Challenges of Climate Change Adaptation in Developing Countries: Expectations from the G20 Leadership

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Abstract: Adaptation is the primary concern for the least developed countries, small island developing states and other low-emitting low-income countries. However, compared to estimated needs by different agencies, adaptation finance continues to remain awfully poor globally as well as for the most vulnerable countries. Only about 20 percent of climate finance is delivered for adaptation actions in developing countries. Together, the quality of this finance represents a few gross injustices; even for the low-emitting LDCs, more money goes towards mitigation than adaptation; 80 per cent of adaptation finance is delivered as loans and even for the LDCs, more than 70 per cent comes as loans. This adds to the debt distress that most of the LICs already suffer from. Next, an increasing share of development aid is packaged as climate/adaptation finance at the cost of supporting the basic provisions of food, education, health care, etc., in the LICs. But ODA remains static, even declined for the LDCs in 2022. Can we reverse this trend? Here we present two arguments: first, poor funding for adaptation can be attributed to the narrow territorial framing under a climate regime that conceptualizes adaptation largely as a local or national public good. Our second claim is that it makes conceptual and political sense to consider adaptation as a global public good. The paper provides a few suggestions towards which the powerful G20 group under India's leadership can contribute.

Keywords: Adaptation, Adaptation Finance, Global Public Good, Low-income Countries, G20 Leadership

Introduction

Adaptation to climate change impacts was an afterthought in the 1992 UN Framework Convention on Climate Change (UNFCCC), while mitigation of greenhouse gas (GHG) emissions was given overwhelming focus. The UNFCCC parties assumed that focusing on adaptation might discourage mitigation (Burton, 2009). However, voluntary mitigation by developed

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countries was not forthcoming. The legally binding Kyoto Protocol did not succeed largely because of the non-participation of the US, the largest global emitter at the time.

Then, at the Conference of Parties (COP13) in 2007, adaptation was elevated on par with mitigation. Finally, the Paris Agreement has an article (#7) on adaptation, with the provision of a global goal. Three reasons can be identified for the steady rise of adaptation in the UNFCCC agenda (Khan, 2014): 1) mitigation was not being done, as expected, other than by EU countries; 2) extreme climate events were becoming the 'new normal' particularly affecting low-income countries, which contribute the least to the problem; 3) So, the climate justice movement was growing stronger.

Still, adaptation support continues to remain very poor compared to mitigation at the global level. But adaptation remains the primary concern, particularly for the least developed countries (LDCs) and small island developing states (SIDS), which, among others, are at the frontline of vulnerability. However, the IPCC AR6 finds that adaptation at the global level has been largely ineffective and even maladaptive (IPCC WGII Report, 2022). What is the cause of this poor state of affairs? Two prime reasons, among others, are highlighted: poor adaptation finance and lack of institutional capacities.

However, this short paper focuses on adaptation finance, with discussions centering on three issues: a) the status of adaptation finance, particularly its qualitative aspects, b) why the poor status persists and c) what could be the ways out that can be supported by the G20 group, led by India.

Status of Adaptation Finance

We all know the figure of $100 billion that was pledged more than a decade ago by developed countries to support developing countries has not been reached yet. The latest figure from the OECD claimed to mobilize $83.6 billion in 2020. But Oxfam usually deflates those claims at least by three times because of over-counting of climate finance under the Rio Marker system and presenting the loans at face value, not in their grant equivalence (Oxfam, 2020, 2022). The G77 group of countries do not trust the OECD figure. We may recall that at COP21 in Paris in 2015, when the OECD delegate claimed an annual average of $57 billion of total public and private climate finance during 2013-2014, the Indian delegate instantly pointed to loopholes in their methodology, asserting that only $1–2.2 billion should be counted as net climate finance (Indian Ministry of Finance, 2015). So, the gulf in numbers is very wide (Figure-1). Now the target is to have a new Collective Quantified Goal (NCQG) by 2025, keeping the $100 billion figure as the floor. Despite having six mandated expert dialogues under the UNFCCC since 2022, no concrete goal is agreed upon yet.

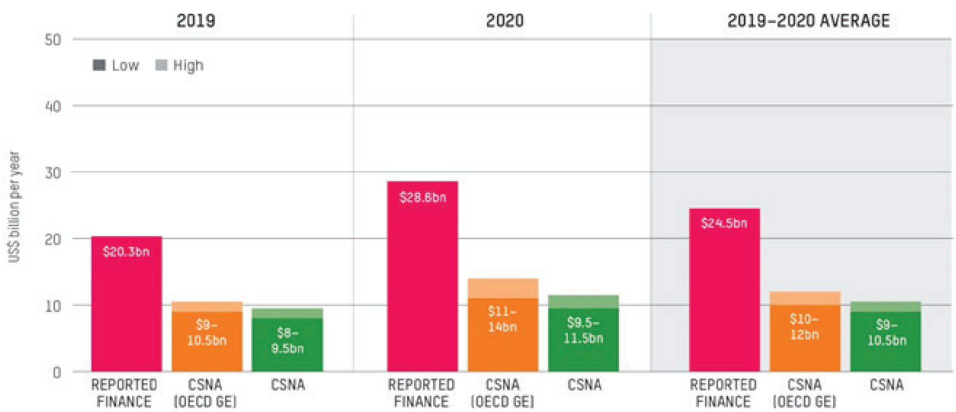
This problem persists because even after three decades since 1992, no agreement could be reached on what climate finance is, or how to measure it. Each developed country decides what it counts as such, why, and whether it can be considered as "new and additional" (Weikmans et al., 2017). Obviously, this is a core demand from developing countries, but developed countries resist discussions on this. So, the Standing Committee of Finance (SCF) under the UNFCCC continues its mandates, repeatedly given by the COPs, of trying to reach a consensus on defining climate finance (ecbi, 2023).

Now let us focus on the quality part of adaptation finance. Globally, only 20 percent of climate finance goes to adaptation for all developing countries and of this, 20 percent goes to the LDCs (Oxfam, 2020). Because of this continued injustice, where adaptation actions already have reached their limits, the united demand from the G77 group for a Loss and Damage financing facility has been adopted at COP27 last year.

Further, 80 per cent of climate finance is delivered as loans, whereas even for the LDCs, it is 71 per cent (UNCTAD, 2019). But adaptation investments do not bring in immediate returns in most cases. This is creating a new 'climate debt trap', adding additional strains to the already accumulated debt burden, which got worse due to COVID-19 (Khan & Munira, 2021).

Next, there is a wide discrepancy between funds approved and actual disbursements under the UNFCCC funds. The actual disbursement from funds under the UNFCCC in 2022 amounts to $150 million to Asian LDCs and only $50 million to African LDCs (Figure 2). What is more disquieting is that an increasing share of development aid is delivered to address climate change, from which investment in mitigation dominates. Even funding from the GCF to the LDCs is higher for mitigation (53 per cent) than for adaptation (Climate Analytics, 2021). For good reason,

Figure 1: Reported adaptation finance versus Oxfam's estimates of adaptation-only climate-specific net assistance to developing countries (CSNA, 2019 & 2020, average)



Note: The red bars show reported adaptation finance as compiled by the OECD (OECD 2022a). The orange bars show Oxfam's estimate of climate-specific net assistance for adaptation finance based on OECD grant equivalent accounting. The green bars show Oxfam's estimate of climate-specific net assistance for adaptation using a more robust methodology to estimate grant equivalence. All figures show adaptation-only finance, not including 50% of cross-cutting finance. The orange and green bars show figures rounded to the nearest 0.5. See T. Carty and J. Kowalzig (2022) in bibliography for detailed methodology.

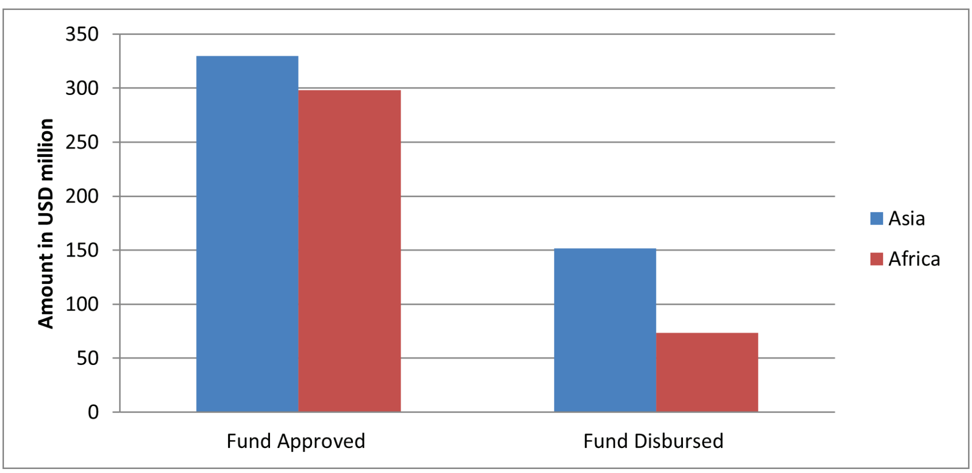
mitigation is not a priority, particularly in the LDCs, which can be considered as 'nano-emitters'. But development aid remains static globally and even went down for the LDCs in 2022 (Climate Analytics, 2021). This is a double injustice because development aid is meant to support the realization of SDGs in low-income countries (LICs), which include the LDCs. It is true that often adaptation and development cannot be differentiated, so both instruments should go up to ensure minimum justice!

If we look into the actual disbursement of adaptation finance, it shows little or no correlation between vulnerability and adaptation support (Figure 3) (GCA, 2022). So, climate justice remains ever elusive. So far, less than 10 per cent of climate finance is targeted toward local communities, including women, and actual delivery is much less (IIED, 2017). However, the now defunct Global Commission on Adaptation has introduced locally-led adaptation as one of the eight tracks for ensuring effective action to address climate change (GCA, 2019). The Cancun Agreements acknowledge that gender equality and the effective participation of women are important for all aspects of any response to climate change (UNFCCC, 2011). Gender-differentiated adaptation finance is even less – about 3.4 per cent of adaptation finance from climate-related ODA was targeted for vulnerable women communities in developing countries (Schalatek, 2022; Oxfam, 2020).

Why Adaptation Remains so Inadequate

The AR6 of the IPCC argues that there is adequate liquidity globally for increased investments to address climate change, including adaptation, but money is not flowing where it is needed most. For example, almost $700 billion have been spent on fossil fuel subsidies since 2021 for sustaining the problem, but not a fraction is available for its solution (Rohini, 2022)). In a similar manner, more than 2 trillion dollars have been spent in 2022 on the military budget to

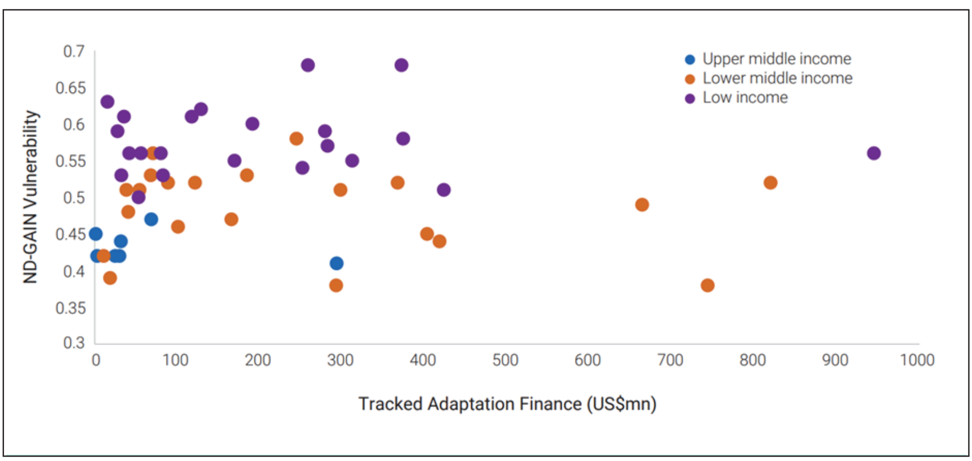
Figure 2: Fund approved versus fund disbursed to African and Asian LDCs in 2022 under UNFCCC funds (UN Funds Update.org. 2022)



address the ‘perceived’ security threats (SIPRI, 2023), but for addressing the ‘real’ threat of climate change, not a minuscule share is available. This is not happening because the world is gridlocked in a dysfunctional order, as the UN Secretary General recently argued (Crawford, 2022).

We may recall that the Paris Agreement (Article-7) frames adaptation as a global goal and global responsibility. But financing continues to remain extremely poor, relative to the estimated needs, even though the regime has obligatory provisions for support by developed countries. How can adaptation finance be increased at scale? We substantiate two claims: (1) that poor funding can be attributed to the narrow territorial framing under the climate regime that conceptualizes adaptation largely as a local or national public good. Kaul (2017) cogently argues that climate finance suffers from theoretical and institutional lock-in, relying on theories and practices that fit neither the nature of climate change as a global common problem nor the current policymaking realities. Benzie and Persson (2019) argue that in the initial years, the then epistemic community looked at climate impacts from the environmental science perspective and so the Convention codified adaptation at a local/national scale, with the predominant focus given to mitigation. They also present cases of “borderless climate risks,” which may be experienced locally but have cross-border, even global, repercussions, as indirect impacts (Hedlund et al. 2018). What will happen if more than 100 countries, including LDCs, SIDS and countries like India, Pakistan, Nicaragua and many other highly vulnerable countries go down in their development trajectory because of climate impacts? We may recall the statement of President Roosevelt, who argued at the opening of the Bretton Woods Conference in 1944, that: “Economic diseases are highly communicable, it follows, therefore, that the economic health of every country is a proper matter of concern to all its neighbours, near and distant” (Roosevelt, 1944). Climate change and Covid-19 induced

Figure 3s: Correlation between tracked adaptation finance and climate vulnerability (GCA, 2022).



economic distress affecting all countries are examples of such communicability. So, the framing of adaptation is being expanded by multidisciplinary thinking from the national to the global level, requiring international cooperation and multi-stakeholder engagement (Banda, 2018; IPCC 2018; Dzebo and Stripple, 2015; Khan, 2016).

Our second claim is that it makes political sense as well to consider adaptation as a GPG. The latter has a normative and distributive connotation while contrasting with GPBs, and articulating an issue as a GPG enhances its status and rhetorical value for wider response (Bodansky, 2012). This is likely to contribute to the political legitimacy and public acceptance of the norm of adaptation as a GPG (Khan & Munira, 2021).

How the G20 Leadership Led by India can Strengthen Adaptation Support

So, how to overcome this systemic dysfunctionality? It is failing to address the existential threat of the day. How can we correct the global public bad (GPB) like climate change that each and every nation on Earth suffers from? This has been very cogently argued, backed by hard facts by the LDC Chair in her recent piece in Nature, where she argued for establishing a Loss & Damage Facility because adaptation has reached its limits (Sarr, 2022).

However, we cannot have radical change for a quick fix, but we can push for rational incremental changes, along a well-considered trajectory of responsible internationalism. India, being a large economy but still, a per-capita low-income country, has many commonalities with the LDCs and other LICs in terms of vulnerability to climate change and poverty reduction. Besides, India always takes a moral/ethical position in its climate diplomacy, focusing on climate justice. So, Indian leadership can push forward the following issues in the G20 deliberations:

- Now, more than 60 percent of the LICs were deemed to be at risk of – or already in – debt distress at the start of 2022. That was twice the level of 2015 (IMF, 2022). So, the G20-initiated Debt Service Suspension Initiative (DSSI) in support of the LICs was a welcome step, but it was a short-term palliative. But these countries need longer-term solutions, as in 2022, the LICs, including the LDCs, had to afford $31 billion in debt-service payments to all lenders (UNCTAD, 2022).
- Again, the G20-launched Common Framework for Debt Treatment (CF) to reach beyond the DSSI as the only multilateral mechanism for forgiving and restructuring sovereign debt is a good step. But the DSSI and CF-supported debt restructuring must go beyond bilateral loans only to also cover multilateral and private loans. Actually, reforming the vision and functioning modalities of the World Bank and other financial institutions is long overdue, for which the COP27 invites them to undergo a revision to reflect the current realities, including the climate justice considerations.

- The cardinal principle of UNFCCC - common but differentiated responsibility based on respective capability - can be operationalized through the application of the polluter-pays-principle (PPP). This will correct the greatest market failure as the most fundamental of solutions, as prescribed by the neoliberal market-based system upon which the climate regime is founded. The EU and a number of developing countries are applying the PPP in different forms (Khan, 2015). While solid waste dumps are not free, atmospheric dump is treated freely because emissions straddle across borders. Many proposals have been mooted over the last 15 years, although at the June 2023 meeting in Paris on climate finance, more than 20 countries supported imposing a levy on maritime transportation. Together, an international aviation solidarity levy can be considered for financing the Loss and Damage Fund. EU countries are likely to support these two innovative sources. As agreed under the climate regime, developed countries must take the lead. Later, it may cover other developing countries with an approach to the poverty-sensitive application of PPP (Caney, 2010). Once the issues are agreed upon, modalities can be configured as to how this money will be mobilised and delivered.
- With no ambitious mitigation around, the 'atlas of human suffering' is expanding, including cross-border and second-order climate risks. As argued before, the increasing effect of a large number of small and big vulnerable countries will severely impact the global food, trading and financial systems. We now live in a wired world where every nation gains from global cooperation. This warrants getting out of the territorial framing that conceptualizes adaptation largely as a local/national public good, and, hence, the inadequate support and unwillingness of the private sector to step in. So, it makes conceptual and political sense to consider adaptation as a GPG, as Inge Kaul, formerly of UNDP, argued that climate finance suffers from theoretical and institutional lock-in with reliance on theories and practices that fit neither the GPG nature of climate change nor the current policymaking realities (Kaul, 2017; Khan & Munira, 2021). Actually, public goods are variable social constructs in response to evolving national and global needs as matters of policy choice. GPGs are simply the enhanced provision of national public good plus international cooperation. Such a reframing should make a difference in boosting adaptation finance by penalising the GPBs, to create a few auto-generation mechanisms for boosting adaptation support. India is now in a position to promote this reframing of adaptation as a GPG.
- Focusing on locally-led adaptation (LLA) as climate change impacts the local communities most, who have been coping for ages. We need to build on this, considering the current and

future risks. This LLA must be locally-led, which involves local governments, elected leaders and other stakeholders, including communities, in order to make them effective and sustainable while linking with national and international policies. Under the LLA model, provisions must be there for local climate finance facilities for access by the most vulnerable, including women. An example is the climate change county fund in Kenya (CCCF) which succeeded as a pilot in several counties and now the national government is accepting scaling up (Arnold & Soikan, 2021).

- As mentioned before, no agreement yet could yet be reached on what climate finance is, nor how to measure it. So reaching the target of an NCQG does not have real meaning unless the global community can agree on what climate or adaptation finance is. The Standing Committee of Finance (SCF) under the UNFCCC is given mandates, repeatedly trying to reach a consensus on defining climate finance (ecbi, 2023). This is an opportunity for India as a strong supporter of this issue and now as the G20 leader to persuade fellow countries to reach a consensus on defining climate finance based on some criteria.
- Providing loans for adaptation must change toward a provision of only grants to the LICs. The Glasgow decision at COP26 on doubling adaptation finance by 2025 compared to 2019 level must be achieved in earnest. These doubling efforts must promote grants, not loans, which is an utter injustice to the LICs. Further, India can push the other G20 countries towards a fairer distribution of adaptation finance and expedite access to it, which is a perennial problem.
- A new instrument called 'debt for adaptation swap' (DAS) can be mobilised, either at multilateral or bilateral levels (Khan, 2020). Earlier models of debt for nature swap succeeded neither in conservation nor in strengthening debt sustainability because of the paltry amounts involved in those projects. Lack of awareness and urgency among countries and the complex nature of administering the process that involves financial institutions are perhaps the reasons for not scaling up. Now the examples of Belize and Seychelles involving a few hundred million dollars and the likely deal with a few Caribbean countries initiated by ECLAC may provide further lessons. Because of the fallouts of Covid-19 and the Ukraine war, no big new money may be forthcoming. So, the DAS scheme, involving billions, may have significant impacts on adaptation and debt sustainability. This may have a better go at the political level since it involves old money, which is already with the recipient countries. It may be recalled that at COP27, the Colombian President argued for the DAS instrument to be taken up by the IMF at scale (cited in ecbi, 2023).
- Finally, capacity building (CB) of government officials, private sector and NGO/community leaders

through education and training is a must, which has been put as a precondition in two-thirds of the first round of submitted NDCs of developing countries (Khan et al., 2021). So, the CB and Action for Climate Empowerment agendas under the UNFCCC must have support at a level based on assessed needs. This requires both generic education and specific training. Earlier experience of technical assistance by foreign consultancy-led workshop-based short-term project approach failed to leave sustainable CB systems behind. So, universities in developing countries must be the central hub of CB (Khan et. al, 2018). This is the reason the LDC Universities Consortium on Climate Change (LUCCC), as an official programme of the 46 LDCs is functioning now. We need a programmatic approach, with a minimum of a 5 to 7-year cycle, so that outcome and impact, such as how the graduates and trained people are applying their skills, can be monitored and evaluated. India is already involved in providing CB support to many countries and is in a better position to promote support for this under the G20 leadership.

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