

IMD's Prediction Role

What is the issue?

- The monsoon has finally set in over Kerala on June 1, 2020 (keeping with the textbook date).
- With a change from its earlier report, here is a look at IMD's prediction and the associated concerns.

What was the earlier prediction?

- In earlier May 2020, the IMD had forecast a four-day delay in the monsoon onset over Kerala.
- This was premised on a relatively mild summer, in early May, in north India.
- Also, there were several spells of Western Disturbances, which are rains from the Mediterranean.
- The impact of super cyclone Amphan in the Bay of Bengal was also a factor behind the prediction.
- A private meteorological company had, however, forecast an early monsoon arrival on May 28.
- This was because its models seemed to suggest diminished impact of Amphan.
- However, in the last week of May 2020, the IMD updated its onset forecast.
- It said that 'favourable conditions' for the monsoon onset were likely on June 1.

What are the criteria?

- The IMD has clearly defined criteria for declaring the onset:
 - i. 8 of 14 designated meteorological stations in Kerala and Karnataka must register 2.5mm rain for two consecutive days
 - ii. there must be 30-40 kmph westerlies (winds from the equator reaching India) at a certain height and a certain value of radiation
- IMD has emphasized that the heavy rains over Kerala alone do not determine the onset of the monsoon.

What are the discrepancies?

- IMD is the only agency with the equipment to measure wind speeds and radiation at higher elevations, along with multiple weather stations.

- It therefore has a monopoly of declaring onset.
- However, the IMD faces competition from domestic and international companies in providing weather-related services.
- In crop insurance, power distribution and short-range forecasts, the IMD no longer has a monopoly on providing weather information.
- This has consequences for the IMD's other major role -
 - i. to give its outlook on how the monsoon might pan out over India
 - ii. how much rain is likely in July and August, the key months for the summer crop
- This year (2020), except India's northeast, the IMD has forecast 'above normal rains' in other areas, which is reassuring.
- However, it is also worth remembering that just last year the IMD failed to communicate that 2019 would turn out to be the wettest in two decades.
- On the other hand, every year of normal monsoon has brought with it both torrential floods and long dry spells.

What is the way forward?

- The complexity of climate change is now such that excess rains in a year seem to have long-ranging impact.
- Reports suggest of a second consecutive year of a locust plague in India on the horizon.
- These can affect the kharif crop.
- It is therefore time that along with improved science and forecasting, the IMD works on disseminating more precise localised weather forecasts.
- IMD's public interface and technology adoption is improving, particularly in cyclone forecasts.
- On the other hand, the IMD has a long way to go in communicating these improvements to a wider population.

Source: The Hindu