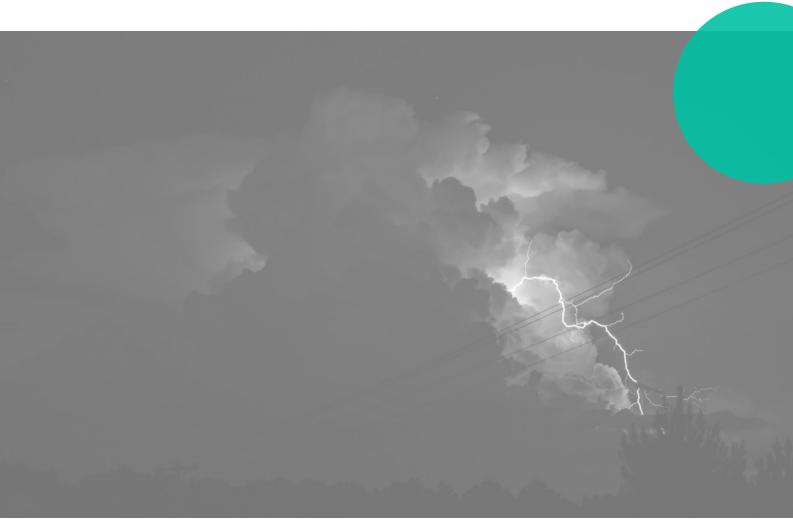
Towards Reparative Climate Justice: from Crises to Liberations



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Year of COP26

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This is not an attempt at defining reparative climate justice, but in identifying some of the potential structural and social systems to overhaul in helping us on our way towards a future built on care and cooperation in a changed climate. Anna Lau, thank you for helping me deepen connections between the various chapters of this report.

Executive Summary

That the global poor generate minimal greenhouse gas emissions but are disproportionately impacted by climate change impacts – while being least resourced to respond – requires a global response that is fair and just.

Such a response should be based on a fair shares approach to climate change action. Using the UK as an example, a fair allocation of climate action would see it responsible for reducing greenhouse emissions by a total of 200% below 1990 levels by 2030,¹ this is physically impossible within its own borders. So, a fair share of responsibility for countries like the UK - early industrialisers with historic responsibility for our current crisis - necessitates both domestic and international action. Within and between countries, this action must acknowledge that the wealthy have the highest degrees of resilience to climate change shocks, but also the greatest responsibility for emissions.

Our collective task is to quickly write a new path away from business as usual, which will see us heading towards a future that is "incompatible with an organized global community."² We must avoid this unmanageable future, which will involve drastically mitigating greenhouse gas emissions now. Lifestyles of carbon intensive luxury in a context of global energy poverty cannot continue, and decarbonisation efforts must recognise this. This will require equity in transitioning to sustainable renewable energy, reducing carbon emissions, while protecting our remaining ocean and biodiversity and reforesting.

At the same time, we must manage inevitable climatic changes already baked-in as a result of historic greenhouse gas emissions and adapt to these changes. Examples of adaptation measures include using scarce water resources more efficiently, reimagining access to housing, requiring any new constructions to meet building codes that are not only generating more energy than they use, but also able to withstand new climate conditions and extreme weather events, building flood defences, and setting aside land corridors to help species migrate.

Critically, we must repair the unavoidable impacts, as well as those poorly managed or entirely unmanaged impacts associated with climate change (referred to in policy circles as loss and damage). This means exploring mechanisms for innovatively and urgently raising funds for those already experiencing the negative impacts associated with climate change harms in a way that protects, respects and promotes human flourishing within our planetary boundaries.³ In part, this will require considerable changes to the unequal aid, development, trade and investment practices that straitjacket countries' abilities to protect people and planet. Just climate responses must also repair the social, cultural and political marginalisation that increases exposure to climate-related hazards. Poverty, gender, age, living with a disability, geography, indigenous or minority status, national or social origin, birth or other similar status, all increase the likelihood of experiencing climate change harms. Yet those on the frontline

Responsibility as prevention and repair: just accounting and equitable action

Between 1850 and 2002, countries in the Global North emitted at least three times⁴ as many greenhouse gas emissions as countries in the Global South, where approximately 85% of the global population also resides. Disparities continue. Every year, the average person in the US, Canada, and Australia continues to emit roughly fifty times more CO2 than someone in Mozambique.⁵ The average person in Britain emits more carbon in the first two weeks of a year than the average per capita emissions than Rwanda, Malawi, Ethiopia, Uganda, Madagascar, Guinea and Burkina Faso combined.⁶

Visualising Responsibility and Impacts, Source: Carbon Map



Exposure to impacts (taking poverty into account)

These injustices multiply the continuing impacts of slavery, colonialism⁹, discrimination¹⁰ and (more recently) neoliberal and austerity policies.¹¹ A country's history of having been colonised continues to be indicative of per capita levels of poverty,¹² while neoliberal trade and investment policies have sometimes deepened inequities by enabling capital flight while supporting carbon intensive industries and ignoring environmental degradation (resulting in biodiversity loss) and promoting precarious working conditions. Soaring inequality has created immensely skewed distributions in both wealth and carbon consumption. In 2019, the world's billionaires (2,153 people) had more wealth than 4.6 billion people (over 60% of humanity).¹³ The world's richest 10% caused 52% of emissions between 1990 and 2015,¹⁴ and those with the most wealth are better equipped with the resources to fund quick retreats to safety.

For some of the world's wealthy, luxury villas on the subtropical ridges close to the equator, where particularly pernicious storms form, feature protective bunkers. Private fire crew defend Californian mansions negligently built on raging wildfire warpaths. At the same time, some public fire crews include incarcerated firefighters, earning only USD\$1 a day containing fires and clearing brush, only for many to return to prisons often overfilled with Black people ¹⁵convicted of minor drug offences by a system that overlooks equivalent offence on the part

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of their wealthy and white counterparts¹¹⁶

The richest 10% of the world population live in every continent; however, around half of the emissions of the richest 10% of people are associated with the consumption of citizens of North America and the EU, and roughly one fifth with citizens of China and India. Conversely, the poorest 50% of people were responsible for just 7% of cumulative emissions between 1990 and 2015, and live precariously, surviving on less than USD\$5.50 a day without the space to prepare for health, climate, environmental or economic shocks. Walls of homes lovingly put together with any available material, as well as thousands of acres of ground crops, boats and other vital community infrastructure are ripped apart during extreme weather events, and droughts or saltwater intrusion can sentence a family to food, water and housing insecurity for decades.

Unless drastic changes are made to how we use energy, in the next ten years, the richest 10% of the global population -those with incomes above about \$35,000 (£27,000) a year - alone will, over the next decade or so, emit more than the carbon budget allotted for a 66% chance of reaching the Paris Agreement's goal of limiting global average surface temperature rise to 1.5°C above pre-industrial levels.¹8 Maintaining lifestyles of luxury – whether flights to expensive faraway villas, SUVs or heating multiple large homes – is incompatible with reaching the goal of "1.5°C to stay alive" so cogently expressed, first by climate justice advocates from small island states facing inundation from rising sea-levels. Instead, equity is foundational towards arriving at a sustainable solution to our multiple crises.

Prevention

We now know that with a 2°C, compared to 1.5°C of global average surface temperature rise, flood risks increase from 100% to 170%, 60 million more people will be exposed to drought, 1.3 billion more people would be exposed to extreme heatwaves, and sea-level rise will be significantly higher. Limiting warming to 1.5°C will bring health benefits, including reducing cases of dengue fever and malaria by hundreds of millions. If the could prevent about 153 million premature deaths from air pollution worldwide by 2100, with about 40% of those over the next 40 years. Meeting the 1.5°C target can help protect over two billion people from food stress, water stress, heat stress, severe drought, and displacement. Meeting this goal is an essential component of reparative climate justice.

However, we could exceed a 4°C rise by the end of this century if no action to limit emissions is taken.²¹ This would render much of the equatorial belt uninhabitable for most of the year, with Saharan deserts spreading into southern and central Europe. Two thirds of the glaciers that feed many of Asia's rivers will be lost.²² We have a collective responsibility to prevent this unmanageable dystopia.

To meet the now ambitious but necessary 1.5°C target, countries must be allocated responsibility for action according to their contribution to emissions. According to the Climate Fair Shares calculus from the Stockholm Environment Institute alongside War on Want and

others, for the UK to undertake its fair share of global effort commensurate with its historic emissions and role as an early industrialiser, the UK must reduce its greenhouse gas emissions by a total of 200% below 1990 levels by 2030;²³ this is physically impossible within its own borders. A fair share of responsibility for countries like the UK therefore needs to take a different form, namely:

- 1. implementing a rapid justice-centred transition domestically, towards decarbonisation by 2030, which promotes democratic and decentralised renewable (wind, solar, and hydro) energy generation; addressing energy poverty through increased energy efficiency; ensuring income security for workers in affected industries and retraining people for decent jobs in green industries; growing, packaging and distributing food sustainably; sharing clean public transport; undergoing significant ecological restoration; building efficient and safe housing for all with sustainable materials as well as flood defences and other adaptation measures to increase resilience to inevitable climate change impacts; sufficiently funding health and social care and addressing social, cultural, political and economic marginalisations that increase exposure to shocks; relocating those faced with inevitable coastal erosion and other forms of climate-linked displacement; reparation (both economic and symbolic) for unavoidable or unmanaged climate linked harms; and
- 2. financing and enabling global action towards the same: a rapid and just transition to net-zero. This requires both new and additional public climate financing as well as restructuring aid and development models to enable countries to promote social protection regimes that increase resilience to climate change impacts while reimagining trade and investment regimes to end unfair extraction and exploitation. It will require a profound shift away from growth and competition towards care and cooperation. It will require a reckoning with historic injustices that have created the context for extreme weather events and other climate shocks to be felt more acutely by those least responsible for the greenhouse gas emissions that strengthen and embolden them.

Parties to the UN Framework Convention on Climate Change (UNFCCC) recognise that achieving the 1.5°C ambition will be impossible without a fair allocation of leadership from developed countries in mitigating greenhouse gases at home, and climate financing from rich to poor countries to support climate action. This is a practical necessity, as well as a moral and legal obligation. Adopted on 9 May 1992, the UNFCCC introduced the concept of "Common but Differentiated Responsibilities and Respective Capabilities and their social and economic conditions" (CBDR-RC).²⁴ Principle 7 of the Rio Declaration (agreed at the Earth Summit the same year) re-asserted the primacy of developed country responsibilities:

"States shall co-operate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command."²⁵

Of course, since 1992, countries like China and India have increased their responsibility and capacity to contribute and that is reflected in the Climate Fair Shares analysis described in the section below.

Yet, developed countries retain primary responsibility but have made painfully few reductions, at home or internationally. Between 1990 and 2016 the UK reported a 41% reduction in greenhouse gas emissions within the UK's national borders. However, once the UK's consumption-based emissions are included (incorporating the large share of emissions relating to goods and services imported from overseas) that figure reduces to 15%. ²⁶ The UK's 5.7 billion barrels of oil and gas in already operating oil and gas fields will exceed the UK's share in relation to the Paris climate goals. Additional oil and gas extraction enabled by recent subsidies could²⁷ There is certainly no space for new coal mines, as proposed in Cumbria, though this in turn requires accelerating efforts to decarbonise industry.

The UK professes leadership through "net zero" plans that aim to distract from their continued reliance on fossil fuels. Net zero plans prioritise inept and problematic schemes over tangible policies towards just transitions. Carbon markets have made minimal impacts, and offsetting allows rich countries to pay penance for their emissions by paying developing countries to do the hard work for them.²⁸

At the same time, policies to reduce greenhouse gas emissions in the future include reliance on fanciful future technologies not yet available. This gives future generations the responsibility to find solutions to our mess. They are also based on dangerous assumptions about the safety and reliability of carbon capture storage technologies.²⁹ Similarly, while using wood wastes to generate electricity and heat may reduce net carbon emissions, cutting down trees explicitly for bioenergy releases carbon that would otherwise stay locked in forests which increases carbon in the atmosphere and increases warming for decades.³⁰ In a 2019 webinar with Friends of the Earth Scotland, Almuth Ernsting from Biofuelwatch concluded:

"There is no realistic prospect of this technology being commercialised and if it was – it would lead to even more logging and land grabbing for the conversion of monoculture tree plantations at the expense of climate, biodiversity and people. It legitimises destructive, high carbon biomass plants and fossil fuel burning to make it happen."

It would require significant proportions of land, often earmarked abroad – not within the UK. So, domestic mitigation is not taking place within the UK's borders, has and instead with grave consequences for communities in the Global South who have largely been managing forests sustainably for centuries. Carbon offsetting schemes, biofuels, hydroelectric power, and forest conservation have also been fraught with allegations of problematic reliance on monocultures (which increase risks of forest fires, require intensive water, release carbon and reduce biodiversity). Such projects have also been implicated in allegations of displacing indigenous peoples, land grabbing, evictions, and violently policing access to territories in the name of conservation or climate action. Pho promise of such schemes alone could lead to an additional catastrophic 1.4°C of warming. About the UK profess to show leadership in promoting net zero by 2050 targets but do so based on socially problematic and technologically unsound pretences, it will fall significantly short of its historic responsibility. Yet, given the right policies decent green job creation within the UK could create more than three jobs for every North Sea oil job at risk, while simultaneously taking decarbonisation action today, and repairing economic and social inequities and inequalities, rather than putting the onus of responsibility

on future generations and countries in the Global South.

UK's fair share for supporting climate action abroad: £1 trillion by 2030

Not only is the UK aiming to outsource, delay and obfuscate its domestic responsibility to decarbonise society equitably, but it is also failing its historic responsibility to finance international efforts towards mitigating carbon emissions, adapting to inevitable climate change impacts and repairing unmanageable ones. Rich countries' 2009 ambition of transferring USD\$100 billion of climate financing (per year by 2020) to countries least responsible for the crisis paled in comparison to what a fair share would require. For the UK alone, this would mean a contribution of £1 trillion by 2030 according to Climate Fair Shares analysis put together by War on Want and other NGOs.³⁶ However, countries are failing to deliver on even this inadequate target. Moreover, countries inflate their donation amounts to include development aid or other non-climate specific amounts to their total. Under the Paris Rulebook, countries are explicitly allowed to count non-concessional commercial loans, equity, guarantees and insurance as forms of climate finance, which again, inflates their total contributions. These are profit-making initiatives cloaked in the name of climate aid and action.

Brandon Wu, Director of Policy and Campaigns at ActionAid USA, explained in 2018 that under the formal climate financing rules:

"The United States could give a \$50 million commercial loan to Malawi for a climate mitigation project. This loan would have to be repaid at market interest rates – a net profit for the U.S. – so its grant-equivalence is \$0. But under the Paris Rulebook, the U.S. could report the loan's face value (\$50 million) as climate finance!"³⁶

The rules remain unchanged, and climate financing continues to be perilously low.

Oxfam analysis found that while reported public climate finance for developing countries amounted to USD\$59.5 billion per year between 2017 and 2018 (just over half of the stated target), the real value (once loan repayments, interest, and finance not directly targeting climate action were discounted) was only a third of the reported figure (USD\$19-22.5 billion per year). Only about 20% of public climate finance was in the form of grants (USD \$12.5 billion per year). The other 80% came in the form of loans and other non-grant instruments, with more than half of these being offered at market rates. Essentially, such loans enable polluters to profit from climate action. Action that is required because of early industrialisers' disproportionate emissions.

Between 2017 and 2019, 40% of total *public* climate finance lending required repayment from developing countries at market rates. Critically, finance to Least Developed Countries (LDCs) represented only 20.5% of the total, and to Small Island Developing States (SIDS) just 3%; 60% of finance to LDCs was in the form of loans, while for SIDS it was nearly half. ³⁸ Given that SIDS and LDCs are least responsible for the climate crisis and yet on the frontline of climate change impacts, this gross under financing entrenches inequality, and simply serves to deepen climate injustice.

Reforestation, protecting remaining ocean and biodiversity, a radical – but attainable – shift to dignified and energy efficient housing, sustainable renewable energy infrastructure, democratically and organically harvested local food, clean transport systems, and a commitment to addressing social, cultural, and political marginalisations would be required to meet the ambitious target.

Money is not an issue. The IMF estimates that global fossil fuel subsidies in 2017 were around \$5.2 trillion.³⁹ Subsidies for other carbon intensive industries – such as the agricultural industry – continue to climb. Agricultural policies across 53 countries provided an average USD\$528 billion per-year of direct support to - predominantly intensive - agricultural businesses during the 2016–18 period.⁴⁰ This is important because not only does the international food industry sometimes drive poor health outcomes, but it is also contributing to environmental degradation through extreme water use, the pollution of ecosystems by pesticides and agricultural run-off and producing roughly a quarter of the world's greenhouse gas emissions. It is also heavily reliant on displacing local peoples form their land and workers in the industry also continue to rank among the world's most insecure workforce.⁴¹

The technology is also available. In addition, the cost of switching to renewable energy would come to about 35% of the current expenditure by global governments on fossil fuel subsidies (USD\$1.7 trillion per year).⁴² This is even in an "as fast as possible" transition scenario that could keep a pathway open to staying below 1.5°C in global average surface temperature rise. It would also create millions of new jobs.⁴³ It would end the paradox of governments continuing to lower the cost of fossil fuel energy production while claiming to be committed to mitigation, adaptation and redressing the loss and damage associated with the adverse effects of climate change.



Yet, we are failing fast. Development financing supports overseas fossil fuels and other carbon intensive industries (Chapter 2). Trade and investment agreements can enable easy access to forests and sites of coal, oil, and gas extraction.⁴⁵ The continuation of the international community underfunding climate action – in the context of responsibility – while actively

financing and supporting carbon intensive industries is grossly corrupt, at a minimum. The failure to make appropriate changes towards limiting global warming of 1.5°C, in full knowledge of the consequences and in the context of available technology and funding, should – in my view – also be denoted a gross violation of human rights, a crime against humanity. The UN General Assembly's Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law inform appropriate remedies for such crimes. They seek to ensure compensation, restitution, rehabilitation, satisfaction (which can include truth commissions and cultural commemorations) and guarantees of non-repetition.⁴⁶

Repair

While we tend to discuss the climate crisis in the terms of the future, its impacts are already being felt. Every year that states fail to take sufficient action to decarbonise or fund adaptation measures, climate and wider harms continue to deepen. The world's five warmest years have all occurred since 2015, with nine of the ten warmest since 2005.⁴⁷ Scientists determined this summer's Siberian Arctic Circle heatwave - with wide-scale impacts including wildfires, loss of permafrost, and an invasion of pests - was "essentially impossible" without climate change.⁴⁸ In South Asia, temperatures are already soaring beyond survivability thresholds, with a disproportionate impact on impoverished labourers working outside as well as older persons.⁴⁹ In the last decade alone, the loss of human life from heatwaves has spiralled by a staggering 2,300%.⁵⁰

Desertification is reducing access to food; driving biodiversity loss; spreading locusts and other invasive plant species; and increasing dust storms and more intensive sandstorms.⁵¹ Climate change has already affected global food security due to warming, changing rain and other precipitation patterns, and greater frequency of some extreme events like floods and storms.⁵² Wildfires are ever increasing.⁵³ Glacier outburst floods pose risk to downstream communities and infrastructure.⁵⁴ Small islands, low-lying coastal areas and delta regions are already subjected to creeping saltwater, resulting in loss of access to land, more frequent and intense storms, lack of drinking water, reduced access to fresh fish due to ocean acidification, and infrastructure damage.⁵⁵

As a result of human caused climate change, storms that we see today bring noticeably heavier rainfall, cause more flooding, and stronger winds, with bigger storm surges than in previous years. December 2015's Storm Desmond, for example, caused exceptionally heavy rainfall and high winds and led to devastating flooding in Northern England, Southern Scotland and Ireland, with many homes damaged. Scientists in the field of weather event attribution² determined that such extreme regional rainfall is roughly 60% more likely due to human-caused climate change.⁵⁶

Climate change is the number one threat to public health this century.⁵⁷ In the Arctic, food and waterborne diseases, malnutrition, injury, and mental health challenges especially among Indigenous peoples have increased.⁵⁸ Covid-19 has also raised concerns about the link between the climate crisis, deforestation and the spread of infectious diseases, particularly

zoonotic (animal-transmitted) diseases. Studies show that biodiversity and habitat losses create the ideal situations to exacerbate their spread,⁵⁹ while warming temperatures also foster a supportive environment for dengue, yellow fever, and several other diseases.

The cost of adapting to climate change could hit USD\$500 billion per year by 2050.60 Climate Action Network estimates that by 2030, global economic loss and damage associated with climate change impacts specifically will require financing for developing countries of at least USD\$300 billion, reaching up to *USD\$1.2 trillion per year* by 2060.61 It is difficult to anticipate the exact amount of financial loss. Some estimates put prospective annual financial loss and damage from 2030 onwards at a far higher amount, with losses growing to USD\$400-430 billion per year for developing countries alone and anticipated global financial losses of between USD\$600-700billion.62 Monetary losses, while helpful for making sense of the scale of the damage, do not do justice to individual stories of heartbreak wrought, behind the figures of financial impacts, there are the loss of livelihoods, nourishment and sustenance, particularly within communities in places holding connections to ancestral lands. The socio-psychological affects are immeasurable.363

As argued above, countries most responsible and with the greatest resources have a moral and legal obligation to take the greatest action to repair the consequences of impacts now inevitable in our already warmed world. Focusing on financial repair to address the already occurring, Civil Society Review's Climate Fair Shares analysis suggests the following contributions:

Country / Group of countries	Fair share (%) (1950 Medium Progressivity Benchmark)	Fair share (%) (1850 High Progressivity Benchmark)
USA	30.4 %	40.7
European Union	23.9 %	23.2
Japan	6.8 %	7.8
Rest of OECD-90	7.4 %	8.8
China	10.4 %	7.2
ndia	0.5 %	0.04
Rest of World	20.6%	12.3
Total	100%	100

Simply ending global subsidies for the fossil fuel industry (responsible for about 71% of cumulative greenhouse gas emissions since 1988) and the agricultural industry (responsible for roughly 20% of annual greenhouse gas emissions) could fund a global transition or Global Green New Deal.⁶⁵

After spending 35% of current fossil fuel subsidies to switch to renewable energy,⁶⁶ and halting subsidies for industrial agriculture, sufficient funds would be saved to meet adaptation and loss and damage needs. Similarly, not investing in militaries and militarised policing, globally, would not only redirect an estimated USD \$1917 billion but also improve millions of

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peoples' lives and reduce greenhouse gas emissions.⁶⁷ Moreover, the link between the military, geopolitics, and fossil fuel extraction is deeply entwined and a source of destabilisation, loss of life, and significant emissions.

Regulating private finance could also play a huge role in a rapid transition. The International Energy Agency estimates that oil, gas and coal investments totalled UDS\$933 billion in 2018.68 Senior executives are still directly incentivised to grow oil and gas production volumes. A Financial Transaction Tax (FTT) covering the European Union putting a levy on shares and bonds at 0.1% and derivative agreements at 0.01% has the potential to raise USD\$63 billion, and a similar global FTT could raise significantly more, given the scale of financial instrument trading internationally. Those engaging in financial trading could contribute towards repairing the rights of those impacted most by climate change. In addition, a March 2020 report (by BankTrack, Rainforest Action Network, Indigenous Environmental Network and others) revealed that 35 global banks have provided \$2.7 trillion in funding to fossil fuel companies since the Paris Agreement came into force in 2016.69

A Climate Damages Tax (a progressive tax on the fossil fuel industry), while not replacing the need to end fossil fuel extraction, would raise revenues of between USD\$75-150 billion (at a rate of USD\$6 per tonne of CO2) and USD\$500-1,000 billion (at a rate of USD\$40 per tonne of CO2) a year. It puts the onus on those responsible for the root causes of climate change impacts and introduces a regulatory incentive on the fossil fuel giants. The 2017 Carbon Majors Study found that just 100 fossil fuel companies were responsible for 71 per cent of anthropogenic GHG emissions. Further information on all these options is available in my April 2019 "Market mechanisms for loss and damage climate finance fail human rights test" report for ActionAid.⁷⁰

Beyond the fossil fuel industry itself, the clear relationships between economic inequality, carbon emissions and consumption mandate that a just transition involves the reduction of inequality, to reshape distributions of wealth and economic activity. Modelling from Joel Millward-Hopkins, Julia K. Steinberger, Narasimha D. Rao and Yannick Oswald shows that it is possible to ensure a decent standard of living for everyone on the planet with minimum energy. This equity would ensure everyone has the opportunity to live a good life in line with our planetary boundaries, and that a minority are not excessively emitting carbon while hoarding the wealth that helps them remain relatively insulated in the face of accelerating climate change impacts.

Doubling the per capita footprint of the poorest 50% of the world's population from 1990 to 2015 would have increased total global emissions less than the actual growth in emissions associated with the richest 1% in this period.⁷²

Percentage of global income by decile the richest 10% 52% receive 52% 19% 11% 5% the middle 40% 5% receive 40% 5th 3% 4th 2% 3rd the poorest 50% 2nd 1% 1st <1% http://civilsocietyreview.org/report2018/

This profoundly unsustainable situation calls for equity within and between countries so that the wealthy minority within developed countries be forced to redirect their resources to collective well-being. This is theme appears again in Chapter 3. Redistributing responsibility within and between countries could fund a justice-centred transition, as well as global Covid-19 testing, a vaccine for everyone on the planet, universal public social services to increase resilience to health shocks as well as climate change impacts, address inequality and improve well-being.⁷³ Philanthropy tends to be minimal, requiring a more consistent and regulated alternative. many of the same countries sit on the boards of development banks that have, for decades, withheld the privilege of fiscal generosity from countries in the majority Global South - through loan conditions - increasing their vulnerability to crises.⁷⁴

It is possible to imagine a future in which funds are leveraged to protect people and planet. Beyond financing, institutions must be re-worked to protect and respond to needs in response to increasing climatic and other adversities. Institutions at the local, national, regional and international levels must be led by those on the frontline of experiencing injustices, they must be accountable to historic and continuing responsibilities for differentiated responsibility, they must protect and promote human flourishing for all, they must be transparent, and fair. In addition, cultures of care and cooperation must be cultivated.

Economic freedom as reparation:

making, moving, and trading goods fairly

The funds available to decarbonise, increase resilience to climate change impacts, and repair climate and other harms currently vary on a country-by-country basis. The differences are striking. Senegal has forty times less funding per capita available than Sweden.⁷⁵ At the same time, the average person in Sweden emits over six times more carbon per year than the average person in Senegal.⁷⁶ Public investment is essential to decarbonising, adapting, increasing resilience and repairing climate harms. Largely leaving climate responses to the market has left us perilously off-track for meeting the vital 1.5°C target.

The changes involved in a sufficiently rapid and just transition require action on a scale, speed and with a level of coordination that cannot be left to the market. Research from the IEA in 2016 found that to date, "market-based, unsubsidised low-carbon investments have been negligible." Many vital aspects of the transition, including adaptation measures and the assurance of public goods are not profitable, and will therefore never be delivered by private interests. Rather, a public investment-led programme of decarbonisation is needed to provide social protection; build flood defences and dignified, zero-carbon and resilient homes; fund ecological restoration; ensure health and social care as well as the right to food, education, clean air and a healthy environment; prepare just emergency responses and repair unavoidable harms.

Research from Global Justice Now suggests that African countries receive USD\$161.6 billion in resources such as loans, remittances and aid each year, but "lose USD\$203 billion through factors including tax avoidance, debt payments and resource extraction, creating an annual net financial deficit of over USD\$40 billion."⁷⁸

By way of example, and, like so many other countries, in aiming to attract investment capital, Senegal has been encouraged by aid and loan providers to promote carbon intensive industries that deepen the crisis at the expense of future generations and do nothing to alleviate poverty for those on the frontline of climate change, Covid-19 and marginalisation today. Global Justice Now analysis suggests that since the Paris Agreement was signed, approximately GPB £568 million of UK aid has been invested in fossil fuel projects overseas, rising to £3.9 billion with the inclusion of export credits provided by UK Export Finance (UKEF).⁷⁹ Trade and investment agreements protect a fossil fuel economy and threaten governments' abilities to prioritise people and planet.⁸⁰ The World Bank's International Finance Corporation presently see oil and gas as part of Senegal's recovery from the economic impacts of Covid-19.⁸¹

Erratic rainfall, rising sea-levels and encroaching salt water have destroyed huge swathes of farmland on Senegal's Baout Island. Four droughts in less than a decade have left hundreds of thousands of people experiencing food insecurity. Public investment to secure food, housing, an adequate standing of living, health, education, clean air and a healthy and sustainable environment has been severely limited by debt repayments, tax evasion and capital flight, as well as a model of investment that entrenches climate harms through long-term reliance on fossil fuel intensive industries and infrastructure.

When global commodity prices fall, countries spend a larger and larger proportion of their available budget on repaying loans typically agreed on terms and with interest rates that enrich creditors. Senegal spends approximately 25.63% of its GDP servicing external public debt. Between 2015-2017 it reduced spending on education by 11.76%, and Eurodad has raised concerns that essential social provisions are cut to pay debts.

Loan conditionalities have imposed austerity policies on Senegal, requiring the privatisation of state-owned enterprises at the cost thousands of jobs, as well as cuts in public spending overall of 40%. These types of loan conditions – inflicted on several countries over the past few decades – have particularly harmful impacts on women, who are often the main users of and workers in public service sectors and continue to provide two thirds of home or community centred unpaid labour, which complements public services. Importantly, women – particularly in the global South – will be on the frontlines of climate impacts while their unpaid care work continues to be expected rather than sufficiently supported.

Senegal has also been required to reduce or eliminate subsidies for staple foods, despite a dry climate that makes it difficult for most families to grow enough to eat. Much of Senegal's population relies on agriculture and pastoralism, which are severely threatened by climate change. Already, nearly half of Senegal's population live in poverty, and chronic malnutrition affects 17% of children aged under five.

In aiming to be attractive to foreign direct investment, the country has opened itself up to unsustainable agricultural practices that deepen the climate crisis, displace local communities, pollute local ecosystems, and reduce access to the land for women who previously engaged in subsistence farming. The practices of agrobusiness not only contribute a quarter of greenhouse gas emissions globally, but also reduce future resilience to climate change impacts by reducing biodiversity and eroding soil health. These practices can also prove devastating to workers through exposure to hazardous working conditions, and to whole communities which are left with reduced access to their land and water, as well as the pollution of the ecosystems on which they rely by pesticides and agricultural run-off.

Industrial biofuel plantations have monopolised precious water resources and promised income to farmers who gave up land and now experience food insecurity. Devastatingly, Senegal is also relying on significant growth in oil and gas production, which – despite creating few local jobs – the World Bank sees as crucial in Senegal's Covid-19 recovery with "oil and gas is part of the future of the country." The key beneficiaries may be the foreign companies embedded in the region, including Edinburgh-based Cairn Energy, Woodside (an Australian company), Dallas headquartered Kosmos Energy Ltd, and British Petroleum.

Privatised industrial agricultural and mining industries have not reduced poverty in Senegal. Wealth has not trickled down to workers and communities, and biofuels whose cultivation consumes agricultural land are exported to Europe. Some companies that make their wealth in Senegal quickly move their profits through tax havens.

It was reported that SNC-Lavalin, a Canadian engineering firm, "exploited a "lopsided" treaty between Senegal and Mauritius after winning a USD\$50-million deal to build a processing plant for Senegal's Grande Cote mineral sands mine." In the hope of becoming more attractive to investors, the 2004 treaty was primarily set up to avoid taxing multinationals twice (once in each country). But by exploiting Mauritius' notorious position as a tax haven, SNC-Lavalin managed to avoid USD\$8.9 million in taxes altogether, establishing a shell company in Mauritius "for the specific purpose of helping the engineering giant avoid tax payments," according to the International Consortium of Investigative Journalists reported.

More broadly, the past forty years of development consensus has enabled situations where foreign direct investment can facilitate the exploitation of local peoples, extraction of resources, pollution of places and capital flight, and reduce resilience to a changing climate while increasing the risk of deepening climate-linked harms for future generations.

At a minimum, and as has been suggested by Christian Aid, Oxfam, Global Justice Now and Jubilee Debt Campaign, ⁸² private sector creditors and multi-lateral development banks should immediately match the terms of the debt suspension offered by the Debt Service Suspension Initiative under a binding and compulsory scheme.⁸³

Going the wrong way - defunding resilience

The 2019 report Austerity: The New Normal: A Renewed Washington Consensus 2010-24 established that most governments – prior to the Covid-19 pandemic – were on track to reduce public spending (as a percentage of GDP and nominally adjusted by inflation) until 2024 at least. The austerity measures - required by loan conditions - that the report's authors expected to continue included several measures known to accelerate widening inequalities: cutting or capping public sector wages, creating more precarious labour, increasing regressive

consumption taxes that have disproportionate impacts on those with the lowest incomes, and privatising public assets, among others.

For years prior to the onset of the pandemic, public investment and the welfare state were being squashed around the world, furthering our vulnerability to the impacts of crises from public health to natural disasters. Yet, alternatives strategies that would reduce inequality while increasing resilience to the impacts of climate change as well as environmental, health, and economic shocks are readily available.⁸⁴ The decades-long ideological push for reliance on the private sector has proven problematic for the delivery of many services. It is certain to prove particularly poor for addressing the climate crisis.

There are alternatives

With the fiscal freedom they are presently denied, countries in the Global South could eliminate illicit financial flows and seek employment-based and wealth-linked contributions to fund social security, decarbonisation and climate change resilience measures. Subsidies for and public investment in fossil fuel, agrobusiness and raw earth mineral, metal mining industries, and the military could be redirected. Sovereign wealth funds from debt cancellations could be allocated to the needs and demands of communities on the frontline of climate change impacts.

Eurodad have pressed the EU to consider debt-to-green-new-deal-swaps, with debt that is currently due to be repaid to the European Stability Mechanism (ESM) and the European Financial Stability Facility (EFSF). Instead, these could be transformed into investment spending for the Green New Deal.⁸⁵ With the freedom to choose a kinder economy, countries could allow for higher budget deficit paths and levels of inflation through a more accommodating macroeconomic framework. Such measures are currently restricted under existing trade and investment paradigms but should be sought, alongside calls for the transfers of wealth from the Global North in line with 'fair shares' calculations (as discussed in the previous chapter).

Global financial architecture is currently punitive in this respect. Loan conditions take away the freedom of governments to pursue certain policies, and firmly limit the availability of fiscal and policy resources. Between 2010 and 2018, external debt payments as a percentage of government revenue grew by 83% in low- and middle-income countries, from an average of 6.71 % in 2010 to an average of 12.56% in 2018. Between 2014 and 2018, resources spent on public services dropped by more than 18% in Latin America and the Caribbean, and by 15% in Sub-Saharan Africa.⁸⁶

The International Monetary Fund currently predicts this trend will continue in all regions, with public spending falling as debt rises.⁸⁷

Government spending predictions

Sub-Saharan Africa: Estimated historic low of public spending in 2024, at **20.74% of GDP**

Latin America and the Caribbean: Estimated fall of public spending from **33.74** % in 2014 to **29.85** % of GDP in 2024

Middle East and Central Asia: Estimated fall from **32.96**% in 2014 to **29.82**% in 2024.

These trends are already having a direct impact on basic services such as education or health: in at least 21 low-and middle-income countries, government education expenditure as a percentage of GDP decreased between 2015 and 2017, while debt service as a percentage of GDP increased. The prioritisation of debt repayments is taking place at the very time that strong health systems, housing, education, decent work and welfare for those not in formal paid work are required to withstand the accelerating climate crisis and promote human rights. Sacrificing public spending and investment on excessive debt costs is compromising not only the resilience of indebted countries, but the global response to the climate crisis and biodiversity collapse. Much like Covid-19, this is a global problem which will require global cooperation, and overcoming debt constraints will be a vital component of the solution.

Debt cancellation in a climate of owed reparations

Despite prevailing financial flows, debts are owed in very much the opposite direction. The legacies and impacts of slavery, colonialism⁸⁹, discrimination⁹⁰ and neoliberal policies⁹¹ all serve to exacerbate climate change impacts. A country's history of having been colonised continues to be indicative of per capita levels of poverty today⁹², while neoliberal trade and investment policies continue to perpetuate inequities by enabling capital flight while ignoring environmental degradation and precarious working conditions.⁹³ Poverty forces billions of people into lives without access to basic needs, while also lowering a country's capacity to reduce emissions and prepare for climate change impacts as any available funds are directed towards attempting to address minimum standards for living.⁹⁴

Colonialism and the fossil fuel era reconfigured the world economy. The Indian subcontinent's share of the global economy shrank from 27 to 3% between 1700 and 1950, while it's estimated that the UK benefited by approximately USD\$45 trillion from its colonial rule of the Indian subcontinent alone. After 1843, following the Opium Wars, when Britain invaded China and forced open its borders to British goods on unequal terms, China's share shrank from 35 to 7%. During the colonial period, Europe's share exploded from 20 to 60%. Reparations have never been paid to colonised countries, communities, slaves, indentured servants, or families of survivors.

As Daniel Macmillen Voskoboynik notes in his brilliant book *The memory we could be:* Overcoming fear to create our ecological future, this history has had profound environmental and human impacts. Mangroves, grasslands, rainforests and wetlands were destroyed to make way for quarries, plantations, ranches, roads and railways. Voskoboynik writes: "ecocide came hand in hand with ethnocide," as ten million people (half the population of Congo at the time) died as Belgium took hold of rubber and ivory, subjecting local people to a ruthless regime. 12 million people - predominantly from West Africa - were shackled into boats headed for the Americas where they were forced into silver and gold mines, and various crop plantations. In the last decades of the 19th century, tens of millions of peoples from the Indian subcontinent

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died of famine, while British colonial policy forced the country to export record levels of food.96

In addition to the environmental and human impacts, colonialism funded European industrialisation, which fuelled an explosion of greenhouse gas emissions and enabled Europe to build the infrastructure and wealth from which it benefits today. This infrastructure also enables the wealthy within Europe to be relatively shielded from climatic changes. While British slave owners have been compensated (to the tune of approximately £300 billion in today's money), those who were enslaved and colonised have not been. The injustices of how these histories continue to affect differential experiences of climate change and its impacts are strongly evidenced in the case of Mozambique (See Box 2) and beyond.

Case study: Mozambique

Mozambique is the sixth poorest country in the world, and highly indebted. Its history is rife with Portuguese and British colonial interests, who imposed forced labour, forced crop cultivation, high taxes, low wages, and land seizures on the resident population. Today, the average person in Mozambique emits roughly twenty times fewer CO2 emissions compared to the average British citizen, but they are nonetheless situated on the frontline of climate impacts. In 2019, Mozambique experienced two devastating and unprecedented storms.

Foreign loans have supported the expansion of coal and titanium mines as well as the agrobusiness industry, enriching investors. ⁹⁸ Concurrently, the people of Mozambique have suffered from reduced social security spending as the government seeks to repay debts in a climate of reduced income from its export commodities. ⁹⁹

In 2013, Jubilee Debt Campaign reported on an aluminium smelter in the country enriching the UK who gained \$88 million in interest payments on its loan (in addition to the original loan being repaid). The World Bank, European Investment Bank, and the governments of South Africa, Japan, France, Germany and Canada also profited. Jubilee Debt Campaign estimates these public institutions made over \$120 million a year from the smelter, eight times more than the \$15 million a year received by the government of Mozambique. The main private investor in Mozal, BHP Billiton, made an average profit of \$114 million a year between 2005/06 and 2011/12, over seven times more than the Mozambique government. 100

In April 2016 it was revealed that the London branches of Credit Suisse and VTB Capital had lent \$2 billion to three state owned companies in Mozambique, much of which had not been publicly disclosed. The loans were not approved by the Mozambique parliament, as required under Mozambique law.¹⁰¹

Major liquid natural gas reserves have resulted in Italy's ENI, ExxonMobil, BP, Shell, China National Petroleum Corporation also competing for assets. Communities living on reserves have been forcibly displaced often with insufficient compensation and without access to decent work. They

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have been removed from their land and facing increased militarisation and conflict. The projects are not only carbon intensive but also cause environmental devastation.¹⁰²

In September 2020, Friends of the Earth issued a legal challenge to the decision by the Department of Trade to invest USD\$1 billion in a major gas project off the coast of Mozambique. Friends of the Earth says there will be immediate environmental impacts, and the construction of the site alone will increase the greenhouse gas emissions of Mozambique by up to 10% by 2022.¹⁰³

Direct imperial powers' control over natural resources in colonies has made way for access to raw materials and labour through foreign investment, often enabled through favourable concession agreements that harm the majority of people and the planet. Though, we have also explored the militarised approach to accessing resources too. In our neoliberal policy space, poverty alleviation efforts are deprioritised over (foreign) investor friendly schemes that have concentrated wealth in the hands of a small elite. Resources to respond to droughts, disease, unprecedented storms (and other climate linked changes) shrink, and thousands of people who contributed negligibly to carbon emissions are left hungry, displaced and destitute. Debt cancellation is the first step. Then, we must acknowledge debt is owed in the opposite direction.

4 Social, cultural and political reparation: towards collective liberation

The social and economic construction of unequal exposures to shocks

Covid-19 has shown the way that crises, like pandemics, serve to magnify underlying injustices; the same is true for environmental and climate-related harms. Poverty, gender, age, living with a disability, geography, indigenous or minority status, national or social origin, birth or other status, all affect the likelihood of experiencing climate change harms.¹⁰⁴

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The disproportionate exposure to Covid-19 among those traditionally marginalised serves as an X-ray for how threats are aggregated in communities. In the UK, the Office for National Statistics found that an astounding two thirds of the nearly 38,000 people who passed away between 2 March and 15 May 2020 in circumstances involving Covid-19 lived with a disability.¹⁰⁵ The carelessness of the pandemic response has revealed the disposability with which many treasured members of our community are treated - the same communities who suffered under a decade of austerity policies resulting in a social security system that, too often, fails to reach those who need it.¹⁰⁶

94% of doctors and dentists that died of Covid-19 until 22 April 2020 were from Black, Asian and minority ethnic backgrounds, as were 71% of nurses and midwives. ¹⁰⁷ People from Bangladeshi backgrounds are twice as likely to die of Covid-19 compared to white British people, while people of Chinese, Indian, Pakistani, other Asian, Caribbean and other black backgrounds face extra risks ranging between 10% and 50%. Racism has been identified as a significant contributory cause. ¹⁰⁸

Frontline workers (across health and social care, older persons care, education and childcare, security, and retail sectors) are often women and/or people of colour. A sixth of social care workers in England are not originally from the UK.¹⁰⁹ Many frontline workers are undervalued, low-paid, with many on insecure contracts living in precarious housing conditions, and with less access to declining urban green spaces.

In the same way that the pandemic has disproportionately affected marginalised communities in the UK, the impacts of the climate crisis will fall along and widen inequalities, with the added injustice that those with the fewest resources to respond emitted the least greenhouse gas emissions.

Environmental injustice

In the US¹¹⁰ and the UK,¹¹¹ research has found that people of colour suffer more air pollution than white residents. Poor air quality, a problem that long predates Covid-19, is linked to multiple chronic conditions, and significantly increases the risk of death from Covid-19.¹¹² Air pollution can have a damaging effect beginning in the womb. A 2016 Royal College of Physicians and the Royal College of Paediatrics and Child Health report found that air pollution contributes to about 40,000 early deaths per year in the UK.¹¹³

Climate change and environmental injustice in the UK

According to academic research, particulate air pollution in the UK is concentrated in the 20% of poorest neighbourhoods in England, often in urban areas with a greater proportion of people racialised as Black.¹¹⁴ A full inquest into the tragic 2013 death of nine-year-old Ella Kissi-Debrah death found that air pollution contributed to her death, and government bodies failed to protect Ella, who lived by Lewisham's busy South Circular Road, from the risk of the dangerous levels of air pollution of which they were aware.¹¹⁵

Natural England's 2019 report 'Messy Challenge of Environmental Justice in the UK' provides important analysis. ¹¹⁶ For example, coastal flood risks are highest among ex-industrial ports and declining resort towns, which are disproportionately communities struggling with poverty wages, underemployment or unemployment. If you live in the most deprived areas of England, you are five times more likely to be exposed to greater emissions, hazards and offensive pollution. ¹¹⁷ If you live within 600m of a river (particularly in the North West, Yorkshire and Humberside and London), and you are in a deprived area, it is much more likely that the river will have poor chemical or biological qualities. ¹¹⁸ Waste recycling and transfer sites, and particularly incinerators, are more likely to be in areas of higher social deprivation. ¹¹⁹

Climate change exacerbates existing class inequalities. The UK has the 7th most unequal incomes of 30 countries in the developed world but is about average in terms of wealth inequality. While the top fifth have nearly 50% of the country's income and 60% of the country's wealth, the bottom fifth have only 4% of the income and only 1% of the wealth. As discussed in Chapter 1, reparative climate justice would seek to centre equity in a transition.

Part of the UK are also at risk of heat related hazard exposure and flooding as climate impacts deepen. Individuals living in high-rise residences will experience heat stress more severely compared to those with green spaces. People racialised as Black are four times more likely than white people to have no access to outdoor space at home (e.g., a balcony or a garden). In Wales, several local authorities are ill-equipped to respond to flooding exposures. Climate change will exacerbate the inequities and injustices experienced by communities and regions already marginalised.

Global injustice and climate change

At the global level, environmental injustices from mining, fossil fuel infrastructure, manufacturing, and the agrobusiness industry are well documented, and include land grabbing, toxic chemical exposure, workers' rights abuses, militarised and violent policing of communities and more. Climate change adds to these historic inequities. The scale of current impacts is discussed in Chapter 1. As explored earlier, countries in the Global South are on the frontline of impacts but least equipped to respond. Currently few remedies are available. Developed countries often point towards insurance as a magic bullet to address global climatic impacts. This is a false solution.

Another market failure - insurance is not available

Insurance is not available for slow-onset events like desertification, biodiversity loss or rising temperatures, nor where extreme weather events are becoming increasingly regular. The business model of insurance companies is based on hedging bets over whether catastrophic events will occur – requiring pay-outs – or not, driven by profit. Catastrophe risk insurance provides coverage for low probability, high-cost disasters, which can be made available for individuals and communities. Unlike risk pooling more generally, catastrophe risk insurance coverage necessitates high quality (and usually expensive) catastrophe risk models.¹²⁴

There is no profit to be made from events that are likely to occur every year, or which are slowly unfolding, and for which there is a growing sense of inevitability, as such insurance is not available. Similarly, catastrophe bonds are high yield debt instruments that enable investors

in these bonds to bet on whether insurance companies, countries or regional governments (insurance risk carriers) will face claims from arising from specified large-scale disasters. It is possible to estimate – with a degree of accuracy – when these impacts will occur in specific regions. As such, catastrophe bonds are limited to low probability (not high frequency or slow-onset events) and high-cost disasters. This makes market mechanisms entirely inappropriate for increasingly regular, predictable and strong climatic changes. They are based on attempting to profit from uncertainties, rather than ensuring protection in the face of accelerating and inventible harms. This is centrally about profiting from hedging bets about climate misery.

In November 2013, Typhoon Yolanda (Haiyan) devastated the Tacloban region of the Philippines. It led to 7,354 deaths, damage or destruction to one million homes, and four million people being displaced. Of the approximately USD\$10 billion of damages caused, only a small fraction was covered by insurance (between USD\$300 – 700 million). Where insurance is available, it is often delayed. Even as 6.7 million food-insecure Malawians faced a prolonged drought in 2016, the regional insurer, the African Risk Capacity, failed to provide the government with timely or sufficient pay-outs. It no 2017 Hurricane Maria caused devastating damage in Dominica, resulting in about financial loss and damage of about \$1.37 billion. But the regional insurance mechanism (the Caribbean Catastrophe Risk Insurance Facility) paid out \$19.3 million, less than 1.5% of the total cost of estimated economic losses. The onus of paying premiums for insurance, where it is available, is also on countries at the frontline of climate impacts mostly countries of the Global South who are least responsible for cumulative emissions to date.

Not in the same boat: unequal impacts and responsibility

Insurance can also not address the social and cultural marginalisation that compounds harms when shocks occur. Storms disproportionately kill or displace poor people in informal housing. Emergency preparedness measures that do not account for the needs of people who live in precarious contexts, or with disabilities, those who are imprisoned or otherwise detained (including for moving across borders), and older members of our communities have devastating consequences. Young people need sites for play and learning in temporary evacuation sites. Women and girls need to be secure from gender-based violence and LGBTQI+ communities from harassment. Yet, time and time again we see that not only do responses typically fail to meet the specific needs of further margilised communities, but they at times also actively discriminate against certain groups. For example, responses to hurricanes in the United States convey the ways in which aid groups will prevent sustenance from reaching LGBTQI+ communities, and that state programmes officials have discriminated against people of colour.¹²⁹

Post emergency measures must secure temporary shelter with clean water, safe from diseases spreading and with good food for all. In reality, those with the resources – and responsibility for greatest emissions – can fund quick retreats to safety. The majority, who previously struggled to survive on poverty wages, are left with accelerating climate precarity.

Disasters have driven more than 70% of the 33.4 million newly displaced people that took place in 2019, with 23.9 million people displaced by weather related disasters (floods, storms, droughts, etc) alone.¹³⁰ Climate related displacement disproportionately impacts women and girls. In 2018, more than half of the 41 million people internally displaced were women.¹³¹ Despite bearing the brunt of the impacts of climate crisis, Black and brown women

are particularly excluded from how to respond to expected impacts. Women also tend to have greater unpaid care responsibilities, making it harder to leave home. For those who do leave, the process of migrating is fraught with risks of gender-based violence, such as trafficking or sexual violence. These risks remain high even for those who have managed to migrate, especially for those who end up in informal settlements or displacement camps. Women and girls in lower-income countries are also driven to migrate because they tend to rely most on subsistence farming as an income and food source, but the combined impacts of climate change and the practices of the agrobusiness industry increasingly place subsistence farming at risk. Repairing the expected extraction of women's care labour, and normalising gender-based risks must be components of justice responses to our multiple and compounding crises. Bangladesh serves as a helpful case study of these disproportionate impacts.

Case study: Bangladesh

The rural poor of Bangladesh who are displaced by saltwater intruding on their crops, cyclones, river erosion, poverty and other factors, may find themselves in Dhaka without formal employment. Approximately 88% of all workers are employed informally, subject to low wages, minimal benefits and high levels of job insecurity. An estimated 1300 individuals move from rural parts of Bangladesh to Dhaka, the capital, every day–whether it is following a cyclone, or due to slow-onset climate impacts such as salt-water intrusion or reduced fish stocks.

Rural migrants to Dhaka may lack the social connections to gain entry to the labour market. Women have the dual burden of care and domestic labour on the one side, and paid work on the other, to as they try and to meet the basic needs – and avoid food insecurity – of family members. Food insecurity rises when women are unable to undertake paid work (for childcare, pregnancy related sickness or older or disable persons' care, for example). Sickness can result in the sale of assets or high-risk indebtedness as poor people are forced to take loans with high interest from informal brokers. When women can work, many are forced to accept precarious work in the precarious global garments supply chain where human rights abuses are endemic. Older people often continue to work gruelling jobs to meet basic needs, despite health consequences.¹³⁴

This example highlights the need to ensure that strong social protection mechanisms are in place to support those forced to move from their homes. Access to lifelong education and re-training, dignified housing, pensions, sickness pay, and care-work related pay can all take steps towards repairing the forms of marginalisation, with on the basis of gender and age or otherwise, that compound the experiences of climate linked harms.

Globally, people of colour, women, LGBTQI+ communities, older people and the very young, Indigenous peoples and those who live with disabilities are on the frontline of climate related harms. Black Lives Matter activists globally have been calling to divest from policing and reinvest funds directly in community resources and alternative emergency response models.

Black Lives Matter UK and Wretched of the Earth collective member Alexandra Wanjiku Kelbert brings together calls for climate justice and abolitionist justice as part of the same liberatory vision.¹³⁵ Redirecting resources from those responsible for climate harms towards those that have – for too long – been sacrificed for a growing economy that is driving economic inequity and continued carbon reliance is essential. Redirecting this wealth while simultaneously undoing social and cultural notions that some peoples' lives can be sacrificed is itself a form of reparation.

From demands to decision making

Reparative justice will also require justice centred decision making by those on the frontline of climate change impacts. As storms increase in severity and intensity, emergency preparedness measures will need to be designed by those particularly threatened by extreme weather events to protect the right to life and provide reparation for losses. This will mean enabling younger and older people, those who live with disabilities, and those subjected to forms of detention to be part of designing responses to emergencies. Those subjected to the slow but persistent creep of salt water or deserts must be part of the decision making to design collective responses, which may include moving together or apart (and having the right to choose where to move with dignity), memorializing places lost, recording how the losses were made and which corporations or groups were most culpable. Greater agency over decision making and a deepening of democracy (when the goals of equity are embedded within those processes) can repair ongoing injustices inherent in a small minority making decisions for the immediate financial interests of their class.

Repairing the values that got us to where we are today

The ideological justifications for slavery, colonialism, dispossession and genocide left a profound global cultural shift in our way of being in nature, imposing a view of 'productivity' that depends on the exploitation of natural resources and people. A small but powerful minority continue to act as though resources are infinite and trespass over our natural world ignoring species loss, land degradation, ocean acidification¹³⁶ and the human impact of 500 years of ecocide and ethnocide.¹³⁷ Decision makers in leading British government positions are overwhelming educated in elite schools, inaccessible to the majority of the population.¹³⁸

Indigenous knowledge which promotes interdependence are derided despite indigenous and tribal peoples being custodians to 80% of the world's remaining biodiversity, bringing remarkable insights to those who will listen. ¹³⁹ In Māori cosmology, for example, human and non-humans are interrelated, and tribes refer to mountains, rivers, and lakes in the same way as they refer to humans and will talk with non-human beings. This kinship implies a set of reciprocal obligations to nurture and provide care, often summarised as 'stewardship', but this term does not encapsulate that community life centres the well-being of all. ¹⁴⁰

The social imagination that requires accumulation and growth at the expense of our collective health and well-being necessarily marginalises alternative ways of thinking, valuing

and being. Māori spiritual practices of "rāhui", for example, prohibit the over-use of rivers, forests, and fisheries – and seek rest, repair and recovery through prohibiting continued extraction. Ecosystems rebuild, often quite resiliently.¹⁴¹ Recentring such value systems is reparation. Undoing social and cultural notions that a certain way of organising an economy and certain peoples, matter less – or can be sacrificed – is reparation. Similarly, recentring collective well-being and cooperation over competition and accumulation is a necessary form of repair as we move away from consumption to reuse and mending.

Yet, false solutions (offsetting schemes, biofuels, hydroelectric power, forest conservation that displaces forest, tribal and indigenous peoples) has been implicated in torturing the forest communities that have long relied on, and protected, the Messok Dja area of the Republic of Congo,¹⁴² and displacing forest communities in Nepal and then and then torturing individuals who attempt to re-enter their territories to collect snails, for example.¹⁴³

Without a centring of social, political, economic and cultural repair – a repair of our relationships built on racism, prioritising wealth accumulation through a belief in supremacy over and subordination of nature, homophobia, transphobia, caste systems, age, disability, gender-based discriminations – responses to climate change impacts will simply magnify existing patterns of oppression. They will also justify the prioritisation of a mythical market that fails to create the conditions of our survival, let alone our well-being.

5 Recommendations

Redistribute the responsibility of climate financing

As we look forward to COP26 (a meeting of Parties to the UNFCCC) in Glasgow next year, we know that climate financing will feature heavily. In the spirit of effective multilateralism, countries party to the UNFCCC could submit Nationally Determined Contributions in accordance with their fair share of responsibility and capacity to meet the 1.5°C target, as well as fund adaptation and loss and damage. Submissions should detail how responsibility for meeting targets domestically will address social and economic inequities and simultaneously require those most culpable for emissions to contribute the greatest through re-orienting subsidies for carbon intensive industries, regulating private finance, progressive forms of wealth and income-based taxation, corporate accountability, international flight rationing or other such means. In practice, these submissions could detail ambitious plans and policies that implement justice-centred Green New Deals¹⁴⁴ of five-year plans that address economic, social, cultural and political inequities.

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The cyclical nature of debt accumulation has been facilitated by a framework geared around bailing out creditors without tackling the underlying driving forces of debt accumulation, fuelled by global power imbalances. In place of this, we need widespread debt cancellation, relief and a restructuring, alongside the creation of a fully independent debt workout mechanism, and the immediate debt moratoriums following climate disasters. Private sector creditors and multi-lateral development banks should immediately match the terms of the debt suspension offered by the Debt Service Suspension Initiative under a binding and compulsory scheme. A fair and transparent process for restructuring and further debt stock cancellation (inclusive of all debt types) and with the binding participation of all types of creditors, could take place through a global debt workout mechanism. It is the duty of the international community to avoid adding a debt crisis to dozens of developing countries that are already dealing with health, humanitarian, hunger and economic crises.

Abolishing the strings attached to aid and loans

Aid and loan conditions must not fund carbon intensive industries nor reduce countries' resilience to climate change impacts through making investments in social protection difficult. This will require international financial institutions like the International Monetary Fund and World Bank parting ways with a market-oriented agenda of austerity, deregulation and privatisation in favour of sensible and sorely needed expansionary macroeconomic frameworks that prioritise social and environmental needs. Womens' labour must not continue to be taken for granted. Forests, oceans and mineral and metal rich sites cannot continue to be viewed as cites for economic growth. We must only extract those resources required for green infrastructure when that infrastructure can serve our common good.

Reimagining trade rules

Trade agreements that secretly arbitrate disputes about profits lost in the interests of pursuing community or planetary well-being must end. Instead, new agreements must require stringent compliance with environmental, social and transparent governance criteria with obligations to the public interest and sustainability rather than to short-term financial objectives. Criteria should also include emissions reduction targets and responsibility to pay for meeting global mitigation targets as well as adaptation and loss and damage according to historic culpability. Renewable energy infrastructure, electrical car batteries, as well as construction materials, that rely on extracted raw earth minerals, metals and products from communities in the Global must not leave communities with limited (if any) access to land, and poverty wages, polluted ecosystems, and spoilt water. Trade rules must enable democratic and transparent negotiations the result in fair allocations of available resources without stepping on what is available for future generations. Such criteria could result in decent jobs (paying a living wage in safe and healthy conditions with freedom of association as well as paid care leave) replacing the precarious work and hazardous short cuts that currently enable wealth concentration.

Companies must also contribute financially towards social protection policies (health, care, education and more) that they rely on to enable people to come to work through fair taxation systems. Women, predominantly, cannot continue to undertake unpaid care work to support a ready pool of workers struggling to survive in precarious jobs with wages insufficient to meet basic needs. Companies should only source from entities that can meet social and environmental sustainability criteria as well as transparent governance criteria and must pay suppliers so that they can be met.

Environmental, social and transparent governance criteria must be enforceable. Countries must implement regulations to enable the monitoring of compliance and take enforcement action against corporations that fail to comply. For example, dividends should not be paid until corporations can comply, and companies that regularly fail to meet decent work, sustainability or decarbonisation targets must be nationalised and bought into democratic control. Countries should also support the creation and operation of an effective UN Binding Treaty on Business and Human Rights.

Governments could incentivise the democratisation of workplaces, municipalities, and care providers. Worker cooperatives that engage with communities to make participatory decisions about outputs and resource use are more likely to uphold the long-term well-being of the area, workers and community in general. They are more likely to be able to make better assessment as to the specific needs of families. Globally, common pools for collectively and universally holding knowledge that enables deep and widespread decarbonisation and ecological restoration while promoting good health, housing, education and sustenance globally will be crucial to prevent the marketisation of information that can ensure universal access to a dignified life in a justice centred transition.

Assessing and addressing the needs of countries and communities

Countries should also undertake internal needs assessments to understand the ways in which climate change disproportionately impacts groups, whether on account of geography, poverty, gender, age, indigenous or minority status and disability, national or social origin, birth or other status, and understand why, what are the root causes. This data should enable those on the frontline of impacts to lead in the creating and implementation of appropriate policy responses. The rights of current and future generations to a sustainable environment that can enable human flourishing, as well as the history of slavery and colonialism should be added to school curriculums. At the same time, we must recognise what we have already lost – both in the natural world and the human impacts of colonialism and slavery – and promote cultural reparations through supporting art, theatre and music from marginalised groups that promotes equity and collective liberation. Those forced to move because of events linked to climate change should also have access to the tools that enable cultural commemorations while ensuring the right to dignified movement. Violent borders cannot feature in reparative climate justice frameworks.

In seeking to transition from competition to cooperation, we can identify and unlearn deeply held belief and value systems about productivity, growth and extraction that impose limits on how we can imagine new ways of living sustainably and interdependently. This could involve a movement away from growth-based assessments of economies as a starting point.

⁶ Conclusion

A commitment to limit energy use for activities that provide social value has the potential to not only increase our well-being but support also life within our planetary boundaries. 147 Covid-19 provided a portal into unveiling what our social priorities might be, including good and nutritious food, safe housing, health and social care for everyone throughout their lives, education, art, music, information, and technology. Food (rather than depleting our soil and water, polluting communities, and keeping harvesters, packers and transporters in poverty while contributing 21-37% greenhouse gas emissions) 148 could be nutritious and local. Land access could be democratised as organic agroecological farming improved soil health, increased crop diversity improving resilience to pests and disease, and avoided the use of chemical fertilisers and pesticides, learning from traditional agriculturalists (usually women). Renewable energy cooperatives could use every rooftop, the waves and wind to generate the energy we need to heat our homes, schools and universities, centres providing care, hospitals, theatres, galleries, museums, waste and wate processing sites, produce our phones and laptops, and to enable scientific and technological access and innovation (where this innovation improves access to what we need to live a good life).

Time not spent in sites of gas, oil, or coal extraction, or in producing consumer goods that do not serve the social good but end up in landfills or in the ocean, or in skyrises betting on the performance of various financial products could be time spent connecting within communities, making decisions about the policies that impact our lives. And, in undertaking ecological restoration towards the Māori spiritual practice of "rāhui, and unlearning notions that got us here.

Safe and resilient dignified housing could be built by workers cooperatives of architects, engineers, construction workers, plumbers and electricians trained to deliver buildings that generate more green energy than they consume – serving the remainder to free and universal childcare cooperatives, hospitals, schools and universities, for example. Safe and decent health and social care work with appropriate protective equipment could be universally available, globally. Those forced to move from areas exposed to sea level rise or uninhabitable temperature could be assured dignified lives in new places with their ancestral homes commemorated. Rather than viewing climate action as requiring sacrifice, climate action can mean collective flourishing despite accelerating impacts, and a planet that can house future generations peacefully.

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