

THE INFLUENCE OF INDUSTRIALIZED NATIONS ON
ENVIRONMENTAL ISSUES: AN EXAMINATION OF WHAT
THE EUROPEAN UNION AND UNITED STATES HAVE
DONE WITH RESPECT TO BRAZILIAN DEFORESTATION

by

MADELEINE TERRY

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Professor Craig Parsons

Climate change is arguably the toughest environmental challenge of the 21st century. When kept healthy, forests, such as the Amazon Rainforest in Brazil, play a key role in mitigating the effects of climate change. Unfortunately, industrialized nations—such as the European Union and the United States—are both directly and indirectly contributing to Amazonian deforestation. This thesis assesses the scope of these actions. It examines the past actions taken by the EU and the US that have brought the issue to this point, while also looking at how these actions are exhibited directly over the pressing issue of deforestation in Brazil. This thesis also presents an overview that helps explain what makes a nation “environmental,” as well as the particular drivers—such as politics, economics, and consumption—that can create ambiguous outcomes in whether an industrialized actor is purposefully exhibiting environmental tendencies or if it is doing so accidentally through lack of action. Through looking at one of the most concrete pieces in the fight against climate change—Brazilian deforestation—this thesis poses the question, what have the worlds two leading powers actually done? To answer this question, it becomes necessary to break down the primary research question into a more pointed question. This then leaves the question: how have their economic, political, and consumer ties to Brazil affected the issue to date? If the strategies are different, why are they different?

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List of Abbreviations

Conference of the Parties – COP

European Commission – EC

European Union – EU

Fiscal Year – FY

Forest Investment Program – FIP

Greenhouse Gas – GHG

Joint Action Plans – JAP

Latin American Integration Association – LAIA

Memorandum of Understanding – MOU

Pilot Program for the Protection of the Brazilian Rainforests – PPPG7

REDD+ for Early Movers – REM

Reducing Emissions from Deforestation and Forest Degradation in
Developing

Countries Program – REDD+

Tropical Forest Conservation Fund – TFA

United Nations – UN

United Nations Framework Convention on Climate Change – UNFCCC

United States – US

United States Department of Agriculture – USDA

Section I. Introduction

Global climate change is undoubtedly one of the most pressing environmental issues today, playing a key role in the environmental policy of many nations. However, of all the components at the recent Paris accord on climate change, the one that got the least attention was the world's forests. Forests around the world store large amounts of carbon that is released into the atmosphere when they are cleared and burnt, contributing to climate change. Deforestation is globally responsible for up to 20% of greenhouse gas emissions.¹ With the Brazilian Amazon representing half of the planet's remaining rainforest,² the immediate concern of the deforestation of this resource and its potential threat to climate change cannot be understated.

Although the world's forests were not at the forefront of the discussions in Paris, a global agreement was still produced that was hailed as "historic, durable and ambitious."³ All 196 nations present agreed to limit their emissions to relatively safe levels of 2°C with an aspiration of 1.5°C.⁴ President Obama, who considers tackling climate change a central element of his legacy, stated, "This agreement sends a powerful signal that the world is fully committed to a low-carbon future. We've shown that the world has both the will and the ability to take on this challenge."⁵ Amid this success, Miguel Arias Cañete, Europe's climate chief, reminded delegates, "Today, we

¹ World Wildlife Fund, "Amazon and Climate Change," *wwf.org*, accessed June 1, 2016, http://www.ccst.inpe.br/wp-content/uploads/relatorio/Climate_Change_in_Brazil_relatorio_ingl.pdf

² "The Amazon Rainforest," *Brazil.org*, accessed June 1, 2016, <http://www.brazil.org.za/amazon-rainforest.html>.

³ Fiona Harvey, "Paris Climate change agreement: the world's greatest diplomatic success," *The Guardian*, December 14, 2015, accessed June 1, 2016, <http://www.theguardian.com/environment/2015/dec/13/paris-climate-deal-cop-diplomacy-developing-united-nations>.

⁴ *Ibid.*

⁵ Coral Davenport, "Nations Approve Landmark Climate Accord in Paris," *New York Times*, December 12, 2015, accessed June 1, 2016, http://www.nytimes.com/2015/12/13/world/europe/climate-change-accord-paris.html?_r=0.

celebrate. Tomorrow, we have to act. This is what the world expects of us.”⁶ As with anything, these words and agreements remain hollow until action is actually taken.

While both the US and the EU have produced similar rhetoric, the EU is still perceived as more environmental. A large contributing factor to this is action. Though President Obama has openly addressed the issue, making bold statements such as, “Today, there’s no greater threat to our planet than climate change,”⁷ the EU is seen taking action. José Manuel Barroso, the 11th president of the EU, made this distinction clear when he expressed, “It is not enough for us to talk about climate change. We need widely accepted communication tools that show progress in these fields.”⁸ The EU’s involvement in multilateral environmental agreements on policy problems of environmental degradation—including climate change—has substantially contributed to the amelioration of global environmental issues, meanwhile, the US has been caught watching from the sidelines.

Ultimately, the goal of this thesis is to answer the question: how has the world’s leading industrialized nations affected environmental issues, particularly climate change? To do so, it becomes necessary to ask a secondary question to create a lens through which the primary research question can be examined. This question is: what have the EU and US done with respect to Brazilian deforestation, and how have their economic ties to Brazil affected the issue to date? If the strategies are different, why are they different?

⁶ Ibid.

⁷ AFP, “Obama says ‘no greater threat to planet than climate change,’” *Business Insider*, April 18, 2015, accessed June 1, 2016, <http://www.businessinsider.com/afp-obama-says-no-greater-threat-to-planet-than-climate-change-2015-4>.

⁸ European Commission, “Key Quotes on the Environment,” *Europa.eu*, October 28, 2015, accessed June 1, 2016, http://ec.europa.eu/environment/beyond_gdp/key_quotes_en.html.

This question is important because the EU is recognized as a leading champion of international action on issues of environmental degradation and is committed to promoting sustainable development worldwide. However, the EU has been unable to fully separate itself from the negative consequences caused by outside factors—such as consumption—on environmental degradation. Its’ internal policies also do not reduce the impact of the EU’s economic activity on natural resources worldwide—including the Brazilian Amazon. As an active participant in the creation and implementation of international environmental agreements and negotiations, the EU’s actions in Brazil have not gone unnoticed.

As arguably the most powerful nation in the world it is impossible to ignore the US’s impact on the global community, which is why it provides a point of comparison for this thesis. Unfortunately, the US has failed to join a large number of treaties directed towards combatting environmental degradation. These treaties set standards and create institutions designed to find and implement solutions to global environmental problems, including the deforestation of the Brazilian Amazon. Failure to actively join these agreements prevents the US from fully participating in ongoing discussions revolving around this issue.

While previous international attention has been focused on climate change as a whole, recent negotiations have put the world’s forests in the spotlight, making it a perfect focus for this project. The global community is working to create rules to encourage developing countries, such as Brazil, to preserve their forests. The Brazilian minister of the environment, Izabella Teixeira, explained that the improper clearing of

forests “is an environmental crime. If I have a crime, this is not acceptable.”⁹ While Brazilians may try to conserve their forests, they cannot do so alone. It is through pressure and aid from Western consumers, environmental groups and industrialized governments that the Brazilian government is able to attain the money needed to tighten their law enforcement and provide subsidies to draw people away from land clearing practices.

This thesis ultimately contributes to literature focused on the ways that big industrialized nations act over environmental protection by taking a comprehensive view of the actions taken largely since 1990 by two global leaders, the EU and the US, with respect to deforestation in Brazil. Through examining these actions, it becomes possible to draw connections to determine whether the EU is more environmental or if actions taken by other nations, such as the US, are more effective in combatting these international environmental issues. The notion that deforestation is solely caused by the development of forested nations is contested through recognizing that outside forces, such as economic power and consumption, cause environmental issues to escalate.

Unfortunately, field research is not plausible for this project. Instead, the analysis is based on five main sources of material: 1) trade deals, 2) environmental discussions, 3) scientific assessments, 4) policy, and 5) legislation involving the EU and US that affect deforestation in Brazil. There will also be the inclusion of testimony from recorded speeches, newspaper articles, scholarly journals, and personal interpretations. Together, these documents will be consulted to give an initial

⁹ Justin Gillis, “Delegates at Climate Talks Focus on Saving the World’s Forests,” *The New York Times*, December 10, 2015, accessed March 16, 2016, http://www.nytimes.com/2015/12/11/world/delegates-at-climate-talks-focus-on-saving-the-worlds-forests.html?_r=0.

evaluation of the motivations and shape of what the EU and US have done with respect to deforestation in Brazil.

Hopefully through this evaluation this thesis will help fill the gap in academic research, tying the issue of deforestation to the idea of the impact that industrialized nations have on the amelioration environmental issues. It therefore aims to analyze the problem from the perspective of these two industrialized actors taking measures to ameliorate Brazilian deforestation. Simultaneously creating an outlook on the future global impact of EU and US actions. Ultimately, this will determine whether the EU or the US is more environmental than the other, or whether something more complicated is occurring.

Outline of What Lies Ahead

To determine whether or not the EU is more environmental in the movement to ameliorate deforestation, it becomes necessary to structure the argument in several sections. The first section describes the current role that both the EU and US play in international environmental affairs, providing insight into the past actions taken by these industrialized nations. Through focusing on past and current actions at the international level, it becomes possible to dive into the smaller focus of Brazilian deforestation. The second section of this thesis examines what the EU and US have done to drive deforestation, and what is being done to mitigate those actions. In this section the impact of politics, consumption, and economic power are all brought into play.

Finally, this thesis concludes with a final evaluation of the motivations and shape of what the EU and US have done with respect to deforestation in Brazil, looking to the future to see how these actions impact deforestation.

Section II. Why do Western industrialized nations play an important role in environmental affairs?

Introduction

There is widespread consensus that when it comes to commitment to the environment, “rich countries should take the lead, but developing countries need to follow pretty closely behind.”¹⁰ Currently, there are a number of industrialized nations who are committed to taking action to combat environmental issues, but it is unclear if their presence is beneficial or detrimental. This section shows that the United States was once a driving force in the arena of international affairs, but in recent years has had its “environmental” status questioned due to a lack of participation. In contrast, the EU did not possess the same trait but in recent years has been recognized by the global community as being very environmental. This section moves the entire thesis along because it highlights the actions taken by these two industrialized nations with regard to environmental issues while simultaneously highlighting the emergence of the problem of Brazilian deforestation.

Why the US is seen as an environmental laggard

The United States was a principle actor in global affairs when environmental issues emerged on the international agenda in the late 1960s and early 1970s. Through initially being one of the strongest and most consistent supporters of international environmental treaties and agreements, the US was quickly recognized as being

¹⁰ Alana Herro, “‘BRIC’ countries top many industrialized nations in environmental commitment,” *World Watch* January to February 2008: 6, *Academic OneFile*, accessed May 27, 2016, <http://go.galegroup.com/ps/i.do?id=GALE%7CA173190005&v=2.1&u=s8492775&it=r&p=AONE&sw=w&asid=b4e9e0792faa7f44dd161fc48beea6ef>

environmental. The US was active in the preparations for the 1972 United Nations Conference on the Human Environment and backed major environmental treaties adopted during the 1970s, such as the 1972 London Convention on Dumping at Sea, the 1972 World Heritage Convention, the 1973 Convention on International Trade and Endangered Species, and the 1978 MARPOL Protocol on Pollution from Ships.¹¹ Subsequently, member states of the EU reluctantly ratified these same treaties making the US to appear more environmental to the global community.

Under the Carter administration the US continued demonstrate environmentalism. In 1977, *The Global 2000 Report to the President* was released providing a basis for the government to further implement a global environmental planning process. Although the findings of the report were discouraging, stating that “if present trends continue, the world will be more crowded, more polluted, less stable ecologically, and more vulnerable to disruption than the world we live in now,”¹² it also emphasized the need for international environmental cooperation and observed that the US had begun to play an active role in this regard.¹³ This cooperation faces the possibility of being construed as industrialized entities acting in imperial ways during a postcolonial period. Industrialized institutions, such as the US, are demonstration that “environmental policy is likely to have a clearer direction, though not necessarily in a

¹¹ Kelemen and Vogel, “Trading Places,” 428.

¹² Gus Speth, “The Global 2000 Report to the President: Entering the Twenty-First Century,” *Boston College Environmental Affairs Law Review* 8.4 (1980): 695, accessed March 30, 2016, <http://lawdigitalcommons.bc.edu/ealr/vol8/iss4/1>.

¹³ Glen Sussman, “The USA and Global Environmental Policy: Domestic Constraints on Effective Leadership,” *International Political Science Review* 25.4 (2004): 350, accessed March 23, 2016, <http://www.jstor.org/stable/1601604>.

pro-environmental direction.”¹⁴ Arguably leaving reports of this sort to portray superior environmental policy performance, but lack the substance necessary to be truly environmental.

The *Global 2000 Report* concluded by explaining, “unless nations collectively and individuals take bold and imaginative steps toward improved social and economic conditions, reduced fertility, better management of resources, and protection of the environment, the world must expect a troubled entry into the twenty-first century.”¹⁵ With these conclusions in mind, President Jimmy Carter realized that it was up to him as the chief diplomat to more actively insert environmental politics into the national agenda. To do so, he made a conscious effort to include these issues in nationally televised speeches to gain national support as well as encourage international cooperation.

Again, in the 1980s, the US demonstrated their commitment to environmentalism by playing a leading role in the negotiations that led to the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer,¹⁶ whereas EU member states continued to be unenthusiastic supporters. In his study of US foreign policy and global environmentalism, Paul Harris, the chair professor of global and environmental studies at the Hong Kong Institute of Education, argued that “The world’s governments and other important actors cannot deal effectively with environmental changes if the United States does not play an active role... Thus, environmental changes have become

¹⁴ Jerry McBeath, “Environmental Politics in Industrialized Nations,” *Global Environmental Politics* 4.4: 144, *Business Source Complete*, EBSCOhost, accessed May 27, 2016, ISSN: 15263800.

¹⁵ Speth, “The Global 2000 Report to the President,” 703.

¹⁶ Sussman, “The USA and Global Environmental Policy,” 350.

a major subject and feature of US foreign policy.”¹⁷ To make sure that being viewed as environmental remains an integral part of US foreign policy, it has been necessary for the executive and legislative branches to come together to push the agenda to the general public.

One of the best mechanisms to internationally broadcast these environmental efforts is through the president’s State of the Union message. Through this message, several presidents have made an effort to place the global environment in a prominent place, therefore reaching a broad and diverse audience. Interestingly enough, some Democratic presidents give the issue far more attention than those who affiliate with the Republican Party (See Table 1). This disparity of the presence of global environmental issues in State of the Union messages between the Carter through Clinton years can be explained by this political party alignment—both President Reagan and President Bush were Republicans while President Clinton and President Carter were Democrats—as well as the fact that other major issues dominated the air space. When taking the presidency President Bush informed the public he would be an “environmental”¹⁸ president, but the issue gained limited attention due to his focus on the end of the Cold War and the war against Saddam Hussein. In contrast, President Clinton, who had the most references to the environment, chose Al Gore as a running mate, and together “they stressed their commitment to the domestic and global environment.”¹⁹ While environmentalists criticized both Republican presidents on their approaches to environmental policy, Presidents Carter and Clinton created development and

¹⁷ Paul G. Harris, “International Environmental Affairs and US Foreign Policy,” in *The Environment, International Relations, and US Foreign Policy*, ed. Paul G. Harris (Washington DC: Georgetown University Press, 2002), 34.

¹⁸ Sussman, “The USA and Global Environmental Policy,” 355.

¹⁹ *Ibid.*

conservation plans that rivaled some of the most successful environmental projects throughout history.

The US is expected to foster remedies and encourage international cooperation in addressing global environmental issues. Gary Bryner, the director of Natural Resources Law Center and research professor at the University of Colorado School of Law, argues that the US has an obligation to be environmental because “Americans pollute more and consume more resources than any other people. The United States is so economically and politically powerful that its participation in the global environmental protection efforts is essential.”²⁰ However, the economic and political influence that the US has over environmental issues sometimes have the affect of doing more harm than good consequently making the US less environmental.

In 2007, the Commitment to Development Index was released evaluating the OECD member countries’ environmental performance. In this assessment the US placed last “due in part to high emissions per capita” and their “failure to ratify the Kyoto Protocol.”²¹ So while the US initially acted in an environmental manner when the issue first entered the global arena, it has since laggard due to glossing over current international environmental policies.

How the European Union Became Recognized as “Green”

The emergence of the European Union as an actor in global environmental politics came out of left field. With no formal treaty recognition mechanism or common environmental policy until the Single European Act in 1987, it had previously

²⁰ Sussman, “The USA and Global Environmental Policy,” 350.

²¹ Herro, “BRIC’ countries top many industrialized nations in environmental commitment,” 6.

proven difficult to have cohesion amongst EU member countries. With all 28-member states showing “willingness to take action at home”²² it started to become possible for the EU as a whole to start gaining international recognition for its’ environmental efforts.

This collaborative, cross-border effort by the industrialized nations that comprise the EU has helped the institution gain the desired “green” recognition. Other major Western powers, like the US, lacked this original barrier to entry of needing a cohesive policy between 28 different democracies, therefore enabling earlier environmental status. However, since 1989, the United States has only ratified two important environmental agreements, whereas 12 such agreements have been both signed and ratified by the European Union and/or its member states.²³ This retreat of the US did not inherently make the EU more environmental—instead this was attained over time through heavily advocating for the protection of the environment.

Over the past three decades, the EU has emerged as the strongest advocate for the expansion of international environmental law. It played an active role in the adoption of the 1989 Basel Convention on Hazardous Waste Disposal, the 1993 convention of Biological Diversity (CBD), the 1997 Kyoto Protocol on Climate Change, the 2000 Cartagena Protocol on Biosafety, and the 2001 Stockholm Convention on Persistent Organic Pollutants (POPs).²⁴ By contrast, the US has not ratified any of these international agreements. While the US has come under strong

²² Tony Blair, speech on the 10th anniversary of the Prince of Wales Business and Environment Program, September 14, 2004, accessed March 24, 2016, <http://www.number10.gov.uk>.

²³ R. Daniel Kelemen and David Vogel, “Trading Places: The Role of the United States and the European Union in International Environmental Politics,” *Comparative Political Studies* 43.4 (April 2010): 428, accessed March 23, 2016, doi: 10.1177/0010414009355265

²⁴ *Ibid.*

criticism for its opposition to new global environmental policy initiatives, the EU has been an active and visible participant at major United Nations environmental conferences helping to solidify their environmental status.

At the 2002 Johannesburg World Summit on Sustainable Development and at the Global Ministerial Environmental Forum of the United Nations Environmental Program it has been discussed that the best way to combat global environmental issues is through unified environmental policies. The EU has proven to be a successful example at these conferences due to its success in fusing the environmental policies of its 28-member nations. The idea this unified EU structure is to “ensure coherence, integrate policies, limit overlap and strengthen implementation.”²⁵ This unity forces each member nation to be held to a higher standard, consequently forcing each to be more environmental than they may have been otherwise. Through environmental criteria and benchmarks attained by member states, the EU inevitably has become more “green.”

On the international stage, EU environmentalism is defined by the use of domestic politics. These domestic politics—“forces within Europe both at the national and EU level”²⁶—have led the EU to embrace strict environmental policies. Given this internal commitment to high standards, it is in the best interest of the EU to support international agreements that will both place emphasis on the continuation of internal policies and put pressure on other states to do the same. The passage of these agreements only further legitimizes the environmentalism demonstrated by the EU.

²⁵ United Nations Economic and Security Council, *Implementing Agenda 21: Report of the Secretary General* (New York: United Nations, 2002): 233, doi: E/CN.17/2002/PC.2.

²⁶ R. Daniel Kelemen, “Globalizing European Union Environmental Policy,” *Europe and the Management of Globalization* 17.3 (2010), accessed March 24, 2016, <http://dx.doi.org.libproxy.uoregon.edu/10.1080/13501761003662065>.

The EU has emerged as a true champion for the environment. Through the regulation instated by the EU over its member nations, the institution has had the ability to “exert more influence vis-à-vis the international community than [possible] if the Member States had acted independently.”²⁷ Therefore, the recognition of one nation being “green” is not only beneficial for that state but for the EU as a whole. Under this environmental umbrella, the EU will continue to confront the global challenges of climate change, biodiversity loss and biosafety, deforestation, air and water pollution, and chemicals management.

The Role of the Brazilian Amazon in the Fight for Environmental Protection

Under the leadership of President Luiz Inácio Lula de Silva, Brazil found itself “on the short list of countries that will most shape the twenty-first century.”²⁸ However, today is a bit of a different story with Brazils’ economy facing its worst crisis since the 1930s, the zika virus epidemic raging, and the recent impeachment of President Rousseff.²⁹ While international attention is being drawn to the previously disregarded country for these ailments, Brazil is also prominent in many important dimensions—including freshwater reserves, food exports, and oil production.

²⁷ Rüdiger K. W. Wurzel and James Connelly, “Introduction: European Union Political Leadership in International Climate Change Politics,” in *The European Union as a Leader in International Climate Change Politics*, ed. Rüdiger K. W. Wurzel et al. (New York: Routledge, 2011), 15, accessed March 24, 2016,

<https://books.google.com/books?id=4oZaBwAAQBAJ&lpg=PP1&ots=B03XuJGfTB&dq=EU%20Environmental%20Leader&lr&pg=PR6#v=onepage&q=EU%20Environmental%20Leader&f=false>.

²⁸ Peter Dauvergne and Déborah BL Farias, “The Rise of Brazil as a Global Development Power,” *Third World Quarterly* 33.5 (London: Routledge, 2012), 904, accessed March 24, 2016, <http://dx.doi.org/10.1080/01436597.2012.674704>.

²⁹ Nick Miroff and Dom Phillips, “How Brazil, the darling of the third world, came undone,” *The Washington Post*, April 15, 2016, accessed May 17, 2016, https://www.washingtonpost.com/world/the_americas/how-brazil-the-darling-of-the-developing-world-came-undone/2016/04/14/40ee9356-fab4-11e5-813a-90ab563f0dde_story.html

While Brazil's initial recognition came from its growing economy, over the past forty years the country has also gained a lot of attention by the international community due to the devastating deforestation of 600,000 square kilometers³⁰ of the Brazilian Amazon. The Brazilian government reported in 2005 that one fifth³¹ of the Amazon forest had been cleared by deforestation to date. Deforestation has since slowed down, but the numbers still remain alarming. Officials estimate that "deforestation in 2010 fell to 5,000 sq km for the year, down from 7,000 sq km the year before and a peak of 27,000 sq km in 2004."³² This mass deforestation has received international recognition due to the fact that it is a key environmental issue and a contributor to global climate change.

However, in a globalized world it is foolish to think that Brazil alone is the driver behind the deforestation of the Amazon. Opportunities and constraints for new land uses created by international markets and policies have come to define the issue. Deforestation is now "substantially driven by major industries and economic globalization, with timber operations, oil and gas development, large-scale farming and exotic-tree plantations being the most frequent cases of forest loss."³³ These industries provide the global market with biomass for "food, feed, fiber, [and] fertilizer,"³⁴ and as of the last decade biofuels.

³⁰ Yadvinder Malhi, et al, "Climate Change, Deforestation, and the Fate of the Amazon," *Science* 319.5860 (2008), 170, accessed March 24, 2016, doi: 10.1126/science.1146961.

³¹ BBC News, "Country Profile: Brazil," August 14, 2012, accessed October 29, 2015, http://news.bbc.co.uk/go/pr/fr/-/2/hi/Americas/country_profiles/1227110.stm.

³² Ibid.

³³ European Commission, "The impact of EU consumption on deforestation: Comprehensive analysis of the impact of EU consumption on deforestation," European Commission (2013), 5. Accessed October 29, 2015. <http://ec.europa.eu/environment/forests/pdf/1.%20Report%20analysis%20of%20impact.pdf>.

³⁴ Ibid.

Often time's the issue of deforestation has proven to be too difficult to reach agreement on at global environmental conferences. Yet, with heavily forested countries, like Brazil, pledging to fight deforestation and promote forest conservation the issue becomes a little bit more manageable. International environmentalists, such as the EU, have also recognized that "cutting emissions from [Brazilian] deforestation by leaving forests standing or promoting reforestation is arguably one of the simplest and most cost-effective ways to address climate change."³⁵ It is important to remember that forests and climate change are intrinsically related. This driver is often overlooked when talking about climate change, but it has become evident that this can no longer occur.

The international community has begun discussing a global binding agreement on sustainable forest management. However, Brazil has expressed a fear "that international regulation would violate their sovereign rights to exploit forests and forest resources."³⁶ For this reason, deforestation is often reframed as a climate change issue—something that the international community is equipped to deal with. This led to the formation of a mechanism called REDD (Reducing Emissions from Deforestation and Forest Degradation in Developing Countries) in 2010. This strategy would allow developed countries to compensate developing nations for protecting forests.

European leaders have endorsed the objective of ending deforestation and reducing forest degradation through signing treaties, initiating several action programs, and funding programs such as REDD+. Through such actions EU environmentalism

³⁵ Gabriela Bueno, "Forests gain long-awaited recognition in Paris climate summit," *The Conversation*, December 18, 2015, accessed March 24, 2016, <http://theconversation.com/forests-gain-long-awaited-recognition-in-paris-climate-summit-52238>.

³⁶ *Ibid.*

has been solidified since the turn of the century. However, the United States has recently joined “the global initiative to reduce deforestation sharply over the next 15 years, with the goal of eliminating the practice by 2030.”³⁷ Besides the US, participating states include wealthy, industrialized nations that could help fund reforestation efforts. This sort of collaboration is necessary to combat the issue of Brazilian deforestation; nonetheless it is necessary to recognize the EU as being a “green” institution due to the fact it will only continue to encourage the good practices of the member nations.

Conclusion

In conclusion, through asserting itself through the protection of the global environment the EU has gained the desired recognition as an environmentalist. Meanwhile, the US has lagged in recent years due to its failure to ratify important treaties and actively participate in combatting the global issue. Industrialized Western nations are attempting to ameliorate the problem of Brazilian deforestation, because, even though it has been recognized as a key issue, it has proven difficult to combat without the resources provided by these entities. Therefore, the desire to be seen as “green” only takes a nation so far; it instead takes dedication to the protection of the environment and recognition by the international community to achieve this goal.

³⁷ Neela Banerjee, “US Joins Other Nations in Deforestation Accord at UN Summit,” Los Angeles Times, September 23, 2014, accessed March 23, 2016, <http://www.latimes.com/nation/la-na-deforest-climate-change-20140923-story.html>.

Section III. What has the EU/US done to drive deforestation, and what is being done to mitigate that?

Introduction

The cause of deforestation has been the focus of a large number of studies. Most of these studies analyze the effect of income, policies, and country characteristics on deforestation. However, rarely do reports delve into the effect of these same factors on the amelioration of deforestation. In this section, we will dive into what actions the European Union and the United States has taken to combat Brazilian deforestation.

How have actions taken by the EU affected deforestation in the Brazilian Amazon?

Introduction. The European Union and Brazil established diplomatic relations in 1960. Since this time, the two have experienced close historical, cultural, economic, and political ties. In this section we will examine the relationship between the two countries, while simultaneously examining how that relationship affects EU influence over Brazilian deforestation policy. This section will also go on to look deeper than just the politics of the issue, diving into the role that EU consumption and economic power plays in this scenario. The reason this section moves the whole thesis along is because it provides an understanding of what exactly the EU has done to drive deforestation in Brazil, consequently allowing for the connection between these actions and the EUs environmentalism.

Establishing a Strategic Partnership. In the period of 2002 to 2006, the EU allocated close to €2 million to EU-Brazil cooperation³⁸—particularly environmental protection—becoming the first real step towards a strategic partnership. Bilateral political relations between the two powers continued to widen, culminating in an established partnership during the Lisbon Summit of July 2007. Though the EU never properly defined what constitutes a strategic partnership, it has “indicated its desire for these arrangements to deliver comprehensive, contractual, rule-based relationships with its strategic partners in the long term.”³⁹ This partnership is truly a tool for the EU to pursue its interests and promote its foreign policy agenda abroad.

The EU had four key incentives in established a strategic partnership with Brazil. First, the strategic partnership is being used as a means to boost partners’ diplomatic status while keeping the EU’s interests in mind. It was stated at the summit that:

Brazil has become an increasingly significant global player and emerged as a key interlocutor for the EU... The proposed strategic partnership between Brazil and the EU should help Brazil in exercising positive leadership globally and regionally and to engage with the EU in a global, strategic, substantial, and open dialogue both bilaterally and in multilateral regional fora.⁴⁰

With Brazil becoming a key player on the global stage for world trade negotiations, the EU must be conscientious since the two actors have the ability to directly affect one-another. Second, Brazil is an emerging market for the EU, and one in which it is

³⁸ Richard Whitman and Annemarie Rodt, “EU-Brazil Relations: A Strategic Partnership,” *European Foreign Affairs* 17.27 (2012): 34.

³⁹ Whitman and Rodt, “EU-Brazil Relations: A Strategic Partnership,” 36.

⁴⁰ Commission of the European Communities, “Towards an EU-Brazil Strategic Partnership,” The European Parliament and the Council, May 30, 2007, accessed February 8, 2016, <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52007DC0281>

competing with the United States and China.⁴¹ It is crucial that the EU secures maximum access to the Brazilian market. Third, Brazil has close cultural ties with Portugal, its former colonial power. It is important to note that “Portugal held the Commission Presidency at the time when the strategic partnership with Brazil was agreed, and President Lula enjoyed an excellent working relationship with Commission President Barroso.”⁴² Finally, and most importantly, the EU supports Brazil’s pursuit of regional leadership in Latin America. Through having a more stable, constructive, and cooperative power in the region, the possibility of the EU achieving its regional goals increases exponentially.

Consequently, at the Lisbon summit, the EU-Brazil Strategic partnership was officially launched. The central areas for cooperation identified included effective multilateralism, trade, human rights, climate change, sustainable energy, the fight against poverty, and regional integration.⁴³ The European Commission allocated €61 million to its Brazil Country Strategy starting in 2007 (and continuing through 2013)⁴⁴ for two key policy areas—fostering bilateral relations between the EU and Brazil, and promoting environmental sustainability. This constant emphasis on promoting environmental sustainability is a characteristic that will come to define the EU-Brazil Strategic Partnership.

The EU explicitly stated that one of its priorities in this partnership was “protecting, preserving and improving the environment and promoting the

⁴¹ Whitman and Rodt, “EU-Brazil Relations: A Strategic Partnership,” 36.

⁴² *Ibid.*

⁴³ M. Emerson and R. Flores, “Enhancing the Brazil-EU Strategic Partnership—From the Bilateral and Regional to the Global,” *Center for European Studies* (2013): 168, accessed February 28, 2016, <http://web.a.ebscohost.com.libproxy.uoregon.edu/ehost/pdfviewer/pdfviewer?sid=1100f7bb-d9f1-4ad2-813e-6ee0f41d9a90%40sessionmgr4002&vid=1&hid=4112>.

⁴⁴ Whitman and Rodt, “EU-Brazil Relations: A Strategic Partnership,” 37.

environmental dimension of sustainable development in Brazil.”⁴⁵ Five objectives were also outlined for this priority area:

1) To curb deforestation; 2) to prevent loss of biodiversity; 3) to reduce carbon emissions due to deforestation, and thereby contribute to Brazil’s efforts to combat climate change; 4) to create income and added value to communities, thus improving living conditions for indigenous people, traditional populations, and the rural poor; and finally, 5) to improve governance in natural resource utilization.⁴⁶

In a true bilateral agreement, these objectives will be met while continuing to develop the established strategic partnership. These mutually acceptable goals have made the environment a top strategic priority as well as a base for the two powers.

In hopes of further developing this partnership, on July 24, 2007 the first annual EU-Brazil summit was held in Brussels. A wide variety of topics were covered ranging from economic growth and job creation to environmental issues and sustainable development. On the topic of development, one of the key focuses was climate change, which they recognized was largely fueled in Brazil by deforestation. At the summit they “reaffirmed [their] commitment to reaching an ambitious, fair, balanced, and legally binding outcome...leading to the adoption of a protocol...applicable to all parties.”⁴⁷ This high level political dialogue proves the mutual interest of both parties to collaborate on these issues, therefore continuing the previously developed strategic partnership.

Deforestation Policy in the EU-Brazil Partnership. Environmental policy is one of the most rapidly expanding areas of EU activity, with environmental legislation setting an example worldwide in areas ranging from greenhouse gas emissions, to

⁴⁵ Whitman and Rodt, “EU-Brazil Relations: A Strategic Partnership,” 38.

⁴⁶ *Ibid.*

⁴⁷ Council of the European Union, “EU-Brazil Summit,” European Union, February 24, 2014, accessed February 10, 2016, http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/141145.pdf.

recycling, to tropical deforestation. On the global scale, the “EU has assumed a clear leadership role in multilateral environmental policymaking, promoting the concept of sustainable development as an evasive principle for global governance.”⁴⁸ As a result, the EUs support for universal norms and global environmental leadership has provided a link between trade and environmental policy.

Since the EU and Brazil are allied in a strategic partnership, they both have placed sustainable development at the top of their bilateral agenda. This agenda is implemented through Joint Action Plans (JAP), the most recent of which was established in Brussels on October 4th, 2011. These plans “reaffirm the values and principles shared by the EU and Brazil which find expression in their Strategic Partnership,” while “deepening the political dialogue in order to generate a greater convergence of positions on key global challenges.”⁴⁹ In each JAP it is reiterated that both powers agree with current Climate Change Dialogue, while stating that in addition they will “strengthen their cooperation and support ongoing efforts to reduce emissions from deforestation and forests degradation.”⁵⁰ This cooperation adds more substance to the partnership.

⁴⁸ Stavros Afionis and Lindsay Stringer, “The Environment as a Strategic Priority in the European Union-Brazil Partnership: Is the EU Behaving as a Normative Power or Soft Imperialist?” *International Environmental Agreements: Politics, Law & Economics* 14.1 (2014): 48, *Business Source Complete*, accessed February 28, 2016,

<http://search.ebscohost.com.libproxy.uoregon.edu/login.aspx?direct=true&db=bth&AN=94278216&site=ehost-live&scope=site>

⁴⁹ Council of the European Union, “V European Union-Brazil Summit Joint Statement,” Europa.eu, October 4, 2011, accessed February 28, 2016, http://eeas.europa.eu/brazil/docs/2011_eu-brazil_summit_joint_statement_en.pdf.

⁵⁰ *Ibid.*

Deforestation is an issue in which a lot of opportunities for further collaboration exist. As the “third-largest emitter of total greenhouse gases in the world⁵¹ if emissions from deforestation and forest degradation are included), Brazil’s actions are incredibly important to the success of a unified global climate change policy. Following the Copenhagen climate summit in 2009, Brazil pledged to cut emissions by 36-39%.⁵² A decrease of this amount would make Brazil a global leader in greenhouse gas reductions, setting a new global expectation. These types of goals by Brazil only deepen the strategic partnership between the EU and Brazil; causing the EU to stress it’s determination to contribute to Brazil’s efforts to combat climate change.

In 2011, the two partners reinforced climate change cooperation by formally launching a self-standing EU-Brazil Climate Change Dialogue. Previously, there was no real common agenda or alliance on the issue at a global level despite the fact that the partnership rests on a strong foundation of environmental protection and sustainable development. Through the development of this conversation, it was realized that Brazil and the EU are facing very different challenges with regard to climate change, sustainable development and renewable energies. For example, “in the case of the EU, carbon fossil fuels are most responsible for GHG emissions, while 85 percent of Brazil’s GHG emissions come from land use changes, partially from deforestation and

⁵¹ International Energy Agency, “CO2 emissions from fuel combustion—highlights,” *IEA Publications* (2011).

⁵² Afionis and Stringer, “The Environment as a Strategic Priority in the European Union-Brazil Partnership,” 54.

degradation in the Amazon.”⁵³ While the challenges are different, the objectives are complimentary. However, new internal forestry laws in Brazil, along with pressure from the powerful Brazilian agriculture lobby, may begin contradicting efforts put forth by the EU.

To its credit, the Brazilian government has since enacted a series of successful policies to curtail deforestation. The international community has applauded progressive efforts made independently by Brazil, but with international attention being drawn to this issue it was emerged as a central focus in the EU-Brazil partnership. While welcoming European involvement, Brazilian policymakers still “complain [about] the EU ‘obsession’ with the Amazon results [with] other potential avenues of climate change cooperation being overlooked.”⁵⁴ Indeed, the EU did spell out that a priority was to “contribute to protecting the environment—more specifically Brazilian forests,”⁵⁵ which can sometimes appear to the Brazilian government that the EU wants to be present when there are successes in this realm so they can have their hand in setting the international norm.

However, the issue of deforestation has absorbed most of the EU’s financial resources for bilateral environmental undertakings through the Pilot Program for the Protection of the Brazilian Rainforests (PPPG7). The objective of this initiative is “to maximize the environmental benefits of rainforests through the implementation of

⁵³ Susanne Gratius and Debora González, “The EU and Brazil: Shared goals, different strategies,” in *Hot Issues, Cold Shoulders, Lukewarm Partners: EU Strategic Partnerships and Climate Change*, ed. Giovanni Grevi and Thomas Renard (Madrid: European Strategic Partnerships Observatory, 2012): 14, accessed February 28, 2016, http://fride.org/download/RP2_EU_Strategic_Partnerships_and_Climate_Change.pdf.

⁵⁴ Afionis and Stringer, “The Environment as a Strategic Priority in the European Union-Brazil Partnership,” 54.

⁵⁵ European Commission, “Brazil—Country Strategy Paper,” Europa.eu, May 14, 2007.

pioneering projects that contribute to the ongoing reduction of the deforestation rate in Brazil.”⁵⁶ PPPG7 experiments with protecting Brazil’s rainforests in a sustainable fashion. So far, this program has established “2.1 million hectares of community-managed extractive reserves, and [has] significantly increased [the] adoption of certified forest management across the legal Amazon.”⁵⁷ Through strengthening civil society and public institutions involved in the protection of Brazil’s rainforests, it is hoped that this project will become self-sufficient.

Despite this progress, the debt crisis in the Eurozone has had a clear impact on EU funds for cooperation with Brazil. For instance, in 2011, “the European Commission informed Brazil that due to budgetary constraints it would need to divert funding for environmental projects to the North African and Middle Eastern ‘Arab Spring’ countries.”⁵⁸ Funding for deforestation initiatives were discontinued from 2011 to 2013, when efforts were restarted with the implementation of REDD+ (which will be discussed later in this thesis). During this time, the EU leveraged any international power it had to continue shining light on the issue.

It cannot be mistaken that Brazil possesses the largest remaining areas of rainforest in the world. Therefore, Brazil is a critical partner for the EU in its campaign for greater international action to combat climate change and to halt the decline of biodiversity.⁵⁹ Since the EU is particularly interested in developing and reinforcing an

⁵⁶ “Pilot Program to Conserve the Brazilian Rain Forest (PPPG7),” The World Bank, August 12, 2009, accessed February 28, 2016, <http://go.worldbank.org/IZ8ZNL180>.

⁵⁷ *Ibid.*

⁵⁸ Afionis and Stringer, “The Environment as a Strategic Priority in the European Union-Brazil Partnership,” 55.

⁵⁹ “*Toward an EU-Brazil Strategic Partnership*”

environmental policy dialogue with respect to deforestation, it must continue working with Brazil on the international stage.

Importance of REDD+ in combatting deforestation. The EU supports a policy target of halting global deforestation by 2030 as well as a reduction of tropical deforestation, much like what is being seen in Brazil, by at least 50% by 2020.⁶⁰ Ongoing United Nations Framework Convention on Climate Change (UNFCCC) negotiations on “reducing emissions from deforestation and forest degradation, conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest stocks”⁶¹ could prove an important tool for achieving this goal. To contribute to achieving this goal, parties of the UNFCCC designed a framework called REDD+, which stands for “reducing emissions from deforestation and forest degradation in developing countries and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.”⁶² This program incentivizes developing countries to either reduce greenhouse gas emissions or to increase the removal of CO₂ from forestland, while simultaneously not harming people or the environment.

In the EU context, REDD+ has four primary objectives. These objectives are as follows:

1. Slowing, halting and sustainably reversing global forest cover and carbon loss (including the enhancement of forest carbon stocks), in order to achieve long-lasting and credible GHG emission reductions,

⁶⁰ European Commission, “REDD+,” *ec.europa.eu*, February 10, 2013, accessed April 15, 2016, http://ec.europa.eu/clima/policies/forests/redd/index_en.htm.

⁶¹ *Ibid.*

⁶² European Commission, “Forests, Climate and People: EU Support to Combat Tropical Deforestation (REDD+) 2006-2014,” *Publications Office of the European Union* (2015): 5, accessed April 15, 2016, http://ec.europa.eu/clima/publications/docs/redd-plus_2014_en.pdf.

consistent with the agreed objective of keeping global warming below 2°C compared to the pre-industrial temperature;

2. Preserving and enhancing other benefits of forests such as poverty alleviation, biodiversity, restoration and resilience of forests ecosystems and the services they provide, recognizing the linkages between adaptation and mitigation, in line with international commitments and objectives;
3. Enabling broad participation of developing countries, resulting in wide coverage of forests to prevent international displacement of carbon emissions;
4. Anticipating and encouraging further movement towards sustainable land use and resource consumption patterns as a basis for food, water, and energy security, raw material supply and rural income in the context of low emission development strategies.⁶³

Through these objectives the EU is attempting to preserve and strengthen the role of tropical forests in climate mitigation, adaptation and development. This support is evident by the fact that from 2006 to 2014, the EU and its member states provided €3 billion in support of REDD+ activities.⁶⁴ This makes the EU the second largest sponsor, behind Norway, of REDD+, globally shouldering about 30% of the total financial effort.⁶⁵ This funding from the EU directly contributes to reducing emissions from deforestation and forest degradation.

Brazil was the first country to receive results-based REDD+ payments from Germany's REDD+ for Early Movers (REM) Program, a member state of the EU, in 2012. REM receives funding of €65 million to support and reward incredibly engaged REDD pioneers,⁶⁶ providing accessible bridging finance to countries which have already taken action independently towards mitigating climate change—something

⁶³ European Commission, "REDD+."

⁶⁴ European Commission, "Forests, Climate and People," 1.

⁶⁵ European Commission, "Forests, Climate and People," 7.

⁶⁶ European Commission, "Forests, Climate and People," 7.

demonstrated by Brazil. This results-based system has proven incredibly successful in emission-reduction efforts. At the same time, the prevention of biodiversity has had a positive impact on biodiversity conservation in the Brazilian Amazon.

As of May 2015, REM compensated for 5.5 million tonnes of CO₂.⁶⁷ A large portion of this is attributed to agricultural cooperatives, farmer associations, and other such project that foster sustainable agriculture. Through REDD+ initiatives in Brazil, it has demonstrated that it is possible, and can be cost effective, to drastically reduce deforestation.

Why EU consumption is contributing to deforestation. Agricultural expansion is by far the leading cause of tropical deforestation. That being said, agricultural expansion does not operate alone, but in combination with other causes such as wood extraction and infrastructure extension. The main factors driving these trends include;

1) economic factors (market growth and commercialization, urbanization and industrialization, poverty); 2) policy and institutional factors (e.g. favorable credits or subsidies for agricultural expansion, liberally granted licenses and logging concessions, land development policies, property rights issues, colonization and transmigration); 3) technological factors (agricultural intensification, use of heavy equipment in timber logging); 4) biophysical factors (natural forest fire, easy access to lowland rainforests) and interlinkages to those).⁶⁸

Lacking green space within its own borders, the EU is guilty of being heavily dependent on natural resources in Brazil. Currently, the resources of 2.6 planets would be needed to maintain the lifestyles experienced in the EU.⁶⁹ This resource dependency

⁶⁷ Ibid.

⁶⁸ “The impact of EU consumption on deforestation.”

⁶⁹ Anke Schulmeister, “Eating Up Forests: How EU Consumption Drives Deforestation and Land Conservation,” World Wildlife Fund, May 2015, accessed February 10, 2016, http://d2ouvy59p0dg6k.cloudfront.net/downloads/wwf_epo_eu_soy_report_2015_v4_web_1.pdf.

inadvertently causes serious environmental problems. The EU is essentially “buying” deforestation by consuming the commodities, therefore contributing to the problem.

To meet its own consumption needs, the EU not only relies upon its own agricultural land and forests, but it also has a land use impact beyond its borders. The European Commission has released a report, *The Impact of EU Consumption on Deforestation*, which for the first time estimates the impact of European consumption of products such as meat, biofuels, and manufactured goods (such as furniture) on deforestation. The report estimates that the “wasteful and unsustainable production and consumption of food, animal feed and energy crops in Europe have resulted in the destruction of an area of forest at least 9 million hectares.”⁷⁰ In Brazil, agricultural expansion is the primary driver of deforestation, namely for 70% over the period of 1990-2000 and 83% during the time period of 2000-2008⁷¹ (this, along with the other primary drivers of deforestation, is reflected in Table 2). It is difficult for the EU to claim to be environmental while allowing forest destruction on a massive scale for personal consumption purposes.

A huge contributing factor that allows for Brazilian agricultural products to enter the European market is the consumer perceptions of products from Brazil—more commonly known as the “country-of-origin effect.”⁷² Ultimately it was determined that “consumers’ perception about the quality of Brazilian [products] in Europe is dependent

⁷⁰ Greenpeace, “Global deforestation—Europe faces up to its dirty secret,” July 2, 2013, accessed February 1, 2016, <http://www.greenpeace.org/eu-unit/en/blog/global-deforestation-europe-faces-up-to-its-d/blog/45812/>.

⁷¹ “The impact of EU consumption on deforestation.”

⁷² Feranda de Tavares Canto Guina and Janaina de Moura Engarcia Giraldi, “The Evaluation of Brazilian Beef in Europe: Consumers, Importers and Exporters’ Perspectives,” *International Food and Agribusiness Management Review* 16 (2013): 102, accessed February 22, 2016, [http://ageconsearch.umn.edu/bitstream/159662/2/20120084_\(5\).pdf](http://ageconsearch.umn.edu/bitstream/159662/2/20120084_(5).pdf).

on the country image.”⁷³ Cattle ranching in the Brazilian Amazon correlates significantly with deforestation, accounting for 62% of deforestation while all other large-scale crop production only amasses to 5%.⁷⁴ Though the EU itself did not fall on the list of the top fifteen importers of Brazilian beef in 2014, three of its member nations did. Italy imported 27.803 tonnes valuing at \$215,767, closely following was the Netherlands at 15.359 tonnes and \$146,200, and finally Germany at 8.331 tonnes for \$85,298.⁷⁵ It is important to make this note, because while the EU may not be a top importer itself, by having its member nations top the list the institution as a whole is inadvertently contributing to the destruction of the Brazilian Amazon through supporting cattle ranching.

While cattle ranching significantly drive deforestation, beef is not one of the top products consumed by the EU as a whole. The top five agricultural crops consumed in the EU linked to deforestation are soybeans, maize, palm oil, rice, and sugar cane. To put that into perspective, of the 22.5 million hectares of embodied deforestation in globally traded crop products, the EU consumed 33 percent of 7.4 million hectares.⁷⁶ With the EU needing land beyond its borders to satisfy its’ consumer demands this is inevitable. However, EU institutions and industry have a responsibility to address the negative environmental and social impacts of this consumption.

The EU imports significant amounts of soybeans and soy cakes for livestock feed from Brazil. Between 1990 and 2008 some 13 million hectares of deforestation can be contributed directly or indirectly to the expansion of soybean production, with

⁷³ Guina and Giraldi, “The Evaluation of Brazilian Beef in Europe,” 103.

⁷⁴ “The impact of EU consumption on deforestation.”

⁷⁵ Patrick Bruha, “Countries that Import Meat from Brazil,” *The Brazil Business*, April 30, 2015, accessed May 16, 2016, <http://thebrazilbusiness.com/article/countries-that-import-meat-from-brazil>.

⁷⁶ Schulmeister, “Eating Up Forests”

65% of that occurring in Brazil alone.⁷⁷ As soybeans transition from being just a food product to also being used as a biofuel, the EU has increased their demand of the product. While the EU is attempting to be more “environmental” by straying away from burning traditional oil, these actions are inadvertently driving deforestation.

Although the increased demand for soybeans and the growth of biofuels represent excellent opportunities for Brazil, this demand requires 2 million hectares⁷⁸ of farmable land that currently isn’t present. The federal government of Brazil is creating Sustainable Forest Districts—“areas where public policies, concerning for example forest management, land tenure, energy, industry, education and science and technology, will be implemented to stimulate forestry or forest recovery.”⁷⁹ That being said, more needs to be done by the international community, not just for the Brazilian amazon but also for future resource security. This is an area where the EU should step up and “use policy, regulatory, fiscal and financial instruments to halt deforestation”⁸⁰ and encourage better consumption practices. Ultimately, this would not only serve the self-interests of the EU but it would also be highly beneficial to their strategic partnership with Brazil.

It is important to note that the EU, as a signatory on the UN Declaration of Forests, has committed to “at least halving the rate of loss of natural forests globally by 2020 and strive to end natural forest loss by 2030” and to support and help “the private sector meet the goal of eliminating deforestation from the production of agricultural

⁷⁷ “The impact of EU consumption on deforestation.”

⁷⁸ C. Azevedo-Ramos, “Sustainable development and challenging deforestation in the Brazilian Amazon: the good, the bad, and the ugly,” *The Food and Agriculture Organization Corporate Document Repository*, May 2007, accessed April 15, 2016, <http://www.fao.org/docrep/011/i0440e/i0440e03.htm>.

⁷⁹ *Ibid.*

⁸⁰ Schulmeister, “Eating Up Forests”

commodities such as palm oil, soy, paper, and beef products by no later than 2020.”⁸¹

The big challenge is ensuring that EU actions address the root causes of the degradation rather than pushing the market elsewhere. The key lies in supporting land use processes while simultaneously strengthening the rights of forest communities.

What is the impact of the EU’s economic ties with Brazil over deforestation? To understand the economic relationship between the EU and Brazil, there are several important things to understand. As the largest economy in Latin America, Brazil clearly provides benefits for the EU—hence the development of the Strategic Partnership. However, the EU also provides benefits for the EU. The EU is Brazil’s first trading partner, accounting for 19.5% of its total trade, and Brazil is the EU’s tenth trading partner, accounting for 2% of total EU trade.⁸² Two primary products dominate EU imports from Brazil: agricultural products (48%) and fuels and mining products (24.8%).⁸³ Along this same vein, Brazil is the single largest exporter of agricultural products to the EU worldwide.

The fact that Brazil is the largest exporter of agricultural products to the EU indicates that despite its leadership on deforestation policy, there is a little bit of the pot calling the kettle black. Forests are cut down for many reasons, but most of them are related to money. The biggest driver of deforestation is agriculture.⁸⁴ Farmers cut forests to provide room for planting crops or grazing livestock. By creating the continuous demand for agricultural products, Brazil continues to produce (and in turn

⁸¹ Ibid.

⁸² European Commission, “Trade: Brazil,” [ec.europa.eu](http://ec.europa.eu/trade/policy/countries-and-regions/countries/brazil/), October 27, 2015, accessed March 28, 2016, <http://ec.europa.eu/trade/policy/countries-and-regions/countries/brazil/>.

⁸³ Ibid.

⁸⁴ “Deforestation: Here’s what you need to know about the warming planet, how it’s affecting us, and what’s at stake,” National Geographic, accessed March 28, 2016, <http://environment.nationalgeographic.com/environment/global-warming/deforestation-overview/>.

deforest) in order to supply. This is incredibly important to keep in mind when considering the positive economic relations caused by treaties and agreements, because underneath it all a lot of economic growth is driven by deforestation.

In 2011, EU Trade Commissioner, H.E. Karel De Gucht highlighted the importance of the continuation of the strong EU-Brazil economic partnership. He said, “if we can make progress on our economic agenda we will be laying solid foundations for a stronger alliance across all areas.”⁸⁵ This economic exchange is the pinnacle of the EU-Brazil strategic partnership; therefore its success will have a ripple effect leading to success in other areas as well.

The upkeep of this strategic partnership is important for the EU and Brazil seeing as it helps the two powers with both economic developments but also with other matters—such as the environment. At the 7th EU-Brazil Summit, a number of global and regional issues were discussed and both the EU and Brazil agreed on the importance of sustainable economic growth and the implications that has on the environment. The joint statement stated:

Recognizing the link between poverty eradication and promotion of sustainable development...we reaffirmed the need for close cooperation on issues such as biodiversity conservation...sustainable forest management, sustainable trade in wildlife and wildlife products, sustainable consumption and production and clean technologies...thus contributing to the protection and rational use of natural resources and sustainable development.⁸⁶

⁸⁵ Leuven Centre for Global Governance Studies, “Strategic Challenges in the EU-Brazil Relationship: Conference Report,” *Katholieke Universiteit Leuven*, May 8, 2012, accessed March 28, 2016, https://ghum.kuleuven.be/ggs/events/2012/05_2012/eubrazilconferencereportfinalv-1.pdf.

⁸⁶ Council of the European Union, “7th EU-Brazil Summit: Joint Statement,” *Europa.eu*, February 24, 2014, accessed March 28, 2016, http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/141145.pdf.

Through the reaffirmation of the two powers to keep the environment at the core of their partnership, the EUs environmental tendencies shine through. It is showing that a partnership, even one that is primarily based on an economic relationship, can be stronger with the inclusion of environmental provisions.

With environmental issues at the core of the partnerships framework moving forward, the two actors are able to show their commitment to ameliorating deforestation. For the EU, this means walking the walk. Unfortunately, eliminating the exploration of Brazilian agricultural products to Brazil might also cause the relationship between the EU and Brazil to crumble. Therefore, it will ultimately be very interesting to see the outcome of this agreement and the effects it has on the economic partnership as well as on conservation efforts.

Conclusion. In conclusion, this section shows that while the EU is having a positive impact both politically and economically over the amelioration of the deforestation of the Brazilian Amazon there is still one large blunder—consumption. It is possible for the EU to have a positive impact over the policies implemented for the protection of this ecosystem, but simultaneously be backtracking on all of those positives with such a strong negative. The consumption being driven by EU demand is enormous, and will only continue to grow with the current emphasis on the use of biofuels made by Brazilian soybeans. The reason this is important to note in the scope of this thesis is that this one negative has the possibility of overshadowing all of the positive work being done, therefore undermining the EUs environmental efforts.

How have US actions impacted Brazilian deforestation?

Introduction. The United States was the first country to recognize Brazil's independence in 1822. The two countries have traditionally enjoyed friendly, active relations encompassing a broad political and economic agenda. This section will dive deeper into the fundamentals of those relations, especially in respect to their collaboration over environmental affairs and deforestation policy. This section will also look at how US consumption patterns and economic power influence relations with Brazil, and how that may impact deforestation of the Amazon. The reason this section moves the whole thesis along is because it gives an understanding of what the US has done (or hasn't done) with respect to deforestation in Brazil, thus allowing for a comparison with how the US is dealing with global environmental affairs.

Strengthening of the EU-Brazil Relationship During the Bush Administration. The relationship between Brazil and the US strengthened with the inauguration of Brazil's internationally oriented, reformist President Fernando Henrique Cardoso in 1995. Deepening of US-Brazil engagement and cooperation continued with President George W. Bush invited President Luiz Inácio Lula de Silva to Washington DC for a summit on June 20th, 2003. Though no policy of significance was produced from this meeting, President Bush did reiterate, "Brazil is an incredibly important part of a peaceful and prosperous North and South America. I can say that from the perspective of the United States, this relationship is a vital and important and growing relationship."⁸⁷ This meeting, though not a typical summit meeting, was the first of

⁸⁷ Office of the Press Secretary, "President Bush Welcomes Brazilian President Lula to White House," *The White House Archives: President George W. Bush*, June 20, 2003, accessed February 28, 2016, <http://georgewbush-whitehouse.archives.gov/news/releases/2003/06/20030620-3.html>.

many that would come to define the relationship forged between President Lula and President Bush. The details of this relationship will be outlined in further detail in the following paragraphs.

High-levels of contact between the two governments continued with President Bush's visit to Brazil in November 2005. President Lula expressed his optimism for bilateral relations, while recognizing that the partnership is grounded on a solid economic basis. He explained at a press conference held in Brazil that, "The United States are the largest individual partner of Brazil as the largest market for our exports and our main source of direct overseas investment. Our exchange has grown at rates of 7 percent per year. In 2004 alone, we received \$4 billion in investments from the United States."⁸⁸ However, this investment doesn't come without strings attached. On a scale like this, the United States has the upper hand in economic and trade discussions allowing for what the Brazilian government sees as "unjustified barriers to [their] bilateral trade"⁸⁹ to enacted when particular standards are not achieved—in this instance those established at the 2004 Doha Round in Geneva, Switzerland. President Bush would respect the Doha Ministerial Declaration idea of "substantial reductions in trade-distorting domestic support,"⁹⁰ if (and only if) Brazil makes significant strides toward advancing the Doha Round.

⁸⁸ Office of the Press Secretary, "President Bush Meets with President Lula of Brazil," *The White House Archives: President George W. Bush*, November 6, 2005, accessed February 28, 2016, <http://georgewbush-whitehouse.archives.gov/news/releases/2005/11/20051106-1.html>.

⁸⁹ *Ibid.*

⁹⁰ General Council, "Doha Work Program" *World Trade Organization*, August 1, 2004, p. A-1, accessed February 28, 2016, https://www.wto.org/english/tratop_e/dda_e/ddadraft_31jul04_e.pdf

Ongoing discussion continued between both powers. Though this time the conversation shifted to areas of mutual concern, or “mutual opportunities”⁹¹ according to President Bush, that need to be improved in light of increased bilateral cooperation. These key areas were democracy, human rights, cultural diversity, trade liberalization, multilateralism, environmental protection, defense of international peace and security, and the promotion of development with social justice. This resulted in the signing of several memorandums related to foreign aid efforts, education, and the environment. In particular, the “Memorandum of Understanding to Advance Cooperation on Biofuels,” which permits for trade and tariffs to be raised if there is no significant advancement toward the development of affordable, clean, and sustainable energy sources,⁹² allowed for the two parties to really begin digging into the issue of the environment—something that had not previously been a part of the conversation.

The US-Brazil Relationship under the Obama Administration. While the US-Brazilian relationship remained close under President Bush, it was not surprising that the election of President Barak Obama only strengthened that bond. Being a progressive, he instantly clicked with President Lula, a progressive leader himself, making ideas and agreements flow freely between the two politicians. On March 14, 2009, President Obama met with President Lula for the first time commenting that he had always been a “great admirer of Brazil and a great admirer of the progressive,

⁹¹ Office of the Press Secretary, “President Bush Welcomes President Lula of Brazil to Camp David” *The White House Archives: President George W. Bush*, March 31, 2007, accessed February 28, 2016, <http://georgewbush-whitehouse.archives.gov/news/releases/2007/03/20070331-3.html>

⁹² “Memorandum of Understanding Between the US and Brazil to Advance Cooperation on Biofuels,” *US Department of State*, March 9, 2007, accessed February 28, 2016, <http://www.state.gov/p/wha/rls/158654.htm>.

forward-looking leadership that President Lula had shown throughout Latin America.”⁹³ It was emphasized in this first encounter that the strong relationship between the two countries would be upheld, but there room to strengthen ties—primarily in the areas of the economy, energy and biofuels, and the environment. President Lula also expressed his excitement for the continuation of the bond under new leadership, mentioning the importance of President Obama’s election to Brazil and Latin America as a whole.⁹⁴ While much of this initial meeting was dedicated to discussing the importance of a continued and strengthened US-Brazil bond, the two politicians also focused on the promise of the future exchange of ideas and technology, leaving the ideas of economic aid, trade, and tariffs absent from the discussion.

Nothing of huge significance came out of that first meeting with Brazil under the Obama administration. The relationship was still riding on the coattails of what diplomatic efforts had been made under the Bush administration. However, this relationship was about to become much more active. During the Conference of the Parties (COP15) held in December 2009, leaders around the world agreed to “provide climate finance to help meet the adaptation and mitigation needs of developing countries.”⁹⁵ The category that received the most funding from the US in Brazil was bilateral programs at a total of \$4,000,000,⁹⁶ with the objective of establishing a partnership that would expand activities that reduced emissions from tropical forest destruction and degradation, particularly in the Brazilian Amazon. Under this financing

⁹³ Office of the Press Secretary, “Remarks by President Obama and President Lula De Silva of Brazil,” *The White House*, March 14, 2009, accessed February 28, 2016, <https://www.whitehouse.gov/the-press-office/remarks-president-obama-and-president-lula-da-silva-brazil>.

⁹⁴ *Ibid.*

⁹⁵ US Fast Start Finance, “US Climate Funding in FY 2010: Brazil,” *State.gov*, 2010, accessed February 28, 2016.

⁹⁶ *Ibid.*

plan, Brazil was also selected as a pilot program under the Forest Investment Program (FIP). The \$20 million⁹⁷ contribution was made in efforts to “provide financing to support Brazil’s efforts to reduce deforestation and forest degradation and promote the sustainable forest management that leads to emission reductions and the protection of carbon reservoirs.”⁹⁸ This contribution, though very minimal, makes a bold statement in part by the Obama Administration since it was one of the very first financial contributions by the US government that had the sole purpose of ameliorating deforestation in Brazil.

This contribution under FIP opened doors between Brazil and the US, creating a desire to enhance the friendship and spirit of cooperation between the parties in regard to tropical forests. In 2010, an “Agreement Between the Government of the United States of America and the Government of the Federative Republic of Brazil Regarding the Reduction of Debt in Support of Conservation and Sustainable Management of Tropical Forests” was signed into effect. The objective of this agreement was to “facilitate the conservation, protection, restoration, sustainable management, and monitoring of tropical forests in Brazil, which provide a wide range of economic, social, and environmental benefits to people.”⁹⁹ To make this possible, the agreement essentially provided a reduction of certain debts owed to the US Government in order to support the conservation and sustainable management of tropical forests in Brazil.

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ “Agreement Between the Government of the United States of America and the Government of the Federative Republic of Brazil Regarding the Reduction of Debt in Support of Conservation and Sustainable Management of Tropical Forests,” State.gov, August 12, 2010, accessed February 28, 2016, <http://www.state.gov/documents/organization/154062.pdf>.

The overall objective of the aforementioned agreement was to ensure that resources were freed from debt so they can be refocused towards the conservation and sustainable management of tropical forests. Within eight months of signing the agreement, “a Tropic Forest Conservation Fund Account (TFCA) shall be established in accordance with the domestic laws of Brazil” therefore canceling the “Old Obligations” (i.e. agreements entitled ‘Loan Grant Agreement between the Government of Brazil and the Government of the United States of America Acting through the United States Agency for International Development,’ dated August 13, 1969) and in their place “substitute the New TFCA Obligations.”¹⁰⁰ However, if Brazil fails to meet the TFCA obligations then the two governments must work together to find a mutually acceptable solution. Consequences, though primarily monetary, have the possibility of straining the relationship between Brazil and the United States making future cooperation on the matter of tropical deforestation difficult.

Thus far, this agreement has been a success. The United States ultimately reduced Brazil’s debt payments by close to \$21 million through 2015,¹⁰¹ while in return Brazil has committed these same funds to support grants that protect the country’s tropical forests. These grants have supported activities to conserve protected areas, improved natural resource management, and developed sustainable livelihoods for communities in the Amazon Rainforest. Rescheduling debt payments alone showed the United States’ desire to work with Brazil to ameliorate the problem of Amazonian deforestation.

¹⁰⁰ Ibid.

¹⁰¹ “Countries with TFCA Programs: Brazil,” US Aid, May 02, 2014, accessed February 28, 2016, <https://www.usaid.gov/biodiversity/TFCA/programs-by-country#Brazil>

The problem of Amazonian deforestation remained on the table when Brazilian President Dilma Rousseff took power in 2011. Much like how President Lula met with President Obama in 2009 after the shift in administrations in the United States, President Obama extended a hand when he flew to Brazil in March 2011—only this time was much different. Unlike previous first encounters, this one was all business. At this meeting three important dialogues were started that are still in effect today—the Economic and Financial Dialogue, the Strategic Energy Dialogue, and the Global Partnership Dialogue. One of the most important documents that came out of this meeting was the “Memorandum of Understanding Between the Environmental Protection Agency of the Government of the United States of America and the Ministry of the Environment of the Federative Republic of Brazil.” The aim of this memorandum is to “improve the institutional capacity through technical cooperation on environmental management.”¹⁰² Though environmental initiatives already exist between the two countries, this memorandum strengthened the previously present bond.

Through this mutual agreement, the two parties are agreeing to effectively protect the environment while promoting economic growth and social development. While the document discusses the need to focus on areas of environmental impact and risk that contribute to major pollutants and destruction of the natural environment, there was one particular section to take note of. Section 10 reads, “This MOU does not impose, nor is it intended to impose, any legal commitments on the Participants.”¹⁰³

Therefore, even though these two countries are making a commitment to implement this

¹⁰² Office of the Press Secretary, “Memorandum of Understanding Between the Environmental Protection Agency of the Government of the United States of America and the Ministry of the Environment of the Federative Republic of Brazil,” White House, April 9, 2012, accessed February 10, 2016, https://www.whitehouse.gov/sites/default/files/EPA_MOU_FINAL.pdf

¹⁰³ “The impact of EU consumption on deforestation.”

plan there is no binding element holding either party accountable. With this five-year agreement expiring this year, there is a possibility for a more binding agreement to be created for future benefit.

With increased diplomatic ties comes increased funding. Success in these high-level contracts is directly reflected in the amount of funding granted to Brazil from the US government. The US more than doubled its financial support to Brazil-US bilateral programs, contributing \$8,600,000 during the 2011 fiscal year.¹⁰⁴ This funding went to building the capacity of the state and municipal governments to reduce greenhouse gas emissions from land use and land change, reduction of deforestation, and strengthening conservation in the Brazilian Amazon. Another area that saw increased financial support post the initial meeting between President Obama and President Rousseff was FIP. The United States contributed \$37.5 million to FIP,¹⁰⁵ therefore continuing the promotion of sustainable agriculture in attempts to reduce deforestation. This monetary support has helped reduced drivers of deforestation, therefore providing healthy, intact tropical forests.

With President Rousseff signing a law transferring responsibility for environmental oversight of nonfederal lands from Brazil's federal environmental protection agency to local officials, there has been a need for a change of collaboration strategy in part by the United States. Due to this transfer of responsibility, imply funding government-ran environmental programs, as well as alleviating debt, is no longer going to make the cut—instead efforts will have to be refocused at the grassroots

¹⁰⁴ US Fast Start Finance, "US Climate Finance in Brazil 2012," State.gov, 2012, accessed February 6, 2016

¹⁰⁵ *Ibid.*

level. Recognizing this predicament, the Obama Administration, through USAID, has started channeling its funding and conservation efforts through the Amazon Basin Conservation Initiative. This initiative supports community groups, governments, and other organizations working throughout the Amazon Basin to conserve the forest's biodiversity. USAID provided Brazil with \$9.6 million in FY 2013, \$10.5 million in FY 2014, and \$10.5 million in FY 2015¹⁰⁶ to continue those programs. However, the Obama Administration did not request any funds for conservation efforts in FY 2016, making it unclear how these efforts will play out in the upcoming year.

Why US beef consumption contributes less to Brazilian deforestation than expected. Under the Obama Administration the United States made significant strides in creating bilateral agreements to combat Amazonian deforestation, but on June 29th, 2015 the US made a trade deal that could significantly undermine the policies, memorandums, and agreements that have been signed into action. While walking with President Rousseff in Washington D.C. he agreed to lift a 14-year-old ban on imports of Brazilian beef.¹⁰⁷ According to Greenpeace Brazil, 80% of Amazon deforestation¹⁰⁸ is due to the clearing of trees for pastures. Cattle herd growth in the Brazilian Amazon has been impressive, stabilizing at about 1 head/hectare,¹⁰⁹ and the regions with the largest herds also produce the highest deforestation rates. With villages and little cities rapidly growing in Brazil and with US lifting the US Brazilian beef ban; new regions of

¹⁰⁶ Peter J. Meyer, "Brazil: Background and U.S. Relations," *Congressional Research Service*, February 11, 2016, p. 26, accessed February 28, 2016, <https://www.fas.org/sgp/crs/row/RL33456.pdf>.

¹⁰⁷ "Making Friends again; Brazil's foreign policy," *The Economist* 4 (July 2015): 27, *Academic OneFile*, accessed February 27, 2016,

<http://go.galegroup.com/ps/i.do?id=GALE%7CA420252366&v=2.1&u=s8492775&it=r&p=AONE&sw=w&asid=27e60c0f3b4d2cb287b554e91f639ce3>

¹⁰⁸ "The impact of EU consumption on deforestation."

¹⁰⁹ J.B. Veiga et al., *Cattle Ranching in the Amazon Rainforest*, World Forestry Congress, 2003, accessed February 10, 2016, <http://www.fao.org/docrep/ARTICLE/WFC/XII/0568-B1.HTM>

the Amazon are being forced to convert from forests to pastures. Therefore, the US can't ignore what negative repercussions this perceived bilateral action could have on deforestation.

With the lift of this ban, the United States Department of Agriculture (USDA) is amending its regulations to allow the importation of fresh beef from Brazil.¹¹⁰ The first round of shipments was 15,000 tons, worth around \$75 million, and is forecasted to reach a volume of up to 9,000 twenty-foot-equivalent units annually.¹¹¹ These numbers fall in line with those of the top importing member states of the EU, placing the US among the top global importers (see Table 3 for comparison). To put that into perspective with regard to deforestation, a recent study by the Massachusetts Institute of Technology found that for every 1/4 lb of hamburger consumed in the US from rainforest beef, about 55 sq ft of rainforest was cleared.¹¹² That would mean that the first shipment alone would have resulted in the clearing of 6,600,000,000 sq ft of rainforest.

Due to the fact that the US holds a great deal of international influence, the USDA breakthrough on Brazilian beef exports could spur Canada, Central American countries, and Japan to follow the US's lead. The Brazilian Association of Beef Exporters president Ricardo Camardelli said "a number of countries use the US system as a reference for international negotiations and may change their views about our

¹¹⁰ Office of the Press Secretary, "FACT SHEET: The United States and Brazil—A Mature and Multi-Faceted Partnership," *The White House*, June 30, 2015, accessed February 28, 2016, <https://www.whitehouse.gov/the-press-office/2015/06/30/fact-sheet-united-states-and-brazil-mature-and-multi-faceted-partnership>.

¹¹¹ Rob Ward, "Brazilian exporters of fresh beef gain access to US market," *JOC: International Trade News*, July 7, 2015, accessed May 16, 2016, http://www.joc.com/international-trade-news/us-market-opens-fresh-brazilian-beef_20150707.html.

¹¹² "Project Amazonia: Threats—Agriculture and Cattle Ranching," Massachusetts Institute of Technology, 2006, accessed February 1, 2016, http://web.mit.edu/12.000/www/m2006/final/threats/threat_agg.html.

product now that the agreement with the US is in place.”¹¹³ If this were to occur, the number of beef exports could increase exponentially therefore contributing substantially to the deforestation of the Brazilian Amazon.

Despite the lift on the ban, many companies and their consumers are aware of the issue claiming they will only buy certified beef products.¹¹⁴ Yet when the beef enters the United States, it is not labeled with its country of origin, “so there is no way to trace it to its sources.”¹¹⁵ For example, beef grown in the rainforest can pass through a processing plant in the United States and still be labeled as domestic meat. Therefore, the USDA doesn’t have an adequate system of labeling where the beef is coming from.

With organizations such as Greenpeace looking under the hood of this problem, American companies are being forced to actively follow the supply chain to verify they are only purchasing sustainable beef. For companies such as McDonald’s this has been historically difficult because they buy finished, frozen patties from about 20 different processing companies globally,¹¹⁶ including Keystone Foods, a division of the Brazilian food service giant Marfrig group. It is easy to see how cows and beef may change hands four or five times between farm and finished patties, making it indeterminable whether or not the beef was in fact rainforest beef.

Nevertheless, to ameliorate this problem would require transforming not just the supply chain but also the entire industry. Cameron Bruett, the Chief Sustainability

¹¹³ Ward, “Brazilian exporters of fresh beef gain access to US market.”

¹¹⁴ Priyakshi Sarma, “Beef Production is Killing the Amazon Rainforest,” *One Green Planet*, March 21, 2014, accessed May 16, 2016, <http://www.onegreenplanet.org/animalsandnature/beef-production-is-killing-the-amazon-rainforest/>.

¹¹⁵ John Robbins, *Food Revolution: How Your Diet Can Help Save Your Life and Our World* (San Francisco: Conari Press, 2011), 256.

¹¹⁶ Joel Makower, “Exclusive: Inside McDonald’s quest for sustainable beef,” *GreenBiz*, January 7, 2014, accessed February 10, 2016, <http://www.greenbiz.com/blog/2014/01/07/inside-mcdonalds-quest-sustainable-beef>

Officer at JBS USA, explained “sustainability is one of those issues that’s defined by the geography in which you’re located, based upon which element you’re focused on...In Brazil, it’s all about Amazon deforestation.”¹¹⁷ The key is to get sustainable beef defined by a wide stakeholder group, so that there is no blurry line that permits for disconnect in the supply chain.

Unfortunately, the Obama Administration has created a ripple effect by lifting the ban on the importation of Brazilian beef. Not only does it have the potential to increase deforestation of the Brazilian Amazon, but it also has the capability of increasing greenhouse-gas emissions. It is widely known that beef is a greenhouse-gas intensive food, and when you factor that in with the fact that deforestation remains a major source of greenhouse gas emissions,¹¹⁸ it is easy to question President Obama’s judgment on lifting the ban.

How deforestations’ role in global carbon emissions gains US attention. While the lift on the ban of Brazilian beef has set the US three steps back in the realm of deforestation policy, the US recently took one big step forward. Prompted by the COP 21 talks in Paris, President Obama and President Rousseff once again put their heads together to discuss new initiatives to reduce carbon emissions. This builds on the progress already made by Brazil and the US in fighting climate change. President Obama said, “Since 2005, our two nations have reduced carbon emissions more than any other country in the world. In Brazil this includes very impressive efforts over the last decade to combat deforestation, including the Amazon, which is sometimes called

¹¹⁷ Ibid.

¹¹⁸ Jonathan Watts, “Amazon deforestation report is major setback for Brazil ahead of climate talks,” The Guardian, November 15, 2015, accessed February 28, 2016, <http://www.theguardian.com/world/2015/nov/27/amazon-deforestation-report-brazil-paris-climate-talks>.

the lungs of the planet.”¹¹⁹ Brazil has reduced its emissions from deforestation by 85% from 2005 to 2012,¹²⁰ and hopes to continue with this trend to meet the joint agreement made by these two leaders.

To convert these commitments into concrete action, Obama administration official claim this joint effort will allow the two countries to strengthen and accelerate cooperation on issues ranging from land use to clean energy. In addition, Brazil pledged to restore 12 million hectares, or 46,322 sq mi, of its forests—about the size of England—by 2030¹²¹ while it simultaneously pursues “policies aimed at eliminating illegal deforestation.”¹²² This would have enormous global significance. A restoration of this scale, combined with rapid and full implementation of existing laws would go a long way toward shifting Brazil from shrinking forests to expanding forests with large benefits to the global climate as well as Brazil’s rural economy and local communities.

Importance of the US-Brazil Economic relationship over bilateral environmental affairs. The United States and Brazil share one of the more important trade and economic relationships in the world. Before diving into the agreements that create the foundation for the economic relationship, it is helpful to visualize the magnitude of the relationship through looking at several numbers. The US goods and private services trade with Brazil totaled \$107 billion in 2012 (latest available data),

¹¹⁹ Voice of America, “US-Brazil Climate-Change Plan: More Renewables, Less Deforestation,” June 30, 2015, accessed February 1, 2016, <http://www.voanews.com/content/us-brazil-climate-change-plan-more-renewables-less-deforestation/2843069.html>.

¹²⁰ *Ibid.*

¹²¹ Climate Advisers, “Deforestation in the Amazon and US-Brazil Climate Action Ahead of Paris,” July 15, 2015, accessed February 1, 2016, <http://www.climateadvisers.com/brazil-us-statement/>.

¹²² *Ibid.*

with exports totaling \$68 billion and imports totaling \$39 billion.¹²³ The top export categories were: Machinery (\$7.3 billion), Mineral Fuel (\$6.5 billion), Aircraft (\$5.3 billion), Electrical Machinery (\$5.2 billion), and Organic Chemicals (\$2.3 billion).¹²⁴ Interestingly enough, the five largest import categories looked remarkably similar with Mineral Fuel and Oil (crude) (\$5.8 billion), Iron and Steel (\$3.0 billion), Special Other (returns and repairs) (\$1.9 billion), Machinery (\$1.9 billion), and Aircraft (\$1.7 billion).¹²⁵ These numbers, while not shocking, are very important to the economic relationship between the two powers.

The more interesting numbers for the scope of this thesis fall in the realm of agriculture. The reason for the interest in this particular area is that agriculture is a primary cause of deforestation. US imports of agricultural products from Brazil totaled \$3.4 billion in 2013, the 6th largest supplier of agricultural imports.¹²⁶ The leading categories include: coffee (unroasted) (\$1.1 billion), tobacco (\$391 million), fruit and vegetable juices (\$304 million), and coarse grains (\$296 million).¹²⁷ One agricultural product that is surprisingly missing from the mix is beef. There are two main reasons for this—1) the United States is a large beef exporter itself, and, more importantly, 2) there has been a ban on the importation of Brazilian beef to the US due to the risk of foot and moth disease for 15 years.

This trade relationship is not something that has just formed overnight, but something that has been carefully mended over several decades. An important step in

¹²³ Office of the United States Trade Representative, “Brazil,” *United States Trade Representative*, accessed March 28, 2016, <https://ustr.gov/countries-regions/americas/brazil>

¹²⁴ *Ibid.*

¹²⁵ *Ibid.*

¹²⁶ *Ibid.*

¹²⁷ *Ibid.*

strengthening this relationship occurred on March 19, 2011 when President Obama and President Rousseff signed the “Agreement on Trade and Economic Cooperation,” to enhance cooperation on trade and investment between two powers. While the agreement expands the direct trade and investment relationship between the two countries through providing a framework to deepen cooperation, it also includes a provision on the environment. In this agreement, the two parties “desire to ensure that their trade and environmental policies promote sustainable development.”¹²⁸ By signing this agreement, both Brazil and the United States have contractually agreed to abide by this provision and take measures to make sure that it is enacted.

While there has always been a dialogue to expand economic prosperity between the two countries, this has continued to see a substantial amount of growth under the leadership of President Rousseff. Her diplomatic strategy moving forward with the US is based on “finding clear wins that can provide direct economic—and political—benefits back home.”¹²⁹ The three primary goals for Brazil in improving US ties include: 1) the prevention of further loss of international economic influence, 2) gaining better access to resources such as technology, investments, markets, and human capital, and 3) enhancing the countries presence on the global stage.¹³⁰ On the US side of things, President Obama has indicated four factors that he believes should drive US action:

¹²⁸ “Agreement on Trade and Economic Cooperation Between the Government of the United States of America and the Government of the Federative Republic of Brazil,” *The White House*, March 18, 2011, accessed March 28, 2016, https://www.whitehouse.gov/sites/default/files/uploads/Brazil_ATEC.pdf.

¹²⁹ Ricardo Sennes, “US-Brazil Relations: A New Beginning? How to Strengthen the Bilateral Agenda,” *Atlantic Council* (June 2015), accessed March 28, 2016, <http://publications.atlanticcouncil.org/usbrazil/>.

¹³⁰ *Ibid.*

1. Improving relations could further unlock access to Brazil's \$2.2 trillion economy
2. Avoiding the loss of political and economic influence in Brazil—particularly to European countries and China
3. Laying the seeds for Brazil to be a better partner in working with countries of mutual interest in Latin America, especially Venezuela, Haiti, and Argentina, thus reducing the burden of dealing with these issues alone; and
4. Providing new momentum for Brazil to better cooperate with the United States in global topics of mutual interest, such as terrorism, money laundering, peacekeeping operations, Internet governance, espionage, drug trafficking, and the environment.¹³¹

Thus, it is evident that the strengthening of the economic relationship would be highly beneficial to both governments. It would also allow for the US to have more control over Brazil, through the use of economic influence—something that has not been entirely plausible with its currently strained relationship.

Currently, Brazil and the US have one of the least structured relationships with the fewest number of agreements among the world's major countries. This lack of depth has nothing to do with disagreements, but instead comes with fear from the Brazilian government that “the country's fundamental national interests are not served by an improved relationship with the United States.”¹³² This results in a lack of agreements in many different areas, including economic and environmental agreements.

For Brazil, the weak relationship is most economically damaging in the trade arena. Over the past twenty years, the US has established trade agreements with eleven Latin American countries, revoking Brazil's previously exclusive access to these

¹³¹ Ibid.

¹³² Ibid.

markets under the Latin American Integration Association (LAIA).¹³³ While this has little effect on the US, it only causes more stress in the already fractured economic relationship. However, previous attempts by Brazil to bandage these problems have begun to fail dramatically creating a need for the two governments to work together.

Therefore, the economic relations between Brazil and the United States continue to gain momentum, but political and diplomatic relations have not successfully kept pace—primarily due to the lack of formal agreements. There are some interesting outliers in the economic patterns, including legal provisions protecting the environment and the inadvertent environmentalism through banning beef imports. All of these things are important to look at when deciphering the economic ties between the US and Brazil, because it is each of these things that paints the larger picture. If economic ties continue to be fractured between the two powers it is only a matter of time before that carries over to other aspects of the relationship.

Conclusion. In conclusion, the United States is almost an accidental environmentalist. This section shows that with the inauguration of President Obama the US began placing much higher value on global environmental affairs. However, most policy that was implemented was more so for the economic and trade benefits than for the humanitarian reason of protecting the Amazon. Without economic and trade agreements, it would not be possible for the US to hold Brazil accountable for its pledged environmental stewardship. That being said, it is also reflected in this section that the US actually benefits substantially economically from these agreements—often more so than Brazil. The reason this section is important, is it helped to illustrate the

¹³³ Ibid.

actions that the US has been taking in regard to Brazilian deforestation allowing for later comparison to actions on an international scale.

Conclusion

In some ways this section left more questions than answers, however after analyzing the effects of policies, consumption, economics, and country characteristics on deforestation (and the hopeful amelioration of the practice) the picture begins to get a little bit clearer. The EU, though actively more involved in the reduction and ultimate reduction of deforestation, also possesses consumption patterns that have the opposite effect of everything they have been working for through the strategic partnership. On the other hand, the US lacks the same levels of consumption, primarily due to the fact that the US is a large producer of many of the same agricultural products, but is missing the policy piece necessary to be recognized as environmental with respect to this issue. This section brings all of these little discrepancies to the light in an effort to provide some clarity in the conclusion.

Section IV. Conclusions

This thesis concludes by taking a final evaluation of the motivations and shape of what the EU and US have done with respect to deforestation in Brazil, finally looking to the future to see how these actions impact global environmental issues. Due to the fact that the EU is seen as an environmental leader, the US less so, it logically only makes sense that over a large problem like deforestation that the EU would continue to behave in an environmental manner through prevention and reduction efforts. However, this thesis has proven to not be so black and white.

After delving into the effect of income, policies, and country characteristics on deforestation, it is possible to identify some of the actions that have been taken by the US and EU to combat (or inadvertently contribute) to deforestation. Though Brazil was on the US's national agenda for years, it wasn't truly until the Obama administration that the US began really paying attention to the environment. At this time the US tried to financially contribute to fight Brazilian deforestation, which was done to some degree but by no means was it enough. With President Rousseff and President Obama working together, the two hope to grow economic and political relations between the two countries, lifting bans on the importation of beef and other such acts, which may lead to increased deforestation in the future.

On the other hand, the EU started recognizing Brazilian deforestation as a problem much earlier and has consistently put emphasis on environmental issues through the implementation of policies, strategic partnerships, and financial contributions. However, the products that they import from Brazil almost overshadow all of the positive work that is being done to combat the issue since the EU has been

effectively encouraging deforestation by importing more Brazilian beef while signing agreements to stop the issue they are perpetuating. This mixed record makes it difficult to determine who is truly acting in a “green” manner in working toward the amelioration of deforestation, because in many ways actions speak louder than words.

Yet, the European Union has always been a different kind of international entity in its very conception. It lacks the same conventional “great power” status possessed by the United States, but has time and time again used its influence to change the global opinion on a matter. So while it can be contested that the EUs consumption patterns are contradictory of the institutions political and economic actions, if the international community is still recognizing the positives brought on by EU involvement in the issue then the environmental piece still remains in tact.

As parents often say to their children, “do as I say and not as I do,” this is being reflected in what is happening in Brazil—especially with regards to the EU. However, actions speak louder than words. So as the EU continues to push the use of biofuels (which is often made with Brazilian soybeans) for the purposes of being environmental, it is important to remember that this may do more harm than good. Regardless, the EU is still more widely recognized than the US as an environmentalist by the international community.

Looking to the future, it will be interesting to see how these dynamics change and how politics will continue to run the environmental sector. With the recent impeachment of President Rousseff, environmental laws have taken a back seat allowing for the possibility of major infrastructure projects that will be given the green light regardless of their impact on biodiversity, conservation areas, or the Amazon.

This could result in environmental tragedy. Meanwhile, the US is coming up on a new election cycle in which the environment has taken a back seat to terrorism and national security, the economy, employment and jobs, and healthcare. Over in Europe, the issue of the environment is still remaining a hot topic, yet as illustrated in this paper some of the outcomes to this “environmental” efforts aren’t being fully considered. So while the EU clearly holds the reins of environmentalism, especially over the matter of Brazilian deforestation, this could all change with the new wave of political leaders and discussions that are about to take center stage.

Appendixes

Table 1. Comparing references to the global environment in State of the Union messages by presidential administration¹³⁴

	Number of references	Difference from the mean
Clinton	15	+7.2
Bush (41)	5	-2.8
Reagan	2	-5.8
Carter	9	+1.2

N = 31; Mean 7.8

Table 2. Attribution of deforestation in Brazil 1990-2008¹³⁵

	1990-2000		2000-2008	
	1000 ha	%	1000 ha	%
Agricultural expansion, <i>of which</i>	20,115	68	18,143	81
Cultivated land expansion & crop production	8,051	27	7,118	32
Pasture expansion & ruminant livestock prod.	12,063	41	11,025	49
Industrial roundwood production (logging)	1,059	4	955	4
Expansion of urban areas, rural settlements, infrastructure	401	1	306	1
Natural hazards (e.g., fire)	1,961	7	1,498	7
Unexplained	5,987	20	1,482	7
TOTAL deforestation	29,523	100	22,384	100

Table 3. Top importers of Brazilian beef in 2014¹³⁶

Country	Value (in USD thousands)	Volume (in tonnes)
Russia	1.296.904	321.058
Hong Kong	1.195.969	260.242
Venezuela	900.522	169.545
Egypt	585.193	153.825
Chile	275.771	53.493
Iran	274.767	61.571
Italy	215.767	27.803
Netherlands	146.200	15.359
Algeria	99.341	20.694
Germany	85.298	8.331
Lebanon	84.875	15.012
Angola	83.897	26.565
United Arab Emirates	76.750	15.322
Israel	53.903	10.856
Libya	51.892	13.799

¹³⁴ Sussman, "The USA and Global Environmental Policy," 354.

¹³⁵ "The impact of EU consumption on deforestation."

¹³⁶ Bruha, "Countries that Import Meat from Brazil."

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