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# **India in the landscape of Climate Finance: Prospects and Challenges**

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## **Abstract**

Climate change is not a cliché anymore but a burning reality with far reaching consequences for the very survival of humankind and the nature. India on the one hand is the third largest carbon emitter and on the other hand is susceptible to the high risks of climate change, ranging from heat waves to cyclones and urban and rural displacements. Though India is a major recipient of international climate finance, it is proven to be more than insufficient to meet the climate change adaptations as per Paris Agreement. The present study analyses the challenges and prospects of India with respect to the Green Climate Fund and the imperative for developing its own paradigm of climate finance.

Key Words: Climate Change, Climate Finance, Green Climate Fund

## **Introduction**

When developing countries strive hard to reignite their economic growth prospects while reducing widening inequalities and poverty, the ability of these countries to tread the path of development without compromising the climate goals envisaged under Paris Agreement needs the financial support of global community especially from the Global North.

Intergovernmental Panel on Climate Change (IPCC) in 2018 report has highlighted the unprecedented scale of challenge of keeping global warming to 1.5<sup>o</sup> C. In the hindsight, the challenge is not only met but it has become worse due to continued increase in green gas emissions. Global warming is presently 1.1<sup>o</sup> C above the pre industrial level due to the reckless burning of fossil fuels as well as unequal and unsustainable energy and land use. (*Urgent Climate Action Can Secure a Liveable Future for All — IPCC, n.d.*)

Climate change with all its shattering consequences like rising average temperatures & sea levels and ever frequent and extreme weather mishaps is likely to be the challenge humankind wouldn't dare to face during this millennia. Climate justice is questioned when countries and people who contribute least to

climate change disproportionately bear its consequences. It's undoubtedly a question that international community cannot overlook. But the query of who would bear the cost of climate change mitigation efforts is much debated and still remains unanswered. Climate finance has been a key discussion point since COP15 in Copenhagen in 2009 and in all international climate negotiations followed. To ensure a low carbon and climate resilient development, developed countries in the Global North committed a climate finance flow worth US\$100 billion per year by 2020 to Developing countries in Global South.(Buchner et al., 2019) The daunting question is ' Is this sufficient enough to meet all the climate action?' in developing countries.

Rich countries in the Global North have historically been main contributors to greenhouse gases accumulation in the atmosphere causing and accelerating the pace of global warming. These countries recklessly exploited the resources of poor countries to augment their industrial revolution all alone destroying the climate and in the perspective of climate justice, these countries are obliged to compensate for 'loss and damage' of the poor countries who have contributed less to climate change and to assist these countries to tread a climate change resilient economic growth path. People of these developing countries are most vulnerable to the consequences of global warming such as floods, droughts and heat waves and often lack resources and infrastructure for adaptation to climate change. Helping these communities adapt and become more resilient is not only a moral imperative but also contributes to global stability and security.(*What Is Loss and Damage and Will Rich Nations Pay for Climate Change?* - BBC News, n.d.) Apart from all these, climate change is a global challenge, which requires a global collective action led by rich countries equipped with the financial resources and technological expertise to mitigate the impacts of climate change and invoke a smooth transition to low carbon economy.

According to Intergovernmental Panel on climate change, India with its vast population and heavy reliance on the growth of its agrarian economy, is particularly vulnerable to the high risks of climate change, ranging from heat waves to cyclones and urban and rural displacements.(*India Faces the Highest Risk from Climate Change's Impact, Says IPCC | Business Standard News*, n.d.) India is the third largest carbon emitter with 2654 million tons of CO<sub>2</sub>. But addressing the climate change with iron hand entails trade-offs, though short term in nature, with economic growth and social development, which may compromise the country's targets of eradication of poverty. As a result, climate finance is a critical issue for India, both in terms of supporting its own efforts to transition to a low-carbon economy and in terms of addressing the impacts of climate change on its people and ecosystems.

India has been actively seeking climate finance from a range of sources, including multilateral institutions, bilateral donors, and private investors. India, in order to meet its Nationally Determined Contributions (NDCs) under the Paris Agreement, has pledged to reduce its greenhouse gas emissions intensity by 33-35% below 2005 levels by 2030 and to generate 40% of its power from renewable sources by 2030.(*India's Updated Climate Pledge to Paris Agreement Gets Union Cabinet Nod*, n.d.) To achieve these goals, India has launched a

number of initiatives to attract climate finance, including the International Solar Alliance, which aims to mobilize \$1 trillion in investments in solar energy by 2030, and the National Adaptation Fund for Climate Change, which supports climate adaptation measures in vulnerable communities across the country. (*Exploring the Rise of Green Energy in India: Investment Opportunities for a Sustainable Future*, n.d.)

Though India is a major recipient of international climate finance, receiving more than \$10 billion in climate-related funding from multilateral institutions and bilateral donors between 2015 and 2018, India has consistently maintained the view that developing countries like India need much more climate finance to achieve its goals in alignment with COP27 plan's aim of holding global warming well below 1.5 degree celsius and that rich countries in Global North have a responsibility to provide additional funding to support the efforts of developing countries like India to address climate change. India estimated at least US\$206 billion (at 2014-15 prices) between 2015-2030 for implementing climate adaptation programs and US\$834 billion (at 2011 prices) for climate change mitigation programs. (*With the United Nations Development Programme (UNDP) for the Republic of India*, 2022)

### **India and The Green Climate Fund (GCF)**

The Green Climate Fund (GCF) is a global fund established in 2010 under the United Nations Framework Convention on Climate Change (UNFCCC). The GCF was created to assist developing countries in their efforts to reduce greenhouse gas emissions and adapt to the impacts of climate change. The fund is intended to be a key tool for implementing the Paris Agreement on climate change.

A board of 24 members, with an equal representation of developed and developing countries, governs the GCF. The fund receives contributions from developed countries and channels these resources to developing countries to support climate action. The fund also works to mobilize private sector financing for climate projects.

The GCF has approved over \$10 billion in funding for more than 170 climate projects in developing countries. These projects range from renewable energy and energy efficiency initiatives to climate-resilient agriculture and forestry programs. The fund has also provided support for initiatives aimed at strengthening the capacity of developing countries to plan and implement climate action.

The GCF is seen as a key mechanism for addressing the climate finance gap and supporting developing countries in their efforts to address climate change. However, the fund has faced criticism over its slow disbursement of funds and its complexity, and there have been calls for reforms to make it more effective and efficient in supporting climate action.

India is one of the countries that received significant support from the Green Climate Fund (GCF) to finance its climate projects. As of March 2021, the GCF had

approved 24 projects in India, with a total funding of over \$1.5 billion. The projects funded by the GCF in India cover a range of areas, including renewable energy, sustainable agriculture, and climate-resilient infrastructure. Some examples of GCF-supported projects in India include:

- A project to expand the use of solar power in rural areas, which aims to provide access to electricity to more than 1 million households and reduce carbon emissions by over 4 million tons.
- A project to promote sustainable agriculture practices in the state of Andhra Pradesh, which aims to reduce greenhouse gas emissions and increase the resilience of farming communities to climate impacts.
- A project to improve the resilience of coastal communities in the state of Tamil Nadu to climate change impacts, such as sea level rise and storm surges.

In addition to funding specific projects, the GCF has also provided support to India for capacity building and the development of national climate strategies. For example, the GCF provided \$1 million to support the development of India's National Adaptation Plan in 2019, which aimed at equipping states and union territories of India to meet the cost of adaptation to climate change.

India is considered a key partner of the GCF, and the country's efforts to attract climate finance have been supported by the fund. However, India has also called for greater financial support from developed countries to help developing countries like India address the impacts of climate change.

### **Indian Challenges with GCF**

While India has received significant support from the Green Climate Fund (GCF), there are also a number of challenges that the country faces in accessing climate finance from the GCF and other international institutions.

One challenge is the complexity of the application process for GCF funding. The process of accessing GCF resources can be lengthy and bureaucratic, and requires significant capacity and resources on the part of the recipient country. This can be a barrier for developing countries like India, which may lack the technical expertise and administrative capacity to navigate the application process.

Another challenge is the limited availability of climate finance resources, both from the GCF and other international sources. While the GCF has provided significant funding for climate projects in India, the overall level of international climate finance remains inadequate to meet the scale of the climate challenge faced by developing countries like India.

A third challenge is the need for alignment between national development goals and climate action. India has ambitious plans to expand its economy and improve the standard of living of its citizens, which can create tension with efforts to reduce greenhouse gas emissions and transition to a low-carbon economy. Balancing these competing priorities can be a challenge for policymakers in India.

Finally, there is also a need for greater private sector investment in climate projects in India. While the GCF has played an important role in financing climate projects, there is a need for greater private sector investment to scale up and sustain these efforts over the long term. This will require the development of policy and regulatory frameworks that provide incentives for private sector investment in climate-friendly technologies and infrastructure.

### **Indian Prospects with GCF**

India has already accessed the GCF and received funding for a number of projects, including renewable energy, sustainable agriculture, and climate-resilient infrastructure. India's efforts to promote renewable energy, such as solar power and wind power, have been particularly successful, and have helped to reduce the country's dependence on fossil fuels and reduce greenhouse gas emissions.

India has also set ambitious targets for reducing greenhouse gas emissions and increasing the share of renewable energy in its energy mix. At COP26 (Glasgow), Prime minister Narendra Modi surprised the world by his announcement that India would zero out its greenhouse gas emissions by the year 2027. (*A Tale of Two Climate Policies: India's UN Commitments Aim Low, but Its National Policies Are Ambitious – Here's Why That Matters*, n.d.) India aimed to install 175 GW of renewable energy by 2022, which included 100 GW of solar power, 60 GW of wind power, 10 GW of biomass power, and 5 GW of small hydropower. (*Committee Reports*, n.d.)

India has good prospects in accessing and benefiting from the GCF, given its vulnerability to climate change and its ambitious efforts to address the issue through renewable energy and other climate mitigation and adaptation measures.

### **Conclusion**

It's high time that India needs to develop its own paradigm of climate finance. The lack of commitment from the Global North with respect to its US\$ 100 billion annually for developing countries is a pressure point for India to evolve its own paradigm. This breach of contract has augmented suspicion among low-income countries of the real commitment of rich countries on climate change mitigation efforts. The Climate Finance Working Group has identified a fund deficit worth of US\$ 54 trillion to achieve climate objectives. Public as well as private sector needs to work in tandem to address the deficit. Indian dream of zero carbon emission and climate resilient development can be realized through a mixture of

policy implementations well articulated in 2023 union budget such as shifting to renewable energy, battery storage system, cleaner transport, climate resilient sustainable farming, optimization of water use, afforestation to create carbon sinks and reducing fossil fuel consumption.

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