

WHAT IS A SHELF CLOUD?

A terrifying shelf cloud recently appeared in Uttarakhand's Haridwar.



About Shelf Cloud:

- A “shelf cloud” or “Arcus cloud” generally forms along the leading edge of thunderstorms.
- It is a type of low-lying, horizontal cloud formation characterized by a clearly defined line of solid clouds.
- It is known for its distinctive wedge-shaped formation. They usually appear as a broad arc across the sky that can sometimes appear to be rotating horizontally.
- **Formation:**
 - Shelf clouds form when cold and dense air is forced into a warmer air mass by wind.
 - This rush of cold air often occurs in a thunderstorm's downdraught, where cold air rushes towards the ground before spreading out to create a gust front.
 - Shelf clouds produced by thunderstorms are always preceded by a rush of dry and cold air ahead of the cloud, with rain arriving after the shelf cloud has passed overhead.

What is a Thunderstorm?

- A thunderstorm is a rain shower during which you hear thunder. Since thunder comes from lightning, all thunderstorms have lightning.
- **Formation:**
 - Thunderstorms form when warm, moist air rises into cold air.
 - The warm air becomes cooler, which causes moisture, called water vapor, to form small water droplets — a process called condensation.
 - The cooled air drops lower in the atmosphere, warms, and rises again.
 - This circuit of rising and falling air is called a convection cell.
 - If this happens a small amount, a cloud will form. If this happens with large amounts of air and moisture, a thunderstorm can form.

WHAT IS eDAR PROJECT?

All states and UTs have started using electronic detailed accident report (eDAR) application for recording road crashes and over seven lakh accidents have been registered on this platform.



About eDAR Project:

- The Integrated Road Accident Database (iRAD) / e-Detailed Accident Report (eDAR) Project is an initiative of the **Ministry of Road Transport and Highways (MoRTH)**, Government of India and is **funded by World Bank**.
- **Objective:** The project aims to **develop an Integrated Road Accident Database (iRAD)**, to enrich the accident databases from every part of the country.
- The project would generate various types of insights by analysing the collected road accident data across the country through implementation of data analytics technique.

How it works?

- The mobile application will **enable police personnel** to enter details **about a road accident, along with photos and videos**, following which **a unique ID will be created for the incident**.
- Subsequently, an engineer from the Public Works Department or the local body will receive an alert on his mobile device.
- He or she will then visit the accident site, examine it, and feed the required details, such as the road design.
- **Data thus collected will be analysed by a team at IIT-M**, which will then suggest if corrective measures in road design need to be taken.

FOXCONN PULLS OUT OF \$19.5-BILLION CHIP PLAN WITH VEDANTA

Why in news?

- Taiwanese electronics manufacturer Foxconn has decided to pull out of its joint venture with Vedanta to set up a \$19.5 billion chip manufacturing plant in India.

- India has identified chip-making as a key priority for future economic growth, hoping to capitalise on companies looking to diversify their operations from China.

Need for domestic manufacturing of semiconductors

- **Foundation stone of modern electronics industry**
 - Semiconductors and displays are the foundation of modern electronics industry.
 - These are critical components that power electronics - from computers and smartphones to the brake sensors in cars.
- **To reduce import dependency**
 - As India does not produce any semiconductors, the country's demands are met with imports.
 - The demand for semiconductors in India will reportedly reach around USD 100 billion by 2025, up from the current demand of USD 24 billion.
- **To overcome the disruption in supply-chain**
 - The absence of local manufacturing affected India the most during the lockdown imposed due to the Covid-19 pandemic.
- **Geopolitical significance**
 - In the current geopolitical scenario, trusted sources of semiconductors and displays hold strategic importance.
 - These are key to the security of critical information infrastructure.
 - E.g., The Department of Telecommunications has in the past raised concerns over possible bugs in the telecom equipment sold by the Chinese company.
- **India Semiconductor Mission –**
 - It will be set up as the nodal agency for efficient and smooth implementation of the schemes on Semiconductors and Display ecosystem.
 - It will drive the long-term strategies for developing a sustainable semiconductors and display ecosystem.
 - The Mission will be led by global experts in semiconductor and display industry.

WESTERN DISTURBANCES

Why in news?

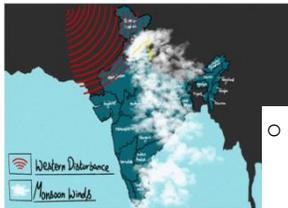
- North Indian states witnessed an intense spell of monsoon rain, resulting in significant damage, loss of life, and property.
- The deluge in north India over the past two days resulted from a deadly confluence of two systems - the monsoon winds and a western disturbance.

Western Disturbances

- **About**
 - A Western Disturbance refers to an extratropical storm or a low-pressure system that originates in the Mediterranean region.
 - As they travel eastward across the Middle East and Iran, they bring changes in weather conditions to the Indian subcontinent.
 - Western Disturbance has a substantial influence on the weather in northern India.

Formation

- They are usually formed by the interaction between cold polar air masses and warm tropical air masses.
- As they move eastward, they bring moisture from the Mediterranean region and the Caspian Sea.



Influence on weather conditions of India

- During the winter months, Western Disturbances are primarily responsible for bringing rainfall and snowfall to the northwestern Himalayan region, including Jammu and Kashmir, Himachal Pradesh, and Uttarakhand.
- Western Disturbances also influence the weather conditions in the Indo-Gangetic plains.
- As they approach the plains, they often lead to cloud cover, lower temperatures, and occasional rainfall.

LEGAL CHALLENGE TO CHANGES IN ARTICLE 370

Context

- A five-judge Bench of the Supreme Court will begin **hearing petitions challenging the changes to Article 370** and downgrading of Jammu & Kashmir state into two Union Territories.
- The petitions, involving important legal and constitutional questions, will be taken up by a constitutional bench led by Chief Justice of India (CJI).

Article 370 (Part XXI - ‘Temporary, Transitional and Special Provisions’)

- It was included in the Constitution on October 17, 1949.
- Article 370 exempted J&K from the Indian Constitution (except Article 1 and Article 370 itself) and permits the state to draft its own Constitution.
- It restricts Parliament’s legislative powers in respect of J&K.
- **For extending a central law on subjects included in the Instrument of Accession (IoA), mere “consultation” with the state government is needed.**
- The IoA gave Parliament the power to legislate in respect of J&K only on **Defence, External Affairs and Communications.**
- **But for extending it to other matters,** “concurrence” of the state government is mandatory.
- Article 370 could be interpreted as **temporary** in the sense that the J&K Constituent Assembly had a right to modify/delete/retain it; it decided to retain it.
- **Article 370(3) permits** deletion of Article 370 by a Presidential Order.
- Such an order, however, is to be preceded by the concurrence of the J&K’s State Assembly.

Events Leading to Abrogation of Article 370

- **Governor’s Rule was imposed in J&K** on June 19, 2018, after the BJP withdrew support to the coalition government led by Chief Minister Mehbooba Mufti.
- **Under Article 92** of the J&K Constitution, six months of Governor’s Rule was mandatory before the state could be put under President’s Rule.
- **President’s rule was imposed** on J&K on December 12, before the end of six months,

- President's Rule was subsequently approved by both Houses of the Parliament.
- On June 12, 2019, President's Rule was extended for another six months.

Constitutional Changes by the Parliament: Abrogation of Article 370

- **On August 5, the Centre issued an order amending The Constitution** (Application to Jammu and Kashmir) Order, 1954, and superseding it with The Constitution (Application to Jammu and Kashmir) Order, 2019.
- **The new order made “all the provisions of the Constitution” applicable to J&K state.**
- The government also **amended Article 367 to add a new Clause (4), making the Constitution of India directly applicable to J&K.**
- Then, President issued a declaration under Article 370(3) making all its clauses inoperative except the provision that all articles of the Constitution shall apply to J&K.

Legal Challenges

Changes Made to Article 370 to Abrogate Art 370

- Article 370 provided for **only application of Article 1 and Article 370 of the Constitution of India to J&K.**
- **Other provisions of the Constitution did not automatically extend to J&K,** but clause (1)(d) of Article 370 empowered the President of India to extend them through an executive order with the concurrence of the government of J&K.
- **Article 370 (3) empowered the President** to “Declare that this article shall cease to be operative” completely or partially but only if the Constituent Assembly of J&K recommended such an action.
- Since the Constituent Assembly of J&K no longer existed, having dispersed in 1957, this power of the President had ceased, unless a new Constituent Assembly came into being.
- **Article 370** explained that “for the purpose of this article”, the state government meant the Maharaja (later changed to Sadr-e-Riyasat) of J&K, acting on the advice of the council of ministers.
- **But there was no state government** either in J&K, so the President had no way to acquire the concurrence of the state government.

- This meant there was no constitutional and legal mechanism available for the Centre to abrogate or amend Article 370.
- **The Centre, however, used the President’s powers** under Article 370(1)(d) to amend Article 367, which provides guidelines to interpret the Constitution.
- **A new clause was added to Article 367**, replacing “Constituent Assembly of the State” referred to in Article 370(3) by “Legislative Assembly of the State”.
- Thus, **the presidential order route under Article 370(1)(d) was used to amend Article 370 itself**, whereas Article 370 could have been amended only upon the recommendation of the Constituent Assembly under Article 370(3), not through Article 370(1)(d).

Conclusion

- After the constitutional changes and reorganisation of the erstwhile State of J&K, the UTs of J&K and Ladakh have been **fully integrated into the mainstream of the nation**.
- As a result, all the rights enshrined in the Constitution of India and benefits of all the Central Laws are now available to the people of J&K and Ladakh.
- However, there are some legal challenges and the constitutional bench of the SC will deliberate upon the process of the removal of Art 370 and pronounce its judgement.

WHAT IS KUI LANGUAGE?

The Odisha Cabinet recently recommended a proposal for inclusion of ‘Kui’ language in the 8th Schedule of the Indian Constitution.



About Kui Language:

● Kui (also known as Kandh, Khondi, Khond, Khondo), is a **South-Eastern Dravidian language** spoken by the Kandha community.

- It is **primarily spoken in the state of Odisha**.
- It is **closely related to other languages in the Dravidian family, such as Gondi and Kuvi**. It was **also referred to as the Kuinga language** during the historical period.
- With 941,988 registered native speakers, it figures at **rank 29 in the 1991 Indian census**.

- **Script:** Kui is traditionally written using the Odia script, which is also used for writing the Odia language.

8th Schedule of the Indian Constitution:

- It lists the official languages of India.
- Although there are hundreds of languages spoken across the country, the eighth schedule recognises a total of 22 languages as the official languages.
- **Languages in 8th Schedule:**
 - The 22 languages now included in the eighth section of the Constitution are, **Manipuri, Maithili, Kashmiri, Hindi, Kannada, Gujarati, Konkani, Malayalam, Assamese, Marathi, Nepali, Bengali, Punjabi, Sanskrit, Sindhi, Telugu, Tamil, Odia, Urdu, Bodo, Dogri, and Santhali.**
 - **Fourteen** of these languages were originally listed in the Constitution. Sindhi was introduced in 1967, Konkani, Manipuri, and Nepali in 1992, and Santali, Dogri, Maithili, and Bodo by the 92nd Amendment Act of 2003.

WHAT IS URBAN 20 SUMMIT?

Recently, the two-day Urban 20 Mayoral Summit which was hosted by the chair city Ahmedabad, in Gandhinagar from 7-8 July, concluded with the handover of the Communiqué from the Mayors to G20 leaders.



About Urban 20 (U20) Summit:

- It is a city diplomacy initiative launched on December 12, 2017, at the **One Planet Summit in Paris.**
- It provides a platform for cities from G20 countries to facilitate discussions on various important issues of **urban development** including **climate change, social inclusion, sustainable mobility, and affordable housing**, and propose collective solutions.
- C40 Cities (C40) and United Cities and Local Governments (UCLG) convene the U20 under the leadership of a **Chair city that rotates annually, based in the G20 host country.**



CROSS & CLIMB ROHTAK



- This year it was chaired by the City of Ahmedabad.
 - The Communique was officially **endorsed by 105 cities across the world**, the highest ever number of endorsements received to date for any U20 Communiqué, and more than twice the number of endorsements for any previous communiqués.
 - The Communiqué has been drafted as an action agenda for the **six priorities identified collectively** by U20 cities which include;
 - Encouraging environmentally responsible behaviours, accelerating climate finance, championing local culture and economy, ensuring water security, catalysing digital urban futures, and reinventing frameworks for urban planning and governance.
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