The intractability of loss and damage issues in climate negotiations

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Why have the world's wealthy countries been so resistant to the issue of loss and damage?

The issue of loss and damage (L&D) has been extremely thorny and contentious in climate negotiations for many years. Due to varied understandings of what it means, no universally agreed definition exists to date.[1] However, it is often understood as referring to the impacts of climate change that cannot be dealt with through adaptation measures alone.

Loss refers to something that has been completely lost and is irrecoverable - such as the loss of human lives; damage pertains to something that can be repaired - such as damage to a road. Loss and damage can occur as a result of extreme weather events, such as cyclones, and from slow onset events, such as sea-level rise.

Distinction is also made between two types of L&D: economic losses, defined as the loss of resources, goods and services that are commonly traded in the market, such as loss of infrastructure; and non-economic losses, where monetary value cannot be attached, since what has been lost is not commonly traded in the

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markets.[2] Examples of non-economic loss can be loss of human lives, cultural heritage, sense of place, biodiversity and so on.

Industrialisation based on fossil fuels is what has made the western world 'developed'. This happened at the cost of huge emissions in billions of tons of greenhouse gases (GHGs), consequently leading to a climate changed world. Though currently about two-thirds of global GHG emissions are contributed by more recently industrialising countries, historically, it is the countries defined by the United Nations Framework Convention on Climate Change's (UNFCCC) Annex 1 that have been, and remain, responsible for over three quarters of GHG emissions.[3] As is widely understood, climate change is a stock, rather than a flow, problem. This means that historical contributions are having a rachet effect, the result of which has made extreme climate events a 'new normal'.

Yet it is the low-income countries - which have contributed the smallest share of GHGs - that are bearing the brunt of L&D resulting from climate change. Though the richer countries have obligatory responsibility under the climate regime, including the Paris Agreement, to support low-income countries in addressing climate change, they are not even providing the minimum level of resources needed for the purpose. The wealthier countries tend to shy away from the discussions related to L&D because they fear that acknowledging L&D could eventually lead to claims of liability against them, and demands for compensation, given that the causal chain makes them mainly responsible for it. But while the rich nations may be feeling uncomfortable, for the vulnerable low-income countries L&D is a survival issue. Such opposing positions mean that L&D discourse is always political. The consequent controversies over L&D - what it means, how it is interpreted, how to finance it, etc - are the subject of this article. Our aim is to tease out the central controversies that underpin the intractability of this agenda at the negotiations of the UNFCCC.

Evolution of loss and damage in the UNFCCC regime

Discussion on L&D began as early as 1991. During the negotiations to craft the UN Framework Convention on Climate Change, Vanuatu, on behalf of the Alliance of Small Island States, submitted a proposal to the Intergovernmental Negotiating Committee for establishing an international insurance pool to 'compensate the most vulnerable small island and low-lying coastal developing countries for loss and damage arising from sea level rise'.[4] The proposed insurance pool would be funded

by obligatory contributions from the industrialised countries based on their relative Gross National Product and relative GHG emissions, a form of calculation drawn from the 'Brussels Supplementary Convention on Third Party Liability in the field of Nuclear Energy 1963'. This proposal was not accepted, and the terms loss and damage did not find any place in the Convention, but the proposal left some mark in the UNFCCC text. Article 4.8 of the Convention notes insurance as a possible action 'to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change'.[5] In addition, Article 4.4 stipulates that developed country Parties 'shall also assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects'.

In the following years, conversations on insurance and compensation in relation to addressing L&D continued to resurface, albeit without any fruition. It took more than a decade and a half for the terms loss and damage even to enter the official UNFCCC texts: it finally appeared in the Bali Action Plan, adopted by COP13 in 2007. This called for enhanced action on adaptation, including consideration of 'means to address loss and damage associated with climate change impacts in developing countries that are particularly adverse to the impacts of climate change'.[6]

At COP16, in 2010, a work programme on L&D was established, under the Cancun Adaptation Framework, which prepared the way for its eventual institutionalisation within the UNFCCC regime. The breakthrough came at COP19 with the establishment of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (WIM). This was established, under the Cancun framework, to 'address loss and damage associated with impacts of climate change, including extreme events and slow onset events, in developing countries that are particularly vulnerable to the adverse effects of climate change'.[7] The WIM is the main vehicle under the UNFCCC to address L&D, and has three key functions: enhancing knowledge and understanding of risk management approaches to address L&D; strengthening dialogue, coordination, coherence and synergies among relevant stakeholders; and enhancing action and support, including finance, technology, and capacity-building .

Implementation of these functions is overseen by the WIM Executive Committee, guided by and accountable to COP. The Committee consists of ten members from the 'developing country Parties' and ten from 'the developed country Parties'. Its

twice-yearly meetings are open to outside observers. As of 2021, there are five thematic expert groups, which play a key role in implementing the Committee's workplan.

In 2014, COP20 approved an initial two-year work plan from the WIM, for implementation over 2015 and 2016. Its 'structure, mandate and effectiveness' was then reviewed at COP22 in 2016, as had been agreed when it was set up, and its indicative framework for a five-year rolling workplan was approved. The second review of WIM took place at COP25 in 2019, and is discussed below.

After long and politically charged negotiation, COP21 in Paris made a breakthrough recognition of L&D. Article 8 in the Paris Agreement, dedicated to L&D, established it as a third pillar in the UNFCCC process, along with mitigation and adaptation. This was heralded as a great victory for the 'developing country Parties', as, within the climate regime, L&D had previously been considered under the rubric of adaptation. There had been two strands in earlier climate negotiations: the global North had attempted to place L&D under the rubric of adaptation, while the South had considered it to be distinct from adaptation. Placing greater emphasis on adaptation has the effect of undermining the salience of L&D - something which is likely to happen at COP26 in November 2021, where the adaptation and resilience agenda will be prominent.

Article 8 of the Paris Agreement also endorsed WIM, ensuring its continuation. However, there is a disconnect in the Agreement between Article 8 and Article 9, on finance. While Article 9 mandates the 'developed country Parties' to provide finance to 'developing countries' regarding adaptation and mitigation, it makes no mention of L&D. This is a major setback, as finance is an important indicator of the sincerity of the international community's commitment to tackle climate change. Moreover, the work of WIM to date has largely overlooked its third function - enhancing action and support, including finance. Over the past decade, finance-related discussions in the L&D discourse have focused on insurance, without addressing the question of who can and should pay the premiums, among other concerns, even though the Alliance of Small Island States had made a proposal on this when they first put forward the idea of an insurance mechanism in the early 1990s.[8] Clearly, asking the victims of L&D from the vulnerable poor nations to pay the premiums would be an utter injustice; and insurance clearly cannot be a solution that addresses the full spectrum of L&D, such as non-economic L&D. Without a financial mechanism

for L&D, its implicit recognition as the third pillar in the UNFCCC regime will not mean much.

The reluctance of the wealthier countries in discussing finance for L&D has obvious parallels with their reluctance over adaptation finance in the first decade after the adoption of the UNFCCC. There was a worry then that agreeing to fund adaptation would implicitly mean acknowledging their liability for their historical emissions. Now they fear that agreeing to finance L&D might create a ground for liability, which could potentially trigger an avalanche of litigation and compensation claims. During the Paris negotiation, John Kerry (at that time US Secretary of State) stated, in relation to L&D as a basis for compensation, that framing L&D this way would 'kill the deal' as Congress would not ratify an agreement having any such provision. Indeed, paragraph 51 of the decision adopting the Paris Agreement states that Article 8 'does not involve or provide a basis for any liability or compensation'.

Loss and damage in the face of rising temperature

With the increasing frequency and magnitude of extreme climatic events around the world, L&D is becoming more and more evident. The irreversible and existential impacts of climate change on the vulnerable nations and communities across the world are clear from the evidence to which L&D debates over the last three decades have been calling attention.[9]

Between 2000 and 2019, the total number of major natural-hazard-related disaster events recorded from all over the world was 7,348, of which 90.92 per cent are climate related.[10] These events have together claimed nearly 1.23 million lives, impacted more than 4 billion people, and inflicted economic losses worth approximately USD 2.97 trillion. From 1980 to 1999, the corresponding statistics were 4,212 events resulting in 1.19 million lives lost, 3 billion people affected, and economic losses of USD 1.63 trillion.

Comparison between the two twenty-year periods reveals a stark rise in the number of disaster events in the last twenty years, and the rise is mainly due to the significant upsurge in the number of climate-related disasters. From 2000 to 2019, 6,681 climate related disasters killed 510,837 people and impacted 3.9 billion. During the previous twenty-year period, there were 3,656 events causing 995,330 deaths and impacting 3.2 billion people. While the number of fatalities has fallen

sharply, the number of people affected in terms of injuries and loss of livelihood, and the associated economic costs of the damage inflicted, have gone up significantly.

One important insight here is that, although in absolute terms the highest share of economic losses occurred in the high-income nations, low-income countries faced the highest level of losses in terms of their GDP percentage (ibid). Thus, for example, when savaged by repeated cyclones that affected 2.3 million people, the Mozambican economy experienced a L&D of USD 3.2 billion in 2019, which is roughly 22 per cent of the country's GDP and 50 per cent of its domestic budget.[11] Furthermore, the number of people affected and killed by disaster events is higher in low-income countries than in high-income countries. Despite having less than 10 per cent of the total global population, 23 per cent of disaster-related deaths happen in low-income countries.[12] Furthermore, it must be borne in mind that disaster events and economic losses in the latter countries, particularly in Africa and South Asia, are significantly under-reported (ibid).

The 2020 findings of UNDRR and CRED resonate with the report by Hirsch et al on L&D.[13] Based on information from the Munich RE group, they show that, over the past four decades, both the number of extreme events worldwide and the economic losses they have caused have increased fourfold. The report confirms, yet again, that devastation caused by climate extremes is geographically unevenly distributed, low-income countries being the worst-affected victims. This is due to their high exposure, small-sized economies, and low socio-economic capacity. They note that, while economic losses in cumulative terms are high in North America and the Caribbean, Asian countries have seen the highest percentage increases in economic losses. Between the 1980s and the 2010s, the average economic losses per annum have increased by a whopping 600 per cent in Asia, whilst the figure is 414 per cent for North America and the Caribbean.

Anthropogenic emissions are responsible for an increase in global temperature of approximately 1° Celsius above pre-industrial levels.[14] And the relationship between anthropogenic emissions and changes in the pattern of extreme weather events related to temperature and sea-level rise is well established through the IPCC assessment reports.[15] A rise in global temperature of 3° C is likely to increase the frequency of high impact climatic hazards to such a degree that the current disaster risk reduction and climate change adaptation strategies of many countries will no longer work.[16]

Loss and damage at COP25

L&D was high on the agenda at COP25, which took place in Madrid in 2019: this was because the second review of the WIM was on the agenda. The issue became one of the politically charged topics that took COP25 to nearly two days of overtime.

As always, the low-income countries and the high-income countries remained at odds in their positions, but, significantly, this was the first COP where the G77 and China were unified in their approach. The G77 is a large group of countries which, owing to its heterogeneity, often finds it difficult to find a united position. In Madrid, however, given the urgency of the issue, G77 and China joined together to call for a strengthening of the WIM's ability to facilitate the 'works on-the-ground' to address L&D. Their 'developed' counterparts, however, felt that all that was needed was some fine-tuning of the functioning of the WIM Executive Committee - for example, the development of a common format for technical reporting.[17]

In the review, the 'developing country Parties' put forward proposals in relation to three main issues: finance to address L&D; the establishment of an expert group on action and support; and the establishment of an implementation network.[18]

The third of these proposals was met through the creation of the Santiago Network on Loss and Damage, as part of the WIM, 'to catalyse the technical assistance' needed by vulnerable countries in implementing the relevant approaches to avert, minimise, and address L&D.[19] In response to the second proposal, the WIM Executive Committee was requested to establish an expert group charged with developing, by the end of 2020, a 'focused plan of action on … the collection, compilation and dissemination of information on the available sources of support under and outside the Convention and the Paris Agreement for activities relevant to averting, minimising and addressing loss and damage in developing country Parties' (ibid). The expert group, now known as A&S Expert Group, and consisting of ten to eighteen members, was established in 2020.

However, on the ever-elusive topic of L&D finance, the outcomes fell somewhat short of expectations. The G77 and China had asked the developed country Parties to respond to their call for 'adequate, easily accessible, scaled up, new and additional, predictable finance', reiterating the demand for a finance mechanism for L&D that they had been making for a long time.

The Madrid outcomes do call for 'scaling up action and support … including

finance', but without making any reference to 'new and additional' finance - and without any direct request to the developed country Parties to provide the funding. There was also a decision in Madrid to request that the Green Climate Fund (GCF) board would 'continue providing financial resources' within its existing structures (ibid). This does not make much sense, however, because the existing structure of GCF does not have any remit for funding L&D. Moreover, its existing resources for funding mitigation and adaptation, which rely on voluntary rather than mandatory contributions, are already inadequate for what is needed on the ground. The decision also asked the WIM Executive Committee to 'clarify how developing country Parties may access funding' for proposals within the strategic workstreams of its five-year rolling work plan. However, despite falling short of expectation, Elisa Calliari and colleagues describe progress on finance as somewhat 'encouraging': it leaves room for furthering the discussions in future.[20]

Another issue of division at COP25 between low- and high-income countries was the governance arrangements for the WIM. The WIM was established under the UNFCCC and is therefore under the authority of the COP, its decision-making body. Article 8 of the Paris Agreement states that the Mechanism 'shall be subject to the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Agreement [CMA]'.[21] It does not, however, say anything about whether or not WIM shall continue to also be subject to the authority and guidance of COP - which means that it is implicit that the WIM would be under the joint governance of both COP and CMA. There are several precedents for such joint governance in other UNFCCC bodies, for example the Adaptation Committee, Technology Mechanism and Standing Committee on Finance. The wealthy countries argued, however, that the WIM should now be under the authority of the CMA on its own, and not under COP. The developing country Parties, on the other hand, were in favour of a joint governance mechanism.

There are two main reasons for the wealthy countries resisting joint governance in this case. Firstly, Paragraph 51 of the COP decision on adopting the Paris Agreement states that Article 8 'does not involve or provide a basis for any liability or compensation'. (This decision is not part of the main text of the Paris Agreement; it is a separate COP decision to adopt the Agreement.) Paragraph 51 therefore forecloses the possibility of any future discussion/negotiation under CMA on the topic of liability and compensation. However, COP itself is not subject to such

a foreclosure. In other words, COP could return to this subject and revise its position.[22] Secondly, given that the US withdrew from the Paris Agreement in 2017 (rejoining in January 2021), it is, in effect, exempt from all discussions about the Agreement's potential obligations in relation to L&D. After intense negotiations at COP25, no consensus could be reached on the issue of governance: it was thus decided that the discussion would continue at COP26.

The way forward at COP26

In the face of increasing climate change impacts, the topic of L&D remains extremely important to vulnerable low-income countries. As such they will be looking to elevate the L&D agenda at COP26. Despite some positive outcomes, the Madrid COP failed to fully deliver what is needed, and could not sign off on the review of WIM due to the unresolved governance issue. Continued inaction and lack of support to address L&D may well be a significant contributing factor to a failed COP26.

Based on what is needed but has not been done, and the progress made until COP25, there are three crucial tasks for COP26.

First, when the Santiago Network on Loss and Damage was established at COP25 there was no indication as to its structure or a timeline for its operationalisation. The next thing on the to-do list must therefore be to fill in the detail of the Network's structure. Thus far the UNFCCC Secretariat has launched a website, and it held an informal consultation in April 2021. But the delivery of an up and running SNLD that caters to the needs of the vulnerable countries is a key task for COP26.

Second, L&D finance is not on the official agenda for negotiations at COP26. The issue will therefore have to be discussed at the political level rather than at the negotiation level. One possible step would be for the UK presidency to take the finance issue up in order to find ways forward that do not require all Parties at the COP to reach consensus. Instead, there could be a kickstart to finance from a coalition of nations willing to support the vulnerable countries in addressing L&D, maybe as a solidarity fund, thereby bypassing the liability and compensation narrative that has acted as a roadblock on this issue for so long. There is a currently evolving consensus that carbon pricing should be applied to mobilise funding for this purpose, independent of the support of richer countries.

Third, the outstanding issue of WIM governance has to be settled by agreeing to keep it under the authority of both the COP and the CMA. Attempts by the developed country Parties to put WIM solely under the CMA are completely unacceptable.

The prominence of adaptation and resilience as a key theme, and the omission of L&D from the official agenda, are serious obstacles to progress at COP26. For the conference to be considered a success from the perspective of the vulnerable countries and the wider global community that has supported the call to address the climate emergency, the UK Presidency would need to champion the global scaling up of financial support for L&D. At the time of writing, however, the strategy of the UK Presidency is to continue to conflate L&D with adaptation and resilience.

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Notes

1. L.M. Bouwer, 'Observed and projected impacts from extreme weather events: Implications for loss and damage', in R. Mechler, L. Bouwer, T. Schinko, S. Surminski and J. Linnerooth-Bayer (eds), *Loss and damage from climate change: Concepts, methods and policy* options, pp63-82, Springer 2019: https://doi.org/10.1007/978-3-319-72026-5_3; E. Boyd, R.A. James, R.G. Jones, H.R. Young and F.E. Otto, 'A typology of loss and damage perspectives', *Nature Climate Change*, Vol 7 No 10, 2017, pp723-729: https://doi.org/10.1038/nclimate3389; A. Durand and S. Huq, *Defining loss and damage: Key challenges and considerations for developing an operational definition*, International Centre for Climate Change and Development 2015: http://www.icccad.net/wp-content/uploads/2015/08/Defininglossanddamage-Final.pdf; A. Thomas and L. Benjamin, 'Management of loss and damage in small island developing states: Implications for a 1.5°C or warmer world', *Regional Environmental Change*, Vol 18 No 8, 2017, pp2369-2378: https://doi.org/10.1007/s10113-017-1184-7.

2. UNFCCC 2013, Non-economic losses in the context of the work programme on loss and damage (FCCC/TP/2013/2), UNFCCC 2013: https://unfccc.int/resource/docs/2013/tp/02.pdf.

3. M.R. Khan, 'Right to Development and Historical Emissions: A Perspective from the Particularly Vulnerable Countries', in L. Meyer and P. Sanklecha (eds), *Climate Justice: The Relevance of Historical Emissions*, Cambridge, Cambridge University Press 2017: https://doi.org/10.1017/9781107706835.011. The countries included as Annex I Parties (developed countries) to the UNFCCC are 'the industrialized countries that were members of the OECD in 1992, plus countries with economies in transition (the EIT Parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States: https://unfccc.int/parties-observers.

4. INC, 'Vanuatu: Draft Annex Relating to Article 23 (Insurance) for Inclusion in the Revised Single Text on Elements Relating to Mechanisms', INC 1991: https://unfccc.int/sites/default/files/resource/docs/a/wg2crp08.pdf.

5. United Nations Framework Convention on Climate Change, UNFCCC 1992: https://unfccc.int/sites/default/files/conveng.pdf.

6. *Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007* (FCCC/CP/2007/6/Add.1), UNFCCC 2008: https://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf.

7. *Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013* (FCCC/CP/2013/10/Add.1), UNFCCC 2014: https://unfccc.int/sites/default/files/resource/docs/2013/cop19/eng/10a01.pdf.

8. M.F. Hossain, D. Falzon, M.F. Rahman and S. Huq, 'Toward climate justice: Making the polluters pay for climate change', in S. Kenehan & C. Katz (eds), *Climate justice and feasibility: Climate politics, principles of justice, and feasibility*, Rowman & Littlefield International 2021.

9. R. Mechler, C. Singh, K. Ebi, R. Djalante, A. Thomas, R. James, P. Tschakert, M. Wewerinke-Singh, T. Schinko, D. Ley, J. Nalau, L.M. Bouwer, C. Huggel, S. Huq, J. Linnerooth-Bayer, S. Surminski, P. Pinho, R. Jones, E. Boyd, A. Revi, 'Loss and damage and limits to adaptation: Recent IPCC insights and implications for climate science and policy', *Sustainability Science*, Vol 15 No 4, 2020, pp1245-51: https://doi.org/10.1007/s11625-020-00807-9.

10. UN Office for Disaster Risk Reduction and Centre for Research on the Epidemiology of Disasters, *Human cost of disasters: An overview of the last 20 years 2000-2019*, UNDRR 2020: https://www.undrr.org/media/48008/download. The figures in this and the following paragraph are all from this same source.

11. Oxfam, *Who takes the heat? Untold stories of climate crisis in the Horn of Africa and Mozambique*, Oxfam 2019: https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620870/mb-who-takes-the-heat-230919-en.pdf.

12. UNDRR and CRED, see note 10.

13. T. Hirsch, M.R. Bijoy, O.B. Etubi, L.K.J. Imuton, G. Jiva, A. Masaba, S. Minninger, S. Mwanga, K. Orach, M.M. Rahman, W. Rajabu, G. Schmidt, *Climate finance for addressing loss and damage: How to mobilize support for developing countries to tackle loss and damage*, Brot für die Welt 2019: https://reliefweb.int/sites/reliefweb.int/files/resources/ClimateFinance_LossDamage.pdf.

14. IPCC, 'Summary for policymakers', in *Global Warming of 1.5 °C, an IPCC Special*

Report on the Impacts of Global Warming of 1.5 °C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty, Intergovernmental Panel on Climate Change 2018: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf.

15. Bouwer, 'Observed and projected impacts from extreme weather events', see note 1.

16. UNDRR and CRED 2020, see note 10.

17. D. Pierre-Nathoniel, L. Siegele, L. Roper and I. Menke, 'Loss and damage at COP25 - a hard fought step in the right direction', *Climate Analytics* 2019: https://climateanalytics.org/blog/2019/loss-and-damage-at-cop25-a-hard-fought-step-in-the-right-direction/.

18. 'Group of 77 and China Submission on the Review of the WIM and the Report of the WIM Executive Committee' (CRP.SBSTA.i4_SBI.9), G77 and China 2019: https://unfccc.int/sites/default/files/resource/CRP.SBSTA_.i4_SBI.9.pdf.

19. *Report of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement on its second session, held in Madrid from 2 to 15 December 2019* (FCCC/PA/CMA/2019/6/Add.1), UNFCCC 2020: https://unfccc.int/sites/default/files/resource/cma2019_06a01E.pdf.

20. E. Calliari, L. Vanhala, L. Nordlander, D. Puig, F. Bakhtiari, M.F. Hossain, S. Huq and M.F. Rahman, 'Article 8: Loss and damage', in G.V. Calster and L. Reins (eds), *The Paris Agreement on climate change: A commentary*, Edward Elgar Publishing 2021 (p480): https://doi.org/10.4337/9781788979191.00017; E. Calliari, S. Surminski and J. Mysiak, 'The politics of (and behind) the UNFCCC's loss and damage mechanism', in R. Mechler, L. Bouwer, T. Schinko, S. Surminski and J. Linnerooth-Bayer (eds), *Loss and damage from climate change: Concepts, methods and policy options*, pp155-178, Springer 2019: https://doi.org/10.1007/978-3-319-72026-5_6.

21. Article 8, Paris Agreement, UNFCC 2015: https://unfccc.int/sites/default/files/english_paris_agreement.pdf. CMA is the acronym for 'Conference of the Parties serving as the meeting of the Parties to this Agreement'.

22. A. Sharma, A. Michaelowa, A. Espelage, J. Allan, and B. Müller, *COP25 key outcomes*, European Capacity Building Initiative 2020: https://ecbi.org/sites/default/files/COP25%20Key%20Outcomes_0.pdf.