

COP28 AND INDIA: A REVIEW OF CLIMATE CHANGE MITIGATION AND ADAPTATION STRATEGIES

V. K. Verma¹ and Jyoti Jangir²

¹Professor and Principal (Political Science)
Govt. College, Rajaldesar, Ratangarh (Churu) India

²Assistant Professor (Political Science)
Seth RN Ruia Government College, Ramgarh Shekhawati (Sikar) India
Email: varma.virendra188@gmail.com

How to cite this paper:

Verma V. K. and Jangir Jyoti
(2024) COP28 and India: A
Review of Climate Change
Mitigation and Adaptation
Strategies, Journal of Global
Resources, Vol. 10 (01)

DOI:

10.46587/JGR.2024.v10i01.007

Received: 14 Dec. 2023

Reviewed: 18 Dec. 2023

Final Accepted: 30 Dec. 2023


Freely available Online
www.isdesr.org

Abstract: *The 28th UN Climate Change Conference (COP28) took place from 30 November to 13 December 2023 in Dubai, United Arab Emirates. Around 70,000 participants took part, making it the largest climate conference of all time. This COP was characterized by a first-time stock take - i.e., the analysis of the national climate protection strategies submitted with regard to their conformity with the 2-degree limit. Convention on Climate Change (UNFCCC) served as a crucial platform for global discussions on climate change mitigation and adaptation. This abstract reviews India's significant role and contributions during COP 28, shedding light on the nation's commitments, challenges, and strategies in addressing the complexities of climate change. The article examines India's updated Nationally Determined Contributions (NDCs), emphasizing emission reduction targets and a transition to renewable energy. Challenges such as economic considerations and technological barriers are explored, accompanied by an analysis of India's resilience strategies, particularly in agriculture and urban development. The abstract also highlights India's advocacy for international collaborations, South-South cooperation, and global climate finance. Through this review, we gain insights into India's proactive approach towards climate action, contributing to the global effort to combat climate change.*

Key words: UN Climate Change Conference, COP28, Climate Change Mitigation and Adaptation

Introduction

The culmination of the UN climate conference in Dubai marked a crucial moment where the imperative for collective action against climate change resounded, echoing the urgent call from corporate leaders. These voices, representing a spectrum of industries and perspectives, underscored the gravity of the challenges posed by escalating global greenhouse gas emissions. Within this dynamic context, India's plea for an inclusive ecosystem highlighted the importance of a collaborative global effort. Key initiatives announced at COP28 underscored a shared commitment to sustainable development, with a spotlight on innovations, technology, and financial investments. Leaders, both from the corporate and technological realms, pledged their support for a future characterized by resilience and sustainability. This collective commitment aims to address the immediate threats posed by climate change and lay the groundwork for a more sustainable and equitable world.

The sentiments expressed at COP28 reveal a recognition of the need for immediate and transformative action. Corporate leaders and technology mavens are at the forefront, acknowledging the urgency to curb emissions and adopt sustainable practices. The update on India's Nationally Determined Contribution (NDC) further exemplifies this commitment, with enhanced targets aiming to reduce emissions intensity and increase the share of non-fossil fuel-based energy resources in the country's electric power capacity. In essence, the UN climate conference in Dubai served as a platform for global leaders to articulate their commitment to addressing climate change through collaborative and decisive action. The emphasis on sustainable development, coupled with ambitious targets and updates to NDCs, signifies a collective determination to forge a resilient and sustainable future. As the conference concludes, the challenge now lies in translating these sentiments into tangible and impactful measures on a global scale. India updates its Nationally Determined Contribution (NDC) according to which target to reduce emissions intensity of its GDP has been enhanced to 45 percent by 2030 from 2005 level and target on cumulative electric power installed capacity from non-fossil fuel-based energy resources has been enhanced to 50 percent by 2030. (MoEF, GoI, 2023)

28th Session of the UN Climate Change Conference (COP28)

An inter-ministerial delegation from India attended the 28th Session of the UN Climate Change Conference (COP28) held in Dubai, United Arab Emirates from 30th November'2023 to 13th December'2023. The major outcome from COP 28 included the decision on Outcome of the First Global Stocktake, ratcheting up global climate ambition before the end of the decade and agreement on the operationalization of loss and damage fund. These global efforts will be taken up by the countries in a nationally determined manner considering the Paris Agreement and their different national circumstances.

The 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change (UNFCCC) held immense significance as nations converged to address the escalating climate crisis. Amidst this global dialogue, India's role and contributions stood as a pivotal point in shaping the collective response to climate change. This article reviews India's stance, commitments, and strategies presented at COP28, focusing on the nation's proactive approach towards both mitigation and adaptation in the face of mounting climate challenges.

India's Third National Communication to the United Nations Framework Convention on Climate Change was submitted on December 9, 2023. The report contains information on India's greenhouse gas emissions, its vulnerability to climate change, and the measures it is taking to mitigate emissions and adapt to the impacts of climate change. Energy sector

contributed the most to the overall anthropogenic emissions with 75.81 percent, followed by agriculture sector with 13.44 percent, Industrial Process and Product Use (IPPU) with 8.41 percent and Waste with 2.34 percent.

India also submitted the Initial Adaptation Communication to UNFCCC. India has been diligently working towards adaptation in mission mode. Several policies and measures have been put in place across key economic sectors, keeping in mind the wide scope of adaptation activities. India has been spending significant number of resources on adaptation relevant actions, despite the competing demands for limited resources in a developing economy.

Mission LiFE

Mission Life, inaugurated by the Hon'ble Prime Minister of India on October 20, 2022, represents a significant initiative aimed at elevating individual behaviours to the forefront of the global climate action narrative. The genesis of this mission can be traced back to the 2021 UN Climate Change Conference (UNFCCC COP26), where the Hon'ble Prime Minister first announced the visionary Mission Life. This mission has garnered international recognition from various esteemed bodies, including the IPCC Climate Change 2022, acknowledged in the Mitigation of Climate Change Working Group III Report of 2022. Further endorsements include its incorporation into the pivotal decisions of the Sharm el-Sheikh Implementation Plan in 2022, the G7 Communique adopted in Sapporo, Japan, in 2023, the Shanghai Cooperation Organisation Communique of 2023, and the G20 Leaders' Declaration of the same year. Additionally, the 9th G20 Parliamentary Speakers Summit (P20) and Parliamentary Forum in 2023 have underscored the importance and impact of Mission Life on the global stage. This initiative not only underscores the commitment of India but also positions individual actions as instrumental in addressing climate change on a worldwide scale. The endorsement from key international forums and reports signifies the broad acknowledgment of the significance of Mission Life in the ongoing efforts to mitigate the impact of climate change.

India Cooling Action Plan

India is the first country in the world to develop a comprehensive Cooling Action Plan, which seeks to provide an integrated vision towards cooling across sectors encompassing inter alia reducing cooling demand, refrigerant transition, enhancing energy efficiency and better technology options with a 20-year time horizon. During Hydro Chlorofluorocarbons Phase Out Management Plan (HPMP) Stage-II implementation, India completely phased out the use of Hydro chlorofluorocarbon (HCFC)- 141b in manufacturing of rigid foam, the first among the developing countries to achieve the milestone. As against target of 35 percent reduction from the baseline as on 1.1.2020, India achieved a reduction of 44 percent, highlighting India's efforts in protection of the stratospheric ozone layer.

India's Climate Commitments at COP28

At COP28, India reiterated its commitment to combating climate change by unveiling updated Nationally Determined Contributions (NDCs). These revised commitments reinforced India's dedication to reducing greenhouse gas emissions, setting ambitious targets to enhance the share of renewable energy sources in its energy portfolio. The nation's pledge to achieve net-zero emissions by 2070, alongside a target of 50 percent renewable energy capacity by 2030, marked a significant leap towards a greener and more sustainable future.

Challenges and Resilience Strategies

While charting an ambitious climate agenda, India faces multifaceted challenges on the path to climate resilience. Economic considerations, including the balance between development

and sustainability, pose complexities in implementing green initiatives. Technological barriers and infrastructural limitations add layers of challenge, necessitating innovative approaches to adopt sustainable practices. India's adaptation strategies showcased resilience-driven approaches across various sectors. The agricultural sector witnessed endeavors to enhance resilience against climate impacts, focusing on sustainable farming practices, crop diversification, and water management techniques. Additionally, urban sustainability initiatives emerged, emphasizing climate-resilient infrastructure, eco-friendly transportation, and smart city development to mitigate the urban heat island effect.

International Collaborations and Advocacy

India, during COP28, underscored the significance of global collaboration in addressing climate change. The nation actively advocated South-South cooperation, promoting knowledge-sharing and technology transfer among developing nations. Furthermore, India emphasized the imperative of global climate finance to support not only its own climate goals but also to bolster climate action in other developing nations.

Conclusion

India's participation at COP28 portrayed a proactive stance towards tackling climate change, underscoring the nation's commitment to aligning development with sustainability. The unveiled climate commitments and adaptation strategies marked a notable leap forward in India's pursuit of a low-carbon and climate-resilient future. The challenges faced by India underscored the complexity of transitioning to a sustainable economy while ensuring equitable growth. Going forward, India's sustained efforts and international collaborations stand as cornerstones in the global endeavor to combat climate change, paving the way for a more sustainable and resilient world and sustainable development in the Indian context.

References

1. IISD, Earth Negotiations Bulletin A Reporting Service for Environment and Development Negotiations Vol. 12 No. 842 https://enb.iisd.org/sites/default/files/2023-12/enb_12842e_0.pdf
2. <https://pib.gov.in/PressReleaselframePage.aspx?PRID=1989495>
3. https://www.munichre-foundation.org/en/climate-mitigation/Dialogue_forums/DF-2024COP-Nachlese.html
4. <https://enb.iisd.org/united-arab-emirates-climate-change-conference-cop28-summary>
5. <https://climateaction.unfccc.int/Events/COP28>
6. <https://www.unep.org/unep-climate-cop28/pavilion>
7. [file:///C:/Users/M percent20M percent20Sheikh/Downloads/Statement_2022.pdf](file:///C:/Users/M%20percent20M%20percent20Sheikh/Downloads/Statement_2022.pdf)