

Gram Panchayat-Level Weather Forecasting

Why in News?

Recently, Indian Government has launched the System of Weather Forecast at Gram Panchayat Level.

What is Gram Panchayat level weather forecasting?

- It is part of the Government's <u>100 Days Agenda</u> and reflects a <u>Whole of Government</u> <u>approach.</u>
- Launch It was launched in 2024, a joint programme of
 - Panchayat Raj Ministry
 - India Meteorological Department (IMD)
 - Ministry of Earth Sciences
- **Aim** It is aimed at <u>empowering rural communities</u> and enhancing <u>disaster</u> <u>preparedness</u> at the grassroots, and will benefit farmers and villagers across the country.
- Localised forecasting It is based on gram panchayat boundaries data provided by the Panchayati Raj Ministry.
- Target It will be available for nearly all 2.6 lakh panchayats across India
- **Dissemination of information** It will be made through Panchayat Raj Ministry's digital platforms like
 - **Mausamgram** of IMD
 - \circ $\textbf{\textit{e-GramSwaraj}}$ of Ministry of Panchayati Raj
 - 。 *Meri Panchayat app* of Ministry of Panchayati Raj

What are the features of localised weather forecasting?

- **SMS alerts on weather warning** It will also be sent to Panchayat representatives regarding extreme weather events like cyclones and heavy rainfall, ensuring immediate action to protect lives, crops, and property.
- **Hourly forecasts** It can see data on the current temperature, wind speed, cloud cover (in percentage), rainfall, and relative humidity at the level of gram panchayats.
- **Five-day forecasts** It will be of minimum and maximum temperatures, rainfall, cloud cover, wind direction, and wind speed, and an overall weather forecast.
- Coverage It is available at the district and block levels.
- Accuracy It currently has the ability to forecast weather events over a $\underline{12 \ km \ x \ 12}$ $\underline{km \ area}$
 - \circ **Experimental forecasts** For 3 km x 3 km grids
 - \circ \boldsymbol{Future} $\boldsymbol{objective}$ To make hyper-local forecasts for 1 km x 1 km areas.

- It is a noble initiative aiming at "HAR HAR MAUSAM HAR GHAR
- MAUSAM" (weather information at each house hold at any time).
- **Developed by** Indian Meteorological Department (IMD)
- **Aim** To provide location specific forecast at Gram Panchayat level.
- Weather forecasts
 - hourly up to 36 hours
 - 3-hourly from 36 hrs to next five days
 - Every 6-hourly from next 5 days to 10 days.
- It will be further augmented with the implementation of Mission Mausam.

e-GramSwaraj

- Launched by Ministry of Panchayat Raj
- **Objectives** It helps to prepare and execute Gram Panchayat Development Plan (GPDP).
- It will ensure real time monitoring and accountability.

Meri Panchayat app

- Launched by Ministry of Panchayat Raj
- **Objectives** It aims to create a unified mobile governance platform for rural areas, including residents, functionaries, and Panchayati Raj Institution System stakeholders.
- It seeks to streamline and consolidate various functions and information scattered across different portals into one cohesive mobile platform, thus serving the varied needs of Gram Panchayats.

<u>Mission Mausam</u> is a two-year initiative by the Indian government to improve India's weather forecasting and climate resilience.

How does it help the public?

- **Efficient disaster management** It will also reduce the loss of life and property from the meteorological disasters.
- **Promote sustainable agriculture** It empowers the cultivators to make critical decisions in agriculture, such as planning sowing, irrigation, and harvesting activities
- Enhance farmer's livelihood It can ensure better returns and increase their profits.
- **Strengthen grassroots governance** It improves administration and ensures tailor made approaches in information dissemination.
- **Enable climate-resilient rural population** It enable rural communities to better plan agricultural activities and prepare for weather-related risks.

There are 2.55 lakh village panchayats across the country, with resident populations of a few thousands on average.

References

- 1. The Indian Express | Launch of Panchayat Level weather Forecasts
- 2. <u>IMD</u>| <u>Mausamgram</u>

