

Climate Change Disasters and the Imperative Role of the G20 Summit: A Global Call to Action

Athira Raveendran^{1*} and Boda Mahesh Naik²

Research Scholar, Department of Economics, M.S. University, Tirunelveli, Tamil Nadu
Senior Research Fellow, ICAR-National Academy of Agricultural Research Management,
Hyderabad

ARTICLE ID: 05

Abstract

In recent years, the world has witnessed an alarming surge in climate-related disasters that have upended economies, destroyed communities, and taken countless lives. The role of global governance, particularly bodies such as the G20, becomes ever more essential in the face of this accelerating crisis. This article examines recent climate calamities and the implications of the Delhi Declaration at the 2023 G20 Summit in India.

Introduction

Climate change is no longer an impending threat but a tangible reality, as evidenced by recent global events from raging wildfires in Australia to scorching heat waves in India. The global community, while aware, has been slow to act decisively. The frequency of climate-induced catastrophes has increased threefold over the past three decades. From 2006 to 2016, global sea levels ascended at a rate that was 2.5 times quicker than the majority of the 20th century. Each year, climate disruptions displace over 20 million individuals. The United Nations Environment Program predicts that by 2030, the financial burden for developing nations to adjust to climate shifts and manage the ensuing damage could range between \$140 billion to \$300 billion annually. In this context, the 2023 G20 Summit emerges as a pivotal moment for the world, marking an intersection of acknowledgment and action. Climate change, once relegated to the domain of academic discussions and futuristic projections, has now firmly established its devastating footprint on the global stage. With each passing year, the tangible manifestations of this existential crisis become increasingly evident, laying bare our collective vulnerabilities. From the prolonged heatwave of India to the sunburned expanses of Australia, no corner of the globe remains untouched by the catastrophic repercussions of a warming planet. However, as the crisis deepens, there's an increasing recognition of the need for swift, coordinated, and comprehensive action. Global governance structures, previously critiqued for

their lackadaisical response to environmental concerns, are now finding themselves at the heart of the debate. This is aptly illustrated by the heightened anticipation surrounding the 2023 G20 Summit. As nations that together account for a significant proportion of global emissions, production, and consumption, the G20's stance and strategy can significantly shape the trajectory of global climate action. The summit, therefore, emerges not just as a forum for dialogue, but a crucible where the future of our planet may well be determined.

Recent Episodes of Climate Unrest: A Worldview

1. Southern Africa's Dual Cyclones: A Portent of Things to Come?

In 2019, Southern Africa confronted the wrath of Cyclones Idai and Kenneth. While cyclones are not uncommon in this region, the intensity and proximity of these two events were unparalleled. Cyclones Idai and Kenneth wreaked havoc in Zimbabwe, Malawi, and Mozambique in 2019, leading to grave humanitarian crises. A pattern of increasing cyclonic activities raises global concerns. The sheer scale of destruction signalled a potential new normal for such weather patterns in the region.



Future Concern: If the frequency and intensity of such cyclones increase, as many climatologists predict, the implications are dire. The region could face continual challenges in terms of infrastructure rebuilds, food security, and human displacement. More alarmingly, repeated cyclonic events might render parts of these countries uninhabitable, leading to the grim possibility of climate refugees.

2. Australia's Bushfire Mayhem: When Flames Portray a Broader Picture

In 2020 Australia saw grappling with unprecedented bushfires, exacerbated by its hottest year, signalling a potential norm for regions with similar climates. Australia's 2020 bushfire season was one for the record books. While bushfires are a recurrent phenomenon in

Australia's ecosystem, the extent and ferocity of the 2020 fires, fuelled by an exceptionally hot and dry year, took the world by surprise.



Future Danger: As global temperatures rise, the chances of prolonged droughts and heatwaves in Australia might become more frequent. This could mean more intense and widespread bushfires, with devastating effects on biodiversity, human settlements, and the Australian economy.

3. Droughts in the Horn of Africa: When Absence Spells Calamity

The Horn of Africa, with its recurring droughts, paints a bleak picture of climate change impacts. Repeated and severe droughts, intensified by rising sea temperatures, are pushing millions in Ethiopia, Kenya, and Somalia towards famine and displacement. Water scarcity has not just parched the lands but has also led to crop failures, livestock deaths, and human misery.



Future Concern: With warming seas, the region might see even more extended periods without substantial rainfall. This could escalate already high food insecurity levels, political instability, and intensify inter-community conflicts over dwindling resources.

4. South Asian Flood Catastrophes: When Abundance Becomes a Bane

Intensified monsoons, arguably exacerbated by climate change, have displaced millions in India, Nepal, and Bangladesh. Monsoons in South Asia have always been a double-edged sword, providing life-giving rains on one hand and causing devastating floods on the other. But recent years have shown an unsettling increase in the intensity and unpredictability of these rains.



Future Danger: As climate patterns shift, these regions may face even more unpredictable and intense monsoons. This could lead to more significant loss of life, damage to infrastructure, and displacement of millions, posing immense challenges for governments and humanitarian organizations.

5. Extended Drought in Central America's Dry Corridor: A Quiet Crisis Amplifying

A prolonged *El Nino*, magnified by the climate crisis, is starving the region, jeopardizing food security, and livelihoods. The Dry Corridor of Central America, extending through parts of Guatemala, Honduras, El Salvador, and Nicaragua, has seen its typical dry season elongate alarmingly, with clear indications of the hand of climate change.



Future Concern: If this trend continues, the very livelihoods of millions who rely on agriculture are at stake. Beyond food insecurity, prolonged droughts can lead to socio-economic upheavals, increased migration, and even potential conflicts over water and other resources.

6. South Asia's Sweltering Reality: A Heatwave like No Other

The recent climatic anomalies in South Asia, especially across India and Pakistan, paint a grim picture of the climate's erratic behaviour. In March 2022, these countries experienced a scorching wave of heat, setting historical records. India, with its century-old meteorological records, found March to be the hottest it has ever documented. Similarly, Pakistan not only set national records but also contributed to the highest worldwide positive temperature anomaly in the same month. Couple this with the unusually dry conditions - an alarming 71% below normal rainfall in India and a concerning 62% in Pakistan - and the scene was set for an intense and prolonged heatwave. As April dawned, there was little respite. By its end, a staggering 70% of India's vast landscape was reeling under the oppressive heat.

Future Concern: South Asia, a region already grappling with challenges of population density, water scarcity, and agricultural dependency, finds itself at the forefront of climate-induced adversities. If the current trends persist or escalate, we were staring at multiple cascading repercussions.

In essence, each of these climate incidents isn't just a standalone event but a piece of the larger, unsettling mosaic of a world grappling with climate change. As we witness the unwavering march of these challenges, the global community must internalize the implications and act with a sense of urgency and unity.

Relevance of the G20 Summit: A Beacon of Hope in the Climate Storm.



The G20, comprising the world's major economies, represents not only the crux of global economic power but also bears a significant responsibility for the lion's share of global greenhouse gas emissions. As such, the stances taken, policies formulated, and actions endorsed by this group resonate far and wide, influencing the trajectory of global climate action. The Climate and Environment Ministers' Meeting, given its timely occurrence, acts as a testament to the international community's collective resolve.

1. Global Interconnectedness and Shared Vulnerability

The aforementioned climate disasters highlight an indisputable truth: climate change knows no borders. The cyclones of Southern Africa, the bushfires of Australia, the droughts of Africa and Central America, and the floods and heat waves of South Asia underline the universal vulnerability we share. As an assembly of the world's most influential economies, the G20 cannot remain insular. Any calamity in one part of the world can have cascading effects on global trade, economies, and human movement, making climate action a shared necessity. The climate calamities we have witnessed underscore the borderless nature of climate change. The G20's unanimous adoption of the theme, 'One Earth, One Family, One Future', epitomized as 'The Delhi Declaration', is a testament to recognizing this shared vulnerability. By setting forth two ambitious objectives – reduction of global greenhouse gas emissions by 43% by 2030 (from 2019 figures) and targeting a global emissions peak by 2025 – the G20 nations have committed to aggressive, collaborative action against a common threat.

2. Economic Imperatives and Long-term Stability

Addressing the catastrophic effects of climate change isn't merely a moral obligation but also an economic imperative. As witnessed, disasters can disrupt global supply chains, affect commodity prices, and lead to large-scale migrations, posing challenges to global stability and prosperity. For the G20 nations, which house major global financial hubs and trade routes, understanding these economic interdependencies and proactively acting on them is crucial for long-term economic sustainability. The G20's decisions are not only emblematic of environmental stewardship but also demonstrate an acute understanding of the economic repercussions of inaction. By pledging to these targets, they are fortifying their economies against the cascading effects of unchecked climate change, such as disrupted global supply chains, skewed commodity prices, and large-scale migrations.

3. Setting a Global Precedent



The actions and commitments of the G20 carry a symbolic weight. By addressing the climate catastrophes and setting ambitious targets like those in the Delhi Declaration, the G20 can send a potent message to the rest of the world. Their leadership can galvanize action at all levels, from national governments to local communities and businesses. India's proposal for a G-20 climate observation satellite, endorsed during the summit, highlights the group's commitment to employing cutting-edge technology to monitor and address climate change. This initiative can provide invaluable real-time data, aiding in predicting, mitigating, and adapting to the ever-evolving challenges posed by climate change.

4. Collaborative Solutions for Global Challenges

The complex challenges of climate change demand collaborative solutions. No nation can combat this crisis in isolation. The G20, with its collective resources, expertise, and technological prowess, is uniquely positioned to foster such collaborations. From shared research and development initiatives to financial mechanisms that support climate-vulnerable regions, the G20 can pave the way for holistic solutions.

5. Legacy and the Moral Imperative

Beyond economics and politics, the G20 nations have a moral duty. The choices made today will define the legacy left for future generations. By focusing on the recent climate calamities and working towards mitigating future risks, the G20 can ensure a safer, more equitable world for all. The decisions made during the G20 Summit are more than mere policy pronouncements; they are symbolic of the leadership role these nations are willing to undertake. By addressing the recent climate calamities and setting actionable targets, the G20 is laying down a legacy, signalling its intent to safeguard the planet's future.

The 2023 G20 Summit, particularly the Climate and Environment Ministers' Meeting, isn't just another diplomatic event. Given the stark realities painted by the recent climate events, it emerges as a potentially transformative moment. A moment where acknowledgment is transformed into action, and where the collective might of the world's most potent economies is channelled to safeguard the planet's future. The critical decisions taken therein, reflecting the synthesis of acknowledgment and actionable intent, have the potential to steer our world towards a more sustainable, secure, and harmonious future.

Conclusion



In the face of a climate crisis that grows more urgent by the day, the actions and decisions made by leading global powers become all the more significant. As we have witnessed, our planet's climatic events are not isolated occurrences but interwoven threads in the vast tapestry of our shared global ecosystem. These events are poignant reminders of the high stakes involved and the narrow window we possess to effect meaningful change. The 2023 G20 Summit, held against this backdrop of heightened climate awareness and urgency, symbolizes a turning point. The commitments made during the summit be it the ambitious targets encapsulated in 'The Delhi Declaration' or the pioneering proposal for a climate observation satellite are indicative of a renewed global momentum. These are not mere diplomatic overtures but concrete steps that signify a collective recognition of the gravity of the situation.

However, declarations, no matter how ambitious, are just the beginning. The real challenge lies in translating these commitments into actionable policies and ensuring rigorous implementation on the ground. While the G20's stance provides optimism, it also underscores the monumental task ahead. For these decisions to have a lasting impact, they must be complemented by regional, national, and local actions, fostering a holistic approach to combatting climate change. The world's response to the climate crisis will indubitably be a defining narrative of our times. And as we tread this path, the G20 Summit serves as a beacon, illuminating the way forward. It stands as a testament to what can be achieved when nations unite with a common purpose. However, the journey has just begun, and as stewards of this planet, the onus is on all of us governments, industries, communities, and individuals to ensure that this momentum is not lost. Only with sustained effort, unwavering commitment, and global unity can we hope to bequeath a healthier, more resilient planet to the generations that follow.

References

Anonymous. (2023). 5 Natural disasters that beg for climate action. Retrieved on: 5 October, 2023, from: <https://www.oxfam.org/en/5-natural-disasters-beg-climate-action>

Anonymous. (2023). Analyzing New Delhi Declaration: Insights from G20 Summit. Retrieved on 8 October, 2023, from: <https://timesofindia.indiatimes.com/india/analyzing-new-delhi-declaration-insights-from-g20-summit/articleshow/103594439.cms?from=mdr>

Anonymous. (2023). What Is Delhi Declaration? All You Need To Know About Consensus Document. Retrieved on: 5 October, 2023, from: <https://www.ndtv.com/india->



news/g20-delhi-declaration-what-is-delhi-declaration-all-you-need-to-know-about-consensus-document-4375275

- Anonymous. (2023). What is the Delhi Declaration? Read the full text here. Retrieved on: 8 October, 2023, from: <https://www.indiatoday.in/india/story/what-is-delhi-declaration-all-you-need-to-know-about-consensus-document-2433727-2023-09-10>
- Bhutta, A. Z., Bhutta, Z. S., Raza, S & Sheikh, T. A. (2022). Addressing the human costs and consequences of the Pakistan flood disaster. *The Lancet*, 400(10360), 1287-1289.
- Bongaarts, J. (2019). Intergovernmental Panel on Climate Change Special Report on Global Warming of 1.5°C, Switzerland: IPCC, 2018. *Wiley, Population and Development Review*, 45(1), 251-252.
- Cook, N & Margesson, R. (2019). Cyclones Idai and Kenneth in Southeastern Africa: Humanitarian and Recovery Response in Brief. *Congressional Research Service*, 12, 1-13.
- Filkov, I. A., Ngo, T., Matthews, S., Telfer, S & Penman, D.T. (2020). Impact of Australia's catastrophic 2019/20 bushfire season on communities and environment. Retrospective analysis and current trends. *Journal of Safety Science and Resilience*, 1(1), 44-56.
- Haidar, S. (2023). G-20 Summit clinches New Delhi Declaration. Retrieved on: 4 October, 2023, from: <https://www.thehindu.com/news/national/g-20-summit-adopts-new-delhi-declaration/article67289646.ece>
- Iyer, K. (2023). G20 Summit 2023 Outcome's: Delhi Declaration, Guest List. News of Universe. Retrieved on: 8 October, 2023, from: <https://www.nalandaopenuniversity.com/g20-summit-2023-schedule-venue-dates/>
- Krishnamurthy, K.P., Choularton, J.R & Kreiva, P. (2020). Dealing with uncertainty in famine predictions: How complex events affect food security early warning skill in the Greater Horn of Africa. *Global Food Security*, 26, 1-21.
- Mateen, Z. (2023). G20: China says Delhi declaration sent a positive signal. Retrieved on: 5 October, 2023, from: <https://www.bbc.com/news/world-asia-india-66783015>
- Waisman, H., Coninck, D. H & Rogelj, J. (2019). Key technological enablers for ambitious climate goals: insights from the IPCC special report on global warming of 1.5 °C. *Environmental Research Letters*, 14(11), 1-5.
- Zachariah, M., Arulalan, T., AchutaRao, K., Saeed, F., Jha, R., Dhasmana, K. M., Mondal, A.,



Bonnet, R., Vautard, R & Philip, S. (2023). Attribution of 2022 early-spring heatwave in India and Pakistan to climate change: lessons in assessing vulnerability and preparedness in reducing impacts. *Environmental Research: Climate*, 2(4), 1-20.

