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India's climate leadership: The power of diplomacy of new Bharat

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Abstract

Entering a new decade fraught with escalating climate challenges, the urgency of robust climate diplomacy, particularly for a nation like India, cannot be overstated. This article delves into the various dimensions of fortifying climate diplomacy within the Indian context. It underscores the importance of envisioning a future devoid of carbon emissions while advocating for climate actions within India that yield multiple benefits. The article also explores avenues for bolstering India's climate diplomacy globally, stressing the need for collaborative efforts toward equitable low-carbon transitions. Drawing from successful climate policies in India, it highlights the significance of fostering resilient economies and communities. Additionally, the article underscores the vital role of mobilizing climate finance to bolster India's adaptation and resilience-building efforts. This recognition stems from the heightened significance of increased financial assistance in furthering India's climate negotiation endeavours. For the purpose of ensuring a rigorous and methodical approach to the process of synthesising the current literature, a comprehensive methodology is utilised. Through these discussions, the article underscores the imperative for India to strengthen its position in climate diplomacy and actively contribute to global sustainability efforts.

Keywords: Climate diplomacy, India, carbon neutrality, co-benefits, climate policy, resilience, finance mobilization, adaptation measures

Introduction

One of the most pressing issues that countries are currently confronting is climate change. A steady stream of alarming findings over the past decade has stressed how critical it is to act quickly to mitigate the climate catastrophe. Countries were given 30 years to cut greenhouse gas emissions in half in 2010, but now that time has been accelerated to less than 10 years (Hohne *et al.*, 2020) ^[57]. The analysis conducted by the Intergovernmental Panel on Climate Change in 2018 indicates that the time available to prevent the most severe consequences of climate change by keeping the increase in temperature below 1.5°C is quickly running out (Bhardwaj, 2023) ^[13, 33, 43]. Forecasts indicate that the world's average temperature will climb by approximately 1.2 degrees Celsius compared to the pre-industrial period in 2020 (Valone, 2021) ^[56]. Anthropogenic greenhouse gas emissions have been a major contributor to unprecedented global heat waves, melting ice caps, and record-high sea levels during the past ten years. A new study shows climate change is making heat waves, floods, and cyclones more frequent and severe in India, and this is likely to get worse in the future (Krishnan *et al.*, 2020) ^[58]. It is quite sure that if nations do not take drastic action to combat climate change, they will face a cascade of catastrophes, including health, economic, and environmental issues, all at once.

The call to action for this decade should be bold climate ambition, but also making sure that communities are not left behind, since the last decade was characterized by more and worse impacts. We have reached a tipping point in the year 2020. Over one million people have died and millions more have fallen into poverty as a result of the COVID-19 pandemic, according to estimates. The world's economy contracted by 5.2% (Buheji *et al.*, 2020) ^[16, 26, 36, 46] and countless people lost their employment. As the pandemic swept the globe, it collided with a terrifying backdrop of natural disasters: Raging wildfires in Australia and the US, super-cyclones in India and the US, locust swarms in South Asia, and scorching heat waves across Europe, Russia, India, and the US. The world's economy has lost millions of dollars, and lives and biodiversity have been wiped out as a result of extreme weather events

(Bradshaw *et al.*, 2008) ^[5, 15, 25, 35, 45]. If nations do not take drastic action to combat climate change, they will face a cascade of catastrophes, including health, economic, and environmental issues, all at once. There are indications of a renewed and quickening of global cooperation on climate change. In 2019, the United Kingdom proclaimed climate change a national emergency and set lofty goals to achieve carbon neutrality by the year 2020. The European Union is ramping up its climate efforts. They're proposing a carbon border tax for trade deals and aiming for net-zero emissions by 2050. The US re-joining the Paris Agreement in 2021 adds further momentum. Interestingly, while the UN's Sustainable Development Goals and the Paris Agreement emerged separately, they're increasingly seen as complementary efforts. Achieving climate targets requires making sure that "No One Is Left Behind". There will likely be an increase in the trend of seeing the climate catastrophe as a matter of global security and peace (Akbaruddin, 2020) ^[1, 11, 21, 31, 41]. The fact that climate change is being pushed to be included in the UNSC agenda (United Nation, 2019) ^[55] and that US Special Ambassador for Climate John Kerry has stated that "America will soon have a government that treats the climate crisis as the urgent national security threat that it is" are proof of this. More and more, climate change is being discussed in both bilateral and multilateral diplomacy. There will certainly be a shift toward seeing the climate disaster as a matter of global security and peace.

Addressing India's massive development and economic demands has been a top policy goal, with climate protection being considered as an added bonus. India has achieved remarkable progress in reducing poverty and shifting to a low-carbon economy, helping millions of people escape poverty. Well-placed to achieve its goals under the Paris Agreement, India is actively pursuing a clean energy transition (UNFCCC, 2015a) ^[53]. This shift is driven by a trifecta of reasons: Economic benefits, job creation, and tackling climate change. India's growing leadership on the global stage is evident through initiatives like the International Solar Alliance (ISA) and the Coalition for Disaster Resilient Infrastructure, showcasing its commitment to both climate action and renewable energy diplomacy. This low-carbon path India has embarked on can serve as a valuable blueprint for other developing nations.

No one nation can hope to meet the climate challenge on its own, especially considering the cross-border nature of climate disasters and the sheer scale of the problem. Working together on climate change and clean energy is crucial for emerging nations, since they are already struggling to meet the demands of rapid economic expansion, a large labour force, and limited access to reliable energy. By showing other developing nations how to strike a balance between producing jobs, achieving development and growth goals, avoiding high carbon lock-ins, and safeguarding communities from climate change, India has an opportunity to become a world leader in the next decade. Addressing India's massive development and economic demands has been a top policy goal, with climate protection being considered as an added bonus.

Methodology

In conducting this article titled "India's Climate Leadership: The Power of Diplomacy of New Bharat," a comprehensive methodology was employed to ensure a rigorous and systematic approach to synthesizing existing literature. A

thorough literature search was conducted utilizing academic databases such as Google Scholar and relevant journals spanning the fields of climate diplomacy, international relations, and environmental policy. The search strategy incorporated keywords such as "Climate diplomacy", "Indian climate policy" and "international negotiations". Selection criteria were applied to include peer-reviewed articles, reports, and policy documents published within the past decade, focusing particularly on works that elucidated the challenges and opportunities for India's role in global climate diplomacy. The relevance, credibility, and quality of the selected literature were critically assessed to ensure their substantive contribution to the content. Information extracted from the literature was organized thematically, allowing for the identification of common trends, debates, gaps, and emerging issues pertinent to the strengthening of climate diplomacy in India in the forthcoming decade. The analysis was informed by established frameworks in climate governance, diplomatic strategies, and international negotiations, facilitating a nuanced understanding of the complexities surrounding this imperative. Throughout the process of writing the article, stringent quality assurance measures were implemented to uphold the integrity and reliability of the findings, while ethical considerations regarding data usage and objectivity were meticulously addressed.

Embracing a future free of carbon

In a historic move for international climate policy, 196 nations ratified the Paris Agreement in 2015, pledging to keep global warming "well below 2oC" and "to pursue efforts to limit the temperature increase to 1.5oC." The pledges to reduce emissions were also made by 192 countries (UNFCCC, 2015b) ^[53]. Good news on a global scale: 126 nations, accounting for 51% of all greenhouse gas emissions, have pledged to achieve net-zero emissions by mid-century (UN Environment Programme, 2020) ^[52]. If the US decides to aim for carbon neutrality or net-zero, this percentage will rise to 63%. A group of investors with over \$9 trillion in assets has pledged to eliminate all greenhouse gas emissions from their financial holdings by the year 2050. Investment in environmentally friendly recovery strategies can increase employment opportunities, stimulate economic growth, and reduce the impact of climate change, according to studies that governments are currently focusing on following the COVID-19 pandemic. Goals to reach carbon neutrality are commendable, but they must be supported by robust capabilities and concrete initiatives to be put into action. This is already a challenging undertaking for developing nations. Meeting massive development demands will require them to strike a balance between facilitating climate transitions and constructing resilience. First, it is essential to strive for the achievement of universal energy access. As an example, in African countries, over 580 million people do not have access to electricity. The second issue is the massive amount of infrastructure that is still needed, with most of it being constructed for the future. As an example, as of now, more than 50% of the structures needed in India by 2030 have not been constructed (Bureau of Energy Efficiency, 2020) ^[7, 17, 27, 37, 47]. Thirdly, it is vital to generate employment possibilities in order to help people escape poverty and provide them a good living. Fourth, there is a huge need for investment and capacity building to address both present and future demands. As an example, it

is projected that, through 2040, it will cost US\$ 120 billion year to guarantee that all Africans have access to dependable electricity. When it comes to mobilizing cooperative climate initiatives, developing nations can look to India as a leader because of its own experiences. Goals to reach carbon neutrality are commendable, but they must be supported by robust capabilities and concrete initiatives to be put into action.

Co-benefits-oriented climate actions in India

India's energy policy decisions have traditionally prioritized growth, prosperity, and security, with climate concerns being a significant but secondary component. India's NDCs are a set of ambitious goals outlined under the Paris Agreement. Three of these eight commitments have specific and measurable targets. One key target aims to reduce the emissions intensity of India's economy, measured by greenhouse gas emissions per unit of GDP, by 33-35% by 2030 compared to 2005 levels. Another ambitious goal is to achieve 40% of India's electricity generation capacity from non-fossil fuel sources by 2030. This transition will rely on technological advancements and access to affordable international financing, potentially through mechanisms like the Green Climate Fund. Finally, India has pledged to significantly increase its forest cover by 2030, creating an additional carbon sink of 2.5 to 3 billion tonnes of carbon dioxide equivalent. These ambitious goals highlight India's commitment to combating climate change and transitioning to a more sustainable future.

India is shining bright in its efforts to fulfil its climate pledges. It's on track to achieve two out of its three measurable goals well before the deadline. From 2005 to 2014, India's emissions intensity dropped by an impressive 21% (Source: UNFCCC, 2018) ^[54]. Projections suggest a further decrease to between 35% and 50% by 2030. Similarly, India's non-fossil fuel capacity, including renewable, large hydro, and nuclear power, has surged to 38.5% as of January 2021 (Central Electricity Authority, 2021) ^[10, 20, 30, 40, 50], placing it close to its NDC target another milestone likely to be reached ahead of schedule. However, there's still room for improvement regarding India's carbon sink goal. While forest and tree cover have increased by 5,188 sq km, resulting in a 42.6 million tonne rise in carbon sink, further efforts are needed to fully achieve this objective.

While India demonstrates strong progress towards its NDCs, it emphasizes the principle of "common but differentiated responsibilities" in the global fight against climate change. This principle acknowledges that developed nations, being historically responsible for a larger share of emissions, should take the lead in accelerating their climate actions. Additionally, India calls for a significant increase in climate finance from developed countries and the facilitation of technology transfer to developing nations. These steps, India argues, are crucial for developing countries like itself to enhance their climate goals and contribute more effectively to global efforts.

Bolstering India's climate leadership through diplomacy

India stands at a crossroads, presented with a remarkable chance to shape a future focused on development, environmental responsibility, and clean energy. This confluence of domestic goals and international relations offers a unique opportunity for leadership. To capitalize on

this, India can ramp up collaborative diplomatic efforts across various levels. By fostering cooperation, India can work towards achieving inclusive low-carbon transitions, building robust economies and communities that can withstand climate challenges, and unlocking the flow of essential climate finance.

Such an approach requires a multi-pronged strategy. First, India can leverage its growing influence to champion the needs of developing nations in international climate negotiations. Second, it can actively seek partnerships with developed countries to facilitate technology transfer and knowledge sharing in clean energy solutions. Finally, India can position itself as a leader in South-South cooperation, sharing its own experiences and expertise with other developing countries to accelerate their climate action efforts. Through these combined actions, India can solidify its position as a global leader in the fight against climate change while ensuring its own sustainable development trajectory.

Uniting global efforts for equitable low-carbon transformations

India's international strategy is based on five principles: Respect, discussion, cooperation, peace, and prosperity. India has highlighted that global growth, combating climate change, and alleviating poverty are crucial for the future of the globe. Building on this foundation, India can leverage its significant renewable energy expertise on the world stage. As a global leader in both solar and wind power, ranking fifth and fourth in cumulative capacity installations by 2019, India has valuable experience and knowledge to share with other developing nations. By championing these clean energy solutions through diplomacy, India can not only lead by example but also contribute to a more equitable and sustainable global energy future. The country has also made significant progress in enhancing the energy efficiency of its economy. The International Solar Alliance (ISA), established in 2015 by India and France, has the potential to significantly support the shift towards low-carbon practices in its member nations. Here's a rephrased version of the first paragraph The International Solar Alliance (ISA) has gained traction with 90 countries signing its framework agreement, though only 73 have officially ratified it. This initiative aligns well with India's foreign policy goals. The ISA presents an opportunity to strengthen continental engagement with the African Union, collaborate on regional initiatives through organizations like the Indian Ocean Rim Association, and foster closer bilateral partnerships among member countries. India's commitment is substantial. They have pledged \$26 million to establish an ISA fund and allocated credit lines totalling \$1.39 billion for solar projects across 15 member (Susarla, 2021) ^[51]. Beyond the immediate project funding, ISA offers India a platform to showcase its technological advancements in solar energy. This leadership role can position India as a key partner for other developing countries seeking to adopt clean energy solutions. Additionally, fostering collaboration on solar projects strengthens diplomatic ties and opens doors for potential trade partnerships in the renewable energy sector. ISA's success can significantly contribute to India's soft power projection on the global stage.

Again, India's strategy for international action is based on five principles: Respect, discussion, cooperation, peace, and prosperity. In the future, India can advance climate

diplomacy through several methods. Strengthening climate diplomacy with regional African organizations like SADC, ECOWAS, and AREI presents a win-win opportunity. Collaboration fosters stronger relationships and facilitates the co-creation of solutions to tackle energy poverty and spur economic growth across Africa. India's expertise in renewable energy and energy efficiency can be leveraged through knowledge sharing and capacity building initiatives within existing global and bilateral partnerships. Furthermore, India's International Solar Alliance (ISA) can support African nations in developing comprehensive low-carbon development strategies. India's success story in clean energy, particularly wind and solar power, opens doors for partnerships, investments, and innovative financing mechanisms. On the global stage, India can elevate its diplomatic efforts by advocating for inclusive and development-oriented multilateral agreements that pave the way for smooth low-carbon transitions in climate discussions. This collaborative approach holds immense potential for expanding India's domestic renewable energy industry, fortifying energy security, propelling sustainable development forward, and ultimately ensuring universal energy access. Beyond the immediate benefits, fostering closer climate partnerships with Africa presents a strategic long-term advantage for India. As a leader in the global South, India can position itself as a champion for developing nations seeking a just and equitable transition to a low-carbon future. This leadership role strengthens India's global standing and fosters deeper South-South cooperation, paving the way for a more sustainable and prosperous future for all.

Policy success stories of Bharat's climate victories

The rise of renewable energy in India

India's solar mission, launched in 2009, initially aimed for a 20 GW capacity by 2022. However, ambition grew significantly. By 2015, the target for renewable energy as a whole had ballooned to 175 GW, and by 2021, it had climbed even higher to a staggering 450 GW well over India's existing capacity at the time i.e. 377 GW (Ministry of Power, 2021). This ambitious target holds immense potential for job creation. Estimates suggest that achieving the 175 GW target alone could generate over 300,000 jobs, with the potential for over a million across various sectors like grid-connected solar, rooftop solar, and wind power. India is making significant progress. As of January 2021, the nation had already reached 92.5 GW of renewable energy capacity, representing a quarter of its total installed capacity. This puts them well on track to achieve the 175 GW target by 2022 (Press Information Bureau, Ministry of New and Renewable Energy, 2019). A notable shift has occurred since 2017: India has been adding more renewable energy capacity each year than thermal power. This trend extends to investment, with annual spending on renewables consistently exceeding that of thermal power for the past four years. Furthermore, solar power has become increasingly cost-competitive. Prices have steadily dropped, reaching lows of INR 2.4 per unit. This translates to being 20-30% cheaper than India's current thermal power costs (Carbon Copy, 2020) ^[9, 19, 39, 39]. Supportive government policies and strong industry backing have undeniably played a crucial role in propelling India's renewable energy sector forward.

Improving Energy Efficiency

India's energy efficiency has seen a remarkable leap, thanks in part to the Bureau of Energy Efficiency's (BEE) comprehensive labelling program. This initiative encompasses mandatory and voluntary schemes, targeting a wide range of 26 essential appliances (JMK Research and Analytics and Institute for Energy Economics and Financial Analysis, 2020). By combining consumer demand and large-scale purchases, the government has driven down the price of Light Emitting Diode (LED) lights and fans with high energy efficiency. This strategy, implemented through the state-run Energy Efficiency Services Limited (EESL), has made these products more readily available to the public. The Ujala program exemplifies this success. Through the distribution of 366 million LED bulbs, it has prevented an estimated 38.5 million tonnes of carbon dioxide emissions annually (Bureau of Energy Efficiency, 2023) ^[8, 18, 28, 38, 48]. Under the National Mission for Enhanced Energy Efficiency, BEE established Perform Achieve Trade (PAT), a market-based and regulatory energy efficiency trading mechanism, to increase efficiency in high-emitting, energy-intensive businesses. The PAT initiative was extended to eleven industries, including petrochemicals, thermal power plants, iron and steel, aluminium, cement, and cement, across five cycles, from 2012 to 2022. The program's rollout yielded significant energy conservation and emissions reduction. In its initial cycle (2012-2015), it achieved energy savings exceeding 6.6 million oil equivalent, translating to a reduction in carbon dioxide emissions of nearly 31 million tonnes.

Improving Energy Access

India has implemented a number of effective programmes that have contributed to the provision of clean energy, better lighting, and clean cooking. Building on earlier initiatives, the Saubhagya Yojana sought to electrify every household by December 2018. In order to increase access to energy, India's household electrification rate is almost 100%, according to government estimates (Government of India, 2017). Launched in 2016, the Pradhan Mantri Ujjwala Yojana aims to reduce indoor air pollution and increase access to cleaner cooking sources by giving 80 million women from low-income families' connections to liquefied petroleum gas by 2019. India surpassed this goal ahead of schedule and increased the program's reach to include an additional 10 million households. In a push to modernize agriculture and boost farmer incomes, India launched the 'Pradhan Mantri Kisan Urja Suraksha Evam Utthaan Mahabhiyan' program in 2018. This ambitious initiative aims to transform irrigation with solar power. The program has three key components: Installing 1.5 million grid-connected solar pumps, deploying two million standalone solar power plants, and establishing ten gigawatts of decentralized renewable energy plants directly connected to the grid.

Developing climate resilient economies and communities

A 2020 Climate Risk Index report identified India and its neighbours as highly susceptible to climate change impacts (Press Information Bureau Government of India Cabinet Committee on Economic Affairs, 2019). Over the past five decades, the region has experienced an average temperature increase of 0.1°C to 0.3°C per decade. These worrying

trends are projected to escalate, with predictions of a 1.5°C to 2°C rise by 2065. Extreme heat waves and cyclones are occurring more frequently and with greater intensity, which emphasises the need for increased collaboration on climate resilience. Discussions about carbon neutrality run the risk of concentrating on policies and actions centred on mitigation. For underdeveloped countries, which have made the least contribution to the climate issue, adaptation is essential. Through diplomatic measures, India can take the lead in attempts to adapt to the environment and garner more attention from other countries. Launched at the 2019 Climate Action Summit, India's International Coalition for Disaster Resilient Infrastructure (CDRI) tackles a critical need for developing nations. With 22 members, CDRI focuses on strengthening infrastructure both new and existing to withstand climate change and natural disasters. This focus on resilience is vital for adaptation, especially for developing countries that have shouldered the least responsibility for the climate crisis. Through CDRI and other diplomatic efforts, India can take a leadership role in promoting climate adaptation and securing greater international attention to this pressing issue.

Recognizing climate change as a strategic concern, India has recently adopted a more prominent role in using climate diplomacy to achieve its long-term goals in the neighbouring BIMSTEC region. This focus on bolstering climate resilience across the Bay of Bengal aims to protect vulnerable communities and strengthen maritime security. In addition to extending financing to its neighbours, India is working with its regional allies in the Indian Ocean region to harness the potential of the blue economy. Beyond its domestic efforts, India has championed regional cooperation in climate resilience. This includes spearheading the development of climate-proof ports and promoting renewable energy use within ports and the maritime industry. This is achieved through a multi-pronged approach encompassing technical assistance, logistical support, technological advancements, and regulatory reforms. Additionally, India has played a leading role in establishing disaster management institutions. Notably, it played a key role in creating the South Asian Cooperative for Environment Protection (2018), the BIMSTEC Centre for Weather and Climate (2014), and the Agreement on South Asia Rapid Response to Natural Disasters (2011). The creation of the BIMSTEC Disaster Management Exercise resulted from the organization's emphasis on collaboration in disaster management. But these have been mostly inactive institutions. These programmes demonstrate India's growing emphasis on using multilateral engagement to manage environmental emergencies and natural disasters. India should prioritise climate resilience in its diplomatic interactions over the next ten years by implementing its "Neighbourhood First" policy. There are four things you can do.

Building resilience against disasters requires a two-pronged approach. Firstly, we need to strengthen existing institutions. This involves identifying potential risks, raising public awareness, and developing mitigation strategies along with clear operational procedures. Secondly, information sharing and collaboration are crucial. By exchanging best practices, we can create standardized frameworks for adaptation strategies. These frameworks can then guide communities in preparing for and protecting themselves from extreme weather events. A successful

example of this collaborative approach is the Air Information Response Plan and India's Heat Action Plans, the first of its type in South Asia, can assist in shielding communities and vulnerable populations from high air pollution incidents and heat waves, respectively. Third, stepping up collaboration to fortify already-existing infrastructure, especially ports, and to construct resilient infrastructures. India's maritime policy in the Indian Ocean Region prioritizes a concept known as Security and Growth for All in the Region (SAGAR). This initiative focuses on fostering a peaceful and prosperous Indian Ocean. To achieve these goals, India can adopt a multi-pronged approach. One key strategy is developing a regional plan for mitigating climate change and building resilience. This would involve collaborative efforts to address environmental challenges. Additionally, promoting the use of renewable energy in port facilities and other infrastructure projects aligns with SAGAR's objectives. This shift towards clean energy sources would not only benefit the environment but also contribute to regional security and economic growth. Finally, exploring innovative financing solutions can ease the transition towards a more sustainable maritime sector. By implementing these strategies, India can effectively navigate the challenges and opportunities within the Indian Ocean Region. Fourth, combining India's numerous climate diplomacy initiatives on a bilateral, regional, and multilateral level can aid in popularising climate resilience. India can contribute to the development of institutional frameworks that promote cooperation, knowledge and investor pool that other nations can access, investment channel options, and venues for knowledge exchange through CDRI.

Mobilizing adaptation finance to build climate-ready India

The funding needed to put mitigation and adaptation plans into action on a global scale is arguably the most significant component of climate action. For emerging nations in particular, financing requirements are vital. For example, reaching India's targets for renewable energy will cost between US\$ 20 and US\$ 30 billion a year. Nevertheless, there hasn't been enough availability or access to international climate money. As part of the Paris Agreement, industrialised nations agreed to give developing nations an additional \$100 billion in climate money annually by 2020 so they can increase their efforts to combat climate change. However, real flows in 2018. Were only about US\$ 79 billion. One of India's main demands in the climate talks has been an increase in climate funding. This will facilitate the mobilisation of financial resources for small and medium-sized nations as well as tiny island developing states, among other developing nations.

Increased Climate Funding: A top priority for India in negotiations

India is not only accelerating renewable energy adoption but also actively improving accessibility within the sector. To foster domestic growth, the country has pioneered creative financing solutions. Organizations like the Indian Renewable Energy Development Agency and the National Agriculture Bank for Agriculture and Rural Development play a key role in this green financing push, alongside private companies like Tata Clean-tech Capital Ltd. Their efforts focus on improving project economics and attracting

long-term, affordable financing for developers. This is achieved through innovative solutions like credit enhancement schemes, alternative investment funds, and mechanisms that ensure payment security. These combined approaches are propelling India's renewable energy sector forward. Internationally, ISA intends to establish a World Solar Bank to assist in the achievement of its objective of raising US\$ 100 billion by 2030 to promote solar energy (Amir & Khan, 2022) [2, 12, 22, 32, 42]. In order to reduce costs, facilitate financing, and increase investments-especially for the smaller countries-ISA can assist in bringing together the demand for solar projects across its member countries. By combining its efforts at economic diplomacy with climate change mitigation, India can be a key player in helping to direct funding and draw in private sector investments. A few fixes can be beneficial. First, encouraging the creation of financial institutions that may act as catalysts, such as green banks, can aid in increasing funding for climate transitions. With its development aid and credit lines, India can foster the growth of catalytic financial institutions, exchange ideas, and ultimately create novel solutions. Utilising low-cost public (national and international) funds, which are usually limited, catalyst finance solutions increase private capital for designated industries. India declared in 2019 that it would establish Green Windows, a framework akin to a green bank, with the aim of promoting new technologies and the underserved sectors of renewable energy (Bhaskar, 2021) [4, 14, 24, 34, 44]. Project economics can be improved with the aid of catalytic finance institutions' co-financing, aggregating, and warehousing services to draw in private money. Second, India can contribute to aggregating demand for resilient infrastructure or clean energy to lower prices and increase private investment through its numerous bilateral, trilateral, and multilateral interactions. Because of their disaggregate demand and size, countries in Sub-Saharan Africa and smaller states worldwide have difficulty attracting affordable funding. In order to reduce solar prices, ISA is putting these strategies into action by combining regional demand and launching a global tender. Third, information exchanges on financial solutions can further expand India's experience with green bonds. The amount of green bonds issued in the nation is increasing gradually despite its young bond market, with a total of US\$ 11.2 billion in 2020 (Kwatra *et al.*, 2019) [59]. Engagements on a bilateral and multinational level can expand these experiences. By emphasising the need for rich countries to provide more climate money and encouraging collaboration on climate finance in its external ties, India can play a constructive role in shaping the future.

Financial solutions must be customised for the conditions of developing nations. India may contribute to the construction of the climate by promoting climate finance cooperation in its foreign relations and emphasising the need for rich countries to contribute more to the cause.

Conclusion

The international effort to combat climate change will be largely determined by the coming decade. Whether the world evolves towards a sustainable future "leaving no one behind" depends on the policy decisions made today. In order to achieve this, it will be critical to support both national goals and promote increased international cooperation. In terms of inclusive climate action, India has the capacity to lead the globe. Promoting a development and

climate agenda in the nation's bilateral, regional, and international partnerships can encourage investments in inclusive solutions, increase trade, and advance the transition to a resilient and sustainable state. India and the rest of the globe have a rapidly closing window of time to protect the future and avert the catastrophic effects of climate change. Now is the moment to start implementing bold, cooperative, and resilient solutions.

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