



"INDIA'S HOTTEST JUNE: A WAKE-UP CALL FOR CLIMATE ACTION"

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June 2024 will be remembered as a historic month for India, marking the hottest June the country has ever experienced. This record-breaking heatwave affected millions of lives, disrupted daily routines, and brought into sharp focus the urgent need to address climate change and its impacts.

Throughout the month, temperatures soared to unprecedented levels across the nation. Northern India, particularly the states of Rajasthan, Punjab, Haryana, and Uttar Pradesh, bore the brunt of the heat. Cities like Jaipur, Delhi, and Lucknow saw temperatures consistently above 45°C (113°F), with some areas even reaching 48°C (118°F). This extreme heatwave did not spare Southern India either, with states like Tamil Nadu, Karnataka, and Andhra Pradesh also experiencing sweltering conditions.

The impact on human health was immediate and severe. Hospitals reported a dramatic increase in cases of heat-related illnesses such as heat exhaustion and heat stroke. The elderly, children, and those with pre-existing health conditions were particularly vulnerable.

Public health advisories urged citizens to stay indoors during peak heat hours, stay hydrated, and avoid strenuous activities. Despite these warnings, the sheer intensity of the heatwave overwhelmed many, leading to numerous fatalities and a strain on healthcare facilities.

The scorching temperatures also had a significant economic impact. The agricultural sector, a cornerstone of India's economy, was severely affected. Farmers struggled to protect their crops from the relentless heat, with many reporting losses due to wilting and heat stress. Livestock, too, suffered, with heat-related deaths becoming a common occurrence. The decrease in agricultural productivity not only threatened food security but also the livelihoods of millions of farmers and agricultural workers. Urban areas faced their own set of challenges. The demand for electricity surged as air conditioning units and fans ran non-stop, leading to frequent power outages. The energy grid, already under pressure, struggled to keep up with the increased demand. Blackouts became a common occurrence,

further exacerbating the discomfort and health risks associated with the heatwave. The intense heat also took a toll on infrastructure. Roads and railway tracks expanded and buckled under the extreme temperatures, causing transportation delays and disruptions. In cities, water shortages became a pressing issue as reservoirs and water bodies dried up faster than usual. This scarcity of water compounded the difficulties faced by urban residents, making daily life even more challenging.

The environmental consequences of the heatwave were equally alarming. Forests in various parts of the country were more prone to wildfires, and several regions reported significant wildfire outbreaks. These fires not only destroyed vast tracts of forest but also released large amounts of carbon dioxide and other pollutants into the atmosphere, further contributing to climate change. The heatwave also had a profound impact on India's rivers and lakes. Reduced water levels and increased evaporation rates led to a decrease in the availability of fresh water, affecting both human populations and wildlife. Aquatic ecosystems were stressed, and fish populations declined, impacting the livelihoods of communities dependent on fishing.

This extreme weather event was a stark reminder of the broader trend of global warming. Climate scientists pointed out that such heatwaves are becoming more frequent and severe due to the ongoing accumulation of greenhouse gases in the atmosphere. The increased concentration of carbon dioxide, methane, and other pollutants is trapping more heat, leading to a gradual rise in global temperatures. The presence of a persistent high-pressure system over India during June exacerbated the situation, creating a 'heat dome' that trapped hot air and prevented cooler air masses from moving in. This atmospheric phenomenon, combined with already elevated baseline temperatures, resulted in the extreme heat observed.

India's response to the heatwave underscored the need for both immediate and long-term strategies to combat the impacts of climate

change. On the immediate front, state and local governments set up cooling centers in urban areas, providing refuge for those without access to air conditioning. Water distribution points were established to ensure access to drinking water, and public awareness campaigns were launched to educate citizens on how to protect themselves during extreme heat conditions.

However, these measures, while crucial, are not sufficient in the long run. The events of June 2024 highlighted the need for more comprehensive and sustainable approaches to climate resilience. The Indian government has recognized this and is taking steps to address the root causes of climate change and enhance the country's ability to cope with its impacts.

On the agricultural front, efforts are being made to promote climate-smart farming practices. This includes the adoption of drought-resistant crop varieties, improved irrigation techniques, and better soil management practices. Providing farmers with access to timely weather information and climate advisories can also help them make more informed decisions and reduce their vulnerability to extreme weather events.

International cooperation is essential in the fight against climate change. India is actively participating in global climate negotiations and is committed to meeting its obligations under the Paris Agreement. Collaborating with other countries to share knowledge, technology, and resources will be crucial in building a more sustainable and resilient future.

June 2024 will be remembered as a turning point, a month that brought into sharp focus the realities of climate change and the urgent need for action. The record-breaking heatwave underscored the vulnerabilities of India's population and infrastructure, highlighting the importance of building resilience and reducing greenhouse gas emissions. As the world continues to grapple with the impacts of climate change, India's experience in June 2024 serves as a powerful reminder of the need for collective action to protect our planet and ensure a sustainable future for generations to come.