

# **Fighting the Forest Code: Environment vs. Economics in Brazil's Struggle to the Top**

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Emerging from its history as a struggling post-colonial society, Brazil is rapidly becoming one of the most important nations to watch in the global sphere, with its economy powering much of this growth. Brazil's estimated 2011 GDP of \$2.248 trillion outstrips even the United Kingdom and makes it the seventh largest GDP in the world (World Factbook). Furthermore, the nation is rife with resources and rich natural environments such as the Amazon River and rainforest. This region not only provides resources and fertile land but also has a huge impact on the environmental health of the world, earning the nickname "Lungs of the Planet" because it produces much of earth's oxygen. In order to protect this highly important region from deforestation and other destructive practices, Brazil implemented the Forest Code in 1965, much to the joy of environmentalists and the chagrin of agriculturalists, ranchers, and loggers who wished to make use of the land. The Forest Code and other environmentally focused legislation have garnered Brazil the reputation of being a leader in environmental policies. However, this may soon change. Facing pressure from industries such as agriculture and ranching, the recently elected President, Dilma Rousseff, is considering easing parts of the Forest Code, and this could have drastic results for the Amazon region. Outcry against the proposed changes is not concentrated solely

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within Brazil; people around the world are critical of the changes, which threaten some of Brazil's current environmental goals. Brazil is a nation struggling to achieve more power on the international level; by weakening the Forest Code it could lose important international support and put its power at stake.

### The Forest Code

The opening of Brazil's Código Florestal (Forest Code), one of the world's most proactive environmental policies, proclaims:

*As florestas existentes no território nacional e as demais formas de vegetação, reconhecidas de utilidade às terras que revestem, são bens de interesse comum a todos os habitantes do País. (Código)*

The forests and other forms of natural vegetation existing in the national territory are recognized as useful and in the common interest of the people [of Brazil]. (the author's translation)

Before delving into the proposed changes and their possible consequences, one must first understand its specific policies. In response to the devastation of the Amazon by commercial interests, the government passed the Forest Code into law in 1965 with the goal of protecting the Amazon from further deforestation. In order to do so, the code declared a percentage of land that landowners must leave pristine or semi-developed depending upon the biome, an area of distinctive plant and animal species impacted by the climatic conditions, the land is located in. Currently the law states that some areas have permanent protection and cannot be deforested. These are categorized as Áreas de Preservação Permanente (APPs), and include steep slopes, hilltops, and riverbanks from rivers to thirty meters back. The other category of land is the Reserva Legal (RSs). The Forest Code originally mandated that landowners keep 50% of Reserva Legal land in its natural state (10BRASILIA156).

The Forest Code was a step towards better environmental protection of the Amazon, but continuing deforestation persuaded politicians to amend the original policies. In 1996, President Fernando Henrique Cardoso, alarmed by the massive deforestation of the Amazon rainforest, increased the percentage of natural vegetative state

to 80% in the Amazon biome (10BRASILIA156). 2008 also marked an important year for environmentalists with proposed punishments for landowners who did not follow the code, including fines for those who did not have the correct amount of legal reserve land and the limitation of state bank credits for those who did not meet Forest Code requirements (Blaustein, Santiago). Legislation allowing the prosecution of landowners who did not follow environmental regulations, including the Forest Code, was slated to go into effect on December 11<sup>th</sup>, 2009, but on December 10<sup>th</sup> President Luiz Inacio Lula da Silva decreed the postponement of this legislation and created the Program Mais Ambiente, a program which allowed landowners three years to register their lands with the proper government authority (10BRASILIA156). To be legal the land must meet 80% natural vegetation; those who do not abide by the regulations stipulated in the code are subject to fines and other punishment and must work on reforesting their land to the required 80% forestation. Landowners who do not register land or meet the required 80% benchmark will be subject to punishment after a grace period. The Forest Code is highly controversial; by postponing legislation designed to prosecute incompassionate landowners, President Lula handed the battle off to newly elected President Dilma.

Agribusiness owners and rural landowners are pushing strongly for changes to the Forest Code in order to ease requirements and punishments for landowners. Among these changes are the decrease of legal reserve land on properties from 80% back to 50% and the decrease of buffer zones around rivers from thirty meters to fifteen (Blaustein, Santiago). These are hardly the only changes however; the bill also seeks to increase the size requirements for small land holdings, which are subject to less stringent policies, from 30 hectares to 80 hectares (Blaustein, Santiago). Proponents of changes to the Forest Code also wish to decentralize parts of the code and allow states to create their own regulations. Perhaps the most hotly debated proposed change is the removal of fines for all code breakers before July 2008, unlike earlier drafts which promoted full amnesty, the newer bill does not fine landowners in violation of the code before July 2008 but does require landowners to reforest their properties to meet the 50% legal reserve requirement (Leahy). Opponents continue to liken this to amnesty and believe that amnesty will encourage landowners to take

the Forest Code less seriously in the future. On December 6, 2011 the Senate passed the bill proposing these changes to the Forest Code. President Rousseff must now decide whether to sign the bill into law or veto it. Either way, it is certain that the controversy about the bill will continue.

### **Proponents and Opponents of the Bill**

Those supporting the bill to change the Forest Code are often acting in the interests of agribusiness industries and rural landowners. Consisting of agriculturalists, ranchers and loggers, the agribusiness industry makes significant contributions to the Brazilian economy and relies heavily on intensive land use. Brazil exports massive quantities of food items including coffee and sugarcane, both of which it produces and exports more than any other nation (Moura). Another crop that is highly important is soy, of which Brazil is the world's second largest producer (Crawford, Pignataro 16). Brazil also produces more oranges and exports more beef than any other nation. However, all of these industries require vast amounts of land to stay competitive in the world market (Moura). Without changes to the current Forest Code, agribusinesses will have to reforest up to 70 million hectares of land currently devoted to the production of commodities, a sacrifice many claim should not and cannot be made owing to the economic consequences for the nation (Moura). Because of arguments such as these, many legislators in Brazil back changes to the Forest Code and many speculate that President Rousseff will also support the bill to win the support of agribusiness lobbyists.

Supporters argue that the bill is necessary to protect important industries, and they further point out that the current Forest Bill has had its fair share of problems. One of the reasons proponents of the new bill think the Forest Code needs revising is that the change from the original land reserve amount from 50% to 80% stands on somewhat shaky legal ground because the original percentage was 50%. According to proponents, returning to the required 50% reflects a much more manageable goal for landowners to achieve and the government to police (Moura). Senator Abreu also argues that the bill will eliminate vagueness in the Forest Code and thus ensure that more people will follow the laws (Butler). Furthermore, many proponents of the new bill note that although the Forest Code has existed since 1965

the government has poorly enforced it; even before the code increased the percentage of required legal reserves from 50% to 80%, many landowners failed to meet requirements. By resolving problems with the Forest Code, proponents of the new bill believe that in addition to protecting landowners it will aid in the feasible protection of the environment (Moura).

However, not everyone agrees that the new bill will benefit the environment; in fact, opponents believe it will have disastrous consequences for both the Amazon and Brazil's environmental goals. The land use practices of agribusinesses, they argue, have been highly detrimental to the health of the flora and fauna of the area. To a large extent the Forest Code and other environmental laws have dramatically decreased the rate of Amazonian deforestation, particularly over the last decade during which deforestation dropped "from a ten-year high of 2.7 million hectares in 2004...to .70 million hectares by 2009" (Blaustein, Santiago). With the proposed changes to the Forest Code, people fear that the rate of deforestation will again skyrocket. Increased deforestation can also have negative effects on the agribusiness industries themselves because trees and other plants aid in preventing evaporation and protect the water supplies which farmers need to grow crops. In addition, the roots of the vegetation help prevent erosion, a vital issue in tropical regions where the soil is often only a thin layer. As environmentalists point out, the benefits of the Amazon go beyond agriculture. Many plants native to the region can be used in medicines and many more have the potential to cure or help patients with devastating diseases. Most importantly the Amazon is vital to the health of the planet, producing more than 20% of Earth's oxygen and containing 1/5 of its water (Facts).

In addition to the effects the proposed changes to the Forest Code could have on the global environment, opponents to the bill also note potential consequences for small-scale farmers who follow the law. Although proponents of the bill expound on the fact that the government has poorly enforced Forest Code regulations and believe that those in violation of the code before 2008 should be given amnesty, opponents believe that amnesty could result in landowners not taking the Forest Code seriously. Amnesty or even partial amnesty now might lead landowners to think that more amnesties will be

allowed in the future and that it is not necessary to follow the code. Preventing agribusinesses from passing legislation that would allow them to deforest more of the Amazon will not necessarily result in financial loss for small-scale farmers. An environmental services program (PES) offers rewards for reducing carbon, especially through the reduced emissions from deforestation (RED) program. With tougher environmental standards, small-scale farmers or indigenous communities actually stand to gain money rather than rich corporate giants. This program requires the Brazilian government to pay the farmers, but, as Anthony Hall points out, the United Nation can help collect and direct aid or funds from carbon trading from other nations to this program (1925). In essence, other nations would pay Brazil to protect the Amazon. Easing the Forest Code would thus result in the elimination of many of the RED payments as farmers and others increase deforestation.

### **Brazil, the Amazon, and International Politics**

Brazil has become known as a world leader in environmental protection, a reputation that is at risk with the potential changes to the Forest Code. Because the Amazon is vital to many fields of study as well as the health of the planet, Brazil is under huge international pressure to protect it. As Crawford and Pignatori argue in “The Insistent (and Unrelenting) Challenges of Protecting Biodiversity in Brazil,” many foreign nations feel it is their duty to protect the Amazon even though it is not within their borders. For many nations, protecting the Amazon is a test of the ability of nations to enforce international environmental protection. “If, as a global community, we cannot make significant advances in stopping habitat loss and its consequences” in Brazil, Crawford and Pignatori observe, “we are unlikely to succeed anywhere” (7). Foreign nations are not the only entities involving themselves in the struggle. NGOs such as Green Peace and the World Wildlife Fund are heavily involved in Amazon issues and very much oppose the proposed changes to the Forest Code. This puts Brazil in an awkward position: the majority of the Brazilian government supports changes to the Forest code, but many foreign entities reject them. While Brazil is striving to grow its economy to become a world superpower, it must balance the conflicting needs of Brazilian industries and international environmental interests.

Thus far, Brazil has taken a leadership role in international environmental summits and, thanks to its aggressive policies against deforestation, has garnered international respect. In 1992, Rio de Janeiro hosted the United Nations Conference on Environment and Development, otherwise known as the Earth Summit, a meeting of nations to discuss pertinent environmental issues. The conference covered air, land, and water protection; natural resource, biodiversity, and forest conservation; and waste and technology management. Participants especially focused on the deforestation of the Amazon. During the meeting, Brazil and many of the other attending nations signed the Rio Declaration, an agreement to work on developing cooperation between nations in order to combat environmental problems and focus on sustainable development. The Earth Summit brought Brazil to the forefront as a leader in environmental protection. Brazil and its environmental policies will be brought to even more international attention during the summer of 2012 when it hosts another important environmental conference: the Rio +20 Earth Summit. If Brazil weakens the Forest Code it will certainly be sending conflicting messages about environmental protection as the UN meets to discuss ideas for sustainable development.

Carbon reduction and offset programs are currently a key component of environmental policies and goals in Brazil, which is another area it has distinguished itself as a global leader. In 2009, its greenhouse gas emissions accounted for 5% of the world's emissions, making Brazil the 4<sup>th</sup> largest producer of carbon dioxide emissions (Ajl). As part of the UN Earth Summit in 1992, Brazil promised to lower its carbon emissions and, in 2009, the Brazilian government vowed to lower carbon emissions 36% by 2020, a gesture designed to end a climate negotiations stalemate (Duffy). What is the best way to reduce carbon emissions? Unsurprisingly it is by reducing deforestation, which accounts for half of Brazil's emissions and may actually increase if the Brazilian government passes the changes to the Forest Code (Duffy). Brazil's Amazon stores about 8% of the total carbon in the atmosphere, in all about 60 billion tons. Werner Baer and Charles C. Mueller posit that deforestation would eliminate many of the trees that absorb carbon out of the atmosphere and will have an enormous effect on the global atmosphere (22). Furthermore, Gary Duffy points

out that as a leading developing nation, Brazil hopes to encourage other nations in the region or in similar circumstances to focus on environmental protection and sustainable development, but this goal could be in jeopardy if Brazil fails to meet its emission reduction role because of changes to environmental legislation.

Another way this legislation could have negative consequences on Brazil's international environmental goals is by threatening the success of the Payments for Environmental Services and Reducing Emissions from Deforestation (PES/RED) programs in Brazil and, in turn, threatening the possibility of these programs catching on in other nations. Margulis argues that these programs promote sustainable development and forest management that will yield a higher profit to a broader sector of society than industries such as cattle ranching or agriculture (57). Currently PES and RED programs have been introduced into Brazil in limited locations but these policies, which reward small-scale farmers for protecting the environment through actions such as refusing to deforest sections of their land and reforesting cleared areas, have the potential to benefit local people and the environment immensely. The current Forest Policy helps farmers earn rewards from these programs by specifying a high percentage of land that landowners must not deforest. Lowering the percentage of land reserves serves the interest of large corporations more than small, local farmers. Instead of making money by adopting harmful agricultural practices, PES/RED programs help local people make money by protecting their land from deforestation; this practice simultaneously helps to eliminate harmful environmental practices and to ameliorate poverty. The Brazilian government makes these monetary incentives to small-scale farmers in the form of direct payments which, as Hall argues, "benefit poor farmers by improving cash flows, providing a fungible store of wealth, and diversifying sources of household income" (2008). Those fearing overspending by the Brazilian government need not fear, because after 2012 funding for PES/RED programs can come from foreign nations via direct aid or carbon trading. The widespread adoption of PES/RED programs in other nations could very well depend upon the successful implementation of these programs in Brazil, where they have the potential to enact widespread environmental and social change.



Changing the Forest Code could further negatively impact the economy of Brazil if corporations boycott Amazonian goods, soy and beef for example, because of deforestation. Although developed nations benefit from the hypocrisy of demanding that poorer nations protect their natural resources from exploitation, developing nations do not have the same luxury. In 2006, European food suppliers, including factories, supermarkets, and even McDonalds, threatened to boycott soy grown in areas of the Amazon that were newly (and illegally) deforested. To ameliorate the concerns of consumers and foreign nations, the Brazilian soy industry banned the use of Amazon grown soy for a short time. In 2008, Lula himself observed that “not protecting the environment would hurt Brazil’s competitive advantage” in the world market, especially in the soy, beef, and biofuel industries (qtd. in “Brazil Toughens”). In addition to McDonalds, in 2009 major corporations such as Walmart, Burger King, and Nike also boycotted beef and leather produced from deforested Amazon land. In both the 2006 and 2009 boycotts, Greenpeace revealed evidence for Amazon deforestation resulting from these industries and gave environmentalists and consumers a new means of getting their message across: economic threats to the agribusiness industries (Butler, “In the Battle”). Clearly, environmental concerns can have enormous effects on the viability of certain industries; changing the Forest Code risks increasing environmental concerns that could very well negatively affect Brazil’s economy – not a benefit for a nation looking to increase its global power.

## **Conclusion**

Because the deforestation of the Amazon would have massive global effects, Brazil cannot escape international attention to its environmental problems and practices. According to Lykke E. Anderson et al., “Deforestation in the Amazon has become an emotional topic and thus it is unlikely that scientific or economic research alone will be able to solve the question of what the socially optimal combinations of end-uses in the Brazilian Amazon are” (200). Thus, in essence, the emotional attachments people have to the ecology of the Amazon may trump even economic considerations. Even though Brazil is poised to emerge as a world superpower and is focused on boosting its economy, the nation must also realize that some of its power derives

from its natural resources and the leading role it has taken to protect them. Weakening the Forest Code is not in line with its history of environmental protectionism that Brazil has made one of its strong points in the international arena. Although environmental concerns will never be able to ignore economic considerations, abandoning the respect that Brazil has earned through its environmental policies does not seem like the best move to improve its international standing. Brazil has the chance to carve itself a unique niche as a superpower that is truly devoted to finding methods of sustainable development instead of following the same path of environmental exploitation and destruction that other superpowers have. Standing apart from other world powers in terms of environmental protection, Brazil may attract the support of other nations that wish to align themselves with similar goals and win the support of superpowers that want to focus more on their own environmental priorities. By cultivating a unique perspective on environmentally sensitive development, Brazil might forge a new path to superpower status.

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