

CIGI Papers No. 152 – November 2017

Equitable Allocation of Climate Adaptation Finance Considering Income Levels Alongside Vulnerability

Patrícia Galvão Ferreira



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About the Author

Patrícia Galvão Ferreira is a former post-doctoral fellow with CIGI's International Law Research Program. While at CIGI, she researched transnational regulatory initiatives to address climate change, including legal issues related to the United Nations Framework Convention on Climate Change. She is also a Law Foundation of Ontario Scholar in the Faculty of Law at the University of Windsor, with expertise in international environmental law.

About the International Law Research Program

The International Law Research Program (ILRP) at CIGI is an integrated multidisciplinary research program that provides leading academics, government and private sector legal experts, as well as students from Canada and abroad, with the opportunity to contribute to advancements in international law.

The ILRP strives to be the world's leading international law research program, with recognized impact on how international law is brought to bear on significant global issues. The program's mission is to connect knowledge, policy and practice to build the international law framework — the globalized rule of law — to support international governance of the future. Its founding belief is that better international governance, including a strengthened international law framework, can improve the lives of people everywhere, increase prosperity, ensure global sustainability, address inequality, safeguard human rights and promote a more secure world.

The ILRP focuses on the areas of international law that are most important to global innovation, prosperity and sustainability: international economic law, international intellectual property law and international environmental law. In its research, the ILRP is attentive to the emerging interactions among international and transnational law, Indigenous law and constitutional law.

Acronyms and Abbreviations

AF	Adaptation Fund
AR5	Fifth Assessment Report of the IPCC
CDM	Clean Development Mechanism
COP	Conference of the Parties
GAVI	Global Alliance for Vaccines and Immunizations
GCF	Green Climate Fund
GEF	Global Environment Facility
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
GNI	Gross National Income
HDI	Human Development Index
IPCC	Intergovernmental Panel on Climate Change
LDCs	least developed countries
LDCF	Least Developed Countries Fund
NAPAs	National Adaptation Programs of Action
OECD	Organisation for Economic Co-operation and Development
SCCF	Special Climate Change Fund
SIDS	small island developing states
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

Executive Summary

The 2015 Paris Agreement elevates the goal of climate adaptation to the same level of importance as the goal of climate mitigation, and emphasizes the need to mobilize finance for climate adaptation in developing countries. As of February 2017, however, the financial gap for climate adaptation remained monumental. With the administration of US President Donald Trump threatening to interrupt American financial flows to the climate regime, developing countries are expressing growing concern about the ability of developed country parties to mobilize enough finance to meet the sizeable costs of their climate adaptation needs.

In this context, the question of how to equitably allocate scarce adaptation finance among competing developing countries has gained renewed relevance. The operating entities serving the financial mechanism of the United Nations Framework Convention on Climate Change (UNFCCC), such as the Global Environment Facility (GEF), the Adaptation Fund (AF) and the Green Climate Fund (GCF), have granted two groups of countries — the small island developing states (SIDS) and the least developed countries (LDCs) — priority access to adaptation resources. Adaptation funds do not clearly differentiate among developing countries beyond these two priority group categories.

The primary criterion for allocation of adaptation finance among developing countries outside the LDCs or SIDS groups has been “vulnerability to the adverse effects of climate change.” However, political agreement on the concept of climate vulnerability has proven elusive, and therefore operating entities have considerable discretion in deciding which countries are considered particularly vulnerable. In practice, high-income developing countries such as Chile, with higher capacity to mobilize private finance and domestic public finance for climate adaptation than lower-middle-income countries such as Guatemala, have been able to access a sizeable share of scarce adaptation finance.

The current formula has proven insufficient to address important equity concerns in the allocation of adaptation finance among developing countries. This paper argues that the operating entities of the financial mechanism serving the Paris Agreement,

especially the GCF, should incorporate an objective, income-based criterion based on gross national income (GNI) per capita to complement the subjective criterion of vulnerability as primary guidance, ensuring a more equitable allocation of scarce climate adaptation finance to those countries with lower financial capabilities.

Introduction

The twenty-second session of the Conference of the Parties (COP 22) to the UNFCCC, held in Marrakesh in November 2016, placed into evidence both the magnitude of projected costs to cover adaptation needs in developing countries, and the sizeable gap in financial resources needed to cover these costs. The matter of how to equitably allocate adaptation finance among developing countries was not resolved during COP 21, which produced the 2015 Paris Agreement, and it remained unresolved after Marrakesh.

SIDS and LDCs have been the only two groups of countries given priority access to adaptation finance. Which criteria should the financial mechanisms serving the Paris Agreement use for prioritizing the allocation of adaptation funds among other potentially competing developing countries? So far, the primary criterion has been the level of vulnerability to climate change impacts. Parties have not agreed on a definition for the concept of vulnerability. In practice, all indications point to significant global adaptation funds being invested in developing countries with higher income levels, which often have comparatively lower levels of geographical vulnerability, lower levels of socio-economic vulnerability, and greater capacity to mobilize domestic financial resources and private finance for climate adaptation.

This paper argues that the operating entities of the financial mechanism serving the Paris Agreement should adopt an objective criterion linked to income levels to complement the broad criterion of vulnerability, thus ensuring a more equitable allocation of scarce adaptation resources among developing countries. This is especially the case for the GCF, which is expected to become the most important source of international public finance for adaptation.

This paper is divided as follows: first, it contextualizes the growing political and normative importance given to adaptation in the climate regime, which stands in contrast to the unresolved challenge of reducing the sizeable deficit in adaptation finance available to developing countries. Second, it reviews the state of the current legal and policy framework for allocating scarce adaptation finance in the climate regime. Third, the paper discusses the limitations of “vulnerability” as the primary criterion for allocation of scarce adaptation finance among competing developing countries. Fourth, it considers the experience of international development financial institutions such as the World Bank and the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) in adopting equity criteria to guide funding allocation. The paper closes with an argument for the incorporation of an income-based criterion to complement the criterion of vulnerability in the GCF and other operating entities of the UNFCCC financial mechanism.

Climate Adaptation and Adaptation Finance: From Periphery to Centre Stage

The Paris Agreement, adopted at COP 21 to the UNFCCC in December 2015, elevated climate adaptation to the legal core of the climate regime, alongside climate mitigation. According to the Intergovernmental Panel on Climate Change (IPCC), climate mitigation is “a human intervention to reduce the sources or enhance the sinks of greenhouse gases,”¹ while climate adaptation is “the process of adjustment to actual or expected climate and its effects.”²

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- 1 IPCC, 2014: “Summary for Policymakers” in O Edenhofer et al, eds, *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK: Cambridge University Press, 2014) at 4.
 - 2 IPCC, 2014 “Summary for Policymakers” in CB Field et al, eds, *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, UK: Cambridge University Press, 2014) at 5.

Unlike the 1997 Kyoto Protocol³ and the 1992 UNFCCC,⁴ which established only mitigation as a core legal goal, article 2 of the Paris Agreement included a global goal to increase “the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production.”⁵ The adaptation goal has been given the same legal priority as the long-term mitigation goal to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels.”⁶

Other elements of the Paris Outcome, formed by the Paris Agreement and the decision which has legally adopted it, reinforce the important position now given to adaptation in the climate regime. Article 7 of the Paris Agreement is entirely dedicated to climate adaptation, departing from the approach in the texts of the UNFCCC and Kyoto Protocol, where adaptation was at best a secondary objective. Article 7 of the Paris Agreement unequivocally establishes that adaptation “is a key component of and contributes to the long-term global response to climate change.”⁷ Article 2 of the Paris Agreement also introduces a third goal to make “finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.”⁸ The language of the financial goal emphasizes that support to adaptation action is key to promote a climate-resilient development pathway. Article 9 of the Paris Agreement, on climate finance, reiterates that “Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation.”⁹

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- 3 *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 11 December 1997, 2303 UNTS 148, Annex B (entered into force 21 May 1994) [*Kyoto Protocol*].
 - 4 *United Nations Framework Convention on Climate Change*, 9 May 1992, 1771 UNTS 107 (entered into force 21 March 1994) [UNFCCC], online: <unfccc.int/resource/docs/convkp/conveng.pdf>.
 - 5 UNFCCC, *Adoption of the Paris Agreement*, 12 December 2015, UN Doc FCCC/CP/2015/L.9/Rev.1, Dec 1/CP.21 (entered into force 4 November 2016) [*Paris Agreement*]. The agreement will (in time) become a separate, binding instrument; see article 2(b) of the Paris Agreement.
 - 6 *Ibid*, supra note 5, art 2(a).
 - 7 *Ibid*, art 7(2).
 - 8 *Ibid*, art 2(c).
 - 9 *Ibid*, art 9(1). See also article 9(4), which reiterates: “The provision of scaled-up financial resources should aim to achieve a balance between adaptation and mitigation.”

The Paris Agreement represents a decisive step in what has proved a long process to change the legal and political landscape for climate adaptation and for adaptation finance in the climate regime. Adaptation took the back seat in the climate regime for almost a decade, as many considered it a distraction from the crucial goal of climate mitigation.¹⁰ In the aftermath of the adoption of the UNFCCC, a significant number of parties agreed to the urgency of promoting the convention's core goal of climate mitigation, and worked toward the establishment of a dedicated legal instrument to promote emissions reductions by developed countries, the 1997 Kyoto Protocol. Parties to the UNFCCC did not sustain the same level of efforts to establish an equivalent dedicated protocol to promote climate adaptation at the time. Climate adaptation would progressively gain more space in the global efforts to address climate change, as new scientific studies demonstrated the magnitude of the impacts and risks of climate change, and as the Kyoto Protocol proved unable to promote significant global emissions reductions.¹¹

The gradual progression of both adaptation action and adaptation finance from peripheral objectives to central goals of the global climate regime has happened in tandem. This parallel development stems from two inverse relationships. First, the inverse relationship between contributions to the causes of climate change and vulnerabilities to the impacts and risks of climate change. Often, the countries that contribute with larger shares of absolute or per capita greenhouse gas emissions, such as the United States and countries in the European Union, are among the least vulnerable to the impacts or risks of climate change.¹² The second inverse relationship is the one between the contribution to the causes of climate change and the capability to adapt to its impacts and risks. The countries that have least contributed to climate change, such as Bangladesh or Guatemala, tend to be the countries least capable (financially and technologically) to adapt. As the evidence of the rising need for climate

adaptation has mounted, in the wake of the failure of large emitters (developed countries, as well as emerging economies with growing emissions) to sufficiently mitigate, so have the indications that those countries with lower contributions to climate change would need international financial support to address climate impacts and risks.

The first important milestone for climate adaptation and adaptation finance in the global regime would happen at COP 7, in 2001 in Marrakesh, almost a decade after the creation of the framework convention.¹³ COP 7 dedicated special attention to the "specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, which would have to bear a disproportionate or abnormal burden under the Convention."¹⁴ The 2001 Marrakesh Accords established guidelines for developing countries to prepare National Adaptation Programs of Action (NAPAs) that would help identify national and global adaptation needs.¹⁵

To address the special adaptation needs of the LDCs, COP 7 established an LDC group of experts to propose future measures to support this specific set of developing countries. During COP 7, three funds were created to support climate action in developing countries, with all three funds expressing the intention to devote special attention to climate adaptation: the Least Developed Countries Fund (LDCF); the Special Climate Change Fund (SCCF); and the AF. COP 13, in 2007, adopted the Bali Action Plan, which included adaptation as one of the four key pillars of climate action, alongside mitigation, technology transfer and finance.¹⁶

The controversial COP 15, in Copenhagen in 2009, has often been considered an example of diplomatic malfunction, since it failed to generate the expected, new, legally binding multilateral

10 MR Khan & JT Roberts, "Adaptation and international climate policy," (2013) 4:3 *Wiley Interdisciplinary Reviews: Climate Change* 171 at 171 [Khan & Roberts]; A Aersson & N Hall, "Global climate adaptation governance: Why is it not legally binding?" (2017) *Eur J Intl Relations* 1.

11 Khan & Roberts, *supra* note 10 at 15.

12 Glenn Althor, James EM Watson & Richard A Fuller, "Global mismatch between greenhouse gas emissions and the burden of climate change" (2016) *Scientific Reports* 6.

13 For an account of the history of international climate finance, see Alexander Zahar, *Climate Change Finance and International Law* (London, UK: Routledge, 2016).

14 UNFCCC, *Implementation of Article 4, paragraphs 8 and 9, of the Convention (decision 3/CP.3 and Article 2, paragraph 3, and Article 3, paragraph 14, of the Kyoto Protocol)*, (2001) Dec 5/CP.7 at 32, online: <<http://unfccc.int/resource/docs/cop7/13a01.pdf#page=32>>.

15 UNFCCC, *Bali Action Plan*, (2007) Decision 1/CP.13 at 3, online: <<https://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf>>.

16 Khan & Roberts, *supra* note 10.

climate agreement to succeed the Kyoto Protocol post-2020.¹⁷ Recent opinion makes the compelling argument that the Copenhagen Accord resulting from COP 15 in fact contained all the central elements that would lead parties to the UNFCCC to successfully adopt the Paris Agreement six years later, in December 2015.¹⁸ The late compromise between the United States and emerging economies that opened the way for the Copenhagen Accord planted the seeds of the important paradigm shift that is reflected in the Paris Agreement, which established a non-legally binding, universally applied system of self-defined commitments for developed countries and developing countries alike (replacing the Kyoto Protocol system of exclusive mitigation obligations for developed countries).¹⁹

Although most parties to the UNFCCC only “took notice” of the Copenhagen Accord in 2009, refusing to endorse it as a legal document at the time due to strong disagreement with what was considered a non-inclusive process, they would officially embrace the main elements of the Copenhagen Accord in future COPs. In Copenhagen, emerging economies and other developing countries agreed to participate more significantly in the global mitigation efforts, albeit with voluntary pledges, in exchange for commitments by developed countries to continue taking the lead in climate action, commensurate with their responsibilities for climate change and their capabilities. Developed countries agreed to adopt economy-wide emissions reductions in their voluntary and self-defined mitigation pledges,²⁰ while providing finance for climate mitigation and adaptation,²¹ as well as technology transfer and capacity building to developing countries. As part of the compromise, developed countries agreed to bring adaptation to the core of the

climate regime. The Copenhagen Accord had just one paragraph entirely dedicated to adaptation.²²

Another crucial element of the 2009 Copenhagen compromise was the pledge by developed countries to mobilize US\$100 billion per year in climate finance for developing countries by 2020, and to balance the allocation of this climate finance between adaptation and mitigation.²³ Following Copenhagen, COP 16 in 2010 approved the Cancun Agreements, which included the creation of an Adaptation Framework, albeit as a mechanism of the UNFCCC, not a stand-alone protocol such as Kyoto.²⁴ The 2009 Copenhagen Accord and subsequent COP decisions have influenced the design of the 2015 Paris Agreement’s provisions on adaptation and adaptation finance. Article 7 of the Paris Agreement, entirely dedicated to adaptation, recognizes that the current needs for adaptation are significant, and stresses the “importance of support for and international cooperation on adaptation efforts.”²⁵ Paragraph 52 of the Adoption of the Paris Agreement expressly states that “financial resources provided to developing country Parties should enhance the implementation of their policies, strategies, regulations and action plans and their climate change actions with respect to both mitigation and adaptation.”²⁶

Despite the high political and legal profile parties have given to climate adaptation and adaptation finance in the current climate regime, there is presently a significant adaptation finance gap that greatly constrains the capacity of many developing countries to adequately address their adaptation needs. This is the case not only for LDCs and SIDS, but also for many other lower-income and lower-middle-income developing countries, which do not have adequate domestic financial and technological capacity to embark on the needed adaptation action.

17 Robert Falkner, Hannes Stephan & John Vogler, “International Climate Policy after Copenhagen: Towards a ‘Building Blocks’ Approach” (2010) 1:3 *Global Policy* 252.

18 Daniel Bodansky, “The Paris Climate Change Agreement: A New Hope?” (2016) 110:2 *Am J Intl L* 288; Robert Falkner, “The Paris Agreement and the new logic of international climate politics” (2016) 92:5 *Intl Affairs* 1107.

19 Bodansky, *supra* note 18.

20 UNFCCC, *Copenhagen Accord*, 18 December 2009, FCCC/CP/2009/11/Add.1, Dec 2/CP.15, art 4 (entered into force 30 March 2010) [*Copenhagen Accord*].

21 *Ibid*, arts 3, 8.

22 *Ibid*, art 3.

23 *Ibid*, art 8.

24 *Cancun Agreements*, FCCC/CP/2010/7/Add.1 at para 102 [*Cancun Agreements*].

25 *Paris Agreement*, *supra* note 5, art 7.

26 *Ibid* at para 52.

The Adaptation Finance Gap

The Paris outcome formalized developed countries' pledge to mobilize US\$100 billion per year in climate finance to developing countries by 2020, and added the commitment to discuss a more ambitious quantified annual financial goal to start in 2025.²⁷ This financial commitment is intended to support both climate mitigation and climate adaptation in a balanced manner.²⁸ Financial flows for climate action have been steadily increasing in recent years.²⁹

At first sight, this rise could be an indication that it would be possible to eventually raise sufficient funds to cover the total adaptation needs of interested developing countries. When existing and projected financial flows are broken down by source (private and public) and objective (mitigation and adaptation), however, the magnitude of the challenge to raise sufficient finance to cover even the most conservative projected adaptation costs in developing countries becomes evident.³⁰

The challenge was recently illustrated by a 2015 report prepared by the Climate Policy Institute to track climate finance flows and to evaluate progress toward the US\$100-billion commitment.³¹ The study found a significant increase in climate finance in 2014, with global financial flows reaching US\$391 billion due to record private investments in renewable energy projects.³² Yet, private investments account for the bulk of climate finance, reaching US\$241 billion in 2014. And private finance flows are primarily invested in mitigation projects in upper middle- or high-income countries.³³ In fact, 92 percent of private climate finance has

remained in the country of origin.³⁴ In other words, countries that have financial capabilities are investing heavily in domestic climate mitigation. Public global financial flows were also on the rise, although less substantially than private funds, reaching more than US\$148 billion in 2014. Yet, most of the public financial flows were still dedicated to climate mitigation. Ninety-three percent of total climate financial flows — public and private — in 2014 went to mitigation projects.³⁵

Developed countries' mobilization of adaptation funds to developing countries remains markedly insufficient to cover the estimated costs. A 2016 United Nations Environment Programme (UNEP) report entitled *The Adaptation Finance Gap Report* assessed the difference between the projected costs of adaptation measures to meet the collective adaptation needs in developing countries, and projected international financial flows to cover these costs.³⁶ First, the UNEP report reassesses projected adaptation costs, concluding that they are likely to be two to three times higher for the period 2010–2030, and four to five times higher for the period 2010–2050, when compared to earlier estimates presented in the IPCC's Fifth Assessment Report (AR5) in 2014.³⁷ The AR5 estimated that costs for adaptation in developing countries would amount to US\$70 billion to US\$100 billion a year by 2050, albeit recognizing that these estimates should be treated with low confidence due to data shortcomings and methodological challenges.³⁸ UNEP's revised estimates indicate that adaptation costs could reach US\$280 billion to US\$500 billion a year by 2050.

Even if parties to the UNFCCC were to fulfill their pledges to mobilize the US\$100 billion per year to climate finance by 2020, and to dedicate a balanced share of this amount to adaptation finance, it would likely not cover the IPCC's 2014 estimates, let alone UNEP's new projected estimates. The UNEP report admittedly presents only an indicative range of costs, based on an assessment of relevant literature, as there is no central system to estimate

27 *Ibid* at para 53.

28 *Ibid* at para 52.

29 Barbara Buchner et al, *Global Landscape of Climate Finance 2015*, Climate Policy Initiative (November 2015), online: <<http://climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2015/>>.

30 Martin Stadelmann, Axel Michaelowa & J Timmons Roberts, "Difficulties in accounting for private finance in international climate policy" (2013) 13:6 *Climate Policy* 718.

31 Buchner et al, *supra* note 29.

32 *Ibid* at 1.

33 *Ibid* at 4, 8.

34 *Ibid* at 10.

35 *Ibid* at 9.

36 United Nations Environment Programme, *The Adaptation Finance Gap Report 2016* (Nairobi, Kenya: UNEP, 2016) [*Adaptation Finance Gap*], online: <www.unep.org/adaptationgapreport/2016>.

37 IPCC, 2014, *supra* note 2.

38 *Ibid*.

global costs of adaptation.³⁹ Despite this caveat, it is possible to conclude that existing and projected adaptation financial flows pale in comparison to the magnitude of the projected costs. According to the UNEP report, adaptation finance reached 17 percent of public climate finance in 2014, or US\$25 billion.⁴⁰

The UNEP report recognizes that there are not, as yet, quantitative estimates of private finance for climate adaptation, due to methodological challenges of tracking private adaptation finance. There is, however, evidence that, thus far, most available funds for adaptation are public, as private finance tends to flow predominantly to climate mitigation.⁴¹ The 2016 UNEP report concludes that to meet the estimated costs of adaptation, financial flows would need to be six to 13 times higher than existing levels in the period from 2030 to 2050.⁴²

The *Adaptation Finance Gap Report* leads to the inevitable conclusion that even if the total target of the financial pledge is achieved, and adaptation finance reaches US\$50 billion per year by 2020, it would not be enough to cover the projections of adaptation costs in developing countries. And this is not including the possibility that some developed countries may change course on their pledges and decide not to provide finance to climate action in developing countries. This possibility has unfortunately become very real with the 2016 election of Donald Trump as the forty-fifth president of the United States, who has declared his intention to significantly reduce American support for international climate finance.

In this context, understanding existing and potential new criteria to guide the allocation of limited adaptation financial resources among competing developing countries is an important item in current climate discussions, and it will remain so in the near future.

This paper will concentrate on the allocation of adaptation finance to developing countries through the various operating entities of the financial mechanism of the UNFCCC. To be clear, developed country parties can channel climate finance to developing countries, including for adaptation projects, bilaterally (through existing

development agencies) or via international financial institutions such as the World Bank or regional development banks.⁴³ In fact, currently most adaptation finance is still flowing via bilateral and multilateral channels outside the UNFCCC financial mechanism. The specific challenges and possibilities for creating harmonized allocation criteria for adaptation finance through bilateral and multilateral financial channels outside the UNFCCC financial mechanisms deserve dedicated examinations, which are outside the scope of this paper. Ensuring that those developing countries that need adaptation finance the most will have priority access to public financial resources available through UNFCCC funds should be seen as a first step.

The next section discusses the legal framework to allocate adaptation finance under the United Nations climate financial regime.

The UNFCCC Legal Framework to Allocate Adaptation Finance

Article 7 of the Paris Agreement establishes that “continuous and enhanced international support shall be provided to developing country Parties for the implementation” of adaptation actions. The language indicates that in legal terms, all developing countries are equally entitled to request this support, except that parties will take into account the special needs of developing country parties “that are particularly vulnerable to the adverse effects of climate change.” The COP 21 Paris outcome includes an express provision establishing that all existing climate funds under

39 *Adaptation Finance Gap*, supra note 36.

40 *Global Landscape*, supra note 29 at 9.

41 *Ibid.*

42 *Adaptation Finance Gap*, supra note 36 at XIV.

43 Smita Nakhooda, Charlene Watson & Liane Schalatek, “Global climate finance architecture”, *Climate Funds Update* (2016), online: <www.climatefundupdate.org/about-climate-fund/global-finance-architecture>.

the UNFCCC will serve the 2015 Paris Agreement.⁴⁴ Currently, there are four co-existing UNFCCC funds relevant for adaptation finance:⁴⁵

- the LDCF, under the UNFCCC, managed by the GEF;
- the SCCF, under the UNFCCC, managed by the GEF;
- the AF, under the Kyoto Protocol, managed by the AF board and hosted by the GEF; and
- the GCF, under the UNFCCC, managed by an independent board.

It is still unclear how these funds will be shaped in order to avoid duplication and ensure complementarities when it comes to adaptation finance. Currently, each of these funds has its own criteria for eligibility and allocation of climate finance. Except for the LDCF, which caters exclusively to a predefined, specific group of low-income countries, climate funds have faced obstacles to identify accepted criteria to effectively guide equitable access to limited financial resources. What follows is an overview of the climate funds relevant to adaptation finance under the UNFCCC and their allocation criteria.

Until 2010, the GEF was the central player in adaptation finance.⁴⁶ The GEF was created in 1991 to serve as a financial mechanism to support the implementation of several multilateral environmental agreements. The GEF serves as a financial mechanism to the Convention on Biological Diversity, the Stockholm Convention on Persistent Organic Pollutants, the United Nations

Convention to Combat Desertification and the Minamata Convention on Mercury, besides the UNFCCC.⁴⁷ In the UNFCCC climate regime, the GEF serves as either the administrator or as host to the three climate funds established by the Marrakesh Accords in 2001: the LDCF, the SCCF and the AF.⁴⁸

The LDCF was established in 2001 specifically to address the urgent and immediate adaptation needs of the world's 49 LDCs.⁴⁹ The LDCF fulfills its mandate mainly by supporting the preparation and implementation of LDCs' NAPAs.⁵⁰ The LDCF's capitalization depends on voluntary contributions. The LDCF is governed by the LDCF/SCCF Council, which decides its strategic priorities under guidance from the UNFCCC Conference of the Parties.⁵¹

Only the world's 49 LDCs are eligible for funding. The LDCF has established a balanced access approach, which aims to ensure that all requesting LDCs will have access to funds for their NAPAs, rather than providing funds on a first-come, first-serve basis. Fifteen years after the LDCF's establishment, and despite recent growth, the LDCF has continuously lacked sufficient financial resources to cover the costs of the LDCs' requests for funds. The progress report of the LDCF/SCCF Council from October 2016 states that the LDCF funds available for new funding decisions by the council as of September 2016 amounted to only \$7.43 million, "whereas resources amounting to \$221.44 million were sought for 32 full-sized projects (FSP) and one medium-sized project (MSP) that had been technically cleared by the Secretariat."⁵² Another 11 project proposals amounting to US\$77.66 million had been formally submitted for review by the Secretariat. The full costs of addressing the

44 UNFCCC, *Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015*, FCCC/CP/2015/10/Add.1 at para 58. Paragraph 59 establishes that the AF, operating under the Kyoto Protocol, might also serve the Paris Agreement, conditional to a decision by the meeting of the parties to the Kyoto Protocol. During COP 22 in Marrakesh in 2016, the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement decided that the AF should serve the Paris Agreement, pending decisions on governance and other issues. See Benito Müller, "Time to Decide! The Adaptation Fund after Marrakesh", *Oxford Climate Policy* (January 2017), online: <www.oxfordclimatepolicy.org/publications/documents/Time_to_Decide_Discussion_Note.pdf>.

45 Robert O'Sullivan et al, *Creation and Evolution of Adaptation Funds* (Washington, DC: World Wildlife Fund, 2011) at 6 [O'Sullivan et al], online: <www.worldwildlife.org/publications/creation-and-evolution-of-adaptation-funds>.

46 Bonizella Biagini et al, "A typology of adaptation actions: A global look at climate adaptation actions financed through the Global Environment Facility" (2014) 25 *Global Environmental Change* 97 [Biagini et al].

47 International Institute for Sustainable Development, *A Summary Report of the 50th meeting of the Global Environment Facility (GEF) Council* (Winnipeg, MB: IISD, 2016) at 2, online: <www.iisd.ca/download/pdf/sd/enbplus192num15e.pdf>.

48 O'Sullivan et al, *supra* note 45 at 6, 49.

49 UNFCCC, *The Marrakesh Ministerial Declaration*, FCCC/CP/2001/13/Add.1, Dec 7/CP.7 [Marrakesh Accords].

50 O'Sullivan, *supra* note 45 at 38.

51 GEF, *Evaluation of the Special Climate Change Fund (SCCF)* (Washington, DC: Global Environment Facility Evaluation Office, 2011) at 3, online: <www.gefteo.org/sites/default/files/ieo/ieo-documents/sccf-approach-paper.pdf>.

52 GEF, *Progress Report on the Least Developed Countries Fund and the Special Climate Change Fund*, GEF/LDCF.SCCF.21/03, (2016) at 2, para 3.

urgent and immediate adaptation needs of LDCs, according to estimates included in their NAPAs, total \$2 billion.⁵³ Even taking into account that some of the requested assistance may be considered ineligible or unessential in the assessment process, the gap is clear.

The LDCs that have been unable to access finance from the LDCF may, however, access other sources of adaptation finance, such as the SCCF. The SCCF was also established in 2001 by the Marrakesh Accords, and is also governed by the LDCF/SCCF Council. The council decides the fund's strategic priorities, under guidance from the UNFCCC COP.⁵⁴ Financed by voluntary contributions from developed countries listed in annex I of the UNFCCC, with no periodic replenishing schedule, the SCCF has been undercapitalized since its inception and unable to fulfill its mandate.⁵⁵ Eligibility for the SCCF is open to all developing countries that are parties to the UNFCCC. The initial SCCF mandate was broad, encompassing financial support to a wide range of thematic windows: adaptation, technology transfer, energy, transport, industry, agriculture, forestry, waste management and economic diversification in oil-exporting developing countries. There were no initial criteria to prioritize funding to specific categories of countries or subthemes.⁵⁶

The SCCF's low capitalization led to the gradual creation of priority criteria to allocate funds. In 2003, COP 9 requested the fund to give top priority to adaptation activities, while also funding essential technology transfer projects.⁵⁷ COP 9 also guided the SCCF to concentrate adaptation funding in seven predefined areas (water management, land management, agriculture, health, infrastructure development, fragile ecosystems and integrated coastal management). The SCCF has also combined geographical and vulnerability criteria to prioritize allocation, giving preferential access to the most vulnerable countries in Africa and Asia, as well as the SIDS.⁵⁸

As demand for SCCF finance continued to exceed capitalization, a series of preselection criteria were established in 2012, including: project quality; balanced distribution of funds in the eligible countries, with an emphasis on vulnerable non-Annex I countries that have not previously had access; equitable regional distribution; balanced support for all priority sectors; and balanced distribution among GEF agencies based on comparative advantage.⁵⁹ The SCCF's cumulative financial contribution to adaptation projects has been limited. From 2006 to 2015, the SCCF provided a total of only US\$286.82 million for adaptation activities.⁶⁰ As of October 2016, the SCCF remained severely underfunded.⁶¹ No new adaptation projects had been approved in the LDCF/SCCF Council meeting in October 2016 due to insufficient funds available.⁶²

The AF, the third climate fund established by the 2001 Marrakesh Accords, faces similar undercapitalization challenges.⁶³ Unlike the LDCF and the SCCF, the AF was created under the Kyoto Protocol, not under the UNFCCC.⁶⁴ The AF is funded through a share of the proceeds from transactions of the Clean Development Mechanism (CDM), receiving two percent of the market value of Certified Emission Reductions, complemented by voluntary contributions.⁶⁵ AF funds are to be invested exclusively in adaptation projects in developing countries that are parties to the Kyoto Protocol. The AF has its own governance board, which is completely independent from the GEF. The AF board decides on allocation criteria, guided by the meeting of the parties to the Kyoto Protocol.⁶⁶

53 GEF, *LDCF/SCCF Council Meetings 20*, GEF/LDCF.SCCF.20.

54 GEF, *supra* note 51 at 3.

55 *Ibid* at 6. See O'Sullivan et al, *supra* note 45 at 50.

56 O'Sullivan et al, *supra* note 45 at 52.

57 Climate Funds Update, "Special Climate Change Fund", Heinrich Böll Stiftung: The Green Political Foundation, online: <www.climatefundsupdate.org/listing/special-climate-change-fund>.

58 O'Sullivan et al, *supra* note 45 at 52.

59 GEF, *Pre-selection Criteria for Projects and Programs Submitted under the Special Climate Change Fund*, GEF/LDCF.SCCF.12/Inf.05 (2012).

60 GEF, *Progress Report on the Least Developed Countries Fund and the Special Climate Change Fund*, GEF/LDCF.SCCF.21/03 (2016) at 15, para 23.

61 *Ibid* at 14, para 21.

62 *Ibid* at para 22.

63 *Marrakesh Accords*, *supra* note 49; Britta Horstmann & Achala Chandani Abeyasinghe, "The Adaptation Fund of the Kyoto Protocol: A model for financing adaptation to climate change?" (2011) 2:3 *Climate Law* 415.

64 AF, "About the Adaptation Fund", online: <www.adaptation-fund.org/about/>.

65 Asa Persson & Elise Remling, "Equity and efficiency in adaptation finance: initial experiences of the Adaptation Fund" (2014) 14:4 *Climate Policy* 488.

66 UNFCCC, *Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its third session, held in Bali from 3 to 15 December 2007*, FCCC/CP/2007/6, Dec 1/CMP.3 at para 5(b); Dec 5/CMP.2.

All developing country parties to the Kyoto Protocol that are considered “particularly vulnerable to the adverse effects of climate change” are eligible to apply for AF resources to meet their adaptation costs.⁶⁷ There was no agreed decision on the concept of vulnerability, except for the earlier specification that vulnerable countries should include: “low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems.”⁶⁸ The assumption was that the proceeds from the CDM would guarantee a steady and substantial flow of funds for adaptation activities under the AF, which proved untrue.⁶⁹

Over time, the scarcity of resources led the AF board to establish new strategic priorities for funding allocation among eligible developing countries.⁷⁰ At the fourth meeting of the parties to the Kyoto Protocol in 2008, which took place in Poznan, Poland, the parties endorsed the AF board’s *Strategic Priorities, Policies and Guidelines of the Adaptation Fund*.⁷¹ According to the 2008 strategy, decisions on the allocation of resources will consider:

- “(a) Level of vulnerability;
- (b) Level of urgency and risks arising from delay;
- (c) Ensuring access to the fund in a balanced and equitable manner;
- (d) Lessons learned in project and programme design and implementation to be captured;
- (e) Securing regional co-benefits to the extent possible, where applicable;

67 UNFCCC, Dec 1/CMP.3, *supra* note 66 at 3, paras 1–2.

68 UNFCCC, *Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its first session, held at Montreal from 28 November to 10 December 2005*, Dec 28/CMP.1. See also UNFCCC, *Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its fourth session, held in Poznan from 1 to 12 December 2008*, FCCC/KP/CMP/2008/11/Add.2, Dec 1/CMP.4.

69 O’Sullivan et al, *supra* note 45.

70 Adaptation Fund Board, *Operational Policies and Guidelines for Parties to Access Resources from the Adaptation Fund* (amended March 2016), online: <www.adaptation-fund.org/wp-content/uploads/2016/04/OPG-amended-in-March-2016.pdf>.

71 UNFCCC, Dec 1/CMP.4, *supra* note 68.

(f) Maximizing multi-sectoral or cross-sectoral benefits;

(g) Adaptive capacity to the adverse effects of climate change.”⁷²

All of these criteria remain remarkably broad, leaving significant room for subjective assessments made by the board. The board’s subjective assessment may be based on a combination of factors, including objective factors. For example, assessment of the first and last items in the above list may include objective factors such as GDP/GNI per capita. Yet the board’s consideration of objective factors while assessing the criteria is neither explicit nor mandatory. In other words, the board members may decide whether or not to use objective factors in what is primarily a case-by-case analysis using broadly defined criteria.

The continuing shortage of funds has led the AF to consider three objective criteria to allocate finance: a uniform cap per country; variable caps considering the specific circumstances of certain groups of countries; and variable caps considering the specific circumstances of each individual country.⁷³ The board has so far been vague about what it means by specific circumstances. This set of criteria helps to ensure that a single developing country or a small group of developing countries will not receive a disproportionate share of funds. However, it does not address the question of equity related to whether those developing countries that have comparatively less capacity to mobilize national and private funds for climate adaptation are the ones accessing the resources. This goal was still left under the guidance of the subjective criteria of “level of vulnerability” and “adaptive capacity”

The AF mobilized more than US\$500 million since its inception until June 2016. It had allocated US\$338.5 million for adaptation projects.⁷⁴ A significant number of recipients of these funds were high-income developing countries such as Chile, a member of the Organisation for Economic Co-operation and Development (OECD), or upper middle-income developing countries such as Argentina, Costa Rica, South Africa and

72 *Ibid.*

73 A detailed discussion of the criteria for allocation of AF finance can be found at Persson & Remling, *supra* note 65; see also O’Sullivan et al, *supra* note 45 at 32.

74 UNFCCC, *supra* note 44.

Turkmenistan.⁷⁵ Studies have shown that the AF has benefited a group of countries with high per capita income that were somehow considered among those with high levels of vulnerability and low adaptive capacity.⁷⁶ In practice, the criteria adopted by the AF so far have not ensured that limited funds will go to those developing countries that have the greatest need due to lower financial capabilities and greater overall socio-economic vulnerability when compared to their developing country peers.⁷⁷

The experience of the AF is relevant because other UNFCCC climate funds also rely on similar broad criteria to guide allocation of adaptation funds. This experience is especially relevant to the adaptation window of the GCF. The fund was created at COP 16,⁷⁸ which also established that most of the public climate finance flowing to developing countries, for both mitigation and adaptation, should be channelled through the GCF in the future.⁷⁹ This has proven challenging, as many developed countries prefer to channel a substantial amount of public funds through bilateral channels or through multilateral channels outside the UNFCCC. Although climate finance is anticipated to continue to be highly fragmented in the foreseeable future, the GCF is expected to become a relevant source of adaptation finance in the climate regime.

The GCF is governed by an independent board comprised of 24 members (in equal numbers from developed countries and developing countries).⁸⁰ The GCF board receives guidance from the COP to the UNFCCC, including on criteria for eligibility and allocation of funds. Unlike the AF, whose secretariat is hosted at the GEF, the GCF has an independent secretariat, sitting in Songdo, South Korea. According to its governing instrument, approved at COP 17, the GCF will “promote a paradigm shift towards low-emission and climate resilient development pathways

(in the context of sustainable development) by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change, *taking into account the needs of those developing countries particularly vulnerable to the adverse effects of climate change.*⁸¹ There is, as of yet, no clarity on how exactly the GCF will take account of the particular needs of vulnerable developing countries, nor an agreed definition of vulnerability outside the indications from the UNFCCC.

The governing instrument includes three broad guidelines for allocation. First, resources will be balanced between adaptation and mitigation activities. Second, an approach using a subjective criterion grounded on results will be used to allocate resources. Third, the allocation of adaptation resources will consider the “urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, including LDCs, SIDS and African States.” Minimum allocation floors for the listed groups of vulnerable countries (LDCs, SIDS and African States) will be established as appropriate, while the board will also aim for appropriate geographical balance.

As of August 2016, the GCF had received financial pledges from 47 countries, regions and cities, totalling US\$10.3 billion.⁸² So far, the COPs have given the board significant flexibility on how to operationalize the allocation of its funds.⁸³ The board has decided that it will review its strategic plan on the occasion of each replenishment process, to revise the vision and core operational priorities.⁸⁴ That includes deciding on allocation criteria. For now, the board has decided to allocate early support for “readiness activities,” meaning small-scale financial flows, to build country capacity to access GCF finance. Although all developing countries are eligible for readiness finance, the board established that 50 percent of readiness dedicated funds should go to especially vulnerable countries, including

75 See AF, “Projects Map View”, online: <www.adaptation-fund.org/projects-programmes/project-information/projects-map-view/>.

76 M Stadelmann et al, “Equity and cost-effectiveness of multilateral adaptation finance: are they friends or foes?” (2014) 14:2 International Environmental Agreements: Politics, Law and Economics 101.

77 Persson & Remling, *supra* note 65.

78 *Cancun Agreements*, *supra* note 24 at para 102.

79 Janna Tenzing et al, “LDC perspectives on the future of the Least Developed Countries Fund” in *LDC Paper Series* (London, UK: International Institute for Environment and Development, 2015), online: <<http://pubs.iied.org/G04040/>>.

80 O’Sullivan et al, *supra* note 45 at 35.

81 UNFCCC, *Launching the Green Climate Fund*, FCCC/CP/2011/9/Add.1, Dec 3/CP.17 [emphasis added].

82 UNFCCC, *Report of the Conference of the Parties on its twenty-second session, held in Marrakech from 7 to 18 November 2016*, FCCC/CP/2016/10/Add.1, Dec 10/CP.22 at 35 [Dec 10/CP.22].

83 Liane Schalatek et al, “The Green Climate Fund” (2014) *Climate Funds Update* at 2, online: <www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9376.pdf>.

84 Dec 10/CP.22, *supra* note 82 at 13.

LDCs, SIDS and African countries. The board has also established another dedicated funding line to support developing countries interested in the formulation of national adaptation plans to present to the Paris Agreement. There is a cap of US\$3 million per country for adaptation plans.⁸⁵

The GCF became fully operational in 2015, when it approved its first eight projects, totalling US\$168 million.⁸⁶ The approval process was guided by the initial investment criteria adopted by the GCF board.⁸⁷ The board used six largely subjective criteria to select the first projects:

- impact (contribution to the GCF results areas);
- paradigm shift potential;
- sustainable development potential;
- needs of the recipient countries and populations;
- country ownership; and
- the effectiveness and efficiency of the proposed intervention.⁸⁸

As of May 15, 2016, the GCF had received another 41 funding proposals, which amounted to US\$2.4 billion. From those, nine proposals were approved by the board at the thirteenth meeting.⁸⁹ Another 10 proposals were approved by the board at the fourteenth meeting, on October 14, 2016, totalling US\$741 million.⁹⁰

The board has established an ad hoc committee to propose a draft strategic plan for the GCF, to be endorsed by the board. The ad hoc group presented its main ideas for the draft strategic plan to the board on March 3, 2016. At the time of this writing, there was no ongoing discussion in the draft strategic plan on objective criteria for adaptation finance. Except for the 50 percent of readiness finance that is dedicated to vulnerable countries, all other developing countries are eligible in equal

terms to adaptation funds, provided they justify the proposal using the existing investment criteria. This indicates that, when faced with competing eligible climate proposals from developing countries, the board will continue to promote equity, primarily by giving preference to those candidates that they consider especially vulnerable to climate change. Based on the AF's experience of relying primarily on the existing criterion of vulnerability for equity considerations in resource allocation, this strategy has proven ineffective.

The Limits of Vulnerability as Equity Criterion

Scholars and policy makers recognize that, in principle, decisions on adaptation finance eligibility and priorities should be informed by the best available scientific knowledge on vulnerability of countries, coupled with equitable considerations.⁹¹ Yet, empirical analysis of the AF activities shows that the use of vulnerability as primary equity criteria to allocate adaptation finance has proven highly problematic. Britta Horstmann has analyzed the allocation of financial resources from the AF between 2008 and 2010, concluding that the definition of "vulnerability" remained so broad as to prevent a proper prioritization in the allocation of funds.⁹²

Asa Persson and Elise Remling also analyzed the AF's allocation, concluding that despite the central importance of the concept of vulnerability for determining equitable outcomes in allocation decisions, it had yet to be defined at the operational level.⁹³ The AF had relied on equal country lump sums as a way to promote international equity, or left it to the fund's applicants to justify why they were particularly vulnerable using their own

85 *Ibid* at 5.

86 Schalatek et al, *supra* note 83.

87 Green Climate Fund, "Concept Note User's Guide" at 8, online: <www.greencimate.fund/documents/20182/239759/GCF_Concept_Note_User_s_Guide.pdf/64866eea-3437-4007-a0e4-01b60e6e463b>.

88 Schalatek et al, *supra* note 83 at 3.

89 Green Climate Fund, *Consideration of funding proposals* (Songdo, South Korea: Green Climate Fund, 2016), GCF/B.13/16/Rev.01.

90 *Ibid* at GCF/B.14/07/Rev.01.

91 Terry Barker, Șerban Scriciu & David Taylor, "Climate change, social justice and development" (2008) 51:3 *Development* 317; Hans-Martin Füssel, Stephane Hallegatte & Michael Reder, "International Adaptation Funding" in Ottmar Edenhofer, Johannes Wallacher, Hermann Lotze-Campen, Michael Reder, Brigitte Knopf & Johannes Müller, eds, *Climate Change, Justice and Sustainability* (Dordrecht, Netherlands: Springer, 2012) at 321.

92 Britta Horstmann, "Operationalizing the Adaptation Fund: challenges in allocating funds to the vulnerable" (2011) 11:4 *Climate Policy* 1086.

93 Persson & Remling, *supra* note 65.

principles and benchmarks. For this reason, the authors concluded that the attempts to allocate adaptation finance based primarily on indices of vulnerability to climate change under that fund have so far been disappointing.⁹⁴ The authors argued that this obstacle could be overcome if parties to the UNFCCC could agree on an official ranking of vulnerability. The challenge is that this political agreement has proven elusive. Peer-reviewed studies on the use of vulnerability as a climate finance allocation criterion have concluded that additional efforts by natural scientists to clarify the concept of vulnerability will not help, as the concept is impervious to scientific definition.⁹⁵

International climate policy negotiators have continuously called for the development of generic indices of vulnerability to climate change that would serve as an objective basis for identifying priorities for allocating adaptation finance.⁹⁶ Hans-Martin Füssel has argued that any country indices or categories based on vulnerability would be impossible because “there is substantial scientific and political disagreement on the measurement of countries’ [climate] responsibility, capability, and vulnerability.”⁹⁷

If it is true that categorizing countries according to climate vulnerability has proven politically elusive, the categorization of countries based on some notion of financial and technological capabilities has proven more politically acceptable. The use of the United Nations’ LDCs category, which has been universally accepted by parties to the UNFCCC, is first and foremost based on criteria such as GNI per capita, human assets and economic vulnerability to external shocks. Socio-economic characteristics such as GNI per capita have been broadly used as proxies of capability in guiding development aid policies and resource allocation. One possible way to find a politically accepted categorization of countries that should receive preferential access to adaptation funds, in the case of competing requests by developing countries outside the LDCs and SIDS

grouping, is to look to how other international financial institutions and development funds such as the World Bank, the United Nations Development Programme (UNDP), and the Global Fund have solved similar challenges to find politically acceptable equity criteria for resource allocation.

Income Level as an Objective Criterion to Guide Preferential Allocation

Parties to the UNFCCC have demonstrated broad political agreement that not all developing countries are the same when it comes to exposure to the impacts of climate change and capability to respond to those impacts. This broad agreement is reflected in the settled incorporation of the categories of LDCs and SIDS in the existing UNFCCC legal framework. Countries with extremely low socio-economic indicators are assumed to be among the most vulnerable to biophysical hazards caused by climate change, as they do not have the financial, technological or human capacity to address these hazards. The incorporation of LDCs as a category of parties deserving special treatment signals the recognition of linkages among low income levels, low capabilities to adapt to climate change and climate vulnerability. This correlation between income levels and vulnerability has been reinforced with the long-established trend of the parties to the UNFCCC to gradually move away from the original approach that viewed climate change as primarily an environmental problem, to a more holistic approach that recognizes the important social and economic dimensions underlying the causes and effects of climate change.⁹⁸

94 Füssel et al, *supra* note 91 at 323.

95 Richard JT Klein & Annett Möhner, “The Political Dimension of Vulnerability: Implications for the Green Climate Fund” (2011) 42:3 IDS Bulletin 15 at 16.

96 Hans-Martin Füssel, “How inequitable is the global distribution of responsibility, capability, and vulnerability to climate change: A comprehensive indicator-based assessment” (2010) 20:4: Global Environmental Change 597 at 598.

97 *Ibid.*

98 James P Bruce et al, *Climate Change 1995: Economic and Social Dimensions of Climate Change: Contribution of Working Group III to the Second Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK: Cambridge University Press, 1996); Robin Mearns & Andrew Norton, eds, *Social Dimensions of Climate Change: Equity and Vulnerability in a Warming World* (Washington, DC: World Bank Publications, 2009); Jonathan Rowson & Adam Corner, *The Seven Dimensions of Climate Change: Introducing a New Way to Think, Talk and Act* (London, UK: Action and Research Centre, Climate Outreach & Information, 2015).

Initial assessments of climate change impacts, risks and vulnerability focused chiefly on biophysical elements.⁹⁹ Since 2007, however, the IPCC has recognized that “climate change impacts depend on the characteristics of natural and human systems, their development pathways and their specific locations.”¹⁰⁰ The 2014 AR5 unambiguously associated climate vulnerabilities to societal risks and economic development pathways.¹⁰¹ A growing number of studies highlight the links between climate change and development, indicating that climate impacts could slow down or reverse hard-won development achievements, undermine efforts to reduce poverty levels, and could lead to human and environmental insecurity, displacement and conflict in lower-income countries.¹⁰²

The growing recognition within and outside the UNFCCC regime of the linkages between climate vulnerability and the levels of socio-economic development and financial capabilities to adapt, warrant rethinking the allocation criteria of the operating entities of the financial mechanism serving the Paris Agreement. There is good reason to argue that these entities should incorporate an objective income criterion to guide the equitable allocation of adaptation finance among diverse developing countries, alongside the broad subjective criterion of vulnerability. This move would be in line with the practice of other international financial institutions and development funds that faced similar challenges on how to take equity into consideration when guiding policy and disbursing funds to developing countries that are dissimilar in terms of socio-economic development.

To be clear, like the concept of vulnerability, the concept of socio-economic development has been disputed, including the importance of income as an indicator of socio-economic progress.¹⁰³ There is, however, a commanding consensus in development circles that the old basic dichotomy contrasting

developed countries with developing countries is no longer adequate to guide international policy in a world where the group of developing countries has become significantly heterogeneous.¹⁰⁴ Identifying a group of the most economically fragile countries — the LDCs — has also been identified as insufficient to take into account the diversity among developing countries in terms of socio-economic development.

Intuitively, no one would dispute that Canada is markedly more developed than Haiti, and the two countries should consequently have very different responsibilities to, and support from, international institutions. Nonetheless, contrasting the levels of socio-economic development of Meso-American countries such as Costa Rica, Mexico, Panama and Guatemala has proven more challenging. A more nuanced categorization of countries according to socio-economic indicators has become crucial to adequately address the diversity that characterizes the geopolitical landscape of the developing world nowadays.¹⁰⁵

The United Nations has yet to officially agree on how to institutionalize a move away from the outdated developing versus developed countries classification, beyond the creation of the special categories of developing countries such as the LDCs, the landlocked developing countries and the SIDS.¹⁰⁶ However, some United Nations agencies, such as the UNDP, global financial institutions such as the World Bank, and development funds such as the Global Fund, have adopted rules-based criteria based on income and other socio-economic indicators to guide research, policy making and allocation of funds among countries beyond a North–South divide. These institutions had to deal with the challenge of prioritizing certain subcategories of countries within the broader developing countries group to better fulfill their mandates in an equitable manner.

Since 1989, the World Bank has used income thresholds based on calculations of GNI per capita to classify countries in four categories. For the 2017 fiscal year, the high-income economies category includes countries with a GNI per capita above

99 *Ibid.*

100 IPCC, 2007, *Climate Change 2007: Synthesis Report: A Report of the International Panel of Climate Change* (Cambridge, UK: Cambridge University Press, 2007) at 64.

101 IPCC, 2014, *supra* note 2 at 181.

102 Sandrine Mathy & Odile Blanchard, “Proposal for a poverty-adaptation-mitigation window within the Green Climate Fund” (2016) 16:6 *Climate Policy* 752.

103 Michael J Trebilcock & Mariana Mota Prado, *What Makes Poor Countries Poor? Institutional Determinants of Development* (Cheltenham, UK: Edward Elgar Publishing, 2011).

104 José Antonio Alonso, Ana Luiza Cortez & Stephen Klasen, *LDC and other country groupings: How useful are current approaches to classify countries in a more heterogeneous developing world?* (New York, NY: United Nations Department of Economics and Social Affairs, 2014).

105 Lyng Nielsen, “Classifications of Countries Based on their Level of Development: How it is Done and How it Could Be Done” (2011) International Monetary Fund Working Paper No 11/31 at 3.

106 Alonso, Cortez & Klasen, *supra* note 104.

US\$12,476, which is double the average world income level.¹⁰⁷ There are now 79 countries in this category, including some countries historically defined as developing countries such as Chile, Uruguay and Saudi Arabia. The middle-income category is subdivided between lower and upper middle-income economies. The upper middle-income category includes countries with a GNI per capita between US\$4,036 and US\$12,475. The lower middle-income category includes countries with a GNI per capita between US\$1,026 and US\$4,035. The fourth category, low-income economies, includes countries with a GNI per capita of US\$1,025 or less.

The World Bank thresholds underlying the classification have been subject to legitimate critiques, yet they have been politically accepted, reflecting “a civilized understanding among sovereign countries about how to label each other.”¹⁰⁸ The classification was deemed necessary for operational purposes, as the World Bank’s International Bank for Reconstruction and Development has to fulfill its statutory obligation to lend only to member countries that could not obtain external financing on reasonable terms, which were those within lower-income thresholds. The World Bank does not use income thresholds because it equates income with development, but because it considers GNI per capita as “the best single indicator of economic capacity and progress.”¹⁰⁹ Legitimate critiques of the World Bank system have led to other attempts to classify countries according to composites of development indicators.

The UNDP has created a country classification system based on the Human Development Index (HDI), a composite index including data on life expectancy, education, income, and savings and economic growth. This method was created by Pakistani economist Mahbub ul Haq and Indian economist Amartya Sen in the 1990s. The HDI was created to focus “on people and their capabilities [as] the ultimate criteria for assessing the development of a country,”¹¹⁰ instead of the World Bank’s focus on economic indicators. HDI is expressed as a figure ranging from zero to one. Countries with “low

human development” are those ranked from 0 to 0.55; “medium human development” from 0.55 to 0.7; “high human development” from 0.7 to 0.8; and “very high human development” from 0.8 to 1. The HDI has had broad worldwide political acceptance, with profound impact on the design of development policies around the world. HDI classification has been used to stimulate debate about government policy priorities and to guide policy action.

Other international financial institutions have also adopted an income level criterion as part of a composite of objective and subjective criteria to guide allocation of funds among various developing countries, including the International Fund for Agricultural Development, the African Development Fund, the Asian Development Fund, the IMF’s Poverty Reduction and Growth Trust, and the Inter-American Fund for Special Operation.¹¹¹ Several global development funds such as the Global Alliance for Vaccines and Immunization (GAVI Alliance),¹¹² the Global Agriculture and Food Security Program, and the Global Fund, which are closer in institutional design to the GCF, have also adopted income levels as part of their composite criteria to ensure equitable allocation of funds among developing countries.

The Global Fund is a public-private partnership created in 2002 to mobilize and disburse financial resources to address the HIV, tuberculosis and malaria pandemics.¹¹³ Over the last 15 years, the Global Fund governance board has revised its eligibility criteria “to ensure that available resources are allocated and invested in countries and regions with the highest burden of disease and the least economic capacity to respond to HIV, tuberculosis and malaria, and to key and vulnerable populations that are disproportionately affected by the three diseases.”¹¹⁴ The Global Fund criteria establishes that: “low-income countries (LICs) and lower middle-income countries (MICs) are automatically eligible; while upper MICs have to demonstrate a ‘severe’ or ‘extreme’ generalised disease burden,

107 World Bank, “World Bank Country and Lending Groups” (2016), online: <<https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>>.

108 Nielsen, *supra* note 105 at 10.

109 *Ibid.*

110 UNDP, “Human Development Index (HDI)”, online: <<http://hdr.undp.org/en/content/human-development-index-hdi>>.

111 Alonso, Cortez & Klasen, *supra* note 104.

112 H Saxenian et al, “An analysis of how the GAVI alliance and low- and middle-income countries can share costs of new vaccines” (2011) 30:6 *Health Affairs* 1122.

113 Olga Avdeeva et al, “The Global Fund’s resource allocation decisions for HIV programmes: addressing those in need” (2011) 14:1 *J Intl AIDS Society* 51.

114 Global Fund Board, *Decision Point GF/B35/DP07: Revised Eligibility Policy* at 3.

or at least a 'high' concentrated burden of disease within a segment of the population."¹¹⁵

Additionally, the Global Fund's guidelines require that all funding proposals from lower middle-income countries invest at least 50 percent of the requested budget on underserved and most at-risk populations and/or "highest impact interventions."¹¹⁶ Funding proposals from upper middle-income countries must dedicate the entire requested budget to underserved or at-risk populations and/or "highest impact interventions." Members of the OECD are ineligible to apply for funding (even if classified as developing countries), while other high-income countries are ineligible to apply for funding through a single country application.¹¹⁷

Finally, the Global Fund has developed a prioritization framework to apply when existing funds prove insufficient to cover all eligible *and* recommended funding proposals.¹¹⁸ The framework consists of a three-part composite index, with two objective criteria (income level and disease burden) and subjective criteria (recommendation by the Technical Review Panel). The rationale is to give greater priority to comparatively poorer and higher-burden countries. By using a composite of objective and subjective criteria, the Global Fund has ensured that developing countries with greater capacity to mobilize domestic funds do not end up undermining the capacity of lower-income countries to access scarce global resources to fight AIDS, tuberculosis and malaria.

Recommendation

To be clear, this paper is not assuming that the World Bank's or the Global Fund's interests and constitutional responsibilities coincide with the interests and constitutional responsibilities of the UNFCCC. The argument is that the operating entities of the UNFCCC's financial mechanism, including the GCF, face a similar challenge as the Global Fund

and other funding agencies to equitably allocate scarce finance among developing countries in different stages of socio-economic development and with different financial capabilities, and subject to various levels of vulnerability (in this case, to climate change impacts).

The recommendation is that UNFCCC funds should embrace composite criteria that include both criteria based on vulnerability (vaguely defined) and criteria based on capability (objectively based on income levels as a proxy for financial adaptive capacity). Retaining the criterion of vulnerability to climate impacts that includes geophysical aspects, such as exposure to rising sea levels and threats to food security, as mandated by the UNFCCC, is extremely important from an equity perspective, albeit insufficient. Therefore, there is a need to incorporate an income-based criterion linked to financial capabilities, so that those developing countries within the lower-income brackets, which are less likely to be able to mobilize resources for adaptation outside the climate regime, have priority access to limited adaptation funds.

The use of vulnerability as part of the composite criteria that also includes an income-based criterion will also serve to ensure that those upper middle-income countries that are deemed extremely vulnerable to climate change hazards, that have sizeable social groups that are particularly vulnerable, and that show difficulty in mobilizing domestic finance will be eligible to get financial support for adaptation from UNFCCC funds as well. In these cases, as with the Global Fund, adaptation funds should be earmarked for those communities that are more socio-economically vulnerable. Still, if the funds can only cover the costs of a few of the eligible requests, priority should be given to those countries in the lower brackets of GNI per capita that are also deemed highly vulnerable to climate impacts. In this way, a lower middle-income country such as Guatemala would not have to compete for adaptation funds with a high-income developing country such as Chile.

115 *Ibid* at 1.

116 David McCoy & Kelvin Kinyua, "Allocating Scarce Resources Strategically: An Evaluation and Discussion of the Global Fund's Pattern of Disbursements" (2012) 7:5 PLOS ONE 7.

117 *Ibid*.

118 *Ibid*.

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