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# Brazils Highway BR-319: The road to the collapse of the Amazon and the violation of indigenous rights

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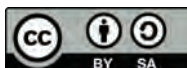
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## Abstract

One of the greatest threats to the Brazilian Amazon is the reconstruction and paving of the formerly abandoned Highway BR-319, which would link one of the most conserved blocks in the Amazon forest to the “arc of deforestation” on the southern edge of the region where most forest has already been destroyed. BR-319 and its planned side roads would allow the actors and processes from the arc of deforestation to move into vast areas of unprotected rainforest. In the specific case of this highway, a judicial decision that is not subject to further appeal established that environmental studies for the first section of the highway to be reconstructed (“Lot C”) must be carried out before paving. The federal highway department and the “Civil House” of President Bolsonaro’s presidential office ignored this decision and issued a call for bids for the construction work. Due to the current lack of governance in the BR-319 area and the history of deforestation whenever Amazonian highways are built, the decision on whether to suspend the contract for the “Lot C” is critical for the maintenance of both the ecosystem services of the Amazon forest and the way of life of indigenous and riverside people. This decision is expected to be made shortly by a single person.

**Keywords** climate change, rainforest, deforestation, environmental impact, indigenous peoples

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## Brazils Highway BR-319: The road to the collapse of the Amazon and the violation of indigenous rights

The Amazon rainforest plays a key role in controlling both South America's rainfall and global climate. In addition, this biome is home to a wide variety of indigenous peoples and one of the planet's largest and most unique arrays of biodiversity. The Brazilian government opened a call for bids and awarded a contract for reconstructing and paving the first section of a highway that cuts through one of the most conserved blocks in the Amazon rainforest. Highway BR-319 (Manaus-Porto Velho) was originally built in the early 1970s but was abandoned in 1988; since 2015 a "maintenance" program has been underway that now makes the road passable in the dry season.

The still-unlicensed reconstruction project, which would be paid for by the federal government rather than by local taxpayers, is a high priority for politicians in Manaus. However, unlike many other infrastructure projects, BR-319 lacks an economic rationale. Most freight from Manaus to Brazil's economic center in São Paulo is currently shipped in truck trailers that are carried by barge to Belém at the mouth of the Amazon River, and the journey is completed by existing highways. As compared to the current system, transport to or from São Paulo via Highway BR-319 would be 19% more expensive, and, if the capacity of port facilities serving Manaus (for example, in Itacoatiara) were expanded, transporting this freight in containers by oceangoing ships to ports in southeastern Brazil would make freight to São Paulo 37% cheaper than the current system (Teixeira 2007).

Not coincidentally, the BR-319 reconstruction project is Brazil's only major infrastructure project that does not have an economic feasibility study (EVTEA). In the absence of an economic argument, a wide range of alternative justifications for the highway have been put forward by proponents, all of which are fallacious (Fearnside 2018a, b). Most recently, Manaus has become world famous for its mismanagement of the COVID-19 pandemic, with the city's hospitals running out of oxygen and further adding to the record-breaking mortality in the city (e.g., Phillips 2021). The mayor of Manaus saw this as an opportunity to promote reconstruction of BR-319 and blamed the city's oxygen crisis on environmentalists who raise objections to rebuilding the highway (Estadão 2021; Fearnside et al. 2021). Needless to say, the real reason for the shortage is the lack of action by the authorities to order oxygen in a timely manner, and, at the time of an emergency like the current one, freight comes by air anyway.

The impacts of BR-319 go far beyond the deforestation that can be expected to spread along each section of the highway, as has occurred with other Amazonian highways. A far greater impact would result from BR-319's connecting roughly half of what remains of Brazil's Amazon forest to the "arc of deforestation" along the southern and eastern edges of the forest where the vast majority of Brazil's Amazon deforestation has occurred so far. BR-319 will allow the actors and processes from the arc of deforestation to migrate to all areas that are already connected to Manaus by road, such as the state of Roraima (Barni et al. 2015), and planned side roads such as AM-366 would give access to the vast "Trans-Purus" area between the Purus River that parallels BR-319 and Brazil's border with Peru (dos Santos Júnior et al. 2018; Fearnside and Graça 2006; Fearnside et al. 2020a) (Fig. 1). Once roads are built in Amazonia, the events that follow are largely outside of government control – they do not follow rosy official "governance scenarios" (e.g., Fearnside 2015).

Brazil's Constitution requires "for the installation of a work or activity potentially causing significant degradation of the environment, a previous study of environmental impact" (Brazil 1988, Article 225, Paragraph 1, Item IV). A court decision established that environmental studies should be carried out for "Lot C" (kms 198 to 250) of BR-319 (TRF-1 2019), but neither environmental studies nor consultation with indigenous peoples have been done for this section of the highway (Ferrante and Fearnside 2020a). For another section of the highway (the "middle stretch," or kms 250 to 655) an environmental study has been submitted to the licensing agency and is pending approval, but no consultation of indigenous peoples has been done (Ferrante et al. 2020a).

The decision to revoke the "Lot C" contract is in the hands of a Brazilian judge who, in January 2019, was a rapporteur of the court case that reached the unanimous decision that reconstruction of BR-319's "Lot C" must first have an environmental impact study (EIA) (TRF-1 2019). In violation of this decision, the federal highway department (DNIT) published an official call for bids in June 2020 for reconstructing and paving this section of the highway despite its not having an EIA even planned, let alone completed and approved (DNIT 2020). The same month the Public Ministry submitted a case to the courts to have the call for bids annulled (JF-1 2020). The Public Ministry is a public prosecutors' office created by Brazil's 1988 Constitu-

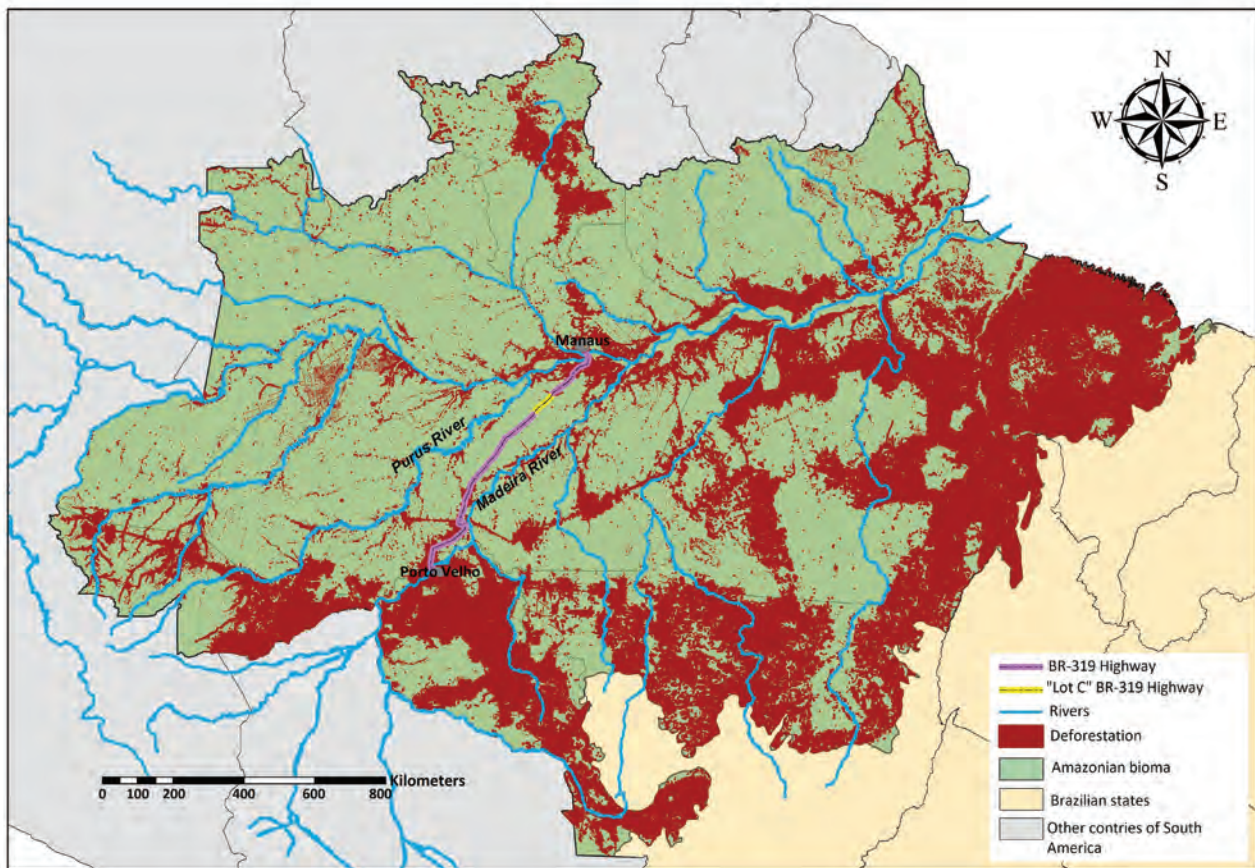


Fig. 1 Brazilian Amazonia and Highway BR-319 (Manaus-Porto Velho). The deforestation is current, until 2021. Source: map produced by Lucas Ferrante in the ArcGIS software, deforestation data from INPE 2021

tion to defend the rights of the people, including the constitutional right to “an ecologically balanced environment” (Brazil 1988, Article 225). However, rather than issuing a judgement, for seven months Judge Mequerian has been sitting on the case (Case Number: 1029927-28.2020.4.01.0000). A deadline for a decision is now approaching.

In December 2020 the contract for “Lot C” was awarded to the consortium Tecon/Ardo/RC. There is little chance that consultations and environmental studies would be done at a later date if the construction work begins. The recent history of infrastructure projects in Brazilian Amazonia is one of repeated violation of legal requirements, especially those for indigenous consultation (Fearnside 2017a, b). The stage appears to be being set for one more example, and the stakes in this case are extraordinarily high.

Given the potential impact of this highway in the Amazon, the decision to suspend the contract for “Lot C” represents an action to contain or prevent one of the world’s greatest environmental disasters, in addition to pre-

venting violation of the rights of various indigenous peoples. The Amazon rainforest is already approximately at its limit of tolerable deforestation before an environmental collapse (Lovejoy and Nobre 2018; Walker 2021), and the current Brazilian presidential administration has intentionally scrapped the country’s environmental bodies, leading to a surge in deforestation (Ferrante and Fearnside 2019, 2020b). Given the lack of environmental governance, one of the projects with the greatest capacity to generate deforestation is Highway BR-319.

Opening roads has increased rates of human migration, disorderly occupation, and deforestation in the Amazon (Laurance et al. 2002; Nepstad et al. 2001; Pfaff et al. 2007). A historical example is provided by the reconstruction and paving of Highway BR-364 in Rondônia, which was completed in 1982 (before environmental studies became a requirement in Brazil in 1986), culminating in an explosion of deforestation that shocked the world (Fearnside 1987, 2017c). Today, this “arc of deforestation” is the main source of human migration that threatens to spread via the BR-319 (Fearnside and Graça 2006).



The BR-319 area contains a substantial number of endemic species of fauna and flora (species that occur exclusively in this area) (e.g., *Cohn-Haft* and *Bravo* 2013; *Ferrão* et al. 2017, 2018a, b; *Stegmann* et al. 2019). The area is also home to indigenous peoples whose right to free, prior and informed consultation as established by ILO Convention 169 (*ILO* 1989) and Decree No. 10,088 / 2019 (formerly 5051/2004) (*PR* 2019) is being violated by the lack of prior consultation (*Ferrante* et al. 2020a). The opening of illegal side roads in areas of traditional indigenous use has been documented, giving loggers, squatters and land grabbers access to areas of untouched forest (*Fearnside* et al. 2020a, b). During the current COVID-19 pandemic these impacts are further aggravated by the vulnerability of Amazonian indigenous peoples to the virus (*Ferrante* and *Fearnside* 2020c, d; *Ferrante* et al. 2020b). The almost complete lack of governance in the area today is illustrated by the ongoing spontaneous building of illegal side roads connecting to BR-319, together with rampant illegal logging and land grabbing (*Fearnside* 2020; *Andrade* et al. 2021).

We ask for nothing more than compliance with Brazilian legislation, including carrying out consultations with indigenous communities and environmental studies before reconstructing and paving "Lot C". These environmental studies are necessary to protect not only the environment, but also the people whose way of life is linked to the region's ecosystems, including indigenous and riverside communities. These studies need to be more comprehensive than those done so far for the adjacent "middle stretch" of BR-319 because of the highway's role in allowing deforesters to migrate to distant areas, and the studies must propose realistic measures to avoid or mitigate impacts.

The judge's decision has the potential to cause impacts throughout the planet, given the importance of the Amazon biome for global climate change and its role in maintaining rainfall in much of South America (*Zemp* et al. 2014). In addition to an environmental catastrophe, the decision directly affects the rights of Amazonian traditional peoples. It is remarkable that the decision of a single person could change the world as we know it.

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