

The Potential Environmental Ramifications of The Belt and Road Initiative in The United States

Sai Mihith Bommineni

Abstract— This paper examines the effects of the up-and-coming infrastructure project, The Chinese Belt and Road Initiative. Using an analysis of empirical data surrounding the project and information from experts in the field, we conclude the project has mostly resulted in an environmental detriment but maintains a potential for improvement. As the climate issue of the world progresses, it is crucial to delve deeper into human economic behavior, we can see in this instance the BRI proves to us the harms of a lack of environmental oversight and inspires a necessity for future change.

Index Terms— Belt and Road Initiative, Environmental Conservation, Infrastructure, Economic Development, Deforestation, Climate Change, China

1 INTRODUCTION

The United Nations has recently released a statement explaining that if we do not take immediate action right now, the effects of climate change will become irreversible by 2030 causing large amounts of poverty, natural disasters, and starvation (Losos et al.). Thus, it is critical we examine the potential climate ramifications of every project we undertake, and when we do so one project cannot be overlooked, the Belt and Road Initiative.

The belt and road initiative are a multinational infrastructure project headed by China. In the project China creates trade agreements with other countries in the east and builds infrastructure to increase trade. In becoming intertwined with the economy of nearly half the world the BRI also brings about a multitude of environmental effects which will affect the future. As such in the context of the Bri it's important to ask ourselves would US participation in the BRI and its climate and infrastructure projects help its environment?

2 ANALYSES OF ENVIRONMENTAL TRENDS

2.1 Deforestation

When we begin to examine the potential environmental effects the BRI can have on the U.S, the first and possibly most alarming consequence we must look to is deforestation; the Belt and Road destroys local forestry through the building of infrastructure projects. According to Paul Novosad and Sam Darnell, professors of economics and researcher at John Hopkins University, the construction, and dissemination of transportation infrastructure leads to large amounts of deforestation due to the fact they often go through forest dense areas (Darnell et al. 32). Emily Losos and her colleagues, who are published researchers and environmental professors from Duke, write in a research paper published by the world bank that this deforestation trend applies to the BRI's infrastructure in specific by analyzing deforestation trends before and after which have

shown a positive uptake in pollution in BRI nations (Losos et al. 13). This trend of deforestation has already led to disastrous consequences in some areas as Muhammad Rakhmat, a journalist from Indonesia, current lecturer at Universitas Islam and researcher for the Institute for Economics and Finance writes that the "BRI has also caused deforestation. For example, in the Pan Borneo Highway – which spans Malaysia, Indonesia, and Brunei – which further led to landslides, floods, and other disaster mitigation concerns" (Rakhmat et al.). When analyzing this empirical commentary, we can presume that the BRI, which uses the same interconnectivity infrastructure, will also suffer from similar deforestation problems if it continues. By letting it spread to America it would create negative environmental impacts since America would undergo the same deforestation impacts if they were to build BRI infrastructure.

2.2 Final Stage

The second trend, which continues the trend of environmental destruction, we must examine when we examine the environmental effects of the belt and road initiative is the massive amounts of emissions produced by the creation and use of infrastructure. China's negative track record in terms of the environment has integrated itself into the BRI and construction and use of their infrastructure will lead to more emissions in the US.

According to Usman Akbar, a Ph.D. candidate at Yanshan University and blockchain manager, Belt and Road infrastructure is energy inefficient causing countries to use more energy to do tasks they could have done with less causing a surplus of unnecessary emissions (Akbar et al. 12). However, the BRI's bad environmental emissions path also expands to the use of dirty fuels during construction, use, and project exportation. According to Daniel Wagner, a former employee of the Asian Development, China's BRI has problematic fossil fuel-related practices which have resulted in se-

vere environmental consequences abroad and its organizational structure is beyond reform to fix these issues, and he furthers as of now the construction of 38 emission producing coal plants has been done through the BRI (Wagner). Furthermore, Brain La Shier, a former environmental researcher, and manager of the department of energy, from Environmental Energy Institute writes that the BRI and its willingness to go through sensitive environments (putting 1000 animal species at risk), its exportation of coal, and weak environmental framework, have led to massive ecological damage in its host environments and cause concerning levels of emissions (La Shier).

Given the evidence, we can conclude that as it did for other countries the BRI will destroy America's environment as well. When we consider the current environmental degradation and emissions it has created in other countries it is crucial, we not let the BRI into the U.S. or else its subpar environmental framework will allow for a continuous cycle of pollution. However, although the BRI has been afflicted with tons of environmental downturns, that does not mean all hope is lost, there are still some benefits it can provide the U.S.

2.3 Figures

Although the BRI has its negatives it is not beyond relief, fixes to it may allow to not hurt the US's environment while providing benefit. According to Elizabeth Losos and her colleagues, who also discussed the BRI's deforestation issue above, while the BRI is currently risking environmental issues, in the long term through reforms which are happening now it may not pose a large environmental detriment (Losos et al. 44).

Losos's furthers "Chinese environmental policies, regulations, standards, and institutional reforms have been greatly strengthened since 2015" (Losos et al. 44). Given this information we can assume that the effect the BRI has on the US may be over exaggerated. When we consider its improving practices in the long term the BRI may likely not be an environmental threat if they continue to develop productively.

Moises Escobar, a Yale fellow and climate researcher, in his paper which was published and honored by Yale as a scholarly source corroborates Losos's point "*The Belt and Road* entails 25 green BRI projects, and *Guidance on Promoting Green Belt and Road* to encourage a philosophy

jects." (Escobar) . These projects have already resulted in real change which may go towards benefiting the US through clean energy (Escobar) . If the US were to join the reforming BRI it is highly likely that they will not be undertaking any carbon intensive projects in the short term, and instead using the BRI's new environmentally clean green infrastructure, but whether these reforms will follow through is still a point of contention.

3 CONCLUSION

It is crucial that the BRI's environmental impacts be evaluated in terms of how it would affect the US because of the enormous changes it has caused. As the world's largest infrastructure project reforming it may be an environmental blunder , as most accounts view it as two far gone. The first two perspectives about the BRI leading to deforestation and bad environmental practices directly precede claims about reform.

When we look at the grand scheme since the BRI has been so detrimental for environments around the world, despite possible reforms it will most likely hurt more than help. When we compare all these perspectives the first and second perspectives still take precedence over the third suggesting that the BRI creates environmental damage. The third perspective acknowledges the BRI has had negative environmental impacts and doesn't prove we can ever completely account for them even with reform and it is extremely speculative pointing out all the great things the BRI could do, but hasn't undertaken.

Empirically we have seen that China as an actor does not care about the environment and this will continue to permeate into the BRI when it spreads to the US.

4 CITATIONS

- [1] Akbar, Uzman, et al. "Energy Efficiency in Transportation along with the Belt and Road Countries." *MDPI*, Multi-disciplinary Digital Publishing Institute, 20 May 2020, www.mdpi.com/1996-1073/13/10/2607. Accessed 16 September 2020
- [2] Escobar, Moises. "The Importance of Sustainability in China's Belt and Road Initiative." *The Yale Review of International Studies*, The Yale Review of International Studies, 15

of environmentalism throughout the Belt and Road pro-

- Sept. 2019, yris.yira.org/essays/3436. Accessed 19 September 2020
- [3] La Shier, Brian. "Exploring the Environmental Repercussions of China's Belt and Road Initiative." *EESI*, Environmental and Energy Study Institute, 30 Oct. 2018, www.eesi.org/articles/view/exploring-the-environmental-repercussions-of-chinas-belt-and-road-initiativ. Accessed 19 September 2020
- [4] Losos, Elizabeth, et al. "Reducing Environmental Risks from Belt and Road Initiative Investments in Transportation Infrastructure." *Nicholas Institute*, World Bank, 25 Aug. 2019, nicholasinstitute.duke.edu/publications/reducing-environmental-risks-belt-and-road-initiative-investments-transportation-infrastructure#:~:text=The Belt and Road Initiative, energy projects' greenhouse gas emissions. Accessed 24 September 2020
- [5] Novosad, Paul. "Rural Roads and Local Economic Development." *Open Knowledge Repository*, World Bank, Washington, DC, 1 June 2018, openknowledge.worldbank.org/handle/10986/29895. Accessed 23 September 2020
- [6] Rakhmat, Muhammed. "Indonesia Needs to Be Careful for Environmental Destruction Caused by the BRI." *International Policy Digest*, 9 Aug. 2020, intpolicydigest.org/2019/12/01/indonesia-needs-to-be-careful-for-environmental-destruction-caused-by-the-bri/. Accessed 29 September 2020

IJSER