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Exploring the Inequities of Climate Finance Mannat Jaspal and Terri B. Chapman

Abstract

Over the last few decades, a global climate finance architecture has emerged to channel domestic and international funds towards climate change mitigation and adaptation efforts. However, mobilising climate capital at scale has been a challenge, particularly in the Global South, since the current financial system is inept at including climate change metrics in its capital allocation and disbursement processes, and applying a climate justice prism in its investment decision-making. This brief aims to analyse and assess the global climate financial flows across a disaggregated set of parameters to lay bare the contextual realities of financial inequities that expose a climate financial system intrinsically skewed against a fair and inclusive energy transition in developing nations.

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he impacts of climate change are already being felt in all regions, but disproportionately so in lower-income countries. This is while a small handful of high-income countries are largely responsible for causing climate change.

Meeting emission-cutting targets and adapting to the already vast impacts of climate change have high costs. Investments in energy transitions alone are expected to cost an additional US\$830 billion a year if the 1.5-degree Celsius target is to be met.¹ But how are those costs to be borne out? Over the last three decades, an international climate finance architecture has emerged to channel domestic and international funds towards mitigation and adaptation efforts. A successful climate finance system will have to not only mobilise vast quantities of capital at scale, but also lay emphasis on the direction of capital flows, the conditions under which they are moved, and the conditionalities attached, which are of critical importance in creating a just financial system for addressing climate change. Who does this architecture serve most, who is left behind, and how is it shaping inequality between countries? This paper looks specifically at international climate financial flows from the prism of climate justice and scrutinises how particular features perpetuate and exacerbate inequalities between countries. small number of countries are responsible for the vast majority of greenhouse gas (GHG) emissions today, with advanced economies emitting appreciably more CO2 per person than lower and middle-income countries. There are considerable differences in historical contributions to emissions, with advanced economies exploiting the majority of the atmospheric commons. Moreover, while climate impacts are felt across continents, they disproportionately affect lower-income countries and the least advantaged populations within them. Developing countries have recognised these inequities and have sought greater climate justice for decades.² While the Paris Agreement recognises differentiated responsibilities and respective capabilities between countries, major gaps in how this applies to finance remain.³

Current Emissions Per-Capita

Human activities, namely GHG emissions, cause climate change. There are vast differences between countries regarding how much they are emitting. The seven highest emitters account for around 60 percent of total emissions.⁴ China emits nearly a third of total GHG emissions (26.1 percent), followed by the US (13.4 percent), the European Union (EU; 7.6 percent), India (6.5 percent), Russia (5.6 percent), Japan (2.6), and Brazil (2.1 percent).⁵

However, looking at total emission by country conceals the importance of country size. For example, India is one of the largest absolute emitters, but when considered on a per-capita basis, India ranks 104th.⁶ Hundreds of millions of people in India still lack electricity, making it difficult to compare growth in emissions to high-income countries. Qatar, New Caledonia, Mongolia, Trinidad and Tobago, and Brunei are the top emitters on a per-capita basis.⁷ The average person in Qatar emits 37.02 metric tons of emissions each year, 30 times more than someone in Sri Lanka, Guatemala, or Paraguay. The 50 least emitting countries per person emit less than one metric ton of CO2 per capita, and all are low and lower-middle-income countries.⁸

Cumulative Emissions

The impact of GHG emissions is cumulative, meaning all historic emissions determine the extent of climate impacts today, not just the current level of emissions.⁹ For this reason, the historical contributions of emissions by country are essential for attributing responsibility for climate change to countries. About 86 percent of the climate 'budget' or the atmospheric commons has already been used up.¹⁰ The US is the highest historical emitter, accounting for around 20 percent of cumulative emissions,¹¹ followed closely by the EU (17.3), China (12.1), and Russia (6.2).¹² Another study offers estimates that far exceed earlier assessments, attributing responsibility for climate change impact as follows: the US (40 percent), the EU (29 percent), the rest of Europe (13 percent), other Global North countries (10 percent), and the entire Global South (8 percent).¹³

Together, historical and current emissions per capita provide a proxy for the extent to which countries are responsible for climate change and its impacts. The vast disparities between the advanced economies and developing economies are stark. Over the last three decades, there has been an increasing call for the Global North to be responsible for covering the costs of adaptation in the Global South, which is disproportionately bearing the consequences of climate change today.¹⁴

Social Impacts of Climate Change

The need to adapt is already evident in much of the developing world where communities are being hit by storms of increasing intensity, and where rainfall shocks, flooding and heat are destroying critical infrastructure, devastating crops, drying up water sources, impacting incomes, demolishing homes, and impacting health. For example, Cyclone Idai led to the loss of more than US\$39 million in income and the destruction and damage to 240,000 homes in Mozambique in March 2019.¹⁵ Hurricane Maria damaged an estimated 90 percent of the housing stock in Dominica in September 2017.¹⁶ As a result of such catastrophic events and other slower-onset climate-related changes, costs are expected to be between US\$70-100 billion annually,¹⁷ increasing to US\$280-500 billion over the next three decades.¹⁸

The 2015 Paris Agreement recognised the need to address losses and damages caused by climate change. However, high-income countries have consistently pushed back against the inclusion of language that will make them liable to

compensate. Emissions must also be considered in the broader context of industrial development. Countries in the Global North have grown their economies and raised incomes without regard for the climate impacts of that process. Today, developing countries are faced with the same need and desire to grow their economies and improve living standards without the luxury of burning carbon to do so.

The causes of climate-related impacts are driven by historical and present emissions, mainly from a small group of high-income countries. As developing countries aim to adapt to these impacts, financing becomes a critical question and determinant. This section has outlined why a justice lens is needed for considering international climate finance, including the fact that emissions today are significantly higher in high-income countries; per-capita emissions are vastly unequal, with advanced economies emitting much more CO2 per person than lower and middle-income countries; a small handful of industrialised countries are responsible for most historical emissions, leaving little room for other countries to develop; and because the impacts of climate change are being felt disproportionately in poorer countries than in the countries that are causing climate change. Within this context, the following section looks at the international climate financial flows and articulates specific features of the system that create or deepen inequality between countries.

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limate finance flows from all sources reached US\$632 billion in 2019/2020.¹⁹ While annual climate finance has grown almost 74 percent since 2011, we are still perilously far from the mark needed to limit global warming to below 1.5 degree Celsius, with an estimated increase of 588 percent to US\$4.35 trillion annually by 2030 considered critical to meet the set global climate targets.²⁰ At the same time, the volume of climate finance needs to significantly scale up the conditionalities that drive and determine the quality of credit also needs evaluation and reconfiguration to ensure greater justice.

Climate finance can be channelled from multiple sources, both public (such as the government, state owned financial institutions, climate funds, and multilateral, bilateral, and national development financial institutions) and private (commercial financial institutions, corporations, wealth funds, institutional investors, households, and individuals).²¹ The nature of each source of capital in terms of scale and quality of credit is variable and holds significant bearing on optimal capital allocation and marginal environmental impact of investment dollars.

Therefore, it is important to analyse and assess climate financial flows across a disaggregated set of parameters to lay bare the contextual realities of financial inequities that expose a climate financial architecture that is intrinsically skewed against a fair and inclusive energy transition in developing nations.

Disaggregating Climate Financial Flows

Shewed at Source: While the public sector provided 51 percent (US\$321 billion) of annual climate finance in 2019, the private sector matched in efforts at 49 percent. But what is interesting is that private finance funded most of the climate projects in the economically advanced regions of Western Europe, the US and Canada, and Other Oceania, while the rest sourced their climate investments primarily from public sources.²² Since the scale up in climate finance is expected to come from the private sector, altering investment patterns and incentivising private sector to invest in emerging economies becomes even more crucial. However, private capital, without negotiating the right terms in the contractual agreements, may risk leaving the poorest sections of the low-income countries shielded from access to opportunities for development.²³

In addition, relying heavily on public investments can lead to diversion of development aid to climate finance, which may lead to vulnerable sections and communities competing for limited resources and funding.

Geographical Disparity: The majority of climate finance mobilised remains in its country of origin. Approximately 60 percent of the US\$291 billion of outflow in climate commitments from the Organisation for Economic Co-operation and Development (OECD) in 2018 was reinvested in the OECD countries.²⁴ In 2019 as well, three-quarters of the tracked climate investments raised was spent within domestic territories. The lion's share was directed towards East Asia and Pacific, Western Europe, and North America, while only a quarter went to Sub-Saharan Africa, South Asia, Other Oceania, Middle East and North Africa, Latin America and Caribbean, and Central Asia and Eastern Europe.²⁵ On average, only 20.5 percent of climate related development finance reported to the OECD went to least developed countries in 2017-18, and merely 3 percent to small island developing states.²⁶ Clearly, both the scale of financial flows and their direction in their current form are illustrative of international inequities inherent in the climate finance system.

Debt Bias: Debt, as a financial instrument, continues to remain the preferred and conventional means for the provision of climate finance. Almost 61 percent (US\$384 billion) of climate finance raised in 2019-20 was in the form of debt, of which 75 percent was at the project-level market-rate and merely 12 percent was at the low-cost project level from public institutions. Close to 31 percent was raised by balance sheet financing majorly by commercial financial institutions. The other end of the spectrum has equity investments at 33 percent of the overall mix, and grants comprising of only 6 percent of the total flows.²⁷ Given that many developing countries are already under debt distress, exacerbated by the pandemic, debt-laden investments are unsustainable alternatives that often come with unfavourable conditionalities, (for instance, the need for performance-focused results or sectoral limitations) and do not always align with the needs of the developing countries or their most vulnerable populations.

Adaptation is Relatively Ignored: Mitigation finance comprised of approximately 90 percent of the total climate finance provided and mobilised by developed countries, while adaptation finance stood at an abysmal 7.4 percent. A further 2.5 percent of commitments went to projects that served both purposes.²⁸

Global warming mitigation efforts that bring universal benefits make the core of climate negotiations and financing, as opposed to adaptation whose benefits are more local. This has implications for the mode of climate financing, such that mitigation efforts are driven by debt funding and almost all adaptation finance gets sourced by public sources (14 percent of total public finance flows in 2019-20).²⁹ Given that low- and middle-income countries are most in need of adaptation financing, lack of capital access at scale, particularly from private sources, leaves them severely vulnerable to impending climate shocks.

Sectoral Preferences: In 2019, the energy and transport sectors accounted for almost half of total climate finance provided and mobilised.³⁰ Private investors provided nearly 54 percent of all mitigation finance flows to the renewable energy sector in 2019-20. Low carbon transport represented 31 percent of the total mitigation finance in the same period.³¹ Given that energy and transport projects have become commercially viable today, it is easier to draw a business case for them to attract private-sector players, in comparison to say projects on agriculture, forestry, or land-use. Since many developing economies rely more heavily on the agricultural sector, investments and innovation in these industries will strongly weigh on the outcome of cumulative emission reduction at both the global and local level.

Unclear Status of the US\$100-Billion Commitment

The COP16 Accord emphasised the imperative for developed countries to commit meaningful climate action and finance to support the transition in developing economies. The Green Climate Fund was set up with the goal of jointly mobilising US\$100 billion in new and additional funds per year by 2020, in line with the idea of climate justice, and has since formed the bedrock of international public finance and cooperation on climate action.³² However, as estimated by a 2018 Intergovernmental Panel on Climate Change report, developing countries together will need approximately US\$600 billion per year between 2020 and 2050 by way of additional investment in the energy sector alone to achieve the transition necessary.³³ Therefore, the amount of US\$100 billion is paltry and highly insufficient to bridge the transition financing deficit in developing countries, and the commitment deliverable has been pushed³⁶ by a few years, leaving poorer nations with more promises than guarantees.

Policy Recommendations

he current financial system is inept at including climate change metrics in its capital allocation and disbursement processes and does not apply a climate justice prism in making investment decisions. The continued reliance on financial mechanisms to pursue development objectives lays bare the limitations of financial tools to accomplish climate parity and calls for a new paradigm that will allow an efficient allocation of capital combined with an optimal pathway for carbon reduction, particularly in the Global South. The private sector has little incentive to invest from a lens of climate justice and hence, financial mechanisms need to be reconfigured by active policymaking at an international level. Public finance should be leveraged to catalyse and direct private flows to low- and middle-income countries, where the marginal cost of reducing emissions is much lower and the environmental impact can be maximised at least cost.

Currently, the different organisations in the climate finance ecosystem all work in silos with competing mandates, which makes delivery and tracking of finance difficult. A Green Bank, instituted by a global body such as the United Nations Framework Convention on Climate Change, offering services such as co-lending, risk mitigation, and credit enhancements (like guarantees, first loss capital, and green bonds)³⁷ can prove to be a comprehensive solution for consolidating and routing both public and private capital towards mitigation and adaptation projects, particularly in developing countries. It can also aid in promoting standardisation of frameworks, transparency in disclosures, and innovation of financial instruments and local institutions. Platforms such as the G20—particularly with the troika formed by Indonesia, India, and Brazil must push forward the agenda of climate finance and jointly influence other member-nations in defining and implementing inclusive policies to help level the playing field by serving the interests of the Global South in the pursuit of an equitable and just climate transition. The centrality of climate justice in climate finance negotiations and transactions needs to be revisited and reinstated to accelerate the pathway to carbon reduction and deliver the promises of creating an equitable and sustainable world economic order. **ORF**

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- 1 Lauren Gifford and Chris Knudson, "Climate finance justice: International Perspectives on climate policy, social justice, and capital," *Climatic Change* 161 (2020), pp. 243-249, https:// link.springer.com/article/10.1007/s10584-020-02790-7.
- 2 Mizan Khan et al., "Twenty-five years of adaptation finance through a climate justice lens," *Climatic Change 161*, (2020), pp. 251-269, https://link.springer.com/article/10.1007/s10584-019-02563-x.
- 3 Khan et al., "Twenty-five years of adaptation finance through a climate justice lens"
- 4 "Global Emissions," Center for Climate and Energy Solutions, https://www.c2es.org/content/ international-emissions/.
- 5 Center for Climate and Energy Solutions, "Global Emissions,"
- 6 "Each Country's Share of CO2 Emissions," Union of Concerned Scientists, https://www. ucsusa.org/resources/each-countrys-share-co2-emissions.
- 7 "Global Carbon Atlas," Global Carbon Project, http://www.globalcarbonatlas.org/en/CO2emissions.
- 8 Global Carbon Project, "Global Carbon Atlas"
- 9 Simone Evans, "Analysis: Which countries are historically responsible for climate change?" Carbon Brief, October 5, 2021, https://www.carbonbrief.org/analysis-which-countriesare-historically-responsible-for-climate-change#:~:text=Historical%20responsibility%20 for%20climate%20change,warming%20that%20has%20already%20occurred.
- 10 Evans, "Analysis: Which countries are historically responsible for climate change?"
- 11 Evans, "Analysis: Which countries are historically responsible for climate change?"
- 12 Marcia Rocha et al., *Historical Responsibility for Climate Change from countries emissions to contribution to temperature increases*, Potsdam Institute for Climate Impact Research , 2015, https://climateanalytics.org/media/historical_responsibility_report_nov_2015.pdf.
- 13 Jason Hickel, "Quantifying national responsibility for climate breakdown: an equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary," *The Lancet Planetary Health* 4, no. 9 (2020), pp. 399-404, https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30196-0/fulltext.
- 14 Khan et al., "Twenty-five years of adaptation finance through a climate justice lens"
- 15 Global Facility for Disaster Reduction and Recovery, *Mozambique Cyclone Idai: Post Disaster Needs Assessment*, GFDRR, 2019, p. 19, https://www.gfdrr.org/en/publication/mozambique-cyclone-idai-post-disaster-needs-assessment-full-report-2019.

Endnotes



- 16 Government of the Commonwealth of Dominica, Post-Disaster Needs Assessment: Hurricane Maria, Government of Dominica, 2017, p. 5, https://reliefweb.int/sites/reliefweb.int/files/ resources/dominica-pdna-maria.pdf.
- 17 M. Chambwera et al., Economics of Adaptation. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, (Cambridge: Cambridge University Press, 2014), pp 945–977.
- 18 Gifford and Knudson, "Climate finance justice: International Perspectives on climate policy, social justice, and capital"
- 19 Barbara Buchner et al., "Global Landscape of Climate Finance 2021," Climate Policy Initiative, https://www.climatepolicyinitiative.org/publication/global-landscape-of-climatefinance-2021/.
- 20 Climate Policy Initiative, "Global Landscape of Climate Finance 2021"
- 21 Barbara Buchner et al., "Global Landscape of Climate Finance 2019," Climate Policy Initiative, https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2019/.
- 22 Climate Policy Initiative, "Global Landscape of Climate Finance 2021"
- 23 Gifford and Knudson, "Climate finance justice: International Perspectives on climate policy, social justice, and capital"
- 24 Akshay Mathur and Mannat Jaspal, "The geoeconomics of climate finance", *Observer Research Foundation*, November 12, 2021, https://www.orfonline.org/expert-speak/the-geoeconomics-of-climate-finance/.
- 25 Climate Policy Initiative, "Global Landscape of Climate Finance 2021"
- 26 Climate Finance Shadow Report 2020, "Assessing Progress Towards the \$100 billion commitment"
- 27 Climate Policy Initiative, "Global Landscape of Climate Finance 2021"
- 28 Climate Policy Initiative, "Global Landscape of Climate Finance 2021"
- 29 Climate Policy Initiative, "Global Landscape of Climate Finance 2021"
- 30 OECD, Climate Finance Provided and Mobilized by Developed Countries: Aggregate trends updated with 2019 data, Climate Finance and the USD 100 Billion Goal, OECD Publishing, Paris, 2021, https://doi.org/10.1787/03590fb7-en.
- 31 Climate Policy Initiative, "Global Landscape of Climate Finance 2021"
- 32 Alina Averchenkova et al., *Delivering on the \$100 Billion Climate Finance Commitment and Transforming Climate Finance*, United Nations, 2020, https://www.un.org/sites/un2.un.org/files/100 billion climate finance report.pdf.

Endnotes



- 33 "Global Warming of 1.5°C," IPCC, https://www.ipcc.ch/sr15/.
- 36 Gifford and Knudson, "Climate finance justice: International Perspectives on climate policy, social justice, and capital"
- 37 Kathy Julik-Heine, Sri Sekar, Abbey Pizel, "Climate finance commitments aren't enough. We need new tools to unlock investment," PreventionWeb, December 6, 2021, https://www. preventionweb.net/news/climate-finance-commitments-arent-enough-we-need-new-toolsunlock-investment.

Endnotes



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