

SUGGESTIVE GUIDELINES FOR PAPER WRITERS



Theme 1

Addressing Climate Change and Environmental Challenges

Climate change and environmental degradation present some of the most pressing challenges of our time. Rising global temperatures, extreme weather events, biodiversity loss, and environmental pollution threaten ecosystems, livelihoods, and economic stability across the world. The increasing frequency and intensity of climate-induced disasters underscore the urgency for transformative policies and sustainable development strategies to mitigate risks and build resilience.

Environmental challenges are closely intertwined with economic and social dimensions. The disproportionate impact of climate change on marginalized communities highlights the urgent need for inclusive policies that ensure equitable adaptation and mitigation measures. Developing economies, including India, face the dual challenge of sustaining economic growth while ensuring environmental sustainability. The transition to a low-carbon economy requires a fundamental restructuring of industries, energy systems, and urban infrastructure, presenting both opportunities and challenges.

India has been at the forefront of global climate action, implementing ambitious initiatives such as the National Action Plan on Climate Change (NAPCC), the International Solar Alliance, and the LiFE (Lifestyle for Environment) movement introduced during its G20 presidency in 2022. However, despite these efforts, several challenges remain, including the need for enhanced climate finance, technological innovation, and strong governance mechanisms to ensure the effective implementation of climate policies.

Addressing climate change and environmental challenges necessitates a multi-pronged approach that integrates scientific advancements, policy interventions, and community-led initiatives. Sustainable resource management, circular economy models, nature-based solutions, and climate justice frameworks must be central to climate action. The role of indigenous knowledge and traditional practices in conservation and climate adaptation also requires greater recognition in policymaking and implementation strategies.

The transition towards renewable energy sources such as solar, wind, and bioenergy presents both opportunities and hurdles. While renewable energy adoption has seen significant progress in recent years, infrastructural gaps, high initial investment costs, and policy inconsistencies continue to hinder large-scale implementation. Strengthening public-private partnerships and fostering research and development in green technologies will be critical to overcoming these barriers and accelerating the shift towards a sustainable energy future.

Furthermore, urbanization and industrialization have placed immense pressure on natural resources, exacerbating pollution and environmental degradation. Effective urban planning that incorporates green spaces, efficient public transportation, and climate-resilient infrastructure is essential to mitigating environmental impacts while enhancing the quality of life. Encouraging circular economy models that promote recycling, waste reduction, and sustainable production practices can significantly contribute to reducing environmental footprints.

Climate change also presents a significant threat to food security, with rising temperatures and erratic weather patterns disrupting agricultural productivity. Sustainable agricultural practices, including agroecology, climate-smart farming, and water-efficient irrigation techniques, are crucial to ensuring food security while reducing greenhouse gas emissions from the agricultural sector. Additionally, investing in community-led initiatives that empower farmers and promote biodiversity conservation can enhance resilience against climate-related disruptions.

International cooperation and policy alignment are equally vital in addressing global climate challenges. Strengthening multilateral frameworks such as the Paris Agreement and ensuring compliance with international climate commitments will be essential in achieving long-term sustainability goals. Additionally, mobilizing climate finance and technology transfer mechanisms can support developing nations in implementing effective climate mitigation and adaptation strategies.

Key issues for consideration under this theme include:

- ⦿ Impact of climate change on poverty, employment, and economic growth
- ⦿ Strategies for enhancing energy security while transitioning to sustainable energy sources
- ⦿ Innovations in water resource management to address scarcity and support conservation
- ⦿ Biodiversity conservation and the role of ecosystems in mitigating climate risks
- ⦿ Climate change, disaster risk reduction, and community-led adaptation initiatives
- ⦿ Circular economy practices to improve resource efficiency and waste management
- ⦿ Integration of indigenous knowledge and traditional practices in climate adaptation
- ⦿ Role of gender equity in climate change mitigation and adaptation strategies
- ⦿ Policies for promoting sustainable consumption and reducing environmental footprints
- ⦿ Implementation challenges and governance issues in climate action frameworks

A holistic approach to addressing climate change and environmental challenges is essential to achieving long-term sustainability and resilience. This theme aims to bring together scholars, policymakers, and practitioners to engage in critical discussions, share research insights, and explore innovative solutions to combat climate change while ensuring economic and social sustainability.