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## **POOR ADAPTATION FINANCE: A PROPOSAL FOR TURNING AROUND**

### **Abstract**

The United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement (PA) have provisions of support for mitigation and adaptation, but it continues to remain poor, relative to the estimated needs by different agencies. The lack of agreement on what climate finance (CF) or adaptation finance (AF) is compounds the problem of their estimations. While the bilateral channels and multilateral institutions indicate widely differing amounts, there is a consensus that adaptation finance is quite inadequate. This poor financing can be attributed: (i) to the inefficacy of market mechanisms for adaptation and (ii) to the problematic framing under the regime that conceptualizes adaptation as national territory-bounded response. But different types of cross-border climate change impacts, or borderless climate risks, are already evident and the Paris Agreement also frames adaptation as a global responsibility. Still, climate regime does not consider adaptation as a global public good. This paper argues that the conceptual lacuna is rooted in the neoclassical economic understanding of public good only at the local or national scale. Further, we put forward two more claims: that it makes conceptual and political sense to consider adaptation as a global public good, and that framing adaptation as such should make a difference in boosting adaptation finance. In a multi-polar world with a wide diversity in views on adaptation finance, multilateral agencies may lead in promoting the proposed framing.

**Key words:** Adaptation, Climate Finance, Global Public Goods, Polluter-Pays Principle

### **1. Introduction**

Climate finance (CF) stands at the core of negotiations under the United Nations Framework Convention on Climate Change (UNFCCC), because the estimated needs and level of mobilization vary widely. Also, the issue of funding is extremely complex, and this relates more to adaptation funding, because of a lack of conceptual clarity in the regime provisions. The current status of adaptation financing (AF) shows a gap in orders of magnitude between the estimated needs and the supply.<sup>1</sup> Of the delivered Fast Start Finance (FSF) during 2010-2012, between 05-

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30 per cent has gone to adaptation.<sup>2</sup> What is more disquieting is that overwhelming share of CF (76-80 per cent) is recycled official development assistance (ODA).<sup>3</sup> Oxfam shows that in 2017–18, only an estimated 20.5 per cent of bilateral CF went to Least Developed Countries (LDCs) and 03 per cent to Small Island Developing States (SIDS) – and the bulk of this finance was in the form of loans and other non-grant instruments. This reinforces the debt distress being suffered by the LDCs, because of COVID-19.<sup>4</sup>

The stimulus package initiated by the rich countries is focused almost entirely within their national economies, and some of them including the United Kingdom (UK) are cutting their ODA budgets when the poorer countries need international support the most, to face the combined effects on health, food and livelihood insecurity and increasing climate impacts.<sup>5</sup> With no ambitious mitigation by the major emitters, industrial countries spend billions of public money on their own adaptation, which long ago Tutu called ‘adaptation apartheid.’<sup>6</sup>

This continued poverty in international adaptation finance is the big puzzle in adaptation politics.<sup>7</sup> There is agreement that climate change is global, both in its cause and effect dimensions. It is a collective action problem, so there is a built-in compulsion for addressing its ‘cause’ through universal response, as the Paris Agreement (PA) vindicates. The mitigation regime is not succeeding yet because of disagreements over sharing of responsibility among the UNFCCC Parties, but nobody questions the properties of restoring climate stability as a life-support global

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<sup>1</sup> Mizan R Khan, *Toward a Binding Climate Change Adaptation Regime: A Proposed Framework*, London: Routledge, 2013; Anne Olhoff, Barney Dickson, Daniel Puig, Keith Alverson, Skylar Bee, *The Adaptation Finance Report: A Preliminary Assessment*, Nairobi: The United Nations Environmental Programme (UNEP), 2016.

<sup>2</sup> Smita Nakhooda et al., “Mobilizing International Climate Finance: Lessons from the Fast Start Finance Period”, World Resources Institute, Washington, DC, available at <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8686.pdf>, accessed on 27 October 2020; David Cipler, J. Timmons Roberts, and Mizan R. Khan, “The Politics of International Climate Adaptation Funding: Justice and Divisions in the Greenhouse”, *Global Environmental Politics*, Vol. 13, Issue 01, 2013, pp. 49-68; Barbara Buchner et al., “Global Landscape of Climate Finance 2015”, *Climate Policy Initiative*, November, 2015.

<sup>3</sup> Oxfam, *The Climate Fiscal Cliff: An Evaluation of Fast Start Finance and Lessons for the Future*. Oxford: Oxfam Media Advisory, 2013; S Nakhooda et al., op.cit.

<sup>4</sup> Oxfam, *Climate Finance Shadow Report 2020*, UK: Oxford, 2020; International Monetary Fund (IMF), “The IMF Executive Board Discusses ‘The Evolution of Public Debt Vulnerabilities in Lower Income Economies’”, available at <https://www.imf.org/en/News/Articles/2020/02/05/pr2033-imf-executive-board-discusses-evolution-public-debt-vulnerabilities-lower-income-economies>, accessed on 23 March 2021.

<sup>5</sup> Oxfam, *Climate Finance Shadow Report 2020*, op. cit.

<sup>6</sup> Desmond Tutu, “We Do not Need Climate Change Apartheid in Adaptation”, available at <http://hdr.undp.org/en/content/we-do-not-need-climate-change-apartheid-adaptation#:~:text=Cushioned%20by%20heating%20and%20cooling,with%20elaborate%20climate%20defence%20systems>, accessed on 23 March 2021.

<sup>7</sup> Mizan R. Khan and Timmons Roberts, “Adaptation and International Climate Policy”, *WIREs Climate Change*, Vol. 04, Issue 03, 2013, pp. 171–189.

public good (GPG). Then, what about the effect of antecedent stock deposition of emissions, or the current undersupply of mitigation? Should not climate change impacts be regarded as a global public bad (GPB), and hence, adaptation as a GPG? It is not yet the case, because adaptation is viewed still as bringing in local, national or at best some regional benefits. However, compared to the earlier scholarship, there is a growing trend of globalizing responsibility for adaptation including in the PA.<sup>8</sup> Benzie and Persson argue that in the initial years, the then epistemic community looked at climate impacts from a narrow environmental or natural science perspective and so the Convention codified adaptation as a local or national scale action, while the predominant focus was given on mitigation.<sup>9</sup> They also present a strong evidence-based case of ‘borderless climate risks.’ Actually, climate change impacts that may be experienced locally have cross-border and sometimes even global repercussions.<sup>10</sup> With increasing involvement of multi-disciplinary expertise, framing of adaptation is expanding from national to global level, requiring international cooperation and multi-stakeholder engagement.<sup>11</sup> These developments are defined by some as an emerging fourth era of adaptation governance.<sup>12</sup>

Ironically, there seems to be no effort yet in implementing the financial obligations agreed by the developed country parties under the climate regime, or in codifying this responsibility through adequate adaptation support to address the ‘effect’ part of climate change. Herein, Gardiner’s thesis of ‘theoretical ineptitude’ remains still relevant, which is manifest in not appreciating the conceptual underpinnings of climate change, condemning those mainly responsible to a ‘moral

<sup>8</sup> Mizan R Khan, *Toward a Binding Climate Change Adaptation Regime: A Proposed Framework*, op. cit.

<sup>9</sup> Magnus Benzie and Åsa Persson. “Governing Borderless Climate Risks: Moving beyond the Territorial Framing of Adaptation”, *International Environmental Agreements: Politics, Law and Economics*, Vol. 19, Issue 04, 2019, pp. 369-393.

<sup>10</sup> Andrew J Challinor, W. Neil Adger, and Tim G. Benton, “Climate Risks Across Borders and Scales”, *Nature Climate Change*, Vol. 7, Issue 4-5, 2017, p. 621; Johanna Hedlund et al., “Quantifying Transnational Climate Impact Exposure: New Perspectives on the Global Distribution of Climate Risk”, *Global Environmental Change*, Vol. 52, 2018, pp. 75-85; SC Moser and J. Finzi Hart. “The Long Arm of Climate Change: Exploring Climate Change Impacts via Teleconnections”, *Climate Chang*, Vol. 129, Issue 1-2, 2015, pp. 13-26.

<sup>11</sup> Frank Biermann, *Earth System Governance: World Politics in the Anthropocene*, Cambridge, MA: The MIT Press, 2014; IPCC, *Summary for Policymakers*, Geneva: the World Meteorological Organization, 2018; Adis Dzebo and Johannes Stripple, “Transnational Adaptation Governance: An Emerging Fourth Era of Adaptation”, *Global Environmental Change*, Vol. 35, 2015, pp. 423-435; Sander Chan and Wanja Amling, “Does Orchestration in the Global Climate Action Agenda Effectively Prioritize and Mobilize Transnational Climate Adaptation Action?”, *International Environmental Agreements: Politics, Law and Economics*, Vol. 19, Issue 4-5, 2019, pp. 429-446; Mizan R. Khan, “Climate Change, Adaptation and International Relations Theory”, in Ed Atkins & Gustavo Sosa-Nunez (eds.), *Environment, Climate Change and International Relations*, Bristol: E-International Relations Publishing, 2016, pp. 14-28.

<sup>12</sup> Adis Dzebo and Johannes Stripple. “Transnational Adaptation Governance: An Emerging Fourth Era of Adaptation”, *Global Environmental Change*, Vol. 35, 2015, pp. 423-435; Richard JT Klein et al., *Advancing Climate Adaptation Practices and Solutions: Emerging Research Priorities*. Stockholm Environment Institute, 2017.

corruption<sup>13</sup>. Correcting this theoretical ineptitude obviously warrants a reframing of adaptation. Further, if the provision of local or national public goods is not left to voluntary or market initiatives, why should adaptation by the poor victims be condemned to mend on their own, through market instruments? Finally, if these questions sound rational, deserving an answer, then the issue is how can such a framing of adaptation be translated into reality?

To deal with these questions, this article substantiates three claims: (i) that inadequate (adaptation) finance is due to the inefficacy of market instruments for adaptation and its current narrow framing; (ii) that it makes conceptual and political sense to consider adaptation as a GPG; and (iii) that reframing adaptation as a GPG should make a difference by boosting public finance. The proposed framing as an integrative conception of adaptation combines ideas from disciplines, such as environmental economics, international law and relations, political economy, human rights, security studies, state responsibility and liability mechanisms. What follows are three sections on the three claims, followed by a conclusion.

## 2. Conventional Framing of Adaptation

The UNFCCC provisions (Articles 4.3, 4.4, 4.7 and 4.9) and Article 9.1 of the PA obligate developed countries to assist the developing countries, especially the Particularly Vulnerable Countries (PVCs), in addressing climate change. But the reality is different. Because of continual absence of an agreed definition of climate or adaptation finance, multiple, fragmented and overlapping sources, different estimates show widely differing numbers. Further, climate investments show a bias toward developed countries. Abadie et al. explain the factors behind this, as fewer risks, known environments and ancillary local benefits, such as clean air and improved infrastructure.<sup>14</sup> As mitigation anywhere brings in global benefits, there is remarkable bias for mitigation support both by public and private sources in developing countries.

However, Articles 7.1 and 7.2 of the PA made “enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change” a global goal and global responsibility as well. But the trend in the AF since COP21 shows no remarkable change in expanding its share. The main reason why AF remains poor is that market instruments and private sector are not interested in addressing adaptation (except for profit-earning insurance), because of its largely public goods

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<sup>13</sup> Stephen M Gardiner, “A Perfect Moral Storm: Climate Change, Intergenerational Ethics and the Problem of Moral Corruption”, *Environmental Values*, Vol. 15, Issue 03, 2006, pp. 397-413.

<sup>14</sup> Luis M Abadie, Ibon Galarraga, and Dirk Rübhelke, “An Analysis of the Causes of the Mitigation Bias in International Climate Finance”, *Mitigation and Adaptation Strategies for Global Change*, Vol. 18, Issue 07, 2013, pp. 943-955.

nature, where benefits are not exclusive. Unlike in mitigation, there are no off-set benefits from adaptation. As indicated, the conventional conceptualization looks at the consequences of climate change mostly as local or national public bad, and hence, adaptation is seen as a local, national or at best a regional public good.<sup>15</sup> Ciplet, Timmons and Khan analyze the process of how material, structural and discursive power continues to reproduce inequality in climate politics, including in issue framing.<sup>16</sup>

The initial impact-focused vulnerability perspective contributed to adaptation actions being codified by the Convention as local or national. Article 3.3 of the Convention stipulating that any climate action must bring in global benefits on a least-cost basis stood as a barrier to adaptation funding, because it was judged from a narrow economic perspective. The Cancun Adaptation Framework of COP16 underlined the need for assisting PVCs in their adaptation, but it mentioned neither the resources needed, nor the *basis* of mobilizing support.<sup>17</sup> Still CF remains voluntary, despite the agreed provision of a responsibility-capability-based mechanism, Common but Differentiated Responsibilities and Respective Capabilities (CBDR+RC), under Article 3.1 of the Convention. This and other provisions in certain terms differentiate CF/AF from ODA, but at implementation level, it is not easy to keep them separate, or even makes sense to mix.

The crux of the problem lies in how neoliberal market economics, the foundational base of climate regime, conceptualizes adaptation as a global policy strategy. An inherent feature of climate change is its global dimension, both in its *cause* and *effect*: diffuse sources of emissions create differing impacts across regions. Accumulated emissions of yesteryears are mixing with increasing emissions of today, drastically changing the share of Green House Gas (GHG) emissions across countries. As a result, atmospheric sink capacity has become rival with increasing emissions since the industrial revolution. Against this, there is free-riding and acute undersupply of mitigation. As a remedy, Hardin prescribed privatization or nationalization of the commons, but the sink capacity as a global commons can

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<sup>15</sup> Scott Barrett, "Climate Treaties and the Imperative of Enforcement", *Oxford Review of Economic Policy*, Vol. 24, Issue 2, 2008, pp. 239-258; Seraina Buob and Gunter Stephan, "On the incentive compatibility of funding adaptation", *Climate Change Economics*, Vol. 04, Issue 02, 2013; Åsa Persson, "Institutionalising Climate Adaptation Finance under the UNFCCC and Beyond: Could an Adaptation "market" Emerge?", *Stockholm: Stockholm Environment Institute*, 2011; Sonja Butzengeiger-Geyer et al., "Policy Instruments for Climate Change Adaptation: Lessons from Mitigation and Preconditions for Introduction of Market Mechanisms for Adaptation", *Colorado Conference on Earth System Governance*, 2011; Maria Antonia Tigre, "Building a Regional Adaptation Strategy for Amazon Countries", *International Environmental Agreements: Politics, Law and Economics*, Vol. 19, Issue 04, 2019, pp. 411-427.

<sup>16</sup> David Ciplet, J. Timmons Roberts, and Mizan R. Khan, *Power in a Warming World: The New Global Politics of Climate Change and the Remaking of Environmental Inequality*, Cambridge, MA: MIT Press, 2015.

<sup>17</sup> Mizan R Khan, *Toward a Binding Climate Change Adaptation Regime: A Proposed Framework*, op. cit.

neither be privatized nor nationalized, though with carbon trading, it has virtually been privatized.<sup>18</sup> Even Clean Development Mechanism (CDM) benefits were overwhelmingly captured by the high and middle-income developing countries. But Vanderheiden argues that unlike most other natural resources, there is no natural distribution of atmospheric space, so climate defies conventional theories of property by presenting a case of pure public good vital to human flourishing.<sup>19</sup>

It is interesting to note the dissimilar interpretations of how mainstream economics relates to adaptation. One group argues that given the direct climate change impacts and adaptation benefits being local, national, or at best regional, adaptation does not constitute a GPG, presenting a less compelling case for global cooperation.<sup>20</sup> Further, unlike mitigation, adaptation concerns present a poor case for market instruments.<sup>21</sup> These ideas draw their strength from Article 3.3 of the UNFCCC, which stipulates that any climate actions must bring in global benefits, with the least costs. Some scholars have already started looking for ways of commodifying adaptation projects in terms of adaptation finance ‘credits’ and piloting such projects.<sup>22</sup>

The other group argues differently, that market economics should internalize the externality of emissions through the polluter-pays-principle (PPP), and this is the most effective way out.<sup>23</sup> This is exactly what is done in industrial economies, either through environmental or carbon tax or emissions trading. The climate regime reflects more of this philosophy. The cardinal principle of CBDR+RC can be operationalized most effectively through the global application of PPP, in the form of a carbon tax, with factoring the historical responsibility to causing the problem<sup>24</sup>. The funds thus generated can finance low-carbon technology and adaptation to

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<sup>18</sup> Peter Newell and Matthew Paterson, “*The Politics of the Carbon Economy*,” in Max Boykoff (ed.), *The Politics of Climate Change: A Survey*, London: Routledge, 2009, pp. 80–99; Garrett Hardin, “Tragedy of the Commons”, *Science*, Vol. 162, Issue 3859, 1968, pp. 1243-1248.

<sup>19</sup> Steve Vanderheiden, *Atmospheric Justice: A Political Theory of Climate Change*, Oxford: Oxford University Press, 2008.

<sup>20</sup> Scott Barrett, “Climate Treaties and the Imperative of Enforcement”, *Oxford Review of Economic Policy*, Vol. 24, Issue 02, 2008, pp. 239-258; Ernesto Zedillo, *Global Warming: Looking beyond Kyoto*, Washington: Brookings Institution Press, 2008.

<sup>21</sup> Scott Barrett, *ibid*; David M Driesen (ed.), *Economic Thought and US Climate Change Policy*, MA: The MIT Press, 2010.

<sup>22</sup> Åsa Persson, *op. cit.*; Sonja Butzengeiger-Geyer et al., *op. cit.*

<sup>23</sup> Joseph E Stiglitz, *The Price of Inequality: How Today's Divided Society Endangers Our Future*, New York: WW Norton & Company, 2012; Oran R Young, *Institutional Dynamics: Emergent Patterns in International Environmental Governance*, Cambridge: The MIT Press, 2010; Mizan R Khan, “Polluter-Pays-principle: The Cardinal Instrument for Addressing Climate Change”, *Laws*, Vol. 04, Issue 03, 2015, pp. 638-653.

<sup>24</sup> Mizan R. Khan, *Toward a Binding Climate Change Adaptation Regime: A Proposed Framework*, *op. cit.*; S. Niggol Seo, “A Theory of Adaptation to Climate Change as a Global Public Good”, *Carbon*, Vol. 25, 2010.

climate impacts. The PPP is now practiced in several developing countries as well.<sup>25</sup> The PPP has both efficiency and equity elements, deserving a global application, and this framing facilitates the arguments proposed in this article.<sup>26</sup> Though adaptation would be needed in the foreseeable future because of the antecedent stock deposition of GHGs, mitigation is the ultimate form of adaptation. So, the non-internalization of externality by the emission powers (major emitters) is the real free-riding.<sup>27</sup> This leads us to the next section, which attempts for a reframing of adaptation, conceptually and politically.

### 3. Constructing adaptation as a GPG

#### 3.1 Conceptualizing adaptation as a GPG

Many environmental issues including atmospheric sink capacity are described as common pool resources.<sup>28</sup> The rivalness of such Common Pool Resources (CPRs) is argued as a source of power for those in the negotiations who are not willing to replenish the CPR.<sup>29</sup> So, the use of sinks as a Global Commons has become an impure or congested public good, with its finite capacity to absorb emissions. Thus, climate change represents the classic case of Tragedy of the Commons, and the greatest market failure<sup>30</sup>, manifest in socializing the cost. From the perspective of a prisoner's dilemma, the collective good of potential cooperation, compared to the collective bad, usually makes cooperation possible.<sup>31</sup> But because of continued disagreement over responsibility sharing and perceived free-riding among the UNFCCC parties, mitigation is not yet succeeding. The under-pledges by the major emitters in their Nationally Determined Contributions (NDCs) reflect this. But nobody questions the basic properties of mitigation as a GPG.

The irony is that the effects of undersupply of mitigation as increased climate disasters are not regarded as a GPB. Even if it is, adaptation to those effects is not considered a GPG, so there seems to be no *compulsion* for global cooperative

<sup>25</sup> Barbara Luppi, Francesco Parisi, and Shruti Rajagopalan, "The Rise and Fall of the Polluter-pays Principle in Developing Countries", *International Review of Law and Economics*, Vol. 32, Issue 01, 2012, pp. 135-144.

<sup>26</sup> Jonathan Remy Nash, "Too Much Market: Conflict between Tradable Pollution Allowances and the Polluter Pays Principle", *Harvard Environmental Law Review*, Vol. 24, 2000, p. 465.

<sup>27</sup> Mizan R Khan, *Toward a Binding Climate Change Adaptation Regime: A Proposed Framework*, op. cit.

<sup>28</sup> J. Samuel Barkin and George E. Shambaugh, *Anarchy and the Environment: The International Relations of Common Pool Resources*, New York: Suny Press, 1999.

<sup>29</sup> Elizabeth R DeSombre, "Developing Country Influence in Global Environmental Negotiations", *Environmental Politics*, Vol. 09, Issue. 03, 2000, pp. 23-42.

<sup>30</sup> Garrett Hardin, op. cit.; Nicholas Stern, "The Economics of Climate Change", *American Economic Review*, Vol. 98, Issue 02, 2008, pp. 1-37.

<sup>31</sup> Elizabeth R DeSombre, "Developing Country Influence in Global Environmental Negotiations", *Environmental Politics*, Vol. 09, Issue 03, 2000, pp. 23-42.

action to address the ‘effect’ part of the problem.<sup>32</sup> The Netherlands Environmental Assessment Agency rightly argues that GPBs should be countered by GPGs.<sup>33</sup> Though some scholars theorize the normative aspects of adaptation, none attempts to conceptualize climate impacts as a result of failed mitigation. One exception is Vanderheiden’s expansive idea of adaptation tending to plug the conceptual gap a little: ‘Adaptation intervenes in the causal chain between climate change and human harm, allowing the former but preventing the latter, but when this is not possible, a third category of *compensation* costs must be assigned in order to remedy failed mitigation and adaptation efforts ... so adaptation shall be understood to include prevention of harm as well as *ex post* compensation to it’.<sup>34</sup> As a corollary to these ideas, no-harm rule and *ex-post* compensation should be taken as obligatory. In like manner, Birdsall and de Nevers rightly argue that adaptation finance ‘is better thought of as a financial transfer based on the “causal responsibility” of richer to poorer countries for the disproportionate costs to the poor of climate change...’<sup>35</sup>

Together with this expansive conceptualization of adaptation, the works of Kaul et al.<sup>36</sup> on the GPGs under the United Nations Development Programme (UNDP) banner contain new and expanded interpretations. A globalized world with both good and bad demands a new understanding of GPGs, different from the neoclassical framing. Kaul et al. defined GPGs as ‘goods whose benefits are strongly universal in terms of countries (i.e., covering more than one group of countries), people (i.e., accruing to several, preferably all, population groups), and generations (i.e., extending to both current and future generations, or at least meeting the needs of the current generations without foreclosing options for future generations’<sup>37</sup>. In their second book, Kaul et al. proposed a broader definition, calling the ‘triangle of publicness’: (a) publicness in consumption, (b) publicness in distribution of benefits, and (c) publicness of decision-making, to ensure procedural justice.<sup>38</sup> Kaul et al. classified GPGs into three groups: (i) global natural commons, such as high seas and the atmosphere, (ii) global human-made commons, such as global networks, knowledge and international regimes, and (iii) global policy outcomes and conditions, such as peace, security and financial stability.<sup>39</sup>

<sup>32</sup> Mizan R Khan, *Toward a Binding Climate Change Adaptation Regime: A Proposed Framework*, op. cit.

<sup>33</sup> Netherlands Environmental Assessment Agency, *A Global Public Goods Perspective on Environment and Poverty Reduction: Implications for Dutch Foreign Policy*, The Hague, 2011.

<sup>34</sup> S Vanderheiden, “Globalizing Responsibility for Climate Change”, *Ethics and International Affairs*, Vol. 25, Issue 01, 2011 pp. 66-84.

<sup>35</sup> Nancy Birdsall and Michele De Nevers, “Adaptation Finance: How to Get Out from between a Rock and Hard Place”, *CGD Policy Paper*, No. 1, 2012, p. 01.

<sup>36</sup> Inge Kaul, Isabelle Grunberg, and Marc A. Stern (eds.), *Global Public Goods: International Cooperation in the 21st Century*, Oxford: Oxford University Press, 1999, pp. 02-19; Inge Kaul, et al. (eds), *Providing Global Public Goods: Managing Globalization*. Oxford: Oxford University Press, 2003.

<sup>37</sup> Ibid.

<sup>38</sup> Inge Kaul, et al. (eds), *Providing Global Public Goods: Managing Globalization*, op. cit.

<sup>39</sup> Inge Kaul, Isabelle Grunberg, and Marc A. Stern (eds.), op. cit.



Climate change impacts all countries, albeit differentially. Benzie and Persson demonstrate how the notion of borderless climate risks challenges the dominant territorial framing of adaptation and its problem structure.<sup>40</sup> Atmospheric sink capacity, climate regime and restored climate stability should be regarded as natural GPGs, along the line of Kaul's multi-disciplinary framing.<sup>41</sup> Deneulin and Townsend argue the concept of GPGs could be more effective if it expands the concept of well-being beyond individuals into community level.<sup>42</sup> In this sense, Sen's concept of human well-being as freedoms to choose and value cannot be secured without climate stability, or in presence of increasing climate impacts.<sup>43</sup> Magnan and Ribera view adaptation as a GPG, on the ground that climate change has potential to displace peoples or bring in new global public health challenges, and these can only be addressed through international cooperation.<sup>44</sup> Seo assumes that since mitigation is a GPG, so is adaptation, and he calculates the optimal level of adaptation aid.<sup>45</sup>

However, such framing of adaptation as GPG, though gradually inching forward, make it a highly contested concept.<sup>46</sup> The critics like Long and Woolley argue that the 'concept gives a simple rationale for the activities of those associated with United Nations (UN) agencies ... to fit the exigencies of international public policy rather than explanatory theory'.<sup>47</sup> But this thinking sounds not justifiable in an era of growing commons problems accompanied by rapid and uneven globalization. The understanding of public goods by Samuelson was national, territory-bounded, as in those days no extra-territorial or global pollution problem or borderless climate risks did arise.<sup>48</sup> Cross-border externality problems now represent a group of GPBs, warranting their collective internalization into national and global policy processes. Even the widening disparity and concentration of poverty in the middle-income countries are now viewed by some as a GPB, warranting collective solution.<sup>49</sup> Kaul et al. argue that poverty alleviation could be a GPG if it contributes to conflict

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<sup>40</sup> Magnus Benzie and Åsa Persson, op. cit.

<sup>41</sup> Inge Kaul, "Global Public Goods: a Concept for Framing the post-2015 Agenda?", Bonn: DIE, Discussion Paper, 2013, p. 185.

<sup>42</sup> Séverine Deneulin and Nicholas Townsend, "Public Goods, Global Public Goods and Common Good", WeD Working Paper, No.18, 2006.

<sup>43</sup> Amartya Sen, *Development as Freedom*, Oxford: Oxford University Press, 1999.

<sup>44</sup> Alexandre K Magnan and Teresa Ribera, "Global Adaptation after Paris" *Science*, Vol. 352, Issue 6291, 2016, pp. 1280-1282.

<sup>45</sup> S. Niggol Seo, "A Theory of Adaptation to Climate Change as a Global Public Good", *Carbon*, Vol. 25, 2010.

<sup>46</sup> Nina Hall and Åsa Persson, "Global Climate Adaptation Governance: Why is It not Legally Binding?", *European Journal of International Relations*, Vol. 24, Issue. 3, 2018, pp. 540-566.

<sup>47</sup> D. Long and F. Woolley, "Global Public Goods: Critique of a UN Discourse" *Global Governance: A Review of Multilateralism and International Organizations*, Vol. 15, Issue 01, 2009, p. 118.

<sup>48</sup> Paul A Samuelson, "The Pure Theory of Public Expenditure", *The Review of Economics and Statistics*, 1954, pp. 387-389; Agnar Sandmo, "Global Public Economics: Public Goods and Externalities", *Économie publique/Public economics*, 2007, pp. 18-19.

<sup>49</sup> Andy Sumner, "Where Do the Poor Live?", *World Development*, Vol. 40, Issue 05, 2012, pp. 865-877.

prevention, peace and environmental protection.<sup>50</sup> Even social justice that promotes productivity of the poor, and hence peace and stability, is regarded as an international public good.<sup>51</sup> Kaul also argues that enhanced provision of GPGs can contribute to poverty reduction, if it is not financed by ODA.<sup>52</sup>

In the case of climate impacts and adaptation, the critiques can be refuted in a number of ways: first, ambitious mitigation brings in the most adaptation benefits in the form of avoided Loss and Damage (L&D), as Vanderheiden argues; this is not taking place, so adaptation must include prevention of harm and *ex-post* compensation for unavoidable loss and damage; second, norms such as human rights including right to development and no-harm rule are globally recognized and regarded as GPGs.<sup>53</sup> Volger talks of vulnerability or global fate interdependence that climate change engendered.<sup>54</sup> Obviously, the centuries-old Westphalian sense of sovereignty cannot deal with emerging GPGs, and a new type, what Kaul calls smart or pooled sovereignty is warranted.<sup>55</sup> This changed perspective of sovereignty and national interests can facilitate an acceptance of adaptation as a GPG.

Third, funding for adaptation can bring in direct or indirect global benefits, such as better monitoring and prediction of climate change, improved modeling of climate impacts, Research and Development (R&D), etc. Also, adaptation measures may prevent potentially huge climate-induced displacement, regarded as an indirect global benefit.<sup>56</sup> Mendelsohn talks of joint adaptation, with benefits for many, for which the government has to take actions.<sup>57</sup> These joint adaptations resemble 'public goods'.<sup>58</sup> Kartha also identifies several indirect global benefits of national adaptation, such as reduced vulnerability of trading partners to climate change, reduced dislocation and migration, reduced pressure for violent conflicts, etc.<sup>59</sup> Such benefits may not be

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<sup>50</sup> Inge Kaul, Isabelle Grunberg, and Marc A. Stern, op. cit.

<sup>51</sup> Ibid.

<sup>52</sup> Inge Kaul, "Providing Global Public Goods: What Role for Multilateral Development Banks", London: Overseas Development Institute, 2017.

<sup>53</sup> S Vanderheiden, "Globalizing Responsibility for Climate Change", *Ethics and International Affairs*, Vol. 25, Issue 01, 2011, pp. 66-84.

<sup>54</sup> John Vogler, *The Global Commons: A Regime Analysis*, Wiley, 1995.

<sup>55</sup> Inge Kaul, "Global Public Goods: A Concept for Framing the post-2015 Agenda?", op. cit.; William D. Nordhaus, "Paul Samuelson and Global Public Goods: A Commemorative Essay for Paul Samuelson", Yale University, 2005.

<sup>56</sup> Jonathan Pickering and Dirk Rubbelke, "International Cooperation on Adaptation to Climate Change", in Anil Markandya, Ibon Galarraga and Elisa Sainz de Murieta (eds.), *Routledge Handbook of the Economics of Climate Change Adaptation*, London: Routledge, 2014, pp. 56-75.

<sup>57</sup> Robert Mendelsohn, "Efficient Adaptation to Climate Change" *Climatic Change*, Vol. 45, Issue 3-4, 2000, pp. 583-600.

<sup>58</sup> Paul A Samuelson, "The Pure Theory of Public Expenditure", *The Review of Economics and Statistics*, 1954, pp. 387-389.

<sup>59</sup> Sivan Kartha, "Adaptation as A Strategic Issue in The Climate Change Negotiations", European Climate Platform, 2006.

enjoyed equally by all countries and citizens, as tax-funded national public goods do not benefit all citizens equally, or some may not benefit at all. Distributional concerns also have legitimate rationale, given the uneven climate impacts across countries. Finally, with evolving better knowledge of cross-border climate impacts and constructions of new and integrated knowledge across disciplines, time has come for articulation of adaptation in a trans-border trans-disciplinary way.<sup>60</sup> Actually, the PA as a universal policy agreement, responded to this call, defining adaptation as ‘a global challenge faced by all with local, sub-national, national, regional and international dimensions’ (Article 7.2). This leads us to the next section, which discusses the political salience of adaptation as a GPG.

**Table 1: Key Types of Adaptation Benefits**

Local private benefits	Local public benefits	Direct global public benefits	Indirect global public benefits
Value of saved crops for individual farmers; improved water storage for households	Flood-proofed infrastructure; afforestation preventing mudslides; coastal afforestation as wind and flood breaks build water storage	Control of climate-sensitive infectious diseases; protection of climate-sensitive biodiversity; agricultural research on flood-and saline resistant crops, improved modeling of climate impacts	Continuation of statehoods by many small island states, with avoided international migration; lower price volatility on climate-sensitive agricultural products; enhanced purchasing power among the vulnerable communities and countries

Source: Adapted from Persson<sup>61</sup>, and expanded by the author.

### 3.2 *Adaptation as a GPG makes political sense*

Hall and Persson analyze the degree of legalization of governance of adaptation under the UNFCCC and reach the conclusion that it is low in both obligation and precision.<sup>62</sup> This explains the continued struggle in framing of adaptation under the UNFCCC and its acceptance in the PA as a global goal between the developed and developing countries; while the former frame climate change merely as a technical problem to be solved through collaboration with low-carbon technologies, the latter frame it as a development problem, to be addressed by global socio-economic and technical solutions.<sup>63</sup> The discourse on various types of GPGs including adaptation discussed above is such a conceptual and political struggle.

<sup>60</sup> Mizan R. Khan, *Toward a Binding Climate Change Adaptation Regime: A Proposed Framework*, op. cit.

<sup>61</sup> Åsa Persson, op. cit.

<sup>62</sup> Nina Hall and Åsa Persson, op. cit.

<sup>63</sup> Mike Hulme, *Weathered: Cultures of Climate*, London: Sage, 2016.

Wuyts et al. argue that PGs are socially defined and socially constructed in response to public needs rather than containing such technical characteristics as non-excludability and non-rivalness.<sup>64</sup> Kaul et al. also argue that publicness or privateness are social constructions, as matters of policy choice.<sup>65</sup> So, central to this articulation is social constructivism and normative international political theory, which argue that the questions of norms, morality and justice are not external but very much intrinsic to interactions among states in the twenty-first century.<sup>66</sup> Thus, GPGs have a normative connotation while contrasting with GPBs, and articulating an issue as a GPG enhances its status and rhetorical value for wider response.<sup>67</sup> Conceptualizing adaptation as a GPG primarily for enhancing the adaptive capacity in the particularly vulnerable countries is likely to further motivate richer nations for enhanced global cooperation to promote collective self-interest. Kaul further argues that a focus on GPGs indicates not only their ‘public’ nature, but also their decision-making process, ensuring procedural justice.<sup>68</sup> Nye argues that while the United States (US) led in production of GPGs since World War II, now cooperation of other powerful states is needed, because power has become a positive-sum game for achieving global goals.<sup>69</sup> The level of risks associated with a 2°C warming had increased for four out of five ‘reasons for concern’, compared with the Fifth IPCC (Intergovernmental Panel on Climate Change) Assessment Report, and so, adaptation efforts warrant deeper international cooperation as a ‘critical enabler’.<sup>70</sup>

However, at the policy level too, there are both supporters and critiques. In the 2000s when the GPG debate started, the European Union (EU) countries supported and Japan and the US opposed. The central issue that differentiated them was the question of additionality of finance, above foreign aid. The developing countries feared of diversion of ODA into provision of GPGs, and their undemocratic

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<sup>64</sup> M Wuyts M, M Mackintosh and T Hewitt, “Development Policy and Public Action,” Oxford: Oxford University Press in association with the Open University, 2012.

<sup>65</sup> Inge Kaul et al., (eds.), *Providing Global Public Goods: Managing Globalization*, Oxford: Oxford University Press, 2003.

<sup>66</sup> M Khan, “Climate Change, Adaptation and International Relations Theory”, in Ed Atkins & Gustavo Sosa-Nunez (eds.), *Environment, Climate Change and International Relations*, Bristol: E-International Relations Publishing, 2016, pp. 14-28; Antonio Franceschet, “Justice and International Organization: Two Models of Global Governance”, *Global Governance: A Review of Multilateralism and International Organizations*, Vol. 08, Issue 01, 2002, pp. 19-34; Chukwumerije Okereke, “Climate Justice and the International Regime”, *Wiley Interdisciplinary Reviews: Climate Change*, Vol. 01, Issue. 03, 2010, pp. 462-474.

<sup>67</sup> Daniel Bodansky, “What’s in a Concept? Global Public Goods, International Law, and Legitimacy”, *European Journal of International Law*, Vol. 23, Issue 03, 2012, pp. 651-668.

<sup>68</sup> Inge Kaul, op. cit.

<sup>69</sup> Joseph S. Nye Jr., *Politicians Say American Leadership is in Decline: They are Wrong*, *The Washington Post*, 29 January 2016.

<sup>70</sup> Ove Hoegh-Guldberg et al., “Impacts of 1.5 C global Warming on Natural and Human Systems” *Global Warming of 1.5°C*, An IPCC Special Report, 2018; IPCC, “Global warming of 1.5°C”, Summary for Policymakers, Geneva: World Meteorological Organization, 2018.

governance.<sup>71</sup> Sweden and France are regarded as pioneers in embracing the GPG approach, and they established an International Task Force on GPGs in 2003. The Task Force defined GPGs as issues that are considered important to global community, which cannot be provided by individual countries acting alone, and must be addressed collectively, both by the developed and developing countries.<sup>72</sup> The Task Force identified among others tackling climate change as a GPG and included strategies such as strengthening adaptive capacities and supporting capacity building in developing countries. Together with mitigation, adaptation is a global need and has to be addressed at all levels, as the PA does (Articles 7.1 and 7.2). As mentioned, such agreed provisions are there, but not implemented yet in an obligatory manner.

So, with an approach of cognitive flexibility, frame-bridging and bandwagoning across relevant ideas and disciplines, we take help of three levers to raise the framing of adaptation at a higher policy or strategic plane.<sup>73</sup> The first lever is ‘double exposure’ causing double loss to the PVCs due to their simultaneous exposure to market-led uneven globalization and climate change.<sup>74</sup> The idea is that many of the most vulnerable countries have not been able to catch the train of globalization, and this fall has been accompanied by another extremely negative factor, climate change. So, some argue that adaptation measures promote economic stability, lack of which endangers vulnerable countries to remain as viable partners in trade and investment.<sup>75</sup> Once the PVCs, numbering over 100 countries, benefit from strengthening their economies and adaptive capacities, no country can be excluded from enjoying benefits from such stability, peace and security.

The second lever is the threats to human and global security from increasing climate impacts, both national and cross-border, and the resulting consequences. As a result, many countries are likely to face both direct and indirect threats to human and national security, which in snowball fashion will spill over beyond national borders and onto the front yards of industrial countries.<sup>76</sup> So, interests from security

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<sup>71</sup> Maurizio Carbone, “Supporting or Resisting Global Public Goods?: The Policy Dimension of a Contested Concept”, *Global Governance: A Review of Multilateralism and International Organizations*, Vol. 13, Issue 02, 2007, pp. 179-198.

<sup>72</sup> Ibid.

<sup>73</sup> Mizan R Khan and Timmons Roberts, “Adaptation and International Climate Policy”, op. cit.

<sup>74</sup> Robin M. Leichenko and Karen O’Brien, *Double Exposure: Global Environmental Change in an Era of Globalization*, Oxford: Oxford University Press, 2008.

<sup>75</sup> Stine Aakre and Dirk TG Rübhelke, “Objectives of Public Economic Policy and the Adaptation to Climate Change”, *Journal of Environmental Planning and Management*, Vol. 53, No. 06, 2010, pp. 767-791; Sivan Kartha, op. cit.

<sup>76</sup> John Podesta and Peter Ogden, “The Security Implications of Climate Change”, *Washington Quarterly*, Vol. 31, Issue 01, 2008, pp. 115-138; Thomas Bernauer, Tobias Böhmelt, and Vally Koubi, “Environmental Changes and Violent Conflict”, *Environmental Research Letters*, Vol. 07, Issue 01, 2012; Jon Barnett, Jon, and W. Neil Adger, “Climate Change, Human Security and Violent Conflict”, *Political Geography*, Vol. 26,

institutions in climate risks and ideas concerning global risk management are rising globally.<sup>77</sup>

The third lever is the rights-and-justice framework. The fact that many countries are being hit first and hardest as innocent victims, with nano contributions to causing the problem, must be grounded on rights and justice claims, that the right to ‘no harm’ is an inalienable right, established and codified in international law, and being practiced in many parts of the world. Many scholars cogently argue that climate impacts documented by IPCC are already undermining and likely to further undermine the realization of a range of protected human rights, such as right to life, liberty, security and livelihoods.<sup>78</sup> Thus, there is a growing interest in adaptation governance including from the finance sector. The operationalization of the global goal on adaptation is expected to contribute to the proposed framing, and institutionalize the new norm of adaptation as a GPG. However, as Hall and Persson argue that it is too early to say, since the follow-up and manifestation of this goal will not become evident until the first “global stock-take” in 2023.<sup>79</sup> In the interim, initiatives to articulate adaptation as a GPG conceptually and politically is expected to boost funding for the purpose.

#### **4. Adaptation as a GPG would make a difference in funding**

##### **4.1 *Instruments for realizing adaptation as a GPG***

For materializing our framing of adaptation as a GPG, and to turn the three levers into actionable gears, we take help of two pivotal instruments, which can generate sustained international financing for adaptation. The first is the PPP, which originated as an economic and ethical principle, then gradually evolving into a legal one, already or being codified in the EU and elsewhere, and it is implicit

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Issue 06, 2007, pp. 639-655; Nicole Detraz, “Threats or Vulnerabilities? Assessing the Link between Climate Change and Security”, *Global Environmental Politics*, Vol. 11, Issue 03, 2011, pp. 104-120; Simon Dalby, *Security and Environmental Change*, Cambridge: Polity Press, 2009.

<sup>77</sup> Lisa Dellmuth et al., “Intergovernmental Organizations and Climate Security: Advancing the Research Agenda”, *Wiley Interdisciplinary Reviews: Climate Change*, Vol. 09, Issue 09, 2018, p. 496; World Economic Forum, *The Global Risks Report 2019*, 14th ed., Geneva: World Economic Forum, 2019.

<sup>78</sup> Lavanya Rajamani, “The Increasing Currency and Relevance of Rights-based Perspectives in the International Negotiations on Climate Change”, *Journal of Environmental Law*, Vol. 22, Issue 03, 2010, pp. 391-429; Simon Caney, “Climate Change and the Duties of the Advantaged”, *Critical Review of International Social and Political Philosophy*, Vol. 13, Issue 01, 2010, pp. 203-228; Henry Shue, “Subsistence emissions and luxury emissions”, *Law & Policy*, Vol. 15, Issue 01, 1993, pp. 39-60; Henry Shue, “Global Environment and International Inequality”, *International Affairs*, Vol. 75, Issue 03, 1999, pp. 531-545.

<sup>79</sup> Nina Hall and Åsa Persson, “Global Climate Adaptation Governance: Why is it not Legally Binding?”, *op.cit.*

in the Convention principle of CBDR.<sup>80</sup> That polluters should pay the social and environmental costs of pollution reflects the most fundamental lessons of economics, justice and responsibility. The PPP is being applied not only in the Organisation for Economic Co-operation and Development (OECD) countries, but also in several developing countries in many different forms. Then, why should it not be applied globally? Is it not the very foundation of market economics, as argued before, and its extension into emissions trading under the climate regime based on the principle of efficiency and least cost? While the earthly garbage dump is not free, why should atmospheric dump be treated free?<sup>81</sup> In a globalized world, this cardinal principle should not have a truncated application in terms of space. James Hansen at COP21 strongly argued for putting a price on carbon from major emitters.<sup>82</sup> The New York Climate Action Summit 2019 was strong in demanding such carbon pricing, as the secretary general himself very forcefully argued for taxing pollution, not people. Already there is an emerging consensus on carbon pricing, as evident from the World Bank's Declaration on Carbon Pricing already endorsed by almost 100 governments and more than 1000 corporations. Earlier, submissions from the LDCs and Alliance of small island states stipulated for application of PPP for mobilization of CF.<sup>83</sup>

However, to ensure equity, some argue that for global application of PPP, there should be differentiation among countries for some time, what Caney calls 'poverty-sensitive' PPP.<sup>84</sup> Or, a better approach could be that funds generated through a global carbon tax<sup>85</sup> or through carbon trading. Seo argues that this can mobilize sufficient adaptation funding while ensuring equity in terms of distributive justice.<sup>86</sup> There is also a strong movement among the international agencies, transnational networks of civil society and Non-government Organizations (NGOs) that the foundation of climate finance might be strengthened by imposing some levies from regulation of GPs, such as carbon emissions. Non-endorsement of PPP yet by some industrial countries does not reduce its theoretical or policy efficacy.

<sup>80</sup> Mizan R. Khan, "Polluter-Pays-principle: The Cardinal Instrument for Addressing Climate Change", *Laws*, Vol. 04, Issue 03, 2015, pp. 638-653.

<sup>81</sup> Oran R. Young, *Institutional Dynamics: Emergent Patterns in International Environmental Governance*, Cambridge: The MIT Press, 2010.

<sup>82</sup> James Hansen, "Paris Talks a 'Fraud'", *The Guardian*, 12 December 2015, available at [www.theguardian.com/environment/2015/dec/12/james-hansen-climate-change-paris-talks-fraud](http://www.theguardian.com/environment/2015/dec/12/james-hansen-climate-change-paris-talks-fraud), accessed on 07 March 2016.

<sup>83</sup> AOSIS, "AOSIS Input into the Assembly Paper on Financing", Bonn: UNFCCC, FCCC/WLCA/2008/Misc.5/Add.2 (Part 1), 2008, pp. 17-23; "Maldives on behalf of the LDCs", International Air Passenger Adaptation Levy, Bonn: UNFCCC. FCCC/AWGLCA/2009/MISC.1, 13 March 2009, pp. 59-60.

<sup>84</sup> Simon Caney, "Climate Change and the Duties of the Advantaged", *Critical Review of International Social and Political Philosophy*, Vol. 13, Issue 01, 2010, pp. 203-228.

<sup>85</sup> S. Niggol Seo, "A Theory of Adaptation to Climate Change as a Global Public Good", *Carbon*, Vol. 25, 2010.

<sup>86</sup> *Ibid.*

The second instrument is the agenda of L&D under the UNFCCC, agreed in 2010 on the understanding that adaptation has its limits and some loss and damage have to be accepted. Obviously, this agenda has the potential of germinating the liability and compensation mechanisms that would drive actions by the wealthy nations for adaptation in the PVCs.<sup>87</sup> The argument is that inflicting harm on a person or a country without due diligence is a culpable action, and hence liable to paying compensation.<sup>88</sup> Such payment actually is the application of PPP *ex-post*. Though Decision 1/CP21 (para 51) forecloses the claims of liability and compensation, that foreclosure is not contained in Article 8 of the PA. Also it does not stop Civil Society Organizations (CSOs) or citizens from suing the polluters for such claims, nor it does apply to other provisions of mitigation and adaptation. This is evident from hundreds of court cases pending in the courts of many countries, including the most in the US. Khan argues that because of the impending prospect of courts giving verdicts in terms of billions of dollars as compensation to inflicted harms from climate impacts, many developed countries finally agreed to a negotiated settlement on L&D under the PA.<sup>89</sup> Now the Warsaw International Mechanism has been mandated to leverage additional public and private finance for risk insurance and risk pooling in the PVCs. It may be mentioned that after a number of years, G77 and China, the umbrella negotiating bloc of developing countries, were united in their demands for new and additional funding for addressing L&D. In the end, the parties to COP 25 urges the Green Climate Fund (GCF) to consider the financial needs associated with L&D. So, things will not stop there, as issue networks increasingly involved in climate diplomacy are becoming increasingly vocal in demanding that the developed countries comply with their agreed obligation to support developing countries, with new and additional finance.

#### 4.2 *Additional Finance for Adaptation*

Since the 1990s, a new thinking emerged that GPGs should be financed by additional resources other than ODA.<sup>90</sup> Kaul cites that about 10 per cent of ODA is spent on provision of GPGs. Despite support of many EU countries then on GPG financing, it could not proceed much because of opposition by economic powerhouses like Japan and the US.<sup>91</sup> Now the EU, along with over 100 PVCs, are

<sup>87</sup> Mizan R. Khan, "Polluter-Pays-principle: The Cardinal Instrument for Addressing Climate Change, op. cit.

<sup>88</sup> R Verheyen, *Climate Change Damage and International Law: Prevention, Duties and State Responsibility*, Boston: Martin-Nijhoff Publishers, 2005; Daniel A Farber, "Basic Compensation for Victims of Climate Change", *University of Pennsylvania Law Review*, Vol. 155, Issue 06, 2007, pp. 1605-1656.

<sup>89</sup> Mizan R. Khan. *Toward a Binding Climate Change Adaptation Regime: A Proposed Framework*, op. cit.

<sup>90</sup> Maurizio Carbone, "Supporting or Resisting Global Public Goods? The Policy Dimension of a Contested Concept", *Global Governance: A Review of Multilateralism and International Organizations*, Vol. 13, No. 02, 2007, pp. 179-198; Inge Kaul et al. (eds), op. cit.

<sup>91</sup> Inge Kaul, *Providing Global Public Goods: What Role for Multilateral Development Banks*, London:



taking renewed drive to introduce additionality in CF. Some major EU countries have already contributed 0.7 per cent or more of their Gross National Income (GNI) as ODA, a target set back in 1970. The EU submission in 2008 contains hints at additionally in CF.<sup>92</sup> Kaul et. al argue that GPG financing must not jeopardize ODA which will hamper much needed basic provisions in poor countries, while supply of GPGs can strengthen people’s resilience to climate impacts, and contribute to poverty reduction.<sup>93</sup> Also studies show that *ex-ante* investment in climate risk reduction is a lot cheaper than *ex-post* relief and rehabilitation.<sup>94</sup> Therefore, cost effectiveness and mutual interest dictate that major economies provide adequate and predictable funding for adaptation. As adaptation is immediate and urgent, several LDCs like Bangladesh, Makawi and others have even established their own funds to protect their development gains from increasing climate impacts. Bangladesh even introduced a separate budget line on climate change, investing about one per cent of its GDP, which comes to around US \$03 billion a year. Against this, climate finance inflow stands at less than half a billion dollar a year. The LDCs obviously have extremely competing and urgent priorities for economic growth and social development.

Since COP7 at Marrakech in 2001, four funds including the latest GCF have been established and many different proposals of how to mobilize additional money have been discussed during the last decade. After Copenhagen, the high level Advisory Group on Finance established by the UN Secretary General, the G20 finance ministers’ forum, covering about 80 per cent of global emissions (G20 2010) and the UNFCCC (2012) and the Climate Action Summit 2019 have suggested different, with some overlapping, public sources at national and international levels.<sup>95</sup> These include proposals of auto-generation of money through domestic carbon tax, phasing out of fossil fuel subsidies, financial transaction tax, carbon pricing for international aviation and shipping, etc. The PA (Article 9.3) provides that ‘developed country Parties should take the lead in mobilizing climate finance from a variety of sources, instruments and channels, noting the significant role of public funds ...’ Developing countries have also been invited to provide financial support voluntarily. Also, a levy

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Overseas Development Institute, 2017.

<sup>92</sup> France on behalf of the EC, “Enhanced Action on the Provision of Financial Resources and Investment to Support Action on Mitigation and Adaptation and Technology Cooperation, Bonn: UNFCCC, FCCC/AWGLCA/2008/Misc.5/Add.2 (part 1), 2008, pp. 120-125..

<sup>93</sup> Inge Kaul et al. (eds.), op. cit.

<sup>94</sup> Ahmadul Haque et al., “Disaster Risk Reduction Investment and Reduction of Response Cost” in *Bangladesh: Disaster risk reduction approaches in Bangladesh*, Springer: Tokyo, 2013, pp. 331-341.

<sup>95</sup> AGF, “Climate Change Financing, Report on Climate Finance”, available at [http://www.un.org/wcm/webdav/site/climatechange/shared/Documents/AGF\\_reports/AGF\\_Final\\_Report.pdf](http://www.un.org/wcm/webdav/site/climatechange/shared/Documents/AGF_reports/AGF_Final_Report.pdf), accessed on 19 November 2011; G20, “Mobilizing climate finance”, available at [www.imf.org/external/np/g20/pdf](http://www.imf.org/external/np/g20/pdf), accessed on 28 August 2018; UNFCCC, Report on the Workshops of the Work Programme on Long-term Finance, FCCC/CP/2012/3, 6 November 2012. Annex II: Table 2, p. 22.

on maritime bunker fuel is actively being discussed in the climate negotiations. EU is a strong advocate of these two sources. Already France leads an initiative on a financial transaction tax, along with other EU members, which will be distributed as CF. Actually, it does not matter much whether additional money is mobilized domestically or internationally, because internalization of externalities, even cross-border, begins at home. Virtually, GPGs amount to national Public Goods (PGs) plus international cooperation. Given growing pressure globally at public, civil society and development agency levels, any future possibility of mobilizing extra-budgetary resources cannot be ruled out. In this process, multilateral development agencies have a role to play.

### 4.3 *Multilateral Agencies to Lead in Framing Adaptation as a GPG*

The post-PA climate governance has become more polycentric and very much a multi-actor affair.<sup>96</sup> Taking a liberal institutionalist perspective, we argue that it strongly matters whether new norms are accepted and embedded in international institutions, since these institutions are considered as “a force in global politics”.<sup>97</sup> So, as a follow-up to UNDP initiatives on GPGs of the last years, the World Bank has commissioned the study *Collective Solutions 2025* as a collaborative platform, to understand, among others, its role in the provision of GPGs. The World Bank’s 2012 study *Turn Down the Heat* warns the global community of the consequences of runaway climate change. As mentioned before, the Bank is trying to promote carbon pricing across the world. Birdsall and MacDonald propose to create a new arm of the World Bank to deal with climate change, arguing that it has comparative advantage in leading this challenge, compared to others like the UNDP, The United Nations Environmental Programme (UNEP) or regional development banks.<sup>98</sup>

So, a GPG framing of adaptation has great implications for the GCF, whose Board already has decided to allocate 50:50 of CF to adaptation and mitigation, with an aim for allocating 50 per cent of adaptation money to the PVCs. However, the funding so far committed to the GCF, US \$10.4 billion for the last five years, up to 2019, is just a minor share of the pledged US \$100 billion a year, pledged for delivery through different channels. In the lead up to COP25 in December 2019, quite a number of developed countries have pledged amount of US \$9.8 billion as GCF’s first replenishment cycle of next four years. COP26 is expected to start discussion on a new progressive global target to be reached by 2025. The goal of mobilizing major

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<sup>96</sup> Andrew Jordan et al., *Governing Climate Change: Polycentricity in Action?*, Cambridge: Cambridge University Press, 2018.

<sup>97</sup> Mizan R. Khan, op. cit.

<sup>98</sup> N Birdsall N and L MacDonald, “Wanted: A Climate Agency for a Bottom-Up World: A Proposal for a New Arm of the World Bank”, Center for Global Development, Washington, DC., 2013.

share of this money from private sector will not serve for adaptation, because of its nature largely as public good. The PGs are funded mostly by national governments across countries. And so is the expectation from the developing country negotiators, including the first author of this article. Further, at the face of developing countries' strong criticisms of the Global Environmental Facilities (GEF's) global benefit framing of adaptation, it has broadened its understanding of global benefit, and funded a number of local or national adaptation projects. The GEF now has closed funding for adaptation, as the GCF's adaptation wing is functioning. However, both the GCF and GEF are increasingly approving regional adaptation and mitigation projects.

Now a consensus emerged that a low-carbon and climate-resilient development is key to solving the most intractable problem of today, as evidenced from the GCF Governing Instrument (para 1-2; Article 2.1c of the PA). The PA linked adaptation with the level of mitigation (Article 7.4), recognizing adaptation explicitly as a 'global responsibility ...' (Article 7.1). In view of this renewed focus on adaptation and its expansive governance space, agencies such as the World Bank, UNDP, UNEP, UNFCCC and the GCF have the potential to set new norms including the expanded GPG framing of adaptation. Historically, the UN agencies with their expertise played the role as 'norm entrepreneurs'.<sup>99</sup> As 'knowledge brokers' international organizations may circumvent the principal-agent relationship, and influence state behavior. Kaul strongly argues for a stronger role of Multilateral Development Banks (MDBs) for provision of global public goods.<sup>100</sup> This is more feasible where there is wide diversity of views among major powers, now setting the world order. CF is such an area. So, a stronger network of many UNFCCC Parties, UN agencies and civil society can continue putting pressure for additionality in CF. An increasing number of transnational organizations, civil society and private actors are involving themselves as players in defining adaptation governance and its socio-economic implications.<sup>101</sup> Many of the NGOs, for example, increasingly question the non-fulfillment of responsibilities by state-actors.<sup>102</sup> Such non-state actors interested in transboundary climate risk, as adaptation as a GPG, could include businesses; and financial institutions, whose overseas investments are at risk.<sup>103</sup>

<sup>99</sup> Pamela S Chasek et al. *Global Environmental Politics*, (5<sup>th</sup> ed.), Boulder, CO: Westview Press. 2010.

<sup>100</sup> Inge Kaul. "Providing for Global Public Goods: The Ole of Multilateral Development Banks", *Overseas Development Institute*, London, 2017.

<sup>101</sup> Asa Persson and Adis Dzebo, *Special Issue: Exploring Global and Transnational Governance of Climate Change Adaptation*, Vol. 19, 2019, pp. 357-367.

<sup>102</sup> Sander Chan and Wanja Amling, "Does Orchestration in the Global Climate Action Agenda Effectively Prioritize and Mobilize Transnational Climate Adaptation Action?", *International Environmental Agreements: Politics, Law and Economics*, Vol. 19, Issue 04, pp. 429-446, 2019.

<sup>103</sup> CDP, *Cascading commitments: Driving Ambitious Action through Supply Chain Engagement*, CDP Supply Chain Report 2018/19, London: CDP, 2019; TCFD, *Final report: Recommendations of the Task Force on Climate-related Financial Disclosures*, TCFD, available at <https://www.fsb-tcfd.org/wp-content/uploads/2018/06/TCFD-Final-Report-Recommendations-2017.pdf>

It can also be argued that adequate financing is not the, but one prime solution. Together with capacity building under Article 11 of the PA, which itself is a GPG, the PA has decided to establish a Review Mechanism of tracking CF/AF, to ensure transparency and accountability. As discussed before, since adaptation cannot be separated from development most often, the first author of this paper keeps on suggesting that mobilization of ODA and CF should be kept as separate accounts, and at utilization point, the two pots can be mixed for getting added value. Such an open and transparent accounting system will contribute to building trust in the UNFCCC negotiations, now utterly missing.

As the number one economy on Earth, China's pledge of contributing US \$3.1 billion for addressing climate change through a southern solidarity fund and other funding initiatives by major developing economies will put pressure on the old rich to open their coffers further. China should bear the added responsibility as the number one emitter in increased provisioning of AF. Actually, consent of Japan and the US with the emerging global consensus on carbon pricing may go a long way in additionality in CF. Acceptance of this instrument across the globe as the key to arrest climate change is believed to be a matter of time. Upon its acceptance, the institutional mechanisms can be further negotiated.

## **5. Conclusion**

In line with Einstein's dictum that no problem can be solved with the same level of consciousness that created it, this article proposed a reframing of adaptation and its financing. The recognition of adaptation as a global responsibility and adoption of a global goal on adaptation under the PA, though sounds vague, is a step forward. This is the era of increasing GPG issues arising in the domain of global commons, and new conceptualizations, different from neoclassical, national territory-bounded lens, are needed. Accordingly, with an approach of frame-bridging and bandwagoning, taking help from Vanderheiden's expansive framing of adaptation under the climate regime and Kaul's nuanced interpretations of GPGs, we have tried to frame adaptation as a GPG against climate impacts as a GPB. The latter has been argued for its universal but varied effects on countries and populations, and adaptation as a national and global response to those effects.

Despite having agreed provisions to consider the expanded adaptation responsibility, they are not being respected by powers that be. The moot point is that an expanded view of adaptation benefits matched by a changed perspective of sovereignty, power and national interests may induce nations toward an obligatory

responsibility for financing adaptation in the PVCs. As a policy choice, adaptation is socially defined and socially constructed. So, it begs to be considered with a multi-disciplinary and multi-foci lens. Such a framing is expected to raise its status on the global policy plane, thereby making a difference in boosting finance. The application of PPP in varied forms, either nationally or internationally, serves as the key to such a policy design. Even tax-funded national public goods do not benefit all citizens equally, or some may not benefit at all. Adequate support for adaptation in the developing countries may encourage them for higher mitigation. The global stock-take under Article 7.14 of the PA in 2023 will be a turning point for fruition of these ideas. We believe this discourse will surely be contested in the policy and discursive world, and that is the ultimate purpose of this article.