Loss and damage from climate change: How much should rich countries pay?

“The wealthy countries must begin providing public climate finance at the scale necessary to support not only adaptation but loss and damage as well, and they must do so in accordance with their responsibility and capacity to act.” This is the main message of a technical report titled *Can Climate Change-Fuelled Loss and Damage Ever Be Fair?*, launched on the eve of the UN Climate Change Conference (COP25) to be held in Madrid from 2 to 13 December.

The US and the EU owe more than half the cost of repairing future damage says the report, authored by Civil Society Review, an independent group that produces figures on what a “fair share” among countries of the global effort to tackle climate change should look like.

“The poorer countries are bearing the overwhelming majority of the human and social costs of climate change. Consider only one tragic incident – the Cyclones Idai and Kenneth – which caused more than $3 billion in economic damages in Mozambique alone, roughly 20 % of its GDP, with lasting implications, nadwot to mention the loss of lives and livelihoods” argues the report. “Given ongoing and deepening climate impacts, to ensure justice and fairness, COP25 must as an urgent matter operationalise loss and damage financing via a facility designed to receive and disburse resources at scale to developing countries.”

The UN Framework Convention on Climate Change (UNFCCC) has defined loss and damage to include harms resulting from sudden-onset events (climate disasters, such as cyclones) as well as slow-onset processes (such as sea level rise). Loss and damage can occur in human systems (such as livelihoods) as well as natural systems (such as biodiversity).

Eight weeks after Hurricane Dorian - the most intense tropical cyclone to ever strike the Bahamas - Prime Minister of Barbados, Mia Amor Mottley, spoke at the United Nations Secretary General's Climate Action Summit. She said: “For us, our best practice traditionally was to share the risk before disaster strikes, and just over a decade ago we established the Caribbean Catastrophic Risk Insurance Facility. But, the devastation of Hurricane Dorian marks a new chapter for us. Because, as the international community will find out, the CCRIF will not meet the needs of climate refugees or, indeed, will it be sufficient to meet the needs of rebuilding. No longer can we, therefore, consider this as an appropriate mechanism...There will be a growing crisis of affordability of insurance.”

An April 2019 report from ActionAid revealed the insurance and other market based mechanisms fail to meet human rights criteria for responding to loss and damage associated with climate change. The impact of extreme natural disasters is equivalent to an annual global USD$520 billion loss, and forces approximately 26 million people into poverty each year.
Michelle Bachelet, UN High Commissioner for Human Rights, recently warned that the climate crisis is the greatest ever threat to human rights. It threatens the rights to life, health, housing and a clean and safe environment. The UN Human Rights Council has recognised that climate change “poses an immediate and far reaching threat to people and communities around the world and has implications for the full enjoyment of human rights.” In the Paris Agreement, parties to the UN Framework Convention on Climate Change (UNFCCC) acknowledged that they should – when taking action to address climate change – respect, promote and consider their respective obligations with regard to human rights. This includes the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, the empowerment of women and intergenerational equity. Tackling loss and damage will require a human-rights centred approach that promotes justice and equity.

Across and within countries, the highest per capita carbon emissions are attributable to the wealthiest people, this because individual emissions generally parallel disparities of income and wealth. While the world’s richest 10% cause 50% of emissions, they also claim 52% of the world’s wealth. The world’s poorest 50% contribute approximately 10% of global emissions and receive about 8% of global income. Wealth increases adaptive capacity. All this means that those most responsible for climate change are relatively insulated from its impacts.

Between 1850 and 2002, countries in the Global North emitted three times as many greenhouse gas (GHG) emissions as did the countries in the Global South, where approximately 85% of the global population resides. The average CO2 emissions (metric tons per capita) of citizens in countries most vulnerable to climate change impacts, for example, Mozambique (0.3), Malawi, (0.1), and Zimbabwe (0.9), pale in comparison to the average emissions of a person in the U.S. (15.5), Canada (15.3), Australia (15.8), or UK (6).

In the 1980s, oil companies like Exxon and Shell carried out internal assessments of the carbon dioxide released by fossil fuels, and forecast the planetary consequences of these emissions, including the inundation of entire low-lying countries, the disappearance of specific ecosystems or habitat destruction, destructive floods, the inundation of low-lying farmland, and widespread water stress.

Nevertheless, the same companies and countries have pursued high reliance on GHG emissions, often at the expense of communities where fossil fuels are found (where oil spills, pollution, land grabs, and displacement is widespread) and certainly at the expense of public understanding, even as climate change harms and risks increased. Chevron, Exxon, BP and Shell together are behind more than 10% of the world’s carbon emissions since 1966. They originated in the Global North and its governments continue to provide them with financial subsidies and tax breaks.

Responsibility for, and capacity to act on, mitigation, adaptation and loss and damage varies tremendously across nations and among classes. It must also be recognised that the Nationally Determined Contributions (climate action plans or NDCs) that have thus far been proposed by
the world’s nations are not even close to being sufficient, putting us on track for approximately 4 °C of warming. They are also altogether out of proportion to national capacity and responsibility, with the developing countries generally proposing to do their fair shares, and developed countries proposed far too little.

Unfortunately, as Kevin Anderson (Professor of Energy and Climate Change at the University of Manchester and a former Director of the Tyndall Centre for Climate Change Research) has said: “a 4°C future is incompatible with an organized global community, is likely to be beyond ‘adaptation’, is devastating to the majority of ecosystems, and has a high probability of not being stable.”

Equity analysis

The report assess countries’ NDCs against the demands of a 1.5 °C pathway using two ‘fair share’ benchmarks, as in the previous reports of the Civil Society Equity Review coalition. These ‘fair share’ benchmarks are grounded in the principle-based claims that countries should act in accordance with their responsibility for causing the climate problem and their capacity to help solve it. These principles are both well-established within the climate negotiations and built into both the UNFCCC and the Paris Agreement.

To be consistent with the UNFCCC’s equity principles – the wealthier countries must urgently and dramatically deepen their own emissions reduction efforts, contribute to mitigation, adaptation and addressing loss and damage initiatives in developing countries; and support additional sustainable actions outside their own borders that enable climate-compatible sustainable development in developing countries.

For example, consider the European Union, whose fair share of the global emission reduction effort in 2030 is roughly about 22 % of the global total, or about 8 Gigatons of CO2 equivalent (GtCO2eq). Since its total emissions are less than 5 GtCO2eq, the EU would have to reduce its emissions by approximately 160 % per cent below 1990 levels by 2030 if it were to meet its fair share entirely through domestic reductions. It is not physically possible to reduce emissions by more than 100 % domestically. So, the only way in which the EU can meet its fair share is by funding mitigation, adaptation and loss and damage efforts in developing countries.

Today’s mitigation commitments are insufficient to prevent unmanageable climate change, and – coming on top of historic emissions – they are setting in motion devastating changes to our climate and natural environment. These impacts are already prevalent, even with our current global average surface temperature rise of about 1°C. Impacts include droughts, firestorms, shifting seasons, sea-level rise, salt-water intrusion, glacial retreat, the spread of vector borne diseases, and devastation from cyclones and other extreme weather events. Some of these impacts can be minimised through adaptation measures designed to increase resilience to inevitable impacts.

These measures include, for example, renewing mangroves to prevent erosion and reduce flooding caused by storms, regulating new construction so that buildings can withstand
tomorrow’s severe weather, using scarce water resources efficiently, building flood defences, and setting aside land corridors to help species migrate. It is also crucial with such solutions that forest dwelling and indigenous peoples be given enforceable land rights, for not only are such rights matters of basic justice, they are also pragmatic recognitions of the fact that indigenous peoples have successfully protected key ecosystems.

Tackling underlying social injustices and inequalities – including through technological and financial transfers, as well as through capacity building – would also contribute to increasing resilience. Other climate impacts, however, are unavoidable, unmanageable or unpredictable, leading to a huge degree of loss and damage. Experts estimate the financial damage also will reach at least USD$300-700 billion by 2030, but the loss of locally sustained livelihoods, relationships and connections to ancestral lands are incalculable.

Failure to reduce GHG emissions now – through energy efficiency, waste reduction, renewable energy generation, reduced consumption, sustainable agriculture and transport – will only deepen impacts in the future. Avoidable impacts require urgent adaptation measures. At the same time, unavoidable and unmanageable change impacts – such as loss of homes, livelihoods, crops, heat and water stress, displacement, and infrastructure damage – need adequate responses through well-resourced disaster response plans and social protection policies.

For loss and damage financing, developed countries have a considerable responsibility and capacity to pay for harms that are already occurring. Of course, many harms will be irreparable in financial terms. However, where monetary contributions can help restore the livelihoods or homes of individuals exposed to climate change impacts, they must be paid. Just as the EU’s fair share of the global mitigation effort is approximately 22 % in 2030, it could be held accountable for that same share of the financial support for such incidents of loss and damage in that year.

The table below provides an illustrative quantification of this simple application of fair shares to loss and damage estimates, and how they change if we compute the contribution to global climate change from the start of the industrial revolution in 1850 or from 1950.

Table 1: Countries' Share of Global Responsibility and Capacity in 2019, the time of Cyclones Idai and Kenneth, as illustrative application of a fair share approach to Loss and Damage funding requirements.
<table>
<thead>
<tr>
<th>Country/ Group of countries</th>
<th>Fair share (%) 1950</th>
<th>Fair share (%) 1850</th>
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<tbody>
<tr>
<td>USA</td>
<td>30.4 %</td>
<td>40.7 %</td>
</tr>
<tr>
<td>European Union</td>
<td>23.9 %</td>
<td>23.2 %</td>
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<tr>
<td>Japan</td>
<td>6.8 %</td>
<td>7.8 %</td>
</tr>
<tr>
<td>Rest of OECD</td>
<td>7.4 %</td>
<td>8.8 %</td>
</tr>
<tr>
<td>China</td>
<td>10.4 %</td>
<td>7.2 %</td>
</tr>
<tr>
<td>India</td>
<td>0.5 %</td>
<td>0.04 %</td>
</tr>
<tr>
<td>Rest of the World</td>
<td>20.6 %</td>
<td>12.3 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 %</strong></td>
<td><strong>100 %</strong></td>
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The advantage of setting out responsibility and capacity to act in such numerical terms is to drive equitable and robust action today. Responsible and capable countries must – of course – ensure that those most able to pay towards loss and damage repairs are called upon to do so through domestic legislation that ensures correlated progressive responsibility. However, it should also motivate mitigation action to ensure that harms are not deepened in the future.

In the Equity analysis used here, capacity – a nation’s financial ability to contribute to solving the climate problem – can be captured by a quantitative benchmark defined in a more or less progressive way, making the definition of national capacity dependent on national income distribution. This means a country’s capacity is calculated in a manner that can explicitly account for the income of the wealthy more strongly than that of the poor, and can exclude the incomes of the poorest altogether. Similarly, responsibility – a nation’s contribution to the planetary GHG burden – can be based on cumulative GHG emissions since a range of historical start years, and can consider the emissions arising from luxury consumption more strongly than emissions from the fulfilment of basic needs, and can altogether exclude the survival emissions of the poorest. Of course, the ‘right’ level of progressivity, like the ‘right’ start year, are matters for deliberation and debate.¹

The report acknowledges “the difficulties in estimating financial loss and damage and the limited data we currently have”, but it recommends nevertheless “a minimal goal of providing at least USD$300 billion per year by 2030 of financing for loss and damage through the UNFCCC’s Warsaw International Mechanism for Loss and Damage (WIM)”. Given that this corresponds to a conservative estimate of damage costs, the report further recommends “the formalization of a global obligation to revise this figure upward as observed and forecast damages increase”.

¹ For more details, including how progressivity is calculated and a description of the standard data sets upon which those calculations are based, see [https://gdrights.org/the-climate-equity-reference-project/](https://gdrights.org/the-climate-equity-reference-project/) For an interactive experience and a finer set of controls, see the Climate Equity Reference Calculator [http://calculator.climateequityreference.org](http://calculator.climateequityreference.org).
The new finance facility should provide “public climate financing and new and innovative sources of financing, in addition to budget contributions from rich countries, that can truly generate additional resources (such as air and maritime levies, Climate Damages Tax on oil, gas and coal extraction, a Financial Transaction Tax) at a progressive scale to reach at least USD$300 billion by 2030”. This means aiming for at least USD$150 billion by 2025 and ratcheting up commitments on an annual basis. Ambition targets should be revised based on the level of quantified and quantifiable harms experienced.

Further, developing countries who face climate emergencies should benefit from immediate debt relief - in the form of an interest-free moratorium on debt payments. This would open up resources currently earmarked for debt repayments to immediate emergency relief and reconstruction.

Finally, a financial architecture needs to be set up that ensures funding reaches the marginalised communities in developing countries, and that such communities have decision making say over reconstruction plans. Funds should reach communities in an efficient and effective manner, taking into account existing institutions as appropriate.

Currently, the Paris Rulebook allows countries to count non-grant instruments as climate finance, including commercial loans, equity, guarantees and insurance. Under these rules, the United States could give a USD$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 US – so its grant-equivalence is $0. But under the Paris Rulebook, the US could report the loan’s face value ($50 million) as climate finance. This is not acceptable. COP25 must ensure that the WIM has robust outcomes and sufficient authority to deliver a fair and ambitious outcome for the poorest and most vulnerable in relation to loss & damage.