

UNFCCC Meeting of Conference of the Parties, COP-28

The 28th United Nations Climate Change Conference of the Parties (COP) took place in Dubai from 30 November to 12 December 2023. This conference was of paramount significance as its primary goal was to facilitate agreement among governments worldwide on policies to restrict the increase of global temperatures and to develop effective mitigation and adaptation strategies.

Established in 1994, the United Nations Framework Convention on Climate Change (UNFCCC) aims to stabilize the concentration of greenhouse gases (GHGs) in the atmosphere. This is to prevent any harmful interference with the climate system caused by human activities. The members of the convention, also known as the Conference of the Parties, work together to make decisions and promote effective implementation of measures to combat climate change.

The 20th yearly session of the Conference of the Parties (COP-20) was held in Lima, Peru, from 1 to 14 December 2014. After several consultations, the UNFCCC announced that the parties had reached a consensus to create plans for their national contributions to reduce emissions, known as Intended Nationally Determined Contributions (INDCs). These contributions are expected to guide future mitigation strategies based on the outcome of COP-21, which was set to take place in Paris in 2015. At this historic meeting, 195 nations agreed to limit the increase in global average temperature to well below 2°C, confirming an irreversible transition to a low-carbon, safer and healthier world.

In the Paris meeting, India pledged to achieve three significant goals by 2030. These include reducing the country's GHG emissions intensity per unit GDP by 33% to 35% below the 2005 level, obtaining 40% of its electricity from renewable sources such as solar and wind, and creating an additional carbon sink of 2.5–3 billion tonnes of carbon dioxide through increased forest and tree cover.

The Intergovernmental Panel on Climate Change (IPCC) Special Report on 'Global Warming of 1.5 Degree Celsius', released in 2018, marked a significant milestone in the ongoing climate change discussion. Its findings emphasized several key points, including that global warming is expected to reach 1.5°C between 2030 and 2052 if current trends continue. Additionally, the report projected that global mean sea level rise would be approximately 10 cm lower by 2100 with global warming of 1.5°C compared to

2°C. Lastly, the report warned of an increase in climate-related risks with global warming of 1.5°C, which would escalate further to 2°C. The report recommended immediate action and global cooperation to limit global warming to below 1.5°C.

At the COP-26 climate summit held in Glasgow, UK, a notable number of countries made a commitment to achieving a net-zero emissions target within the timeframe of 2050–2070. India announced its intention to reach net-zero emissions by 2070 and to meet 50% (as opposed to the previous target of 40%) of its energy requirement through renewable energy by 2030. While the COP-26 meeting can be considered a moderate success as it established a framework for future actions on climate change, it fell short of its target for raising funds for climate finance. Nevertheless, one of the noteworthy accomplishments of the summit was the successful finalization of the Article 6 negotiations of the Paris Agreement.

At COP-27 in Egypt last year, a central question was posed: who bears responsibility for the costs of climate change? It is important to reflect on the Kyoto Protocol in this context. This international treaty established obligations for developed nations to reduce GHG emissions, acknowledging their role in current atmospheric levels. The Protocol also acknowledged the disproportionate burden placed on developed nations as a result. Consequently, many developed countries committed to legally binding emissions limitations and reductions over two commitment periods.

During COP-27, the loss and damage fund was announced as a global financial package to aid countries grappling with the effects of climate change. The fund aims to provide compensation to developing countries with low carbon footprints that are disproportionately affected by climate change. This has been a long-standing issue, with the establishment of a Green Climate Fund (GCF) agreed upon at COP-16 in Cancun, Mexico. Over the course of four years, nations have pledged varying amounts to support projects, policies and other activities in developing countries. At COP-20, the UNFCCC called for accelerating ongoing resource mobilization efforts and encouraged nations to increase their contributions to achieve the target of US\$ 100 billion by 2020.

COP-28 successfully acknowledged the significance of protecting vulnerable nations from the repercussions of climate change. Parties expressed concerns regarding climate finance. The commitment to shift away from fossil fuels, expand the use of renewable energy sources, and mitigate the effects of climate change are noteworthy advancements. While the COP-28 agreement was not as ambitious as anticipated, it presents a well-balanced strategy for expediting climate action.

One of the key themes addressed at COP-28 was the impact of climate change on global health. International sustainability programmes and the World Health Organization (WHO) have repeatedly emphasized the interconnectedness of human health and the environment we inhabit. Appropriately, the theme of World Health Day 2022 was 'Our Planet, Our Health', with the WHO website stating that, amidst a pandemic, pollution and rising disease rates, this day will focus on the urgent actions needed to promote well-being for both humans and the planet. The WHO recognizes that the climate crisis is also a health crisis, and global leaders have endorsed the Health and Climate Change Declaration, highlighting the critical need to understand the complex connections between a changing global environment and human health. It is well-known that climate conditions can impact the spread of epidemic diseases, with climate change being a likely reason for changes in transmission patterns. Studies have demonstrated that sudden temperature changes

and extreme weather events can create ideal environments for virus modification and the emergence of new infectious diseases.

COP-28 saw significant progress in the development, production and deployment of cleaner energies in aviation. The Subsidiary Body for Scientific and Technological Advice (SBSTA) played a vital role by providing scientific and technological guidance related to the convention, protocols and agreements. At SBSTA59, the International Civil Aviation Organization (ICAO) made an important announcement to facilitate the global scale-up of cleaner energies in aviation, which is a landmark decision. Focus of COP-28 on considering the impact of emissions from the aviation sector on climate change is a significant step forward. The proposal to triple the capacity of renewable energy sources like wind and solar power by 2030 and double the rate of energy efficiency improvements is also encouraging. The success of COP-28 depends on all countries meeting these commitments.

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