TEACHING NOTES

CFR Deforestation in the Amazon InfoGuide By Eve Bratman.

Discussion Questions:

- 1. What is at stake globally if deforestation in the Amazon significantly increases?
- 2. What does the concept of the "tipping point" mean when we think about Amazonian deforestation? Which ecological cycles would be irreversibly altered, and what are the implications of those changes?
- 3. How does forest loss in the Amazon relate to other environmental issues, such as water resources, climate change, biodiversity?
- 4. What are some of the social issues that are connected to the problem of deforestation? How could reducing deforestation help to address these concerns?
- 5. What are the types of land uses that contribute the most toward the problems of deforestation? What types of land uses tend to mitigate or prevent deforestation?
- 6. How have national and global environmental agreements on deforestation in the Amazon faired in the past?
- 7. To what extent have historical national and international policies been effective in addressing deforestation and why do you think some policies have been more effective than others?
- 8. How can encouraging transparency in commodity chains reduce deforestation?
- 9. Why are creating conservation areas and indigenous parks important as strategies to reduce Amazonian deforestation?
- 10. To what extent is deforestation in the Brazilian Amazon something that Brazil alone should handle? What can other nations do to support Brazilian efforts at combatting deforestation?
- 11. What are some things that can be done to protect the Amazon rainforest and at the same time address Brazil's perceived need for economic growth?

Further Discussion (Extra Credit):

- 1. What is the role of regional cooperation in South America in tackling Amazonian deforestation, and what are some of the cooperation challenges that this set of countries (Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname, and Venezuela) faces?
- 2. Describe the Amazon's "arc of deforestation," and discuss the socio, economic, cultural, and political issues at play along its frontier.
- 3. Current policies in the Amazon concentrate on avoiding deforestation and increasing the productivity of deforested landscapes. To what extent should policies focus on reforestation efforts instead?

Essay Questions:

- 1. How has the Amazon come to be seen as a source of economic prosperity for Brazil? How, if at all, do you think this view is changing over time as Amazonian forest resources are protected instead of deforested? Explain and justify your argument with examples of Amazonian development and forest protection initiatives.
- 2. How much influence can local, national and international actors play in reducing deforestation? Analyze how different stakeholders who care about the Amazon region may contribute to the problems of deforestation, and/or work toward the resolution of deforestation problems. Be sure to identify major challenges and specific initiatives, historical and present-day, to support your argument.
- 3. In the course of international environmental negotiations. The Brazilian government has argued that the concern of countries like the U.S. for Brazilian deforestation was hypocritical in that deforestation has been central to development in other nations. At the Copenhagen climate change summit, President Lula said "We want to preserve, but they [gringos] will have to pay the price for this preservation because we never destroyed our forest like they mowed theirs down a century ago." Given these concerns, what policy response do you think is the most appropriate for the U.S. and other wealthy countries to take in regard to deforestation in the Amazon?
- 4. How does deforestation in the Amazon affect the productivity of landscapes? Explain some of the steps that international policy makers, federal officials, and international businesses and consumers can take to make sure that there is no new deforestation in the Amazon, while still achieving social and economic benefits from the region's resources. Be sure to explain some of the opportunities and challenges for conservation and sustainability in your essay.

Class Exercises:

1. The Magnitude of Deforestation Problems: Calculating and Communicating

Describe in more tangible terms the deforestation of the Amazon on an annual basis. As an example, can you calculate how many football fields of Amazonian forest were lost per day in 2015, or how the amount of lost forest compares to the size of states in the US? A second, related exercise involves using online calculators (see:

https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator) to determine equivalencies for carbon emissions as a result of deforestation. Have the class break into teams to discuss the significance of deforestation in terms of their everyday lives. Discuss the magnitude of the tangible impacts of deforestation as well as factors that can't be calculated in such tangible terms.

Optional: Have students write a short (500 words or less) newspaper article or blog post communicating their findings to the general audience. The article should describe some of the causes of deforestation, summarize the magnitude of Amazonian forest loss based on the previous part of the exercise, and suggest potential solutions. Encourage students to think creatively about the tone, perspective, and storyline of the article.

2. Coordination and Competition in Reducing Deforestation: Role Play

Explore the unique responsibilities and roles that different local actors have as they approach the challenges of living and using the rainforest's resources for different purposes.

Part I: Team Meetings: Divide the class into three main teams, as follows: *Amazonian locals team*: members should represent wealthy urban Amazonian businesspeople (e.g. agribusiness soybean farmer like Blairo Maggi, or a sawmill owner), rural small-scale subsistence farmers, isolated indigenous tribes, cattle ranchers, and rubber tappers (or other extractive subsistence activity such as Brazil nut gathering or fishing). *Brazilian domestic political institutions team*: members should represent the President, IBAMA, the Ministry of Agriculture, the Ministry of the Environment, and a Priority Municipality (black-listed) with a major urban center. *International policy team*: members include McDonald's corporate head of sustainability, US climate change negotiator, Norway's international development agency, Brazilian President, and Greenpeace activists. Have the teams debate amongst themselves what, if anything, should be done to reduce deforestation in the Amazon. After their meetings have ended, have each team internally evaluate which communities won or lost out in terms of the outcomes of the debates.

Part II: Plenary. Students from each team should then report to the whole class on key lines of disagreement in each meeting, and what, if any, common ground was found. Discuss the different and often competing interests that each of these groups hold, and how these interests shape the complex political dynamics of deforestation in the Amazon. Discuss the importance of coordination and negotiations among stakeholders in achieving an overall decline in deforestation in the Amazon.

3. Foreign Policy Implications: Testimony

Instruct students to imagine that they are in a high-level advocacy position at an environmental conservation organization and have been invited to speak before Congress on why support for reducing Amazonian deforestation should be a U.S. foreign policy concern. Have them write a testimony that clearly articulates the risks and negative consequences of Amazonian deforestation in terms of US national interests. Testimonies should be sensitive to Brazilian Amazonian community needs and Brazilian national sovereignty concerns over Amazonian territory, in addition to U.S. interests. Make sure testimonies address historical and current factors that contribute to deforestation, and the positive benefits of reducing deforestation. The rationale for how curbing deforestation is linked to U.S. foreign policy should be clear and specific actions for the United States to take should be suggested. Have students deliver testimonies over one or more class periods. Discuss as a class which testimonies were the most persuasive and why.

4. Strategies for Reducing Deforestation: Proposal Writing

Divide students into small groups and ask them to respond to a request for proposals (RFP) from a donor looking to fund a project (or otherwise devote resources) to reduce deforestation and/or conduct reforestation in Brazil's Amazon region. Proposals should include an overarching goal, specific objectives, and activities for implementation and describe relevant partner organizations involved in the project. They should also include clear indicators of success and a plan for monitoring and evaluating the project.

Optional: In addition to having students submit their proposals in written form, organize a role play in which students present their proposals and you, the instructor, act as the donor. Be sure to ask students plenty of questions. Conclude by selecting one project to receive the funding, and lead a full class debrief on why this particular project was chosen. For example RFPs, see http://www.npguides.org/.