

# **IMD's Annual Summer Forecast**

#### Why in news?

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India Meteorological Department (IMD) has recently released its annual summer forecast.

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#### What are the key aspects?

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- Summer 'Normal' temperatures refer to the mean temperatures during a particular period (months) between 1981 and 2010.  $\n$
- IMD has forecasted a "warmer" than normal summer months from March-May.

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- Heat Waves The IMD's climate summary in January said that 2017 was the "fourth warmest year on record since 1901".  $\n$
- Several parts of India, from Palakkad in Kerala to Mumbai, reported heat wave conditions.

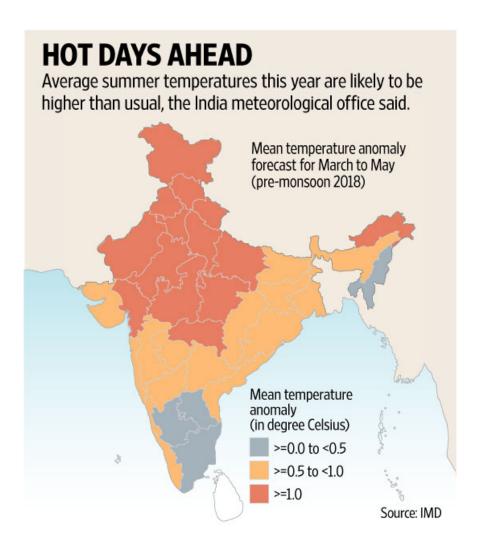
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- They recorded day time temperatures greater than 35°C.  $\slashn$
- Increasing trends in the frequency and duration of heat waves over the country is also indicated.  $\n$
- $\bullet$  This is attributed to increasing trends in the greenhouse gases emission.  $\ensuremath{\sc n}$
- The warming of the sea surface temperatures over the equatorial Indian and Pacific oceans is also a reason.
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- Regions A harsh summer is awaiting certain states, with mean seasonal temperature-spikes likely to be greater than 1 °C.  $\n$
- These are J&K, Punjab, HP, west and east Rajasthan, Uttarakhand, west and

east UP, west and east MP, Vidarbha, Gujarat and Arunachal Pradesh. n

- Certain parts would witness temperature rise between 0.5°C and 1°C from their historical normal.  $\n$
- These include Tamil Nadu, south interior Karnataka and Rayalaseema.  $\n$

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• La Nina - La Nina is a weather condition that generally brings heavy rains to India.

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- $\bullet$  Currently, the sea surface temperature conditions over equatorial Pacific suggest moderate La Nina conditions.  $\n$
- The IMD forecast indicates that La Nina conditions are likely to be moderate till spring (May-end).
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- They are likely to start weakening after spring.

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- But even if La Nina weakens, it is sure that El Nino (which negatively effects monsoon) will not immediately develop.
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- Given these, the prospects of a normal monsoon are more.  $\ensuremath{\sc vn}$
- However forecasts before spring are prone to error, with better accuracy after May.

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#### Why is the forecast significant?

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• A scientific estimate of annual mortality attributable to heat waves between 2010 and 2015 ranges between 1,300 and 2,500.

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- For many States, the summer of 2018 may pose a public health challenge.  $\slash n$
- Even a marginal rise above the normal may lead to enormous heat stress for millions of Indians, given the deprived conditions of life.  $\n$
- A heat event can lead to fatal heat stroke in some, and exhaustion, cramps and fainting in many.
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- Moreover, there are distinct groups at particular risk for health-related problems during a heat wave.
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- These include senior citizens and people with pre-existing disease, mental illness or disability.

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## What does it call for?

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• The IMD's forecast is a timely alert for State authorities to review their summer preparedness.

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- Interventions States must facilitate for community-level interventions.  $\n$
- This is to deal with heat stress and particularly to help the vulnerable

groups.

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- All stakeholders, including the health-care system, should be prepared to deal with the phenomenon.
- $\^{\n}$  Alerts The World Health Organisation recommends that countries adopt
  - heat-health warning systems.
- This includes daily alerts on weather conditions. n
- This could ensure that people are in a position to deal with adverse weather, starting with reduction of exposure.  $\n$
- **Water stress** Water stress is a common and often chronic feature in many States.

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• Arrangements should be made by the State authorities to meet possible water scarcity.

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- GHG The average temperature caused by climate change and the frequency and intensity of extreme weather events are perceivably linked.  $\n$
- Thus, taking a long-term view, India has to pursue mitigation of greenhouse gases.

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## Source: The Hindu

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## **Quick Fact**

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## La Nina

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• La Nina is associated with the cooling of the eastern equatorial Pacific Ocean.

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• It favourably impacts the four-month long (June to September) south-west monsoon in India.

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- This is particularly critical to the rain-fed farming season which begins in June.  $\slash n$ 

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