To Petition and Listen: How NGOs Work to Stop Deforestation in the Amazon

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by

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Deforestation is a known issue in the Amazon river basin. The publicized invasive industrial and agricultural practices threaten the region's habitat. Importantly, the Amazon is a major global carbon sink that curbs greenhouse gases emissions (Zaman, 2022). Earth's environmental health depends on the Amazon. Deforestation has a direct impact on global warming, impacting humanity worldwide. Non-governmental organizations (NGOs) work to protect the Amazon. Some NGOs focus only on environmental protection. These NGOs narrowly view the effects of invasive practices on the ecosystem. Other NGOs account for the effects on Amazonian indigenous peoples who live in these regions. NGOs including indigenous solutions are most effective. Indigenous groups are the most conscious members of the Amazon meaning invasive land use practices impact them directly. The health of the Amazon depends on the wellbeing of indigenous people, and vice versa. Effective NGOs recognize these groups as inherent to the Amazon, just as wildlife. Indigenous wellbeing is vital to the Amazon's. To stop deforestation in the Amazon River basin and protect their rights of its indigenous inhabitants, international nongovernmental organizations (NGOs) publicize abuses and pursue means of enforcement.

Review of Research

Researchers have studied NGOs' efforts to protect the Amazon Basin. They look at how NGOs prioritize indigenous rights. Stetson (2012) proposes a framework that includes indigenous peoples in conservation projects. NGOs should listen to the people affected. Yahya (2007) studied the polio vaccine's transmission in Nigeria during the early 2000's. The vaccine

faced backlash from local leaders in the region. The World Health Organization's strategy ignored cultural needs of the Nigerian people. This failure led to a low rate of vaccine transmission. Yahya's study is a case study of an organization that failed to respect the group affected. Toohey (2012) argued there are benefits to having networks of interest groups that work towards similar goals. Toohey showed this in the context of Amazon land use. This paper furthers the work done by researchers such as Stetson and Toohey. Moore (2022) argues land use and indigenous rights are dependent. Indigenous groups suffer the direct results of deforestation. Further, the link between land use and social inequality was defined by Coomes (2016). Forest cover and agricultural land use relate to inequality metrics. This can be extended to indigenous groups and land use. Work by May (2016) gives background to Amazon deforestation and is referenced in this paper. May analyzed land use trends in the Amazon. Defining actions that NGOs take separates this paper from previous research. This paper explores how NGOs partner and engage with governments, activists, and indigenous groups. This piece is meant to substantiate and support work that has been done on this topic.

Combat against Invasive Projects

Indigenous land rights and environment preservation are dependent on each other. Some organizations do not believe this. Conflict arises when conservation practices ignore indigenous rights. NGO Survival International is "campaigning to end carbon offset projects in Protected Areas where the rights of Indigenous peoples are violated" (Survival International, 2023). Proenvironmental practices can hurt indigenous groups where land is conserved. "Green Genocide" describes this trend. Governments or NGOs protect an area and subsequently "keep out the original inhabitants, sometimes with a shocking level of violence". Now that "Carbon credit

offsets are part of a new push for the commodification of nature", economic benefit exists to conservation. This can leave little room for indigenous peoples who live in these areas. Survival International keys this as "Carbon Colonialism". They say the practice is common in South America and Africa. Survival International likens conservation groups such as the World Wildlife Fund (WWF) to this ideal. Groups like these "have been aware of these atrocities for many years but they continue to fund and support colonial conservation". WWF argues they are "Creating multi-million dollar funds to properly manage forests that are designated as protected" (WWF, 2024). While they do appear to "Work with communities and governments to understand and prepare for climate change", WWF's focus is wildlife. To "reduce forest loss and degradation" is beneficial, not at the expense of displacing indigenous groups. Groups like WWF should include indigenous perspectives. Groups like Survival International work to prevent conservation-related abuse towards indigenous groups. This is often not spoken about in the media. NGOs must recognize the notion that these issues are dependent. Being truly sustainable must include human rights for people who interact in said environment.

Indigenous groups also suffer from invasive projects which are industrial or agricultural in nature. Governments are involved (in both supporting and mitigating industrial practices). The Brazilian INPE (National Institute for Space Research) recognized that major deforestation has happens even in the 2020's. INPE's PRODES project, "carries out satellite monitoring of deforestation through clear-cutting in the Legal Amazon" (INPE, 2022). INPE details the historical and recent damage to the Amazon. This project, "has the collaboration of the Ministry of the Environment (MMA) and the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA)" along with the "Ministry of Science, Technology, Innovations and Communications (MCTIC) in the Group Permanent Interministerial Work". They work "to

reduce deforestation rates in the legal Amazon, created by presidential decree". Many facets of government analyze deforestation. This proves some parts of government look to prevent deforestation, rather than defending it. Deforestation is not a new issue that NGOs have been resolving. Today groups like illegal loggers will "land grab" by falsifying land title records (May et al., 2016). Large-scale farmers procure land once a logging operation is done in an area. Then more land is illegally logged and purposed. This is common for land use violations. May says that policy changes are needed to amend this. May suggests, "policies seeking regional and local sustainable development need to address the recent demographic changes" by noticing "increase in consumption and land demands". Invasion into the Amazon basin affects the habitat's quality. People in these areas often relocate due to development. NGOs like The Coordinator of the Indigenous Organizations of the Amazon Basin (COICA) notice the land use conflict. Indigenous groups face "illegal loggers, poachers and land grabbers" (COICA, 2024). COICA says "community leaders should not be criminalized for defending their land and our forest". To "build lasting networks, target unjust policies, and advocate for greater rights for indigenous and local peoples" COICA produces "make films, take photographs, curate content, commission local artists and host events". Land use trends indigenous groups face prompts NGOs to take action. Preventing from invasive land practices are what NGOs strive for.

Government Contrast

Governments push and pull between economic and societal decisions. The economics prove to increase power the nation has or to gain influence. Social deeds that governments do boost societal wellbeing. In 2008, the Brazilian Government started Amazon Fund, "created to raise donations for non-reimbursable investments in efforts to prevent, monitor and combat

deforestation" (Amazon Fund, 2024). This allows them to "promote the preservation and sustainable use in the Brazilian Amazon". Amazon Fund supports projects like Strengthening Territorial and Environmental Management of Indigenous Lands in the Amazon. The project was partnered with NGO: The Nature Conservancy of Brazil (TNC Brazil) and "is a nongovernmental organization dedicated to environmental conservation on a global scale". This project raised a total of \$6.7 million. This powerful government response supported "protection, recovery, conservation, and sustainable use of the natural resources of indigenous lands and territories". TNC Brazil considered indigenous views by "respecting their sociocultural autonomy". Connecting groups with "discussions within communities and between different communities" added cultural notions to their agenda. The project recognized, "the importance of social participation in the construction and performance of actions and activities carried out by indigenous peoples". These projects are an avenue for government support for enviro-indigenous issues. Governments recognize indigenous groups in land use vulnerable areas. Foreign governments support dialogue with indigenous groups. The US Embassy in Brazil initiates "Indigenous Dialogues for Territorial Protection" (U.S. Mission Brazil, 2022). The event was held with NGOs and other related groups like the "Articulation of Indigenous Women of Maranhão - AMIMA, NAFWS, Instituto Sociedade População e Natureza - ISPN" and the US governmental side, "United States Agency for International Development – USAID, USFWS, Department of State and the International Technical Assistance Program of the U.S. Department of the Interior (DOI/ITAP)". The dialogue was between, "representatives of Indigenous Peoples from 12 regions in Maranhão and northern Tocantins and the United States". Talking about, "challenges and strategies for the management and protection of Indigenous Lands", the discussion brought ways to promote, "political advocacy for the defense of indigenous rights".

The embassy sowed cultural connections among the US Native Americans and the indigenous peoples of Brazil. Bringing environment to indigenous rights, "biodiversity conservation and respect for and recognition of ethnic diversity were highlighted". Outside countries have realized the enviro-indigenous issue. These countries can be a source of support that local governments may not provide. Governments can work with NGOs as seen with the US Embassy in Brazil.

There is push back to conservation in government. Former Brazil President Bolsonaro supported, "proposals to give property titles to land grabbers, allow mining in indigenous lands and loosen environmental licensing" (Rocha et al., 2022). Bolsonaro, "has advocated against what he sees as excessive environmental legislation and protections" and openly criticizes activist groups and spokespeople. His actions are "seen by NGOs and opposition politicians as an incentive to those on the ground" to promote "agriculture and mining, including in indigenous protected territories". Some politicians are ignorant to indigenous groups' relationship with land use. Parts of South American governments support invasive land practices openly. Economic and financial goals continue to be a large factor. Legal battles are an avenue to fight invasive practices. Amazon Frontlines (an NGO) partners with lawyer Maria Espinosa, "who provides technical and legal support to Indigenous guards, face criminalization, stigmatization, and death threats for their legitimate work" (Amazon Frontlines, 2022). Her legal practice supports indigenous people. Attorneys like Maria have, "litigated emblematic lawsuits on behalf of Indigenous peoples threatened by extractive industries in the Amazon rainforest". Amazon Frontlines supports Maria who, "provides on-the-ground legal and technical accompaniment to Indigenous peoples in Ecuador, Colombia and Peru". Another legal activist, Joenia Wapichanca, is also an active land use protector. As an indigenous lawyer and former member of Brazil's congress, she stated, "I'm very happy to be answering the call of all the indigenous people who

yearn to have their rights represented in Congress" (Alberti, 2018). "People had the hope to believe we can create positive change" explaining her role is representing indigenous people of Brazil. Her goal is "that we can have a voice there to represent our rights". Other places with land use conflicts also have looked to legal help to invoke change. NGO Native American Rights Fund (NARF) "has provided legal assistance to Native American tribes, organizations, and individuals nationwide" (NARF, 2024). NARF work by "protecting and establishing the inherent sovereignty of tribes". They are "Obtaining official tribal recognition for numerous Indian tribes", and "protecting their rights to hunt, fish and use the water on their lands". NARF's primary goal is to, "assure the civil and religious rights of all Native Americans". This includes indigenous and environmental protection in the US. Relating to climate change and other environmental impacts, NARF realizes, "Native Americans and Alaska Natives are especially vulnerable and are experiencing disproportionate negative impacts on their cultures, health, and food systems". They work in response to "catastrophic climate change that adversely impacts the lives of people". Amazon Frontlines and NARF use legal force to drive change and to uphold protections. Laws must be upheld to resist economic and industrial pressures.

Amplifying Voices

Awareness means raising voices of indigenous people on their land use struggles. Often a spokesperson does this. Indigenous lawmaker and activist, Celia Xakriaba, works towards this cause. Being elected to Brazil's Congress, she stated, "We were not only elected by progressive people. It is the environmental issue, the issue for life, the issue of the right to water, the issue of the right to food without poison" (Mendes , 2023). She explained in a Q&A done with news outlet Mongabay (with writer Karla Mendes), "the context that we are living, of an ecocide, of a

genocide, is now!". She went further to state, "We cannot postpone the fight for life, we cannot postpone a fight that is committed to humanity". Her message relays a sense of urgency about the issue. She says that "because the issue of the climate emergency, the emergency of humanity, and the emergency and threat to Indigenous peoples have points of convergence". She recognizes the enviro-indigenous dependency. Powerful outspoken people like Celia advocate for indigenous people's issues. Nobel Prize candidate Raoni speaks on this issue. Roani stood up to Brazil former president Bolsonaro as he was "welcomed by opposition lawmakers with ovations and tribal chants at Congress" (Boadle, 2019). He voiced his stance on the land use issue, "My concern is for the environment. Today everyone is worried". Indigenous leaders like Raoni and vocalize about land use issues. Just how leaders have a role in raising awareness, NGOs do as well. Content that NGOs release can be informative and can give outsiders indigenous views of the Amazon land-use issue. Amazon Watch, an NGO that has been active for nearly 20 years, is "Amplifying the power of Indigenous women's leadership" (Amazon Watch, 2023). Land use effects are communicated through groups like indigenous women view. Amazon Watch voices indigenous viewpoints through social media and their Women Defenders Program. This program has been, "supporting economic empowerment projects and aiding in the growth of a Pan-Amazon Indigenous Women's Movement". This helps indigenous women vocalize their concerns. Their perspective shows how deeply land loss affects communities. Amazon Watch says that indigenous people "bear the brunt of environmental destruction, corporate greed, and climate change and are often excluded from top-down solutions". Amazon Watch accounts the connection of indigenous people to their environment. But also, notions that indigenous people voices must be included to allow NGOs to be effective. Ventures that do not include their views often lead to ignorant solutions.

Another NGO that supports indigenous groups is the International Work Group for Indigenous Affairs (IWGIA). IWGIA works to, "increase and consolidate efforts to get land rights and related human rights violations exposed and denounced at all levels" (IWGIA, 2021). They believe "Land dispossession will lead to the loss of Indigenous Peoples' traditional livelihood practices". Land loss will "cause poverty, food insecurity, social disintegration and loss of identity", noting that deforestation leads to humanitarian issues. NGOs like IWGIA voice the concerns of indigenous groups. IWGIA make documentaries, publish reports about political actions, and post plugs to indigenous activist events. IWGIA releases "urgent alerts, briefing papers, video documentaries, radio reports and human rights reports". NGO Land Rights Now focuses on Amazonian land use rights awareness. The NGO "mobilizes and engages active citizens, media, communities" to aid "land rights of Indigenous Peoples" (Land Rights Now, 2024). Recognizing that both industry and conservation can hurt indigenous peoples, "land grabbing by more powerful actors to create large plantations or fossil-fuel projects, hydroelectric dams, tourism, speculation or conservation" provides a broader view. Land Use Rights looks to, "amplify the voice of these communities, and help defend their land rights worldwide". In cooperation with "International Land Coalition, Oxfam and the Rights and Resources Initiative", Land Use Rights published a "flagship report, Common Ground". Common Ground, "launches a Global Call to Action on Indigenous and Community Land Rights, backed by more than 300 organizations all over the world" (Pearce, 2016). Published coalition pressures governments to support vulnerable groups. Common Ground investigates how, "Courts respond to community pressure" and how "important that the rights of women within communities are asserted". This is seen in the Paanama, Sri Lanka women's protest. This revealed how women of Paanama village vocalized for their land rights. They "linked up with other groups defending their territories

against government land grabbing for other tourist developments", explaining the women connected with NGOs. This can similarly happen with Amazonian indigenous groups. Even when "officials had not acted", Common Ground reports, "the women are not backing down". NGOs supporting social causes prove a force that sparks change. Indigenous people must gain an audience to vocalize. This can be done through NGOs to voice their concerns. This follows the notion that helping indigenous groups and preserving the Amazon the same.

Conclusion

For sustainable land use protection, NGOs must work with indigenous groups. Strategies must involve indigenous perspectives. How can NGOs know exactly what is best for these people and their land without dialogue? Some NGOs do understand this. Topical thinking can restrict or cause NGOs to be ignorant. Separating indigenous rights from deforestation detracts from solving both. This can lead to excluding indigenous rights. Effective NGOs involve the people affected by their strategies, in their strategies. This means direct dialogue, a two-way street for NGOs and indigenous groups. Other common NGO supported issues should follow the same thinking. Non-topical thinking may provide a path to solutions. NGOs who see problems as part of a larger network of related issues are more wholistic in their approach. This approach relates to other social issues and NGOs that work in those arenas. Land use NGOs engage with governments, politicians, industry, and donors. More study must be done to resolve Amazon enviro-indigenous land use. The Amazon and its people are part of a complex socioeconomic system. More work is needed to know what is best for NGOs to do. What other strategies may boost NGOs' work? How may they best engage with governments? What are better ways to dialogue with indigenous groups? This paper contends how effective NGOs support this issue,

not what they could do to be more effective. This answer requires experience working for indigenous land use rights. A fruitful venture would be to speak with NGOs about what inhibits their work. What could better serve indigenous peoples is a next study topic. Bearing this in mind, NGOs are one cog in the intricate, dynamic system that is the Amazon. Sole responsibility should not be placed on NGOs to protect land. The priorities of governments, citizens, and industry need change.

References

- Alberti, Mia. (2018). Joenia Wapichana: Brazil's first native woman voted to Congress. Al Jazeera. www.aljazeera.com/news/2018/10/13/joenia-wapichana-brazils-first-native-woman-voted-to-congress
- Amazon Frontlines. (2022). The First Line of Defense: Indigenous Guards of the Amazon. amazonfrontlines.org/chronicles/the-first-line-defense-indigenous-guards-amazon/
- Amazon Fund. (2020). Project: Strengthening Territorial and Environmental Management of Indigenous Lands in the Amazon. Environmental Conservation Institute –TNC Brazil. www.fundoamazonia.gov.br/en/projeto/Strengthening-Territorial-and-Environmental-Management-of-Indigenous-Lands-in-the-Amazon/
- Amazon Watch. (2023). Stop Amazon Destruction. amazonwatch.org/work#stop
- Boadle, Anthony. (2019). Brazil's Amazon chief Raoni calls on Bolsonaro to step down. Reuters. www.reuters.com/article/us-brazil-politics-indigenous-idUSKBN1WA2I0
- COICA. (2024). If Not Us Then Who?. The Coordinator of the Indigenous Organizations of the Amazon Basin. ifnotusthenwho.me/about/demands/
- Coomes, O. T. et al. (2016). Forests as landscapes of social inequality: tropical forest cover and land distribution among shifting cultivators. Ecology and Society 21(3). JSTOR.
- INPE. (2022). Monitoring Deforestation in the Brazilian Amazon Forest by Satellite. National Institute for Space Research. www.obt.inpe.br/OBT/assuntos/programas/amazonia/prodes
- IWGIA. (2021). International Work Group for Indigenous Affairs. iwgia.org/en/land-defencedefenders
- Land Rights Now. (2024). www.landrightsnow.org/about/
- May, P. et al. (2016). Forests, land use trends and drivers of deforestation and degradation. *In The context of REDD+ in Brazil: Drivers, actors and institutions 3*, 1–23. JSTOR
- Mendes, Karla. (2023). 'If Brazil starts with us, why did we arrive last?': Q&A with Indigenous lawmaker Célia Xakriabá. *Mongabay*. news.mongabay.com/2023/02/if-brazil-starts-with-us-why-did-we-arrive-last-qa-with-indigenous-lawmaker-celia-xakriaba/

Moore T (2022) Including Indigenous Peoples in Geospatial Services. Front. Clim. Frontiers.

NARF. (2024). Native American Rights Fund. narf.org/about-us/

- Pearce, Fred. (2016). Common Ground. Oxfam. policy-practice.oxfam.org/resources/commonground-securing-land-rights-and-safeguarding-the-earth-600459/
- Rocha, et al. (2022). Deforestation is accelerating in Brazil as Bolsonaro's first term ends, experts say. *CNN World*. www.cnn.com/2022/09/20/americas/brazil-bolsonaro-deforestation-term-intl-latam/index
- Stetson, G. (2012). Oil Politics and Indigenous Resistance in the Peruvian Amazon: The Rhetoric of Modernity Against the Reality of Coloniality. *The Journal of Environment & Development 21(1)*, 76–97. JSTOR.
- Survival International. (2023). Decolonize Conservation: Indigenous people are the best conservationists. www.survivalinternational.org/conservation
- Toohey, D. E. (2012). Indigenous Peoples, Environmental Groups, Networks and the Political Economy of Rainforest Destruction in Brazil. *International Journal of Peace Studies 17(1)*, 73–97. JSTOR.
- U.S. Mission Brazil. (2022). Brazilian and U.S. indigenous peoples exchange experiences on territorial protection. US Embassy & Consulates in Brazil. br.usembassy.gov/brazilian-and-u-s-indigenous-peoples-exchange-experiences-on-territorial-protection/
- WWF. (2024). World Wildlife Fund. www.worldwildlife.org/initiatives/climate
- Yahya, Maryam. (2007). Polio Vaccines "No Thank You!" Barriers to Polio Eradication in Northern Nigeria. *African Affairs* 106(423). 185-188. JSTOR
- Zaman, Khalid. (2022). Environmental cost of deforestation in Brazil's Amazon Rainforest: Controlling biocapacity deficit and renewable wastes for conserving forest resources. Forest Ecology and Management 504. ScienceDirect.