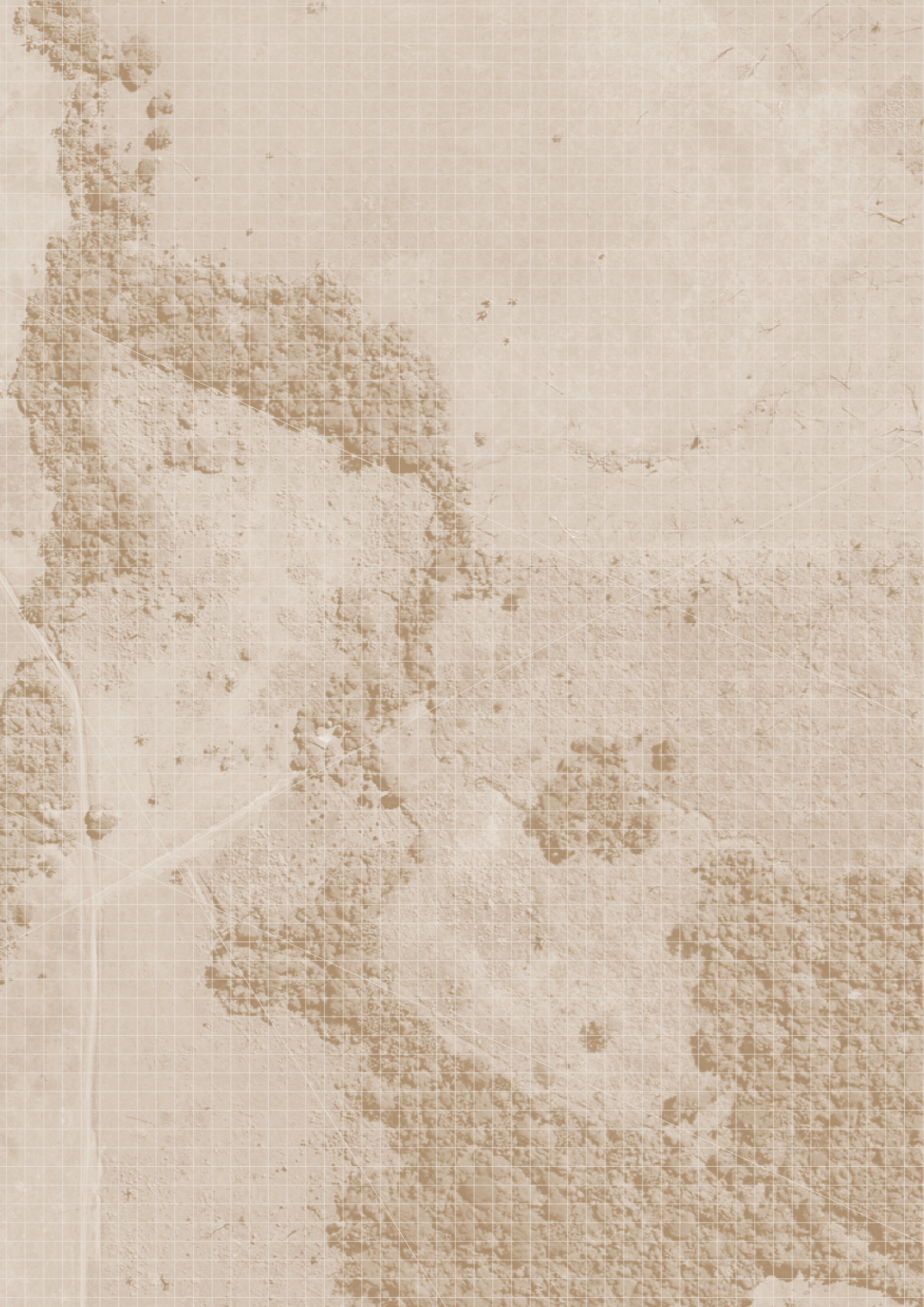


BRIEFING

How does external public debt drive the destruction of the Colombian Amazon?



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Abstract

This briefing sums up the main findings of a longer research project, completed as part of the Master's course in Political Ecology, Degrowth, and Environmental Justice at the Universitat Autònoma de Barcelona, in collaboration with the Observatori del Deute en la Globalització.¹ Indigenous peoples and social movements are central actors in the struggle against colonial capitalism. The briefing responds to the explicit research need identified by Debt for Climate – a global social movement demanding the cancellation of the Global South's external public debt – by exploring the ways in which this same debt drives the destruction of the Colombian Amazon. Whilst indigenous peoples have recognised that debt is a structural driver of deforestation, the precise mechanisms connecting the two have not been extensively studied. This briefing presents a mixed-method case study based on semi-structured interviews and extensive desk-based research. Seven mechanisms through which Colombia's external public debt drives the destruction of the Colombian Amazon are described; two are direct – including debt-based investment in roads – and five indirect. It establishes that a vicious cycle between external public debt and deforestation exists in the Colombian Amazon. In addition, Colombia's state of indebtedness – in its history and its impacts – is shown to be a clear part of the colonial project, past and present. Whilst the Colombian nation-state remains indebted, the Amazon will always be under threat.

¹ The [full report](http://www.odg.cat) can be found on the ODG webpage: www.odg.cat

Abbreviations

COICA	Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica
COP30	30th Conference of Parties of the United Nations Framework Convention on Climate Change
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
IDB	Inter-American Development Bank
IMF	International Monetary Fund
ISDS	Investor-State Dispute Settlement
NGO	Non-governmental Organisation
REDD+	A United Nations scheme for funding anti-deforestation efforts (Reducing Emissions from Deforestation and Degradation; “the ‘+’ adds fostering conservation, sustainable management of forests, and enhancement of forest carbon stocks” ^[1])
USA	United States of America
USD	United States Dollars
WB	World Bank

1 Introduction

At present, over 500 indigenous peoples and more than 10% of known plant and animal species call Amazonia home ^[2,3].

Their survival has required centuries of resistance to colonial-capitalist exploitation and violence. During this time, a vast colonial and ecological debt has accumulated. If a balance sheet were to be drawn up with the wealth stolen by the Global North² on one side, the other would show this debt, owed by the Global North to Amazonia. Acknowledging and paying this debt sits within the call for reparations ^[4].



² Box 1 of the [full report](#) explains the use of the contested terms Global North and Global South.

Amazonia is a vast ecosystem without borders. However, it is undoubtedly shaped by the colonial power structures of nation-states [5,6]. Within this system, external public debt creates a host of oppressive social and environmental outcomes [7].³ **Cancelling nation-states' external public debt is a tangible first step to settling Amazonia's ecological debt.** As such, social movements like Debt for Climate call for the total, unconditional cancellation of external public debts as “a starting point for the richest countries of the Global North to begin to pay their climate debt”, and a “common denominator” to unite a variety of social actors [10].

Colombia's history, and that of the Amazon, bears witness to the violence and complexity of colonial capitalism. Colombia's independence was made possible by taking on external debt. Britain financed the independence movement with debt, transforming colonial subjugation under Spain to economic subjugation under Britain [11,12]. Whilst this ‘independence’ came *after colonisation* for most of the country, in the Colombian Amazon – around half of Colombian territory, and an area the size of Spain – colonisation largely began *after independence* [13]. Waves of extractivism for rubber and quinine were the first major colonial-capitalist pressures felt in the territory, severely affecting the forest and its people [14–17].⁴ Today, the highest levels of cumulative deforestation lie in Caquetá and Putumayo, the areas most integrated into the Colombian nation-state [16]. However, the causes of deforestation vary across the region, with ranching, mining, and other activities (legal and illegal) all contributing to different extents [2,16,18,19].

Social movements demanding debt cancellation have a window of opportunity in 2025. Debt cancellation⁵ has been a consistent demand of social actors in the Global South for decades [21]. A wave of global protests in 2000, built to coincide with the church-led Jubilee year, led to some successful debt cancellations [22–24]. 2025 is the next Jubilee year, presenting a window of opportunity for social actors to demand debt cancellation as a first step towards much-needed reparations. In this context, **global grassroots movements are strategically building power towards debt cancellation in Amazonia next year.** One mobilisation point in the next Jubilee year is COP30, which will take place in the Amazon [25]. Amazonia has incredible political resonance in the Global South, as a symbol of resistance, and in the Global North, as the ‘lungs of the Earth’. Cancelling debts in Amazonian countries is thus a strategic objective and, of these eight countries,⁶ Debt for Climate has identified particular opportunities in the current state leadership of Colombia and Brazil. **This briefing seeks to support these efforts by exploring the following question: how does external public debt drive the destruction of the Colombian Amazon?** Given the limitations on the meaningful reach of the state and the high prevalence of illegal activities, the Colombian Amazon is a challenging place to study this connection. However, if such connections can be found, this would strongly indicate that the relationship exists elsewhere in Amazonia. Understanding these dynamics is critical for achieving the self-determination of Amazonian peoples and wellbeing of others around the world [27].

Debt cancellation is a specific objective, commensurate with the roots and scale of the colonial-capitalist polycrisis. Debt is recognised by indigenous voices as a structural driver of the Amazon's destruction [3]. By adding precision to this claim, and by supporting Debt for Climate's efforts, this research can help with building power towards colonial and ecological reparations [28]. This may seem ambitious but, through activism, we can create hope [29].

3 Box 2 of the [full report](#) explains how debt should not be seen as a neutral economic tool but as a structural tool of capitalist violence: a power relation, and one which is used as a “political weapon” [8,9].

4 Section 6.1 of the [full report](#) contains more detailed historical context.

5 Unless otherwise stated, all references to debt in this study relate specifically to external public debt, that is, debts where the creditor is outside of the country and the debtor is a public body such as the central government, government departments, municipalities or decentralised public bodies [20].

6 A small proportion of Amazonia also sits within France, in the département of French Guiana. As a country of the Global North, France is rarely considered an Amazonian country, including by the Amazon Cooperation Treaty Organisation [26]. That norm is followed here.

2 Methodology

The research question – ‘how does external public debt drive the destruction of the Amazon rainforest in Colombia?’ (Box 1) – was developed by triangulating between gaps in academic understanding, the questions posed by a social movement collaborator, and the reflective process of asking: “who is served by this research?” [30]. The output is a mixed-method case study, drawing on semi-structured interviews and desk-based research.

Eleven interviews were conducted in Spanish, online, between December 2023 and February 2024 with experts from NGOs, social movements, universities and the private sector, all of whom offered a diverse range of perspectives and experiences. These interviews lasted between 30 and 70 minutes. Care was taken to build trust with, and protect the identities of, interviewees.^{7,8} From the transcripts, dynamics were mapped out to identify prospective mechanisms connecting debt and the destruction of the Colombian Amazon. Each prospective mechanism was then verified through extensive desk-based research.⁹

Box 1: Deforestation or destruction?

“Although coloniality is intrinsically linked to capitalism, it cannot be reduced to economics, for it also encompasses cultural, epistemological and ontological mechanisms of subjugation.” [31]

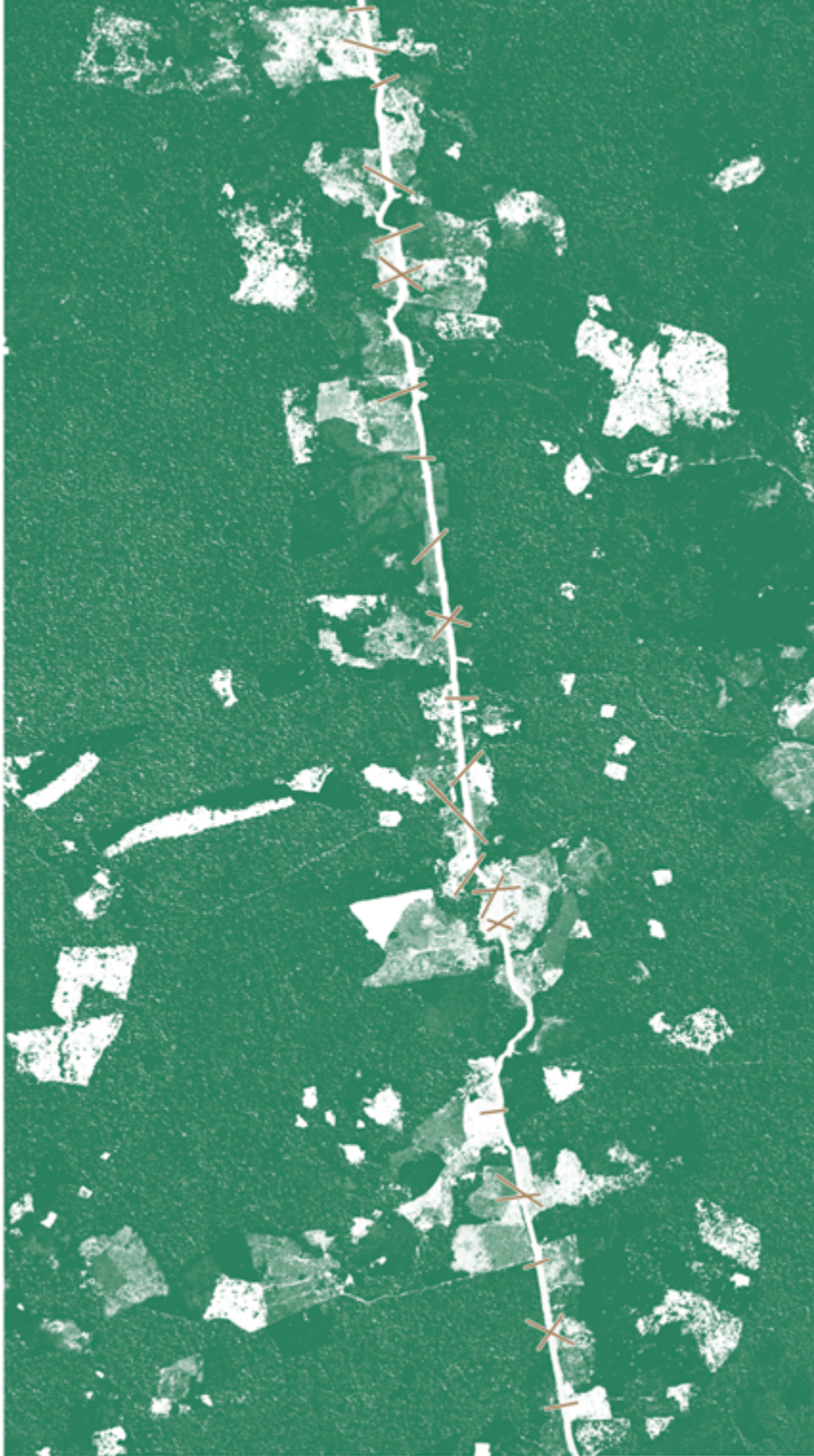
The research question speaks to the ‘destruction of’ rather than ‘deforestation in’ the Colombian Amazon. Deforestation calls to mind quantitative analyses of how quickly trees are felled; I use the term destruction to denote both this and the other ways in which human and more-than-human communities in the territory are affected. This decision was made for two reasons. First, debt activism faces the challenge of uniting people around an abstract economic concept. By being open to stories of how debt affects humans and more-than-humans, beyond tree cover alone, the results have a greater chance of connecting with people. Second, decolonial and eco-feminists describe how many of today’s most powerful binaries – including the distinction between ‘human’ and ‘environment’ – are social constructs [32]. It felt important to question the framing of deforestation as a stand-alone issue, separate from the plight of the humans living in the forest.

7 For this reason, interviews are referred to in this briefing according to a code within parentheses e.g. (Interview 2) rather than by names.

8 Key to building trust is the author’s positionality. A full account of how this shaped the research is included in Section 3 of the [full report](#), however, briefly: I am a North-European, middle-class student-activist-researcher. I was born and raised on a small island in Europe best known for being a tax haven. I have the privilege of having French and British passports. This background makes me particularly motivated to tackle the power of finance and the legacies of colonialism in my activism. Both of these dynamics are central to this project. I took on this project to serve Debt for Climate: a movement initiated by people from the Global South which is building power with indigenous groups, trade unions, feminist groups, environmentalists and others. However, this does not discount the fact that my positionality – along with the fact that I have never even been to Colombia – created a lot of challenges in conducting this research ethically. Nevertheless, I made significant efforts to do so with the resources I had available.

9 See the [full report](#) for: detailed methodological information in Section 4 and Appendix 1.1, and the theoretical framework in Section 2.

3 Mechanisms through which Colombia's external public debt drives the destruction of the Amazon



Direct mechanism

Investment destinations

Debt is invested in road construction in the Colombian Amazon, contributing directly to its destruction, as well as indirectly by accelerating land grabbing and extractivism.

One interviewee mentioned how investment in roads relies on public debt:

“When there are large infrastructure works, particularly in Colombia where, for example, there is a trans-Amazonian highway [...] these are carried out with public debt.”

Interview 2

Roads are an important driver of deforestation and forest degradation in the Colombian Amazon. Directly, road construction leads to felling of trees and fragmentation of the forest habitat [18]. Indirectly, roads accelerate legal and illegal extractivism by cheapening access and making it more profitable (*Interview 11*) [18]. Road construction projects are also connected to deforestation through land grabbing and corruption (*Interview 2*) [33,34].

Whilst the Colombian Amazon has a very high concentration of illegal roads (*Interviews 4 and 11*) [35] – which have similar impacts on the forest but are not financed by public debt – public debt still plays a role in the territory. One major example of public debt-financed roads is the controversial and conflictive road linking San Francisco to Mocoa, financed by a loan from the Inter-American Development Bank [36,37].

Therefore, while not all of it is tied up in roads, a part of Colombia’s debt is directly invested in the destruction of the Colombian Amazon.

Direct mechanism

Foreign exchange pressure

Since all of Colombia’s external public debt is held in foreign currencies, the Colombian state is under pressure to expand destructive mining and oil operations for export.¹⁰

The pressure to develop Colombia’s mining and oil sectors for export was highlighted explicitly by three interviewees (*Interviews 3, 7 and 11*):

“It’s a perverse relationship in which they give us debt, but we have to pay with our natural assets, like oil, gold, coal.”

Interview 7

“The increase in indebtedness implies pressures on the Colombian state to [...] expand the export of raw materials, from countries of the periphery.”

Interview 3

¹⁰ Box 7 of the full report describes how the composition of Colombia’s external public debt has evolved over the last 50 years. Today, 95% of this debt is held in USD [38].

Mining for diverse minerals is carried out in the Colombian Amazon, polluting water sources, increasing the risk of violence and displacing communities (*Interview 4*) [39,40]. Displacement, in turn, leads to deforestation, as people are forced to colonise new areas (*Interviews 1 and 10*). Similarly, fossil fuel extraction has led to water pollution, disputes with indigenous communities and deforestation following unplanned immigration by *colonos* [16].

It is again important to note that much of the mineral extraction in the region is conducted illegally, with little state involvement (*Interviews 1 and 4*) [16,18]. Since these operations lie off the national balance sheet, they are immune to the foreign exchange pressures on the state, even though the final product may well be exported (*Interview 4*).

The state remains, however, an influential actor (*Interview 1*). Mining and oil extraction are a crucial part of Colombia's exports, and the state encourages these sectors' expansion (e.g. through contracts and concessions) as a means of obtaining sufficient "hard currency" to repay its debts [41]. Putumayo's economy has been shaped by oil extraction ever since the state built a road for, and contracted, Texaco in the 1950s [16]. Today, a controversial copper mine, also in Putumayo, is being justified for its export potential as part of the 'green transition' [42,43]. Huge numbers of mining concessions lie within protected areas, causing a range of socio-ecological harm (*Interviews 10 and 11*) [44–46]. Colombia's debt, therefore, clearly creates a pressure for foreign exchange which exacerbates the destruction of the Colombian Amazon by expanding (legal) mining and oil extraction for export.¹¹

Indirect mechanism

Limiting environmental enforcement

Debt leads to reduced environmental spending, which constrains the capacity of public bodies, contributing to conflict and deforestation in the Colombian Amazon.

The pressure of Colombia's debt burden has led to a variety of austerity measures, including reduced environmental funding. Two interviewees made this connection:

“The country stops making certain investments in order to pay the public debt. [And] the environmental sector, particularly in Colombia, is one of the sectors that has the least resources.”

Interview 2

“While debt service consumes 20 percent of the budget, investment in the environment is about 0.16 percent.”

Interview 11

¹¹ The case for this applying to ranching, timber, and palm oil extraction is weaker: see Section 6.2.2 of the [full report](#).

Although the National Park model can be disputed in terms of its coloniality, such lack of funding is cited by people working in Colombia's National Parks as a "principal factor" behind Park-related conflicts [47]. It has led to the parks in the Colombian Amazon being called "protected areas on paper", as the public authorities lack the resources to sufficiently protect against encroachment in the form of, for example, illegal roads [48].

In 2006, Pérez-Rincón found evidence that external public debt pressure contributed to reduced environmental funding, noting a marked decrease from 1997 onwards [49]. At this time, the Colombian state had been accumulating public debt which, alongside other factors, left it "vulnerable" to any economic shocks, one of which arrived in the form of the 1997 global financial crisis [50]. This crisis led to an agreement between the Colombian state and the IMF, and the subsequent imposition of reforms such as privatisation and reduced government spending, especially to decentralised public bodies [50,51]. Among such bodies in the Colombian Amazon are the National Park Agencies and the Autonomous Regional Corporations [18].

While the financial shock first hit in 1997, the agreement was only signed into law in 2000 [50], by which point Colombia's environmental investment had, in fact, stabilised [49]. Therefore, it is likely that the "pressure of external debt" contributed to the reduction in environmental spending [49], leading to budget cuts in anticipation of the austerity logic of the agreement to come. The pressure of Colombia's external debt has consequently led to a reduction in environmental spending, contributing to conflict and destruction in the Colombian Amazon.

Indirect mechanism

Liberalising trade

Debt pressures the Colombian state to open up to Foreign Direct Investment and Free Trade Agreements, leading to the growing threats of intensified extractive industries and regulatory chill.

Trade liberalisation – through Foreign Direct Investment (FDI) and Free Trade Agreements (FTAs) – is a destructive force in the Amazon. Both dynamics draw on crises, power relations, and logics connected to Colombia's external public debt.

Firstly, the **growth of FDI has led to intensified extractivism in the Colombian Amazon**. Supporters of FDI say it can "modernise" Colombian industry by importing new technologies and business models [45,52,53]. In the case of extractive industries, this means intensified environmental and social harm [54]. As previously seen, Texaco's (USA) oil operations have had long-term impacts in Putumayo [16]. Meanwhile, Repsol (Spain), Endesa (Spain), Anglo Asian (UK) and Libero (Canada) are behind some of the largest environmental justice conflicts in the region [46,55,56].

These conflicts are “chronicles of genocide and ecocide foretold” in that the state plays an active role, showering foreign companies with mining titles whilst local people are dispossessed and injured [45,46,57].

Until the 1980s Latin American debt crisis, Colombia had fairly stringent controls on FDI [53]. During the crisis, Colombia suffered significant capital flight and rapidly increasing levels of debt [38,58,59]. Since FDI is one of only two options for gaining foreign currency [60], the pressure to liberalise grew. The WB, IDB and IMF used debt and a carrot-and-stick approach to usher in a variety of FDI-friendly policies, such as the mining code of 2001 (*Interview 11*) [45].¹² The damaging growth of FDI results from creditor pressure, exposure (through debt) to a continental public debt crisis, and the pressure to service debt itself. In turn, this has led to the “modernisation” and intensification of extractive sectors, which creates further harm and conflict.

Secondly, **Investor State Dispute Settlement (ISDS) clauses in Colombia’s FTAs have emboldened extractivist actors in the Amazon.** Under an ISDS, Cosigo Resources (a Canadian gold-mining corporation) is suing the Colombian state for over USD16bn [61,62], more than a quarter of the state’s total annual budget [63].

“It just doesn’t add up.”

Interview 11

The fear of such enormous claims – or even just the legal costs of challenging them – makes public bodies afraid to regulate corporations, a phenomenon known as regulatory chill, and one which is especially strong in “developing countries” (*Interview 10*) [64]. Although “difficult to detect”, one famous case demonstrates how regulatory chill enabled the permitting of a mine in a protected Indonesian forest [64]. In the Colombian Amazon, oil exploration licences alone cover 28% of the territory (*Interview 11*) [3], whilst half of Colombia’s growing portfolio of ISDS cases are brought by oil and mining companies [65,66]. Given these sectors’ track record of causing conflict in the region [46], this clause represents a clear threat to the territory.

As “the two sides of neocolonialism”, debt and FTAs are intimately connected [67,68]. The Colombia-US FTA (containing an ISDS clause) was shaped by creditor-debtor power dynamics: the USA controls the IMF and WB, Colombia’s debt is mostly in USD, and the state lacks alternatives for generating USD [41,69–72].

Thus, through regulatory chill as well as FDI, trade liberalisation is clearly a threat to the Colombian Amazon. Debt is connected to these phenomena to the extent that FDI and FTAs are creditors’ goals and Colombia is pressured into adopting these changes due to its indebtedness.

Increasing insecurity

Debt exacerbates conditions of insecurity – without alternative economic options, people turn to extractive activities: independently or under exploitation.

Colombia's debt leads to reduced social spending, policy shocks, and imported inflation – oppressive social conditions which leave people vulnerable, often indebted, and without economic alternatives.

Firstly, the lack of social programmes leads to insecurity, poverty, and inequality (*Interviews 3 and 6*)^[73]. During the Latin American debt crisis, Ley 100 (1993) saw much of Colombia's health and social security programmes privatised^[74]: “[Debt implies] the impossibility of the Colombian state to provide [...] wellbeing” (*Interview 6*). Secondly, debt induces economic shock measures which affect the most marginalised (*Interviews 3, 4, 8 and 9*). For years after the Latin American debt crisis, domestic taxes increased while labour protections shrunk^[52]: “the demands of the banking sector, because of the public debt, [...] where they implement such terrible shock measures, get worse every time” (*Interview 9*). Thirdly, because 95% of Colombia's debt is in USD^[38], it essentially imports inflation from the USA; with “double-digit” inflation, Colombians are being driven into household debt with untenable interest rates of 25-50% (*Interview 3*): “in Colombia, 40% or 50% of the population does not manage to even take home a minimum wage. So the question is: how do these people support themselves? If that income no longer meets basic needs, then that is where indebtedness comes in, too. Family and household debt.” (*Interview 3*).

Such economic insecurity and a lack of alternatives drive residents towards ranching or illicit agriculture (*Interviews 1 and 6*), and also leave them vulnerable to exploitation by powerful extractive actors (*Interviews 8 and 9*)^[33] including families, corporations and criminal groups (*Interviews 4 and 10*).

“People need to deforest in order to be able to cultivate and harvest, and much of the deforestation is also associated with illicit agriculture.”

Interview 6

“There are no alternatives for farmers.”

Interview 1

“Part of the employment alternatives that do exist are those created by criminal groups.”

Interview 4

Overall, it is clear that debt has contributed to social conditions which enable the destruction of the Colombian Amazon.

Care should be taken at this juncture; while this mechanism appears to identify those living in conditions of insecurity as key agents of deforestation, such an analysis could be understood to support political responses which – under the guise of tackling deforestation – lead to their repression. This power-blind response avoids tackling the problem's root causes, and only leads to more conflict (*Interview 10*).

Disciplining tool

Debt imposes a developmentalist logic on the Colombian Amazon which is at the root of its destruction.

Debt is a tool of neocolonialism, disciplining Colombia to abide by developmentalism by creating a dependency on development funding and multiple pressures on the state to conform.

Firstly, we have seen how debt has led to reduced environmental and social spending (*Interviews 2, 3 and 8*). International development funding fills the gap but brings with it a different worldview: “[Debt] takes up a large part of the national budget [meaning] our government can offer fewer social programmes, environmental programmes. [...] These programmes are, in the end, what the *North wants*” (*Interview 6, italics added*). Secondly, the Colombian state is shown a clear pathway for reproducing itself: development. The Colombian state has often used its agency to oppress and violently exploit the Amazon (*Interview 7*)^[75,76]. However, the state is also itself oppressed: its agency is significantly limited by debt (*Interviews 3 and 10*). This works through the mechanisms previously described, and by equipping the political opposition with an excuse to resist change (*Interview 8*)^[9]: “those relations of physical violence are determined or justified by a structural economic violence that arises from public indebtedness.” (*Interview 3*)

These two mechanisms impose developmentalism on the Colombian Amazon. Development is a colonial, capitalist paradigm: a system for economic growth “based on social inequality”, to which “ethnic and cultural diversity is an impediment”^[77,78]. The “disharmonies” this creates are understood as the root of the Amazon’s destruction (*Interviews 3, 5 and 7*):

“the lack of respect, or the imposition of the interests of the Western world on indigenous peoples’ knowledge systems, especially in the Amazon, is what has led to this situation of pressure on nature in the Colombian Amazon [...] these impositions brought by the state, by the market, and by NGOs on indigenous territories begin to generate disharmonies.”

Interview 7

Such “disharmonies” can be found in UN Reducing Emissions from Deforestation and Degradation (REDD+) projects – one of several programmes in the territory which seek to commodify nature (*Interviews 2, 3, 6, 10 and 11*).¹³ Whilst justified by anti-deforestation narratives, REDD+ projects are socially and ontologically destructive. Community rights are not respected and negotiations are unclear, creating social division (*Interviews 10 and 11*).

¹³ Section 6.2.2 of the [full report](#) contains further examples.

These projects can also impose “predatory logics” upon indigenous communities (*Interviews 3 and 11*). Payments to “guardabosque” families can create a fracture where, instead of being “part of nature, just as nature is part of them”, people begin to see nature as separate from them (*Interview 3*). This is alienation and individuation: fundamental processes of capitalist commodification [79].

“A forest guard [...] cannot live in the forest. He takes care of the forest, it’s different. [...] He who takes care of the house is outside the house, and he who lives in the house lives in it.”

Interview 3

Operating through development actors and the state itself, Colombia’s debt imposes developmentalism on the Colombian Amazon. This changes how people relate to themselves and the more-than-human Amazon – such disharmonies represent a destructive force in Amazonia.

Indirect mechanism

Opportunity cost

The servicing of Colombia’s external public debt diverts important resources away from transformative initiatives which would address the root causes of the Amazon’s destruction.

Almost all interviewees mentioned how the resources allocated to servicing debt could otherwise be spent on a number of other, more transformative purposes, including those which alleviate the root causes of deforestation and conflict (*Interviews 1, 2, 3, 5, 6, 7 and 8*). We may term this the ‘opportunity cost’ of debt [80].

“If those resources were used to tackle the hunger that exists here, or to avoid deforestation, well then it would be useful.”

Interview 7

In Colombia, a potentially transformative government is being held back by economic structures such as debt, a view held within the government itself [81] and by outside observers:

“The approach has changed with Gustavo Petro’s government. There is a shift towards protecting the territory. There is a drive to stop exploring for oil. [...] There is a drive to make a transition, [but] to make transformations – environmental, political, or cultural – we need economic change. Without that, [these] transformations are impossible.”

Interview 3

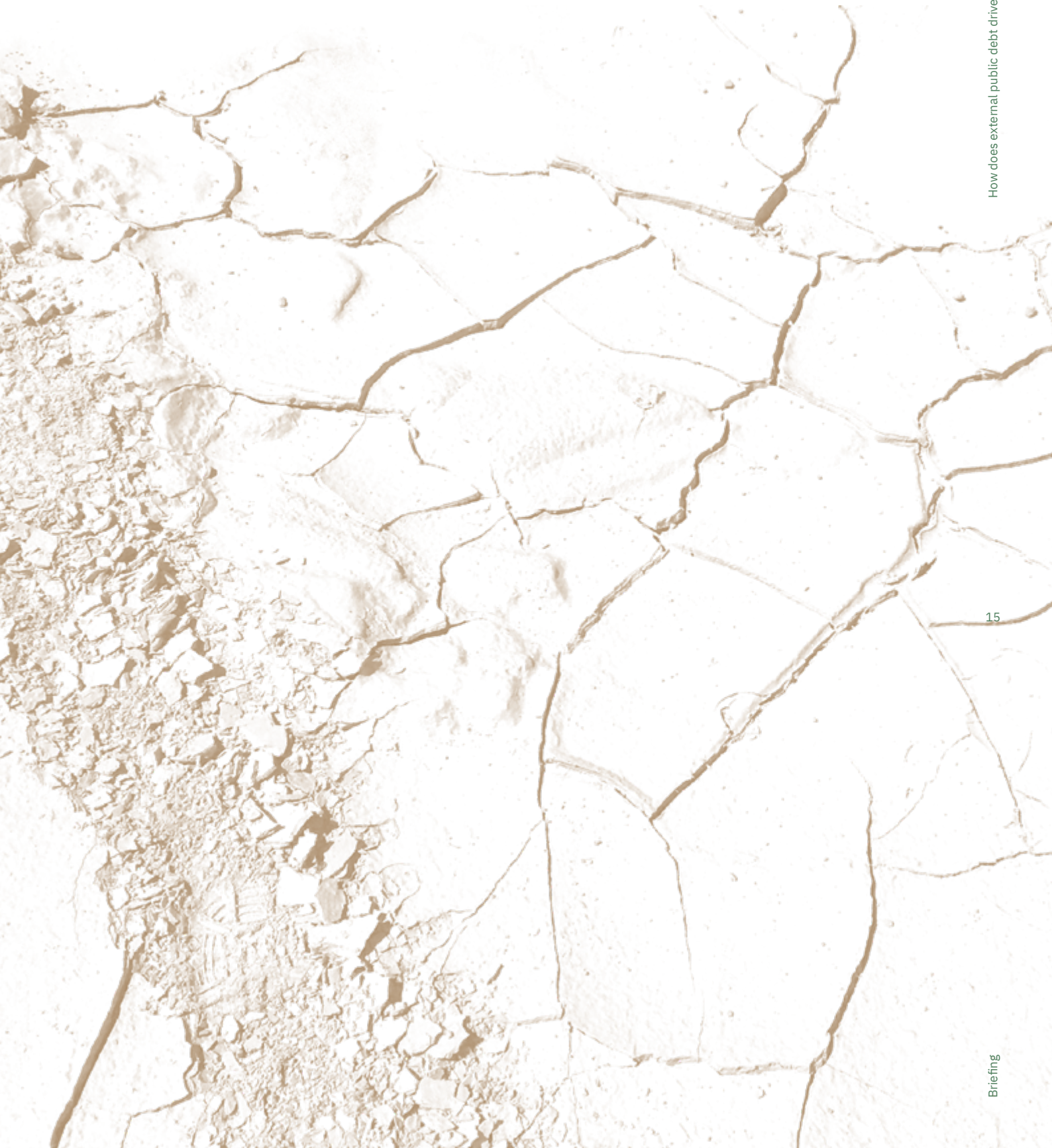
One of the transformative initiatives under the Petro government which interviewees felt was positively tackling the root causes of the Amazon's destruction are community-public partnerships. This participatory approach centres the knowledge of local communities and uses it as the basis for public action (*Interviews 10 and 11*): “nothing about us, without us” [82,83].

Another initiative is the transformation of Colombia's land tenure system around water, the “principal transformation” of the government's Plan de Desarrollo Nacional, addressing a recognised root cause of conflict and deforestation in Colombia (*Interviews 1, 10 and 11*) [33,39,84]. This initiative has received fourteen times less resources each year than the state's debt service obligations (*Interview 11*).

The servicing of Colombia's external public debt represents an enormous opportunity cost. Important resources are diverted away from transformative initiatives which could address the root causes of the Amazon's destruction. Whilst there is no guarantee that the liberated funding would go towards such initiatives, Petro's government today is implementing initiatives which are largely supported by those with a direct understanding of the context, and debt is holding back that work.

4

Mechanisms through which deforestation in the Colombian Amazon leads to more external public debt



Flooding and mudslides

Deforestation leads to soil loss and an increased risk of flooding and mudslides; responding to such events requires taking on more debt.

The destruction of the Colombian Amazon leads to a higher risk of damaging floods and mudslides. Deforestation involves a change in land cover which, particularly in the case of ranching, leads to soil loss. Soil blocks drainage channels and leads to an increased risk of flooding [85]. One interviewee cited destructive floods in Putumayo in 2012, which affected over a third of Putumayo's residents (*Interview 6*) [86].

Mudslides are also a major problem. The city of Mocoa lost hundreds of its residents to a mudslide in 2017 [42,87]. Whilst the President at the time said this was a "disaster caused [...] by climate change", it is also clearly "deforestation-related" [42,88,89]. Funding restoration, a partial estimate of the loss and damage, is expected to cost over 1,000 billion Colombian pesos (over USD250m) [90]. This represents around three times the annual budget of Putumayo – and roughly 0.5% of the entire nation-state's annual budget – as of 2017 [63,91].

Climate damage

Deforestation is a major contributor to the climate crisis which, in the Colombian Amazon, is experienced as drought and floods; responding to such events requires taking on more debt.

Deforestation is a major contributor to the climate crisis (*Interviews 2, 4, 5, 9 and 10*) [92]. In Colombia, this crisis is experienced as loss and damage to infrastructure, water resources, agriculture, ecosystems and human health [93]. In the Colombian Amazon, flooding is expected to continue increasing in frequency and intensity [94].

Flood-related damage in Colombia from El Niño/La Niña already caused USD6bn of damage in 2010 and 2011; as the climate crisis deepens, disastrous weather events are expected to occur more frequently [93,95], with the Amazon region at particular high risk of exposure to such events [96].

Responding to such loss and damage, whether the impacts be in the Amazon or elsewhere in Colombia, relies on the Colombian state taking on more debt:

“Our countries have nowhere to get the money from to be able to [redress losses and damage], so what is happening now is that they are borrowing to be able to do so, and that increases public debt.”

Interview 6.

Recently, the Colombian state and the World Bank agreed a credit line of USD250m to ensure that when “disasters caused by natural and climate-induced hazards” strike, the government is provided with “quick liquidity” [97]. Beyond this liquidity, the government will also end up more indebted.¹⁴

14 Additional borrowing may not be the only impact, with higher interest rates and the imposition of regressive policies also a risk [98,99].

5 Results and policy implications¹⁵

Seven mechanisms through which external public debt drives the destruction of the Colombian Amazon have been described, along with two further mechanisms which explain how deforestation in the Colombian Amazon leads to increased external public debt in Colombia. We conclude with three final results:

- **A vicious circle connects external public debt and the destruction of the Colombian Amazon.**

Debt – although hidden from view – is one of the structural drivers of the Colombian Amazon’s destruction. However, with mechanisms connecting debt to destruction and back again, it can also be seen that these two phenomena feed into each other, creating a vicious circle.

Debt drives the region’s destruction through the direct funding of roads, the imposition of developmentalist worldviews, and other mechanisms. The destruction of the Amazon leads to more debt through mechanisms including increased exposure to expensive floods. Overall, these results complement quantitative studies which show that increased debt leads to greater deforestation [100]. They also give additional precision to Amazonian indigenous voices from the Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica (COICA), who also recognise that debt is a driver of the Amazon’s destruction [3].

- **Servicing external public debt represents an enormous opportunity cost and precludes the possibility of implementing transformative initiatives.**

The obligation to service external public debt prevents the Colombian nation-state from allocating its limited resources to initiatives which can transform the root causes of the Amazon’s destruction. This was recognised by almost all interviewees as one of the key impacts of Colombia’s debt.

In theory, there is no guarantee that liberated resources would be put to any specific purpose. In practice, however, the Colombian state under Petro is currently attempting to provide resources for transformative initiatives but is being held back by debt service obligations. One such initiative is the community-public partnership. Another is the transformation of Colombia’s land tenure system around water – in this case, fourteen times more resources go towards servicing external public debt than towards this transformative process.

- External public debt is a modern-day tool of the colonial project

Debt imposes colonial-capitalist interests on the Amazon territory, in continuity with the region's history of quinine- and rubber-driven colonisation. This imposition occurs through foreign exchange pressure, FDI, and by disciplining the territory into developmentalism. Whilst debt benefits globally from the political protection of the development narrative [41], debt's connection to development is actually one of its most destructive aspects.

Colombia's state of indebtedness stretches back to the moment of formal colonial independence and underpins much of Colombia's present-day injustice; as such, it is clearly a part of the colonial project, even though this was purportedly ended long ago (*Interview 7*) [101]. Thus, to recover sovereignty for the people of the Colombian Amazon, Colombia's external public debt needs to be addressed.

- Policy implications

On a policy level, mainstream options to address the interconnection between debt and nature conservation are largely limited to debt-for-nature swaps [102].

However, debt-for-nature swaps represent incursions on Colombia's sovereignty (*Interviews 3 and 11*). The typical swap model involves Global North NGOs negotiating a partial debt cancellation in return for a new protected area or a different developmentalist initiative. This creates "disharmonies": it can leave locals displaced or characterised as harmful actors rather than caretakers of the territory (*Interview 11*). It is possible to form alternative swap models which preserve sovereignty – Colombia's government is now calling more for debt-for-climate-action swaps (*Interview 11*) – but, in any case, swaps are ill-advised. This is because debt-for-nature swaps do not represent the transformative type of action required (*Interview 4*). Through both the conservation strategies and the amount of debt left untouched, debt-for-nature swaps create an illusion of action whilst leaving the underlying structural drivers of the Amazon's destruction untouched (*Interview 4*) [103].

In contrast, total unconditional debt cancellation could relieve debt's pressure and create space for transformative policies in Amazonia. Although not a silver bullet, this could play an important role as the first step towards repaying the territory's ecological debt (*Interview 11*) [10]. Debt cancellation has been conceived as an act of justice [99,104], a crucial perspective which debt-for-nature swaps completely ignore.

6 Closing remarks

The mechanisms set out in this study show how colonial capitalism uses external public debt to put pressure on the Colombian Amazon. It is likely that similar mechanisms are at play in other Amazonian countries. Debt cancellation would not only shake the capitalist system, but also represent a tangible first step towards paying the vast colonial and ecological debt owed by the Global North to Amazonian countries. Cancelling external public debt requires building power from below and taking advantage of windows of opportunity such as that presented by the 2025 Jubilee year. For as long as the Colombian nation-state remains indebted, the Amazon will always be under threat.

Bibliography

1. Zambrano-Cortés, D.G.; Behagel, J.H. The Political Rationalities of Governing Deforestation in Colombia. *Forest Policy and Economics* 2023, 154, 103029, doi:10.1016/j.forpol.2023.103029.
2. Hänggli, A.; Levy, S.A.; Armenteras, D.; Bovolo, C.I.; Brandão, J.; Rueda, X.; Garrett, R.D. A Systematic Comparison of Deforestation Drivers and Policy Effectiveness across the Amazon Biome. *Environ. Res. Lett.* 2023, 18, 073001, doi:10.1088/1748-9326/acd408.
3. Quintanilla, M.; Guzman Leon, A.; Josse, C. *Amazonia Against The Clock 2022: A Regional Assessment on Where and How to Protect 80% by 2025*; Amazonia for Life: Protect 80% by 2025 Coalition, 2022;
4. Warlenius, R.; Pierce, G.; Ramasar, V. Reversing the Arrow of Arrears: The Concept of “Ecological Debt” and Its Value for Environmental Justice. *Global Environmental Change* 2015, 30, 21–30, doi:10.1016/j.gloenvcha.2014.10.014.
5. Cabaña Alvear, G.; Vandana Only for the Global North? Questioning the ‘Who Should Degrow’ Issue. *Degrowth Journal* 2023, 1. doi:10.36399/Degrowth.001.01.03.
6. Gaeta, P.C. Los ecosistemas no tienen fronteras. *Nuestra America Verde* 2023.
7. United Nations Conference on Trade and Development *Tackling Debt and Climate Challenges in Tandem: A Policy Agenda*; Policy Brief; United Nations Conference on Trade and Development, 2022;
8. Graeber, D. *Debt: The First 5,000 Years*; Melville House: Brooklyn, N.Y, 2011; ISBN 978-1-933633-86-2.
9. *Imperialism and the Political Economy of Global South’s Debt*; Sylla, N.S., Ed.; Research in Political Economy; Emerald Publishing Limited, 2023; ISBN 978-1-80262-484-7.
10. Debt for Climate FAQ. Available online: <https://www.debtforclimate.org/faq> (accessed on 22 November 2023).
11. Galindo, C.A.; Gómez, J.F. El Sistema de la Deuda en Colombia. *CADTM* 2018.
12. Gómez Celi, J.F. Tendencias de la gestión política de la deuda pública 2002-2020: Casos de estudio Argentina, Colombia y Ecuador, Universidad Nacional de Colombia: Bogotá, 2023.
13. Palacio Castañeda, G.A. *Cinco ejes analíticos para comprender la Amazonia actual*; Políticas Públicas; Foro Nacional Ambiental: Bogotá, 2007; p. 16;.
14. BBC News Mundo Cien años después, la Amazonía recuerda uno de sus episodios más trágicos. *BBC News Mundo* 2012.
15. Gomez Chaparro, C. The Value of the sacred: Extraction of natural resources in territories of the Colombian Amazon, McGill University: Montreal, 2021.
16. Revelo-Rebolledo, J. The Political Economy of Amazon Deforestation: Subnational Development and the Uneven Reach of the Colombian State, University of Pennsylvania, 2019.
17. Ruiz, S.L.; Sánchez, E.; Prieto, A.; Gómez, R.; et al. *Diversidad biológica y cultural del sur de la Amazonia colombiana: diagnóstico*; Corpoamazonia: Bogotá, 2007; ISBN 978-958-8343-15-0.
18. Armenteras, D.; Gonzalez, T.; Ramírez-Delgado, J.P.; Meza Elizalde, M.C.; Cabrera, E.; García, G.; Yepes, A. *Causas de degradación forestal en Colombia: una primera aproximación*; IDEAM: Bogotá, 2018; ISBN 978-92-5-130582-9.
19. Potter, L. Colombia’s Oil Palm Development in Times of War and ‘Peace’: Myths, Enablers and the Disparate Realities of Land Control. *Journal of Rural Studies* 2020, 78, 491–502, doi:10.1016/j.jrurstud.2019.10.035.
20. Guerrero, J.A.R.; Beltrán Rejas, M.E.; Rodríguez, M.A. *Deuda y DEG en Colombia*; Cedetrabajo, 2021; p. 19;.
21. Jubilee South Manifesto. Available online: <https://www.jubileesouth.net/> (accessed on 21 September 2023).
22. Ambrose, S. Social Movements and the Politics of Debt Cancellation. *Chicago Journal of International Law* 2005, 6.

23. Josselin, D. From Transnational Protest to Domestic Political Opportunities: Insights from the Debt Cancellation Campaign. *Social Movement Studies* 2007, 6, 21–38, doi:10.1080/14742830701251252.
24. Sorg, C. *Social Movements and the Politics of Debt: Transnational Resistance against Debt on Three Continents*; Amsterdam University Press, 2022; ISBN 978-90-485-5327-3.
25. Araujo, G. Brazil Says UN Confirmed Amazonian City of Belem as COP30 Host. *Reuters* 2023.
26. Amazon Cooperation Treaty Organization About Us Available online: <http://otca.org/en/about-us/> (accessed on 3 October 2023).
27. Bautista-Céspedes, O.V.; Willemen, L.; Castro-Nunez, A.; Groen, T.A. The Effects of Armed Conflict on Forest Cover Changes across Temporal and Spatial Scales in the Colombian Amazon. *Reg Environ Change* 2021, 21, 70, doi:10.1007/s10113-021-01770-6.
28. Russell, B. Beyond Activism/Academia: Militant Research and the Radical Climate and Climate Justice Movement(s). *Area* 2015, 47, 222–229, doi:10.1111/area.12086.
29. Loach, M. *It's Not That Radical: Climate Action to Transform Our World*; Dorling Kindersley Limited: London, 2023; ISBN 978-0-241-59753-8.
30. Derickson, K.D.; Routledge, P. Resourcing Scholar-Activism: Collaboration, Transformation, and the Production of Knowledge. *The Professional Geographer* 2015, 67, 1–7, doi:10.1080/00330124.2014.883958.
31. Álvarez, L.; Coolsaet, B. Decolonizing Environmental Justice Studies: A Latin American Perspective. *Capitalism Nature Socialism* 2018, 31, 50–69, doi:10.1080/10455752.2018.1558272.
32. Öztürk, Y.M. An Overview of Ecofeminism: Women, Nature and Hierarchies. *the Journal of Academic Social Sciences* 2020, 81, 705–714, doi:10.29228/JASSS.45458.
33. Rodríguez-de-Francisco, J.C.; del Cairo, C.; Ortiz-Gallego, D.; Velez-Triana, J.S.; Vergara-Gutiérrez, T.; Hein, J. Post-Conflict Transition and REDD+ in Colombia: Challenges to Reducing Deforestation in the Amazon. *Forest Policy and Economics* 2021, 127, 102450, doi:10.1016/j.forpol.2021.102450.
34. *Colombia país de bosques*; Valencia, M.F., Rodríguez Becerra, M., Eds.; Alpha Editorial: Bogotá, 2023; ISBN 978-958-778-737-5.
35. Faleiros, G. Routes into the Forest | Amazonia at the Crossroads. Available online: <https://crossroads.amazoniasocioambiental.org/story/caminos-selva-adentro> (accessed on 2 February 2024).
36. IDB San Francisco-Mocoa Alternate Road Construction Project - Phase I. Available online: <https://www.iadb.org/en/whats-our-impact/CO-L1019> (accessed on 7 February 2024).
37. Uribe, S. *Frontier Road: Power, History, and the Everyday State in the Colombian Amazon*; Wiley/ Blackwell: Hoboken, NJ, 2017; ISBN 978-1-119-10017-1.
38. World Bank IDS Online Tables: Colombia 2022.
39. Krause, T. Reducing Deforestation in Colombia While Building Peace and Pursuing Business as Usual Extractivism? *Journal of Political Ecology* 2020, 27, doi:10.2458/v27i1.23186.
40. Murad, C.A.; Pearse, J. Landsat Study of Deforestation in the Amazon Region of Colombia: Departments of Caquetá and Putumayo. *Remote Sensing Applications: Society and Environment* 2018, 11, 161–171, doi:10.1016/j.rsase.2018.07.003.
41. Hickel, J. *The Divide: A Brief Guide to Global Inequality and Its Solutions*; William Heinemann: London, 2017; ISBN 978-1-78515-112-5.
42. Bermúdez Liévano, A.; Kaplan, A.; Lehren, A. Powerful U.S. Political Family Linked to Copper Mining in the Colombian Rainforest. Available online: <https://pulitzercenter.org/stories/powerful-us-political-family-linked-copper-mining-colombian-rainforest> (accessed on 21 December 2023).
43. Carvajal Vargas, C. del P. Colombia: The “Energy Transition” Jeopardizes the Northwestern Amazon Basin. *World Rainforest Movement* 2024.

44. El Espectador La amenaza minera en el Alto Putumayo. *El Espectador* 2020.
45. Gutiérrez-Gómez, L. Mining in Colombia: Tracing the Harm of Neoliberal Policies and Practices. In *Environmental Crime in Latin America: The Theft of Nature and the Poisoning of the Land*; Rodríguez Goyes, D., Mol, H., Brisman, A., South, N., Eds.; Palgrave Studies in Green Criminology; Palgrave Macmillan UK: London, 2017; pp. 85–113 ISBN 978-1-137-55705-6.
46. *Entrevista a Pau Soler, documentalista ambiental y social*; Lahuitdenia, 2014;
47. De Pourcq, K.; Thomas, E.; Arts, B.; Vranckx, A.; Léon-Sicard, T.; Van Damme, P. Understanding and Resolving Conflict Between Local Communities and Conservation Authorities in Colombia. *World Development* 2017, 93, 125–135, doi:10.1016/j.worlddev.2016.12.026.
48. Tarazona, D. Colombian Amazon Park Rangers Face Violence, Threats by Illegal Armed Groups Available online: <https://news.mongabay.com/2023/12/colombian-amazon-park-rangers-face-violence-threats-by-illegal-armed-groups/> (accessed on 2 March 2024).
49. Pérez-Rincón, M.A. Comercio Internacional y Medio Ambiente en Colombia, Universitat Autònoma de Barcelona: Barcelona, 2006.
50. Luzardo-Luna, I. *Colombia's Slow Economic Growth: From the Nineteenth to the Twenty-First Century*; Palgrave Studies in Economic History; Springer International Publishing: Cham, 2019; ISBN 978-3-030-25754-5.
51. Bretton Woods Project Strikers in Colombia in Protest at IMF and Debt. Available online: <https://www.brettonwoodsproject.org/1999/09/art-15472/> (accessed on 21 September 2023).
52. Lora, E. *Structural Reforms in Latin America: What Has Been Reformed and How to Measure It*; Inter-American Development Bank: Washington DC, 2001;
53. Montoya, M.U. Inversión extranjera en Colombia: un recuento. *Revista del Banco de la República* 1996, 69, 5–32.
54. Sapkota, P.; Bastola, U. Foreign Direct Investment, Income, and Environmental Pollution in Developing Countries: Panel Data Analysis of Latin America. *Energy Economics* 2017, 64, 206–212, doi:10.1016/j.eneco.2017.04.001.
55. Duarte Abadía, B.; Urrea, D.; Calle, D.; Harman, J.; Quijano, J.; Alvarez, J.; Villamizar, J.; Maldonado, T. *Extractivismo, conflictos y resistencias*; CENSAT Agua Viva, 2014;
56. SIAT-AC Atlas de conflictos socioambientales de la Amazonia colombiana. Minería de cobre y otros minerales en la cuenca alta del río Mocoa. SIAT-AC 2022.
57. Sierra, J.; Schwartz, B. Mining Reforms Have Left Colombia's Artisanal Miners behind. *IIED* 2020.
58. Ahumada, C.; Andrews, C.W. The Impact of Globalization on Latin American States: The Cases of Brazil and Colombia. *Administrative Theory & Praxis* 1998, 20, 452–467.
59. Isla, A. The Debt Crisis in Latin America: An Example of Unsustainable Development. *Canadian Woman Studies* 1993, 13, 65–68.
60. Rowland, P. *The Colombian Sovereign Spread and Its Determinants*; Banco de la República: Bogotá, Colombia, 2004.
61. Bathke, B.; Ortega, S. Canadian Junior Miner, Colombia in Trade Dispute over Rights at National Park. *Stop Investor-State Dispute Settlement* 2016.
62. UNCTAD Cosigo Resources and Others v. Colombia | Investment Dispute Settlement Navigator. Available online: <https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/726/cosigo-resources-and-others-v-colombia> (accessed on 25 January 2024).
63. Galindo, C.A.; Gómez, J.F. Colombia: El Presupuesto General de la Nación en el Pos-Acuerdo una farsa para los movimientos y sectores sociales. *CADTM* 2017.
64. Tienhaara, K. Regulatory Chill in a Warming World: The Threat to Climate Policy Posed by Investor-State Dispute Settlement. *Transnational Environmental Law* 2018, 7, 229–250, doi:10.1017/S2047102517000309.

65. Alsema, A. NGO's Urge Colombia to Sink Investor Protection Treaties. *Colombia News | Colombia Reports* 2023.
66. González, J.; Cruz, S.; González, F. An Overview of Investment Disputes Involving the Colombian State: Lessons Learned. *Investment Arbitration Outlook Uría Menéndez* 2022, 10. 67. GRAIN; Attac Maroc; CADTM Africa; Tunisian Observatory of the Economy Free Trade and Debt: The Two Sides of Neocolonialism. *Bilaterals* 2023.
68. Toussaint, E. How Debt and Free Trade Subordinated Independent Latin America. *CADTM* 2016.
69. Ferro, E.; Higuera, L.J.; Portugal, A.; Reyes, J.-D. *Colombia-US Free Trade Agreement –A Positive Analysis of Its Implementation–*; Working Papers; World Bank, 2016.
70. Portillo, L. FTAs/IIRSA, Plan Colombia and the Axis of Western Development. *Stop Investor-State Dispute Settlement* 2004.
71. United States Trade Representative United States- Colombia Trade Promotion Agreement. Available online: <https://ustr.gov/trade-agreements/free-trade-agreements/colombia-tpa> (accessed on 8 February 2024).
72. United States Trade Representative Chapter Twenty-One: Dispute Settlement. In *United States-Colombia Trade Promotion Agreement*; United States Trade Representative, 2012.
73. Gómez, J.F.; Galindo, C.A. La deuda como germen de desigualdad en Colombia. Available online: <https://www.alainet.org/es/articulo/202327> (accessed on 15 December 2023).
74. Álvarez, J.E. Las reformas estructurales y la construcción del orden neoliberal en Colombia. In *Los desafíos de las emancipaciones en un contexto militarizado*; Colección Grupos de trabajo; CLACSO: Buenos Aires, 2006; pp. 247–284 ISBN 978-987-1183-34-0.
75. Del Cairo Silva, C.L. Environmentalizing Indigeneity: A Comparative Ethnography on Multiculturalism, Ethnic Hierarchies, and Political Ecology in the Colombian Amazon, University of Arizona, 2012.
76. Sankey, K. Extractive Capital, Imperialism, and the Colombian State. *Latin American Perspectives* 2018, 45, 52–70.
77. Vieco, J.J. Desarrollo, Medio Ambiente y Cultura en la Amazonia Colombiana. *Revista de Salud Pública* 2001, 3, 2–23.
78. Escobar, A. *Encountering Development*; Princeton University Press, 2012; ISBN 978-1-4008-3992-6.
79. Castree, N. Commodifying What Nature? *Progress in Human Geography* 2003, 27, 273–297, doi:10.1191/0309132503ph428oa.
80. Oxford UP Opportunity Cost, N. Available online: https://www.oed.com/dictionary/opportunity-cost_n?tl=true (accessed on 26 February 2024).
81. Munevar Sastre, N. La recolonización de América Latina y la deuda como instrumento. *El Comején* 2021.
82. Asociación Minga Carta de la Asamblea pueblos de la tierra para la Amazonía: «Nada sobre nosotros sin nosotros». *Asociación Minga*.
83. Sollund, R.; Maldonado, A.M.; Rico, C.B. The Norway–Colombia Agreement to Protect Rainforest and Reduce Global Warming: Success or Failure? *International Journal for Crime, Justice and Social Democracy* 2019, 8, 56–73, doi:10.5204/ijcjsd.v8i3.1245.
84. Guerra Rincón, F. La Mojana. Propuestas para ordenar el territorio alrededor del agua. Available online: <https://www.dnp.gov.co:443/publicaciones/Planeacion/Paginas/la-mojana-propuestas-para-ordenar-el-territorio-alrededor-del-agua.aspx> (accessed on 5 March 2024).
85. Jaimes, J. Los errores históricos que condenaron al Putumayo a una eterna inundación. Available online: <https://infoamazonia.org/es/2021/07/29/los-errores-historicos-que-condenaron-al-putumayo-a-una-eterna-inundacion/> (accessed on 5 February 2024).
86. Gómez, G. *Flooding/Windstorm in Putumayo Department*; UN OCHA, 2012.
87. Summers, H. Colombia Landslide: Grief Turns to Anger as Mocoa Mourns – in Pictures. *the Guardian* 2017.

88. Brocchetto, M.; Sanchez, R.; Ramos, F. Colombia Mudslides Kill More than 200. *CNN* 2017.
89. García-Delgado, H.; Machuca, S.; Medina, E. Dynamic and Geomorphic Characterizations of the Mocoa Debris Flow (March 31, 2017, Putumayo Department, Southern Colombia). *Landslides* 2019, 16, 597–609, doi:10.1007/s10346-018-01121-3.
90. Redacción Colombia Así va la reconstrucción de Mocoa, cuatro años después de la emergencia. *El Espectador* 2021.
91. Gobernación de Putumayo *Informe de Gestión 2016-2019*; Gobernación de Putumayo: Mocoa, 2019.
92. Intergovernmental Panel On Climate Change Technical Summary. In *Climate Change and Land: IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems*; Intergovernmental Panel On Climate Change, 2019.
93. USAID *Climate Risk Profile - Colombia*; USAID, 2017.
94. Inter-American Development Bank *Funding Proposal - The Amazon Bioeconomy Fund: Unlocking Private Capital by Valuing Bioeconomy Products and Services with Climate Mitigation and Adaptation Results in the Amazon*; Green Climate Fund, 2021;
95. World Bank *Turn Down the Heat : Confronting the New Climate Normal*; World Bank: Washington DC, 2014; ISBN 978-1-4648-0437-3.
96. Campos Garcia, A.; Holm-Nielsen, N.; Diaz G., C.; Rubiano Vargas, D.M.; Costa P., C.R.; Ramirez Cortes, F.; Dickson, E. *Analysis of Disaster Risk Management in Colombia : A Contribution to the Creation of Public Policies*; World Bank: Washington DC, 2011; ISBN 978-1-4648-0484-7.
97. World Bank Resilience to Disaster Risk and Climate Change in Colombia. Available online: <https://projects.worldbank.org/en/results/2023/03/16/resilience-to-disaster-risk-and-climate-change-in-colombia> (accessed on 6 February 2024).
98. Kling, G.; Lo, Y.C.; Murinde, V.; Volz, U. Climate Vulnerability and the Cost of Debt. *Social Science Research Network* 2018, 30, doi:10.2139/ssrn.3198093.
99. Táiwò, O.O.; Bigger, P. *Debt Justice for Climate Reparations*; Climate + Community Project, 2022.
100. Shandra, J.M.; Shor, E.; Maynard, G.; London, B. Debt, Structural Adjustment, And Deforestation: A Cross-National Study. *Journal of World-Systems Research* 2008, 14, 1–21.
101. Wright, C.; Rolston, B.; Ní Aoláin, F. Navigating Colonial Debris: Structural Challenges for Colombia's Peace Accord. *Peacebuilding* 2023, 11, 62–77, doi:10.1080/21647259.2022.2027153.
102. Bourke, I. What If Debt Was Written off to Protect Climate and Nature? Available online: <https://www.bbc.com/future/article/20231212-what-if-the-world-cancelled-debt-for-climate-and-nature> (accessed on 29 December 2023).
103. Fresnillo, I. *Miracle or Mirage? Are Debt Swaps Really the Silver Bullet?*; Eurodad: Brussels, 2023.
104. Johnson, J.; Ayles, L.; Herfort, N.; Macintyre, C. *An Internationalist Green New Deal Programme*; Green New Deal Rising, 2023.

