Rising Temperatures in North India before Winter End

What is the issue?

- The plains over North India reported a sharp shift in temperatures (rising) in mid-February.
- This has triggered apprehensions that the cold season is ending soon and the summers are going to start early. Here is a look at the geographical factors.

How has the weather over North India been in 2021?

- The region experienced continuous cold conditions all through January and the beginning of February 2021.
- Cold conditions dominated both the plains and hilly regions in North and Northwest India this season.
- The average monthly minimum temperature recorded over the country in January remained the warmest in 62 years.
- However, Delhi, Punjab, Haryana, Himachal Pradesh, Chandigarh and Jammu and Kashmir experienced prolonged severe cold conditions.
- The national capital and neighbouring areas also reported sporadic rainfall in the first week of January.
- However unlike the winter of 2020, not many cold day conditions were recorded during this season.
- In January, there were fewer and feeble western disturbances across lower latitudes.
- The effects of western disturbances were mostly limited to hilly regions in January.

Why is the sudden rise in temperatures?

- In the absence of cold wave and cold day conditions over the plains of north India, temperatures began to soar.
- Delhi, Dehradun and many locations in both the plains and the hills recorded significantly above normal day temperatures for this time of the year.
- On February 11, New Delhi recorded 30.4 degrees Celsius, which was 7.7 degrees above normal.
- The cold waves are prevented from reaching the northern parts of India by -
    i. the dominance of the prevailing easterly waves
    ii. presence of multiple weather systems over Central India

- It is because of these that temperatures have seen a sharp rise.
- The temperature departures notably ranged between 5 to 7 degrees from normal.

How will these weather systems affect the cold conditions?

- There is the presence of multiple weather systems in Central India.
- Their confluence with moist easterly winds is expected over Central India for few days.
- With this, thunderstorm is forecast over this region for some days.
- Madhya Pradesh, Chhattisgarh along with parts of Vidarbha, Marathwada, South Interior Karnataka, Jharkhand and Odisha will experience light intensity rainfall accompanied by lightning.
- Some parts of Maharashtra could see hailstorm for two to three days.
- As a result, no significant cold conditions would prevail over the country, except Jammu and Kashmir during this period.

Is the winter season over then?

- India Meteorological Department (IMD) identifies January and February as winter months over India.
- The temperatures would remain on the higher side till February 20, 2021. But, the winter season is not over yet.
- A fresh western disturbance is expected to cross extreme north India on February 20.
- This system will bring rainfall or snowfall over Jammu and Kashmir.
- Once it passes, there is likely to be a marginal drop of around 2 to 3 degrees over Delhi, Punjab, Haryana, Chandigarh areas starting February 22 onwards.
- It would not be a very cold spell, but would be a respite from the present warm conditions.

What is the forecast for the coming months?

- With the winter season nearing its end for this year, the seasonal transition is expected to commence soon.
- With that, a gradual rise in minimum temperatures by 2 to 4 degree Celsius over North and Northwest India is expected after February 25.
- The day temperatures, too, shall soar in the coming days and remain between 22 to 30 degrees, except over Jammu and Kashmir, Shimla and places of higher altitudes.

Source: The Indian Express

