights from these discussions and develops next steps.

For the full report and German executive summary, see: iatp.org/the-rise-of-big-meat

This report is based on and updated from A Cadeia produtiva de carnes no Brasil, by Sergio Schlesinger, <https://fase.org.br/wp-content/uploads/2016/08/Livro-Cadeia-Industrial-da-carne.pdf>, pgs. 6-86.

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