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## Revaluing Afrodescendant Seeds in the Age of the Plantationocene: Bridging climate and reparatory justice

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THE UNIVERSITY  
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# Climate Change and Social Justice

Reflections on COP26 from the  
Geographies of Social Justice  
Research Group



## *Preface*

We are a group of human geographers, and colleagues from other disciplines, engaged in politically committed and theoretically informed scholarship. Our research and teaching focus on progressive and radical political transformation, as well as the pursuit of social justice and human dignity.

Founded in late 2020, we work with anarchist, anti-racist, autonomist, feminist, Marxist, poststructuralist, queer, postcolonial and decolonial theories across a diverse range of fields, including cultural studies, multispecies studies, development studies, environmental studies, food studies, gender and transgender studies, critical race and Indigenous studies, political economy, rural and urban studies. Whilst diverse in approach and focus, our work holds in common a commitment to questions of inequality, power, and justice.

This booklet has been put together by some of our members in order to share their thoughts, critiques and reflections on COP26, and how their research relates to key issues related to climate change.

Climate change is undoubtedly a question of social justice, inseparable from the socio-political relations from which it has emerged, but also that it produces and reinforces. Issues of inequality and power permeate matters of climate change at all levels, from how it is being caused, to how it should be addressed, and who it affects the most. Consequently, events such as COP26 must engage with, and be inspired by, a fundamentally social justice driven agenda. Climate change discussions are, at their heart, a question of our place in the world – who are we, how did we arrive at this point, and what is the way forward? Never has such an existential threat to human civilisation reared its head and demanded collective action on such a scale to be addressed. However, it is crucial that in seeking to address this crisis, we do not produce new crises or *reproduce* those which have stalked our civilisation for centuries. Therefore, if our attempts to deal with climate change are to be socially just, we must forge responses which simultaneously address the rampant marginalisation and inequality which have for too long characterised our global society.

The Geographies of Social Justice Research Group



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## *Climate Change and Racial Capitalism in the Neoliberal Eurocentric University*

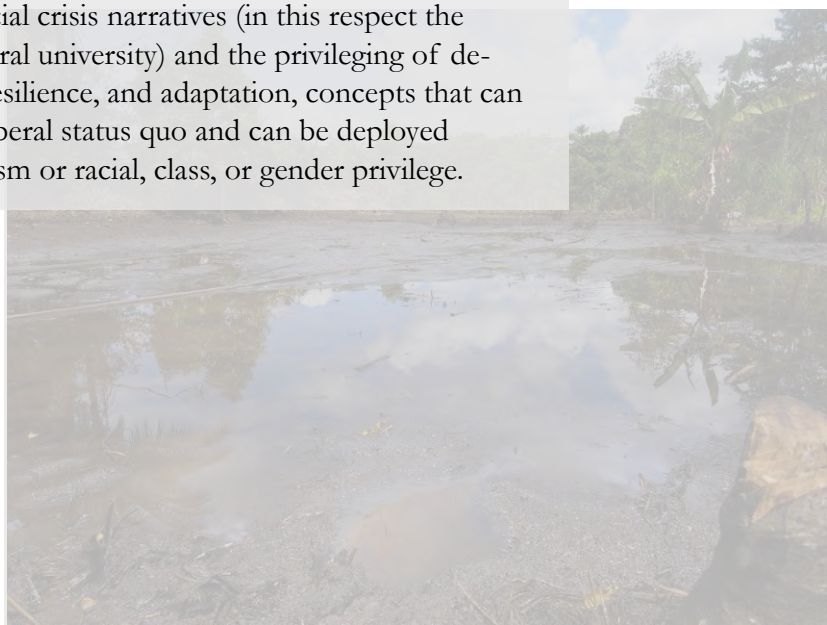
*“It seems almost impossible to imagine a response to the ecological crisis that does not take the world that is responsible for the plausible destruction of the planet as the exclusive starting point in a conversation about the current condition of the planet.” (Blaser and de la Cadena, 2018: 3)*

I was excited to learn recently that Naomi Klein and Avi Lewis have joined the Department of Geography at UBC in Canada to assist in the creation of a Climate Justice Centre. A similar centre has also recently been created at the University of California. These centres aim to put social justice and anti-racism at the heart of action on climate change, to link the question of climate to militarization, police brutality, and reparations for slavery, and to draw on a range of Black, Indigenous, feminist, and activist knowledges.


UBC and UC are unfortunately outliers. Most top-down university climate change initiatives, including the Edinburgh Earth Initiative, tend not to explicitly acknowledge that the violent forms of power that lead to the premature deaths of racialized peoples have been strengthened and legitimized by Eurocentric science produced in the westernized university. They don't tend to acknowledge how science that claims to be universal and objective, has frequently dismissed the kind of knowledges that could have prevented the destruction of human and non-human life on our planet.

Meanwhile, campus climate action is depressingly reduced to a set of technocratic, managerialist and instrumentalist forms of intervention that involve little more than trying to stop academics flying to conferences, serving vegetarian food at meetings, offsetting, along with calls for more or better data or “data-driven innovation.” Although decolonizing pressures have intensified, the contemporary university, especially in the UK, thus becomes a site in which decolonization is endlessly deferred through the constant reproduction of financial crisis narratives (in this respect the pandemic is a gift to the neoliberal university) and the privileging of de-politicising discourses of risk, resilience, and adaptation, concepts that can be easily articulated to the neoliberal status quo and can be deployed without confronting Eurocentrism or racial, class, or gender privilege.

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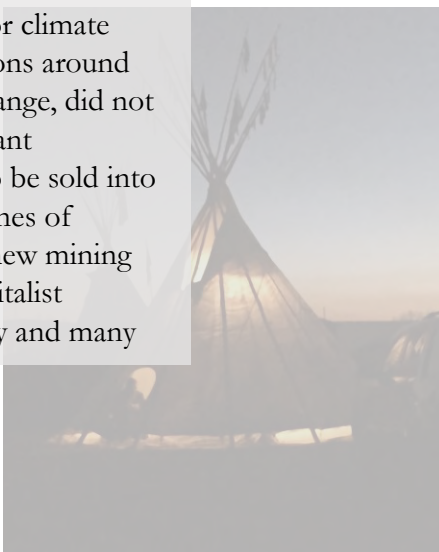
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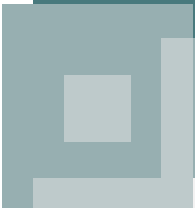
The reason we are facing devastating climate collapse is because the contemporary world is built on racial capitalism. We are still living in the world system created in 1492 when European colonizers denied the humanity of the colonized and enslaved, and saw their lands and resources as things to be stolen and extracted. The conquest laid the foundations for the violent socio-economic inequalities that underpin contemporary forms of extractivism and dispossession. But this important fact remains marginal thanks to the hegemonic nature of Eurocentric positivist science. Sylvia Wynter and Katherine McKittrick (2015) note how the Intergovernmental Panel on Climate Change (IPCC) authors, as bourgeois liberal subjects, reproduce a commonsense discourse that suggests that “we”, that is humanity as a whole, are responsible for destroying the planet and that “we” have failed (or almost failed) to act in time. British prime minister Boris Johnson parroted this dangerous and problematic discourse at the United Nations on 22 September when he said:

*“We still cling with part of our minds to the infantile belief that the world was made for our gratification and pleasure and we combine this narcissism with an assumption of our own immortality. We believe that someone else will clear up the mess we make, because that is what someone else has always done. We trash our habitats again and again with the inductive reasoning that we have got away with it so far, and therefore we will get away with it again. My friends the adolescence of humanity is coming to an end. We are approaching that critical turning point – in less than two months – when we must show that we are capable of learning, and maturing, and finally taking responsibility for the destruction we are inflicting, not just upon our planet but ourselves. It is time for humanity to *grow up*.”<sup>1</sup> (emphasis added)*

The idea that all humans, rather than bourgeois liberal humans and those that build pipelines and create oil fires, are responsible for climate change is a ludicrous and dangerous idea. Indigenous populations around the world, who are being disposed and displaced by climate change, did not create global warming, and neither did Black and Afrodescendant populations, whose ancestors were kidnapped by Europeans to be sold into slavery. Black and Indigenous peoples have been on the frontlines of environmental protection for decades, blocking pipelines and new mining projects and defending forests, mountains, and rivers from capitalist incursions. They often face riot police or armed private security and many



<sup>1</sup> <https://www.gov.uk/government/speeches/pm-speech-at-the-un-general-assembly-22-september-2021>



have been incarcerated or lost their lives in the process. It is clear they have not failed to act, they have been acting, and their actions have kept many carbon emissions out of the atmosphere (see Table 1). But because their climate actions are not carried out by white bourgeois liberal subjects and are connected to questions of sovereignty and settler colonialism, they are rendered invisible. And five decades after scientists first confirmed that carbon emissions are warming the planet, Boris Johnson now says “we need to act” and “we need to grow up.”



The Sioux people who blocked the Dakota Access Pipeline at Standing Rock do not need to grow up.

The Ogoni people in Nigeria who have been fighting the human rights and environmental violations carried out by Shell for decades do not need to grow up.

The Gwich'in people of Alaska that fight against oil drilling to protect the caribou do not need to grow up.

The Kayapó people of the Brazilian Amazon who have been defending the rainforest from loggers and other capitalist incursions do not need to grow up.

The Tiny House Warriors who are fighting to stop the Trans Mountain pipeline from crossing unceded Secwepemc Territory do not need to grow up.

The Shuar people of the Ecuadorian Amazon who have been fighting Chevron for decades for the toxic pollution the oil company created on their lands do not need to grow up.

The Gidimt'en clan of the Wet'suwet'en people who are protecting their ancestral territories, cultural heritage, and way of life from pipelines and drilling by Coastal GasLink do not need to grow up.

The Inuit activists in the Canadian arctic whose lives are seriously threatened by climate change and who are demanding that Shell's permits on their territories be invalidated do not need to grow up.

The Mapuche people in Neuquén, Argentina who are the opposing shale and gas explorations that are polluting their air and rivers do not need to grow up.

**Table 1:**  
**Visibilizing climate action**

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So Britain welcomes the world to COP26 in Glasgow and many grand statements and platitudes will be uttered. Elite scientists from westernized universities will be interviewed by the global media and they will emphasize the urgency of the situation. But they probably won't draw our attention to the ways that the climate crisis intersects with and is exacerbated by coloniality and racial capitalism, and that it is connected to the murders of environmental defenders in Colombia, Honduras, Guatemala, and Mexico, to police brutality in London, Rio de Janeiro, and Chicago, and to the apparent willingness of the home secretary to let refugees drown in the Mediterranean. They won't talk about the global Afro-Indigenous movement for climate justice that is articulated to the return of stolen lands and reparations for slavery. They will probably continue to treat climate change as if it were an environmental problem that can be solved within the existing system rather than a political and civilizational problem that is created by the system and that cannot be solved within it. If western scientists or politicians now think it is time to act, perhaps because they have realized that their white skin might not save them after all, then they need to learn from and accord humanity to those that have been acting all along.



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## *Climate Goldilocks: We need to host more than the COP if we want to ‘do our fair bit’ in Scotland*

The story of anthropogenic climate change is a story of inequality. It is widely noted that the most vulnerable countries and communities have contributed very little to greenhouse gas emissions. Wealthier countries can protect themselves much better against socio-environmental disasters, by building sturdier infrastructure, developing extensive disaster management approaches and providing generous funding for post-disaster recovery. And those nations have become wealthier in the first place through the extensive use of cheap but dirty fossil fuels. In other words, the lower vulnerability of climate change ‘culprits’ is not an accident.

‘Common but Differentiated Responsibilities’ (CBDR) is a fundamental principle that underpins the Paris Climate Accords to cut global greenhouse gas emissions and prevent runaway climate change. It means that all countries share the same responsibility, but some must act more than others. Signatories to the Paris Agreement have to commit to Nationally Determined Contributions (NDC) specifying the level of climate action they will undertake. But to what extent do NDCs reflect the ‘fair bit’ that every country should undertake? It is an ongoing matter of debate which dimensions should determine the level of climate solidarity across national borders; is it historic emissions (i.e. cumulative culpability) or the duties of care that come with wealth and high-tech know-how (i.e. current capabilities)? Or anticipated levels of suffering in the worst affected nations (i.e. basic human rights)?


But there is a fourth one that doesn’t get the same attention; the uneven geographies of beneficial climate change impacts. For want of a better word, we also need to acknowledge climate change winners and non-losers. In extra-terrestrial research, the term Goldilocks Zone refers to the area in the solar system where the level of solar heat is such that water can exist in liquid form – allowing biological life (as we know it) to thrive. Let’s use the same term for geographical zones on our own planet where global warming can be (relatively!) benign. We can point at the dozens of new Swedish vineyards<sup>1</sup> or growing opportunities for farming<sup>2</sup> and mining<sup>3</sup> in Greenland as its ice sheets recede. But let’s look closer to home. Scotland clearly belongs in the climate goldilocks category.

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<sup>1</sup> <https://www.theguardian.com/world/2020/mar/20/wine-cooler-global-heating-helps-swedens-vineyards-to-success>

<sup>2</sup> <https://www.reuters.com/article/us-greenland-climate-agriculture-idUSBRE92P0EX20130326>

<sup>3</sup> <https://www.nytimes.com/2021/10/01/business/greenland-minerals-mining.html>



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Of course, we can expect more disruption and damage<sup>4</sup> from more extreme and unpredictable weather events (storms, flooding), but across its territory, Scotland has little land vulnerable to sea level rise, it has a lot of freshwater reserves to make it through drought periods and it is unlikely to suffer from extreme heatwaves. With a low population density and flat-lining population curve, domestic pressures on resources are not expected to increase and heating demand is likely to go down.

Scotland's annual renewable electricity generation is about to surpass our electricity consumption. That's a historic milestone but we have no laurels to sit on: Electricity makes up only a quarter of all energy used in Scotland, so we still have a very long way to go to decarbonize our transport, building heating and industrial sectors. Most of Scotland's vast renewable energy potential (especially wind and tidal) is still untapped. Do we want to 'mine' all of it, filling the land and sea with wind turbines, or seek to do just enough to reach net zero at the national level? Clearly not all countries have the same renewable energy potential, and some will find it much harder to reach self-sufficiency. Therefore, it stands to reason that Scotland should go much further and export (much) more of its renewables. It is up for debate 'how far' Scotland should go here, but it is clear that we need to accept more local and cumulative impacts from the deployment of renewable energy technologies in order to help other countries, more densely populated and less well endowed with renewables, to reach net zero.

But in the long term, there is a far more difficult consideration for Scotland to face; as a climate goldilocks, what constitutes our 'fair share' in the support for the victims of climate change? Future COPs will be faced with this increasingly urgent question. It will not only be a debate about financial aid – which Scotland could fund through the proceeds from some of that zero-carbon energy we will be exporting. Indeed, the Scottish Government already has a Climate Justice Fund<sup>5</sup> and has recently increased its budget. But money alone only goes so far. Climate refugees have to go somewhere<sup>6</sup> and increasingly this means crossing national borders. Climate goldilocks will be in the weakest possible position to claim that their house is full and pull up the drawbridge; they will be morally obliged to accept climate refugees.

<sup>4</sup> <http://climatereadyclyde.org.uk/wp-content/uploads/2018/11/Climate-Ready-Clyde-Climate-Risk-and-Opportunity-Assessment-Key-findings-and-next-steps.pdf>

<sup>5</sup> <https://www.gov.scot/news/climate-justice/>

<sup>6</sup> <https://www.unhcr.org/uk/news/latest/2020/11/5fbf73384/climate-change-defining-crisis-time-particularly-impacts-displaced.html>

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Moreover, history shows that for the benefit of locals and newcomers alike, welcoming works much better than grudging acceptance or outright hostility. Scotland and its place in the world was always shaped by migration. The Scottish diaspora is more than twice the size of Scotland's current population, whilst over centuries, various migrant communities have brought significant economic and cultural benefits to Scotland. Scotland's hosting capabilities are not limited to COP, festivals and golf tournaments. So, let's open this debate in Scotland now. Climate migration is a growing dimension of international climate justice, which cannot be put on hold until a future COP finally starts to debate 'Nationally Determined Contributions' to offer a new home to people forced to flee from climate catastrophe.



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## *Rights of Nature: A new paradigm?*

In December 2009 the United Nations General Assembly adopted the first resolution on “Harmony with Nature”. The resolution was agreed due to the General Assembly’s “concern over the documented environmental degradation and the negative impact on nature resulting from human activity”<sup>1</sup>. What has followed has been a series of annual interactive meetings (known as the Harmony with Nature dialogues) between member states, NGOs, IGOs, and experts in areas such as law, policy, environmental and ecological economics, as well as both the natural and social sciences.

The notion that we must establish a “new paradigm” is often referred to within the Harmony with Nature dialogues. Most commonly, the current paradigm (and its problems which are deemed in need of change) is identified as being dictated by a pervasive anthropocentrism (or human exceptionalism) which exists within global society. The Harmony with Nature dialogues seek to address this by advocating and exploring ethics and social frameworks which place the intrinsic value of non-human nature as paramount, thereby (in theory) leading humanity away from unsustainable development, and towards a more sustainable form of development.

Principle of these frameworks has been rights of nature<sup>2</sup> (sometimes framed as legal personhood) approaches to infusing non-anthropocentric values into political and legal systems, in order to promote environmental protection and sustainability. Rights of nature have been gaining significant recognition in recent years, rising to prominence after both Ecuador and Bolivia enshrined similar (albeit different<sup>3</sup>) rights frameworks into their national constitutions. Since then, rights of nature frameworks have emerged in various forms at regional and sub-regional levels in countries such as India, Colombia, Mexico, and New Zealand.

While it is common for rights of nature advocates to associate these rights with Indigenous knowledges and cosmologies, the extent to which this is an accurate association is highly questionable (Tănăsescu, 2020). In fact, this serves more to reproduce Redford’s (1991) ‘ecologically noble savage’ stereotype, where Indigenous populations are romanticised and essentialised as being ecologically minded purely by virtue of being

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<sup>1</sup> <http://www.harmonywithnatureun.org/>

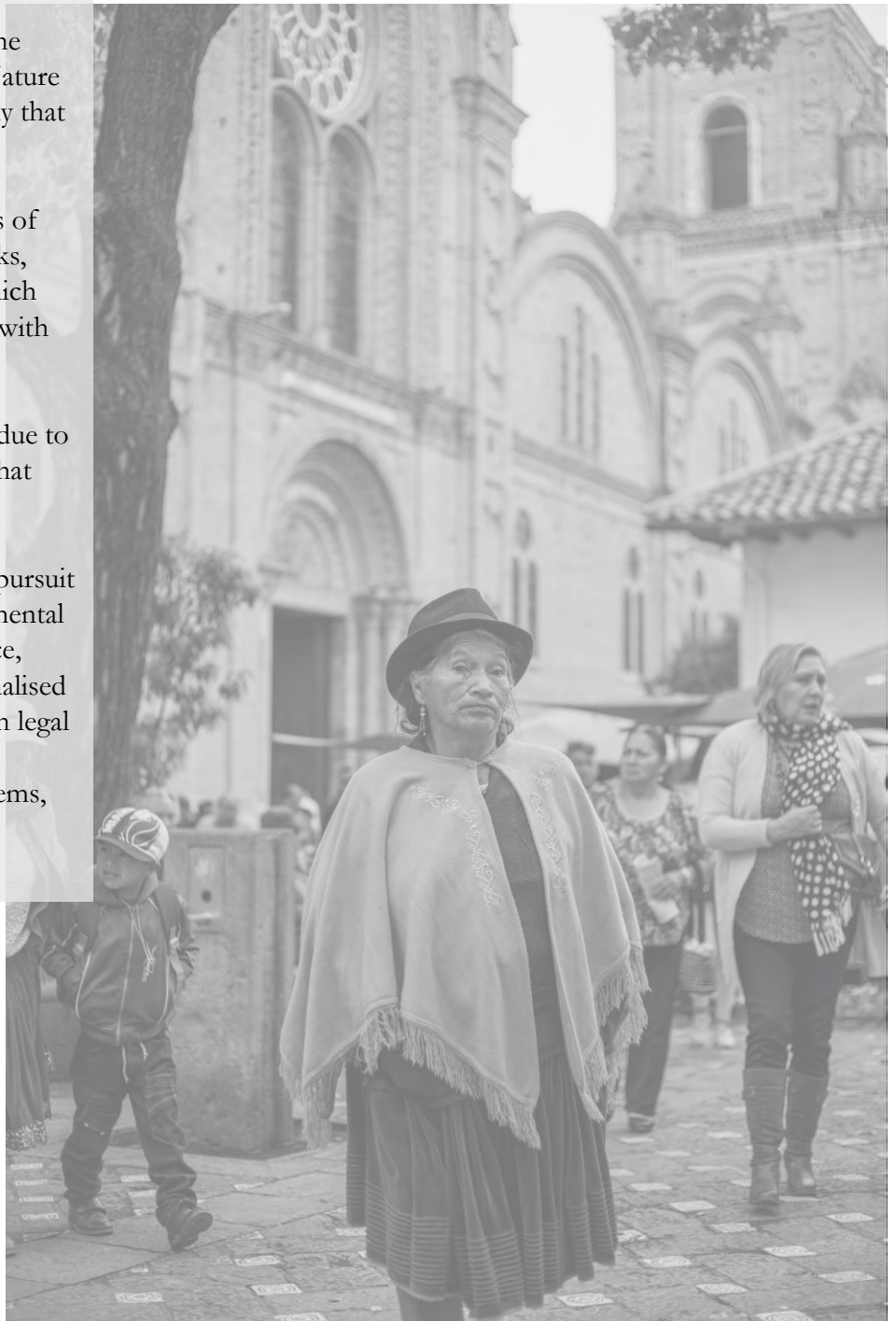
<sup>2</sup> The notion that non-human nature has the right to exist, persist, and maintain and regenerate its vital cycles.

<sup>3</sup> Ecuador’s constitution frames these explicitly as rights of nature, while Bolivia’s is focused on legal personhood. Ecuador’s constitution in particular drew significant influence from the first legal rights of nature frameworks, established in a series of municipal ordinances in Schuylkill County, Pennsylvania, U.S.A.




Indigenous. However, it is true that rights of nature frameworks have often come to manifest most firmly in places with a strong Indigenous political presence, and Indigenous support for these frameworks has tended to be vital to passing them into law (O'Donnell et al., 2020).

Consequently, it is common for contributors to the Harmony with Nature dialogues to imply that a new paradigm, underpinned by widespread rights of nature frameworks, would be one which inherently aligns with Indigenous empowerment. Primarily, this is due to the assumption that rights of nature frameworks are grounded in the pursuit of both environmental and climate justice, providing marginalised communities with legal tools to protect territory, ecosystems, and livelihoods.



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A closer look, though, at where these frameworks already exist in law reveals that, contrary to empowering Indigenous populations, it is often the settler-colonial state which remains the primary beneficiary. For example, in Ecuador, the constitutionalisation of rights of nature has equipped the state with another tool to exert power over land, and has left much to be desired on the part of the country's Indigenous communities. For years, many civil-society rights of nature claims have been unsuccessful, while those which benefit the state and promote its own vested interests have seen great success (Kauffman and Martin, 2017). This is clear when we observe how, for example, artisanal mining operations have been shut down by the state (citing the protection of the rights of nature), simultaneously protecting windfall taxes collected by the government from multinational mining corporations. Conversely, civil society driven cases which challenge state interests, such as the efforts to prevent oil drilling in the Yasuní National Park, often fail to even reach court.

Similarly, in Aotearoa New Zealand, the granting of legal personhood to Te Urewera (formerly Te Urewera National Park) was possible only through the signing of a legal agreement as part of the wider Te Urewera Act of 2014, which has been argued to represent a straitjacket for truly emancipatory Indigenous politics in the area (Tănăsescu, 2020). At the behest of the settler-colonial state, the Tūhoe were only allowed to be legal representatives of Te Urewera within the Act, as long as the state was too, thereby dividing the political and legal representation of Te Urewera between coloniser and colonised. Most importantly, what this prevented was the Tūhoe utilising the newly established legal personhood of Te Urewera to secede from New Zealand and establish their own nation.



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While the rights of nature movement attempt to represent these rights as a fundamentally empowering tool for Indigenous populations, who are (problematically) associated with an inherent sustainability, the fact remains that rights of nature frameworks provide the state with significant power over land and territory – land and territory which, for decades, many Indigenous peoples have been fighting for their rights to control.

If the United Nations Harmony with Nature dialogues are eager to promote rights of nature frameworks as a part of wider initiatives for sustainability, it is crucial that rights of nature advocates recognise and address the deeply political and multifaceted character these rights possess across diverse cultural and political contexts. Likewise, if we want to push for a paradigm shift, focused within the complex nexus of sustainability and with rights of nature frameworks at the heart, then we must ask ourselves who these rights are empowering, and who they are not.



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## *Revaluing Afrodescendant Seeds in the Age of the Plantationocene: Bridging climate and reparatory justice*

Most social scientists accept the term ‘anthropocene’. Yet critical scholars of racial capitalism question this blanket approach to human-induced climate change. In contrast to the anthropocene, the idea of the ‘plantationocene’ (Haraway 2015, Davis et al 2019) identifies the development of plantation economies in the seventeenth century as the ‘watershed event in human-mediated history’ (Carney 2020: 1-2). The sugar plantation and its legacies exemplify the inextricable ties that connect ecological loss with racial inequality and (neo)colonial power. In Latin America and the Caribbean (LAC), the ecological footprint of the sugar plantation has been extensive: ‘Sugar cane production has probably caused a greater loss of biodiversity than any other single crop in the world’ (UNEP 2009: 26). The LAC region is highly vulnerable to climate change, including increases in the frequency and intensity of natural hazards, sea level rise, greater rainfall variability, more severe floods as well as droughts. COP26 offers an opportunity to develop strategies for redressing and repairing the planetary but also the social, spiritual and bodily damage caused by plantation monocultures.

One strategy to bridge climate and reparatory justice in LAC is to revalue and reinvigorate the use and protection of agrobiodiverse seeds, recognizing and rewarding their Afrodescendant and Indigenous custodians. Seed saving is multifunctional, with reverberating effects on a range of factors, including resilience to economic and climatic threats but also enhanced human nutrition and wellbeing, soil and biome health, and political, economic and cultural sovereignty (FAO 2019). Seed conservation is more than just an ecological or economic issue; it is also a matter of group identity, culture, spirituality and tradition (Mitchell et al. 2019). Yet violences of the plantation led to the cultural denigration of indigenous landraces, local foods and agriculture, including views of native crops as ‘slave foods’ (Wilson and McLennan 2019: 173). In Jamaica and other places in the region, these agri-food cultures are now widespread among younger populations who have seen their elders struggle to sustain rural livelihoods through neoliberal structural adjustment (Anderson and Witter 1994). As in other places, neoliberal policies and strategies have increased consumer demand for imported foods, further narrowing the range of agrobiodiverse plant material.

### **Authors:**

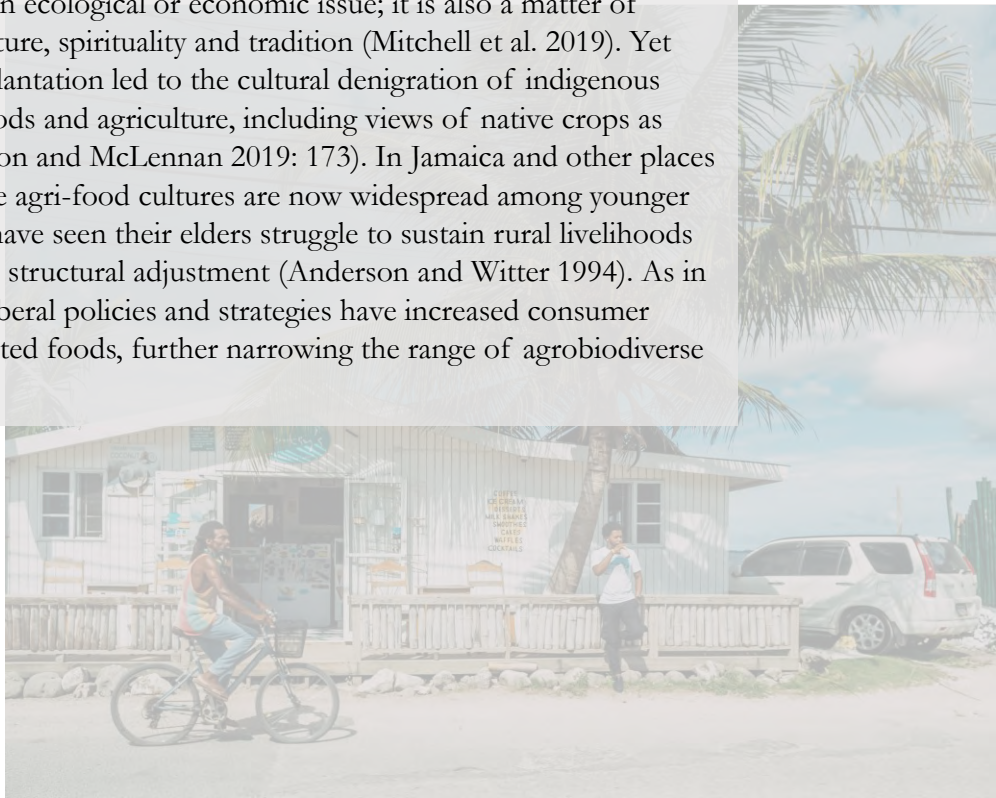
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Despite their importance to our food systems, cultures and bodies, agrobiodiverse seeds are being lost at an alarming rate. Jamaican farmers, and others in the region, now rely on imported seeds, utilising fewer native plants and seeds. As a result, at least 221 of Jamaica's endemic species are in danger of extinction (NEPA 2013). Inequitable intellectual property regimes for seeds have undermined Afrodescendant and Indigenous farming practices since the colonial period. Early registries of botanical material taken from the tropics were created by the colonial 'explorer', who received all the credit and whose primary interest was in species of economic value to them, which were archived elsewhere (Mitchell, et al 2018). Spatial, techno-scientific and moral infrastructures for storing, using and valuing Caribbean plant genetic resources continue to reinforce structural and epistemic violences of colonisation, enclosing seeds and excluding direct access and benefit sharing by West Indian scientists and farmers (Mitchell and Ahmad 2006). In Jamaica, the main Flora encyclopedia has no pictures, and some plants are still unknown to science. In St Lucia, restrictive institutional and legislative frameworks for food production have negatively impacted intra- and inter-community interactions and knowledge flows (St Ville, Gordon and Hickey 2017), obstructing human-human but also human-plant (and other human-nonhuman) relationships.



One way to overturn these forms of epistemic violence is to call attention to the stories that connect and celebrate ethnobotanical knowledge, cultural and spiritual identity, resistance and survival (Carney, 2003). For centuries, farmers in the LAC region have adapted to economic and environmental stresses by conserving and sharing agrobiodiverse seeds.

Some of the seeds were smuggled onto slave ships from Africa (e.g. okra, ackee, kola nut, pigeon pea, yam), while others were brought by indentured labourers from India (e.g. castor bean, cannabis); still others are thought to have been brought by the Tainos from South America (e.g. cassava, yam, pumpkin, hot pepper), while others appear to be endemic (e.g. search-mi-heart, chainy root, see figure 1). As ‘incubators of African survival’ (Carney and Rosomoff 2009), these seeds have enabled Afrodescendants and others to establish ‘roots of culture’ (Wynter 1971:102) in the face of the dehumanizing and ecologically degrading tendencies of the plantation system.

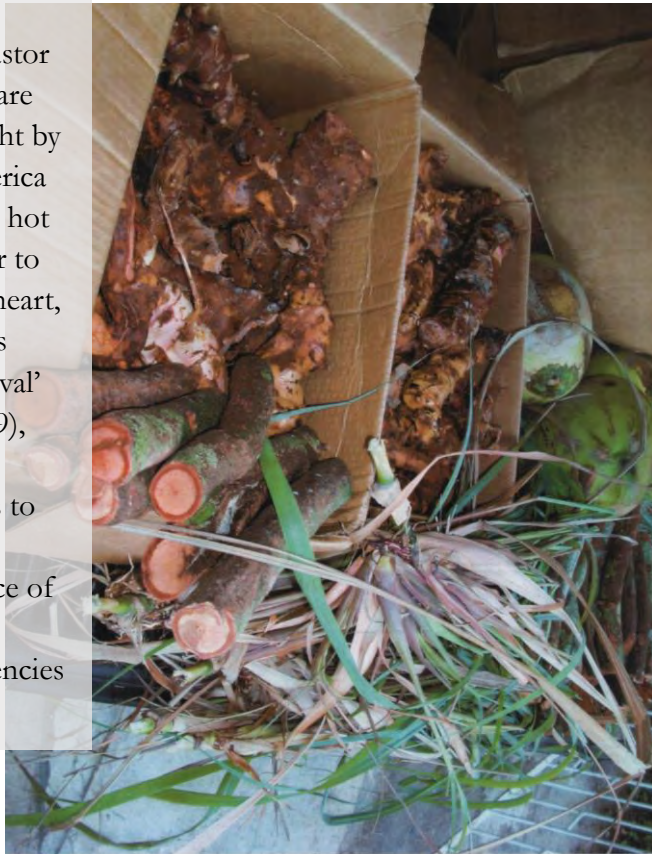


Figure 1. Chainy root, (*Smilax balbisiana*), endemic to Jamaica, and endangered. Here the root has been harvested after many trials of multiplying and rooting in tissue culture.



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The COP26 offers an opportunity to develop collaborative South/North research and action that reverses flows of agrifood knowledge and value from corporate centres in the global North to rural peripheries in the global South, including biodiversity hotspots in the tropics such as the Caribbean. It opens the floor for discussion on how to protect Indigenous and Afrodescendant seeds and plants, their unique genetic properties and the traditional knowledges and practices that underpin their reproduction.

This is an opportunity for scholars, activists and policymakers alike to increase recognition of, and respect for, the knowledge and climate resilience of Afrodescendant, as well as, East Indian, Chinese and Indigenous farmers in the Americas. The history of their seeds is a history of cultural resistance and climate resilience. Recognising and showcasing the ways subaltern peoples, pushed to the economic and ecological peripheries of globalisation, continue to maintain biodiversity and adapt to climate change in the face of extreme pressures, is one way to bridge the goals of climate and reparatory justice.



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## *Teaching Climate Justice: Channelling the ‘political ecology killjoy’ and critical hope*

I have the great pleasure and privilege of teaching students on the Masters in Environment and Development here at the University of Edinburgh. For a number of years now I have convened a course called ‘Understanding Environment and Development’, in which I invite students to unpack the interconnected and contested relationships between environmental concerns over resources and sustainability on the one hand, and societies’ demands for ‘development’ on the other. The course takes an explicitly ‘critical social science’ approach, thus *‘Beyond description or superficial application...[it] asks further questions, such as those of responsibility, interests, and ideology...it starts from prevailing social problems, and thereby chooses the perspective of those who suffer most, and critically analyses those in power, those who are responsible, and those who have the means and the opportunity to solve such problems.’* (van Dijk, 1986). Taking the intersection of environmental and social justice as its starting point, the course invites students to understand relations of power and responsibility – including reflecting on their own place within these. It draws heavily on the disciplinary field of political ecology, a field *‘where scholars aim to expose the values they bring to a discussion, instead of pretending their research is value-free’* (Benjaminsen & Svarstad, 2021, p.151), and which promotes values of de-centring, decolonising and pluralising global development and environmental governance.

Studying climate change from a political ecology perspective entails engaging with the material manifestations of environmental change, as well as the discursive struggles over its management and control. Feminist political ecologists highlight how the impacts of a changing climate are gendered, with women being more vulnerable than men to a flooding event for example (as they may never have been taught to swim due to cultural norms, or as they are responsible for looking after other family members) and how they may be worse off during recovery or relief operations (where they may suffer increased levels of male violence, or not be able to access sufficient food compared to men). Feminist political ecologists also highlight how patriarchal decision-making structures from global policy to local implementation impede women’s voices and representation in climate adaptation interventions (Sultana, 2014).

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Whilst gender is of course a concern to many climate change scientists, feminist political ecologists argue for the importance of viewing gender not as simply about the practical needs of women, but rather as about intersectional subjectivities and unequal power relations arising from patriarchy, racism, capitalism and colonialism. Political ecology therefore critiques mainstream climate change adaptation efforts as *'they largely fail to address strategic gender needs and systemic gender inequalities, power structures, and exclusions'* (Sultana, 2014 p.378).

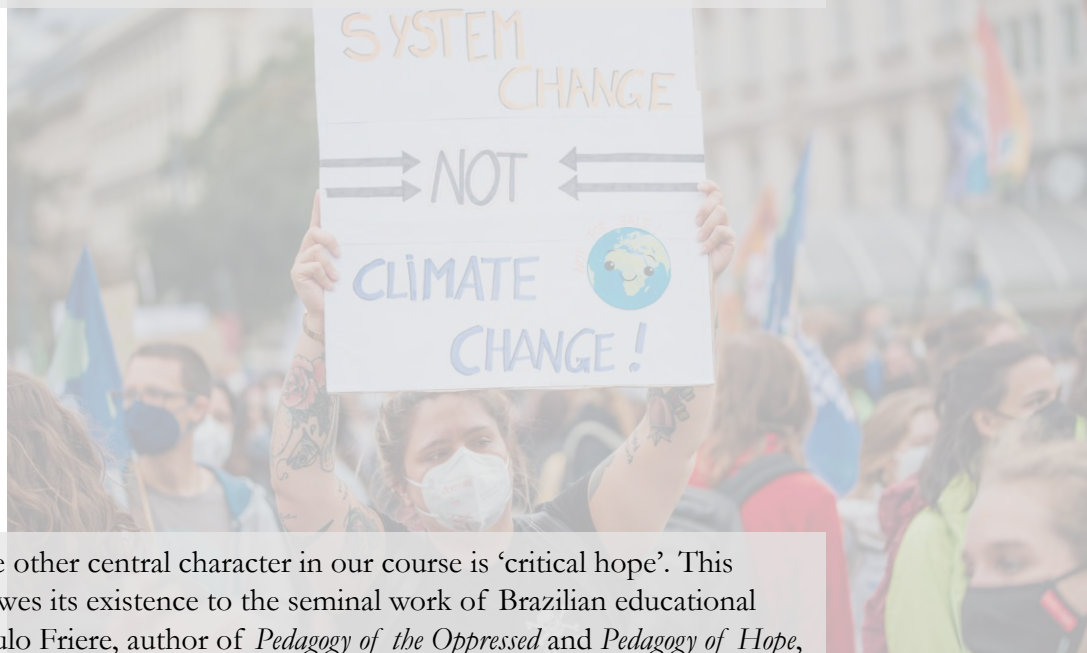
Political ecology is well known for such critique, which Robbins (2004) refers to as the 'hatchet' of political ecology, used to critically examine dominant narratives and ideas on environmental change. Political ecology for example takes a metaphorical hatchet to the idea of Payments for Ecosystem Services (PES) schemes such as REDD+ (Reducing Emissions from Deforestation and forest Degradation), which despite being sold as a 'win-win' solution by many focused on climate change mitigation, are facing widespread resistance from communities who rely on these forests for their livelihoods, and who see carbon off-setting in terms of control and access, and thus as a new form of colonialism, i.e. 'carbon colonialism'.



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Now, I have to admit, wielding the political ecology hatchet, and teaching about such critiques, sometimes leaves me feeling as if I am deliberately bursting the bubble of optimism and enthusiasm that many students come to the University with. I feel like I am disappointing them, and destroying their expectations of a readily ‘fixable’ world. But then I remember the work of feminist scholar and activist Sara Ahmed, and one of the central characters in her book *Living a Feminist Life*, the ‘feminist killjoy’. The feminist killjoy is seen as responsible for bursting the bubble of so many living a life seemingly untroubled by patriarchy, however Ahmed warns against the readiness to ‘shoot the messenger’; *‘Feminists: looking for problems. It is as if these problems are not there until you point them out; it is as if pointing them out is what makes them there’* (Ahmed, 2017, p.39). I have therefore started to ‘warn’ students about a central character in our course; the ‘political ecology killjoy’, who *will* point out problems, but, importantly, who *did not* make them there.



The other central character in our course is ‘critical hope’. This character owes its existence to the seminal work of Brazilian educational theorist Paulo Friere, author of *Pedagogy of the Oppressed* and *Pedagogy of Hope*, and to others who build on that work, including Sultana (2019) who does so in the name of decolonising development and development education. Sultana argues that *‘critical hope enables transformation by accepting the struggle as part of the process, and dialectically the struggle relies on critical hope for transformation’* (2019, p.37). Sultana reminds us that to decolonise development we must first acknowledge the ongoing legacies and continuities of colonialism and imperialism – for me and my students there is clear evidence of this in the form of ‘carbon colonialism’ through REDD+. She also invites us to work against the complexes of the ‘white savior’ or the ‘expert savior’, to be silent so that marginalized Others can be heard, and to practice deep listening, humility, reflexivity, praxis, and solidarity-building.

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The idea of critical hope is reflected in the counter to the political ecology hatchet i.e. the political ecology ‘seed’, which Robbins (2004) describes as a normative agenda to seek alternatives which are more socially just and ecologically sustainable. Feminist political ecologists draw attention to such alternatives, for instance the communal responses of women to flooding through the formation of self-help groups, offering these as examples of ‘commoning’ i.e. of working collectively based on values of reciprocity, mutuality and care (Di Chiro, 2020).

So, teaching my course at this time, in the build-up to COP26 in Glasgow, all eyes are on climate change and I wonder what this really means for those of us taking a critical, political ecology and decolonial approach to environmental and social justice. Such an approach, remember, means taking the perspective of *‘those who suffer most’*, and means analysing *‘those in power, those who are responsible, and those who have the means and the opportunity to solve such problems’* (van Dijk, 1986). Political ecologists would argue that those who suffer most are those whose identities position them within intersecting systems of oppression, such as patriarchy, racism, capitalism and colonialism. It would also highlight that those in power and who have the opportunity to solve problems may include those working in the name of climate change mitigation, as well as privileged classes across the Global North who enjoy an ‘imperial mode of living’ (Brand and Wissen, 2021).

For all the attention COP26 is bringing to the issue of climate change, we may therefore ask, is it drawing attention to the right issues? Is it asking the right questions, of the right people or processes? In our course, students’ group presentations will see them exploring, explaining and evidencing one of the following climate justice slogans; *‘System Change not Climate Change’*, *‘Climate Justice is Social Justice’*, *‘Climate Justice is Racial Justice’*, *‘End Climate Colonialism’*. Through this assignment, I am hoping that students will wield the political ecology hatchet themselves and be political ecology killjoys in articulating the interlocking systems of oppression that lead to environmental and social injustices associated with climate justice. I am also hoping that they will find and practice a critical hope, and sow the political ecology seeds of alternatives, by listening deeply and with care to those who are suffering climate injustices, and by sharing the stories of those who are resisting these injustices. The students will make their presentations whilst COP26 is taking place just down the road in Glasgow, and I am so excited to listen to what they have to say.



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## References

### ***Climate Change and Racial Capitalism in the Neoliberal Eurocentric University***

Wynter, S. and McKittrick, K. (2015). Unparalleled catastrophe for our species? Or, to give humanness a different future: Conversations. In K McKittrick (Ed) *Sylvia Wynter: On being human as praxis* (pp. 9-89). Durham: Duke University Press.

### ***Rights of Nature: A new paradigm?***

Kauffman, C.M., Martin, P.L., 2017. Can Rights of Nature Make Development More Sustainable? Why Some Ecuadorian lawsuits Succeed and Others Fail. *World Development* 92, 130–142.

O'Donnell, E., Poelina, A., Pelizzon, A., Clark, C., 2020. Stop Burying the Lede: The Essential Role of Indigenous Law(s) in Creating Rights of Nature. *Transnational Environmental Law* 9, 403–427.

Redford, K.H., 1991. The ecologically noble savage. *Cultural survival quarterly*, 15(1), pp.46-48.

Tănăsescu, M., 2020. Rights of Nature, Legal Personality, and Indigenous Philosophies. *Transnational Environmental Law* 9, 429–453.

### ***Revaluing Afrodescendant Seeds in the Age of the Plantationocene: Bridging climate and reparatory justice***

Anderson, P and Witter, M (1994). 'Crises, Adjustment and Social Change. A Case Study of Jamaica.' In Le Franc, E. (ed) (1994). *Consequences of Structural Adjustment: A Case Study of Jamaica*. UWI: Canoe Press.

Carney, Judith. 2020. 'Subsistence in the Plantationocene: Dooryard Gardens, Agrobiodiversity and the Subaltern Economies of Slavery?'. *Journal of Peasant Studies* 48(5): 1-25.

Carney, Judith. 2003. 'African Traditional Plant Knowledge in the Circum-Caribbean Region.' *Journal of Ethnobiology* 23(2): 167-185.

Carney, Judith and Richard Rosomoff. 2009. *In the Shadow of Slavery: Africa's Botanical Legacy*. Berkeley: UC Press.

Davis, Janae, Alex A Moulton, Levi Van Sant and Brian Williams. 2019. 'Anthropocene, Capitalocene...Plantationocene? A Manifesto for Ecological Justice in the Age of Global Crises' *Geography Compass* 13(5): 1-15.





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FAO. 2019. Report on the State of the World's Agrobiodiversity:  
<http://www.fao.org/state-of-biodiversity-for-food-agriculture/en/>.

Haraway, Donna. 2015. 'Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin.' *Environmental Humanities* 6: 159–165.

Mitchell SA, K Kitson-Waters, AA Mitchell. 2019. 'Valuing Caribbean Biodiversity Knowledge. In: *Changing Ecosystems and the Services*. IntechOpen. 34 pgs.

Mitchell SA, K Lindsay, A Richards. 2018. *Bioprospecting in the Caribbean Region: Caribbean ABS Traditional Knowledge Stocktaking Traditional Knowledge in the Caribbean Region*. IUCN, 103 pgs.  
<http://www.abscaribbean.com/resources/documents>

Mitchell S.A. and M.H. Ahmad. 2006. 'A Review of Medicinal Plant Research at the University of the West Indies, Jamaica, 1948-2001'. *West Indies Medical Journal* 55(4): 243-269.

National Environmental Planning Agency (NEPA). 2013. *State of the Environment Report*. Jamaica. <https://www.nepa.gov.jm/publications/soe>

St. Ville, A., Hickey, M.G. & Phillip. E.L. (2017). 'Institutional Analysis of Food and Agriculture Policy in the Caribbean: The Case of St. Lucia'. *Journal of Rural Studies* 51: 198-210.

UNEP (2009). *Integrated Assessment of Trade Related Policies on Biological Diversity in the Agricultural Sector of Jamaica: Transition Strategies for the Sugar industry in Jamaica*.

Wilson, M and McLennan, A. 2019. 'Structural Violence and Diet-related Non-communicable Diseases: A Comparative Ethnography of the Caribbean and the Pacific. *Social Science Medicine* 228: 172-180.


Wynter, Sylvia. 1971. 'Novel and history, plot and plantation.' *Savacou* 5: 95-102.

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Ahmed, S. (2017) *Living a Feminist Life*. Duke University Press.

Benjaminsen T. & Svarstad H. (2021) *Political Ecology. A Critical Engagement with Global Environmental Issues*. Palgrave Macmillan.

Brand U. & Wissen M. (2021) *The Imperial Mode of Living. Everyday Life and the Ecological Crisis of Capitalism*. Verso Books.



Di Chiro G. (2020) Mobilising ‘intersectionality’ in environmental justice research and action in a time of crisis. In (ed) B. Coolsaet. *Environmental Justice. Key Issues*. Routledge. pp.316-333.

Robbins P. (2004) *Political Ecology: A Critical Introduction*. Blackwell.

Sultana F. (2019) Decolonizing Development Education and the Pursuit of Social Justice. *Human Geography*, 12, 31-46.

Sultana F. (2014) Gendering Climate Change: Geographical Insights. *The Professional Geographer*, 66:3, 372-381.

van Dijk, T.A. (1986) *Racism in the Press*. Arnold.

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