



Earthquake in Uttarakhand | Uttarakhand | 29 May 2024

Why in News?

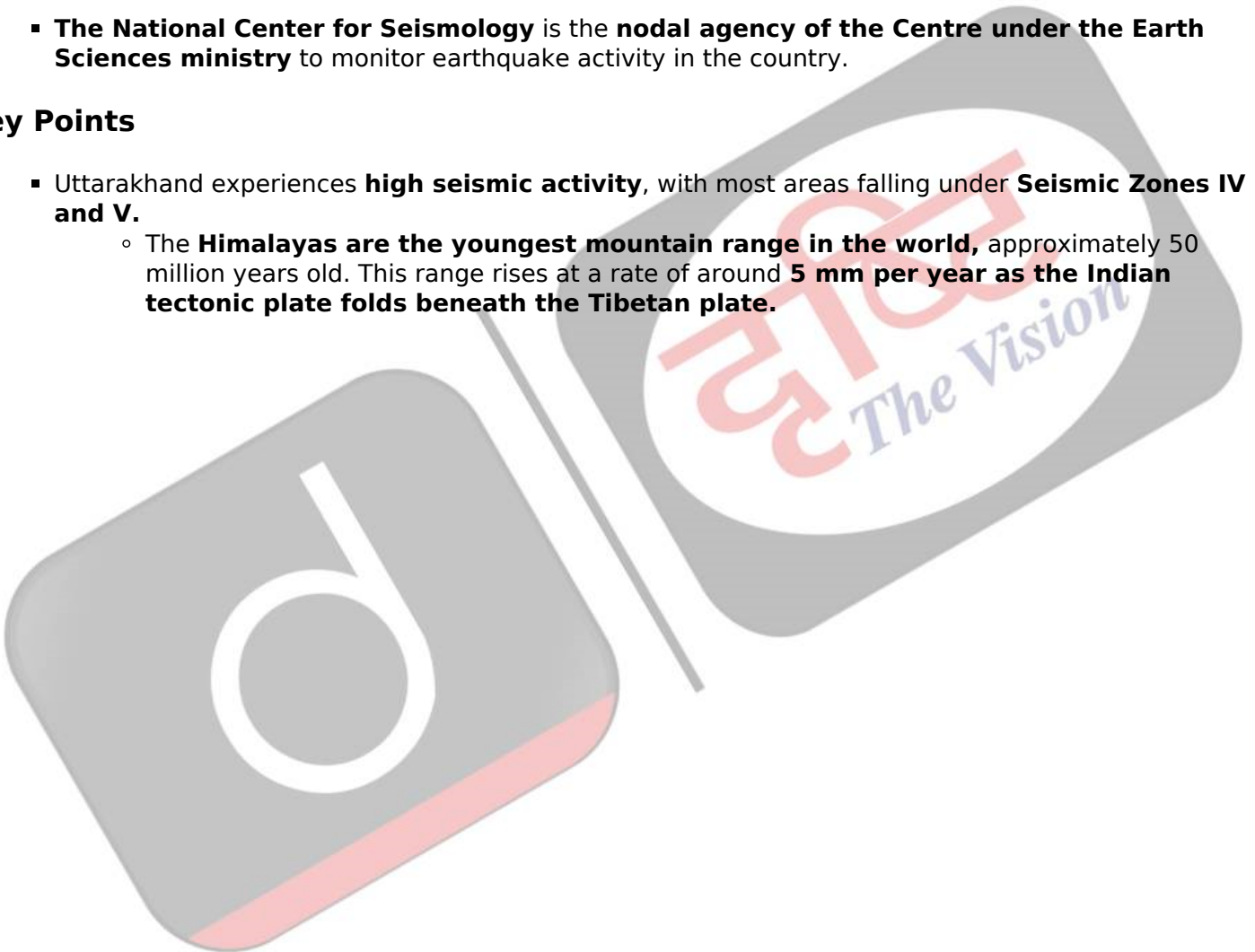
According to **the [National Center for Seismology](#)**, an **[earthquake](#)** of 3.1 magnitude struck Uttarakhand's **Pithoragarh district** recently with the **epicentre around 5 km** beneath the earth's surface.

- **The National Center for Seismology** is the **nodal agency of the Centre under the Earth Sciences ministry** to monitor earthquake activity in the country.

Key Points

- Uttarakhand experiences **high seismic activity**, with most areas falling under **Seismic Zones IV and V**.
 - The **Himalayas are the youngest mountain range in the world**, approximately 50 million years old. This range rises at a rate of around **5 mm per year as the Indian tectonic plate folds beneath the Tibetan plate**.

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EARTHQUAKE



ABOUT

- Shaking of the earth; caused due to release of energy, generating **seismic waves in all directions**

HYPOCENTER

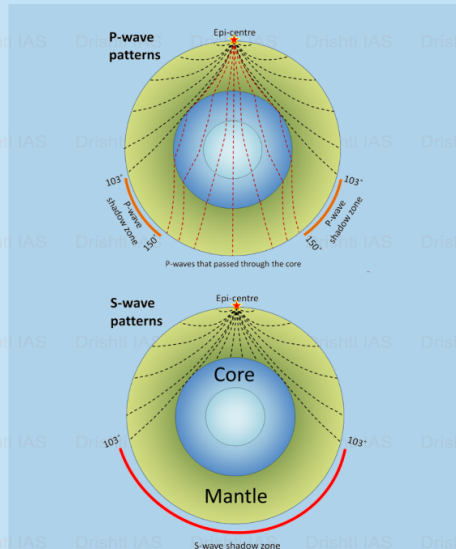
- Location where the earthquake starts (below earth's surface)

EPICENTER

- Location right above the Hypocenter (on the earth's surface)

EARTHQUAKE WAVES

- Body Waves:** Move in all directions travelling through the body of the earth
 - P Waves:** Move faster, First to arrive at surface, Similar to sound waves, Travel through gaseous, liquid and solid materials
 - S Waves:** Arrive at surface with some time lag, Travel only through solid materials
- Surface Waves:** Last to report on seismographs, More destructive, Cause displacement of rocks
 - Love Waves:** Same motion as S-waves (horizontal) without vertical displacement, Sideways motion perpendicular to the direction of propagation, Faster than Rayleigh waves
 - Rayleigh Waves:** Cause the ground to shake in an elliptical pattern, Spread out the most of all seismic waves, Move vertically and horizontally in a vertical plane



CAUSES OF EARTHQUAKES

- Release of energy along a **Fault/Fault Zones** (break in the crustal rocks)
- Movement of **tectonic plates** (most common)
- Volcanic eruption** (stress changes in rock-injection/withdrawal of magma)
- Human activities** (mining, explosion of chemical/nuclear devices etc.)

EARTHQUAKE IN INDIA

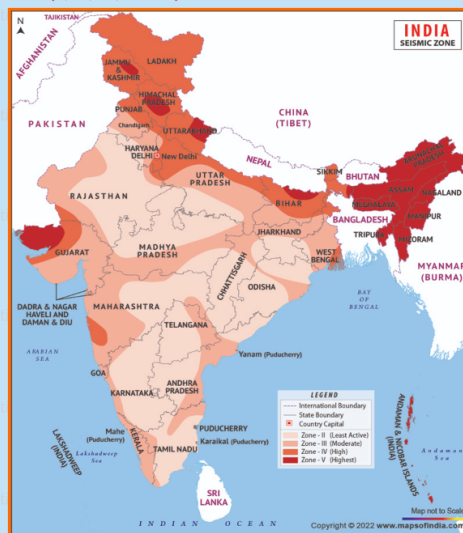
- India is **one of the highly earthquake affected countries** due to the presence of technically active mountains - the Himalayas.
- India has been divided into **4 seismic zones** (I, II, III, IV, and V)

MEASURING EARTHQUAKE

- Seismometers** - Measures seismic waves
- Richter Scale** - Measures magnitude (energy released; range: 0-10)
- Mercalli** - Measures intensity (visible damage; range: 1-12)

DISTRIBUTION

- Circum-Pacific Belt** - 81% of earthquakes
- Alpide Earthquake Belt** - 17% of the largest earthquakes
- Mid-Atlantic Ridge** - Mostly submerged underwater



Uttar Pradesh Set to Invest in Civil Aviation | Uttar Pradesh | 29 May 2024

Why in News?

According to the sources, the **Uttar Pradesh government** is targeting **private investment of USD 2 billion (over Rs 16,000 crore)** in the [civil aviation sector](#).

- Apart from promoting ancillary activities, such as aviation training, aircraft maintenance, and aero-sports, the proposed investment may be used to **develop and upgrade existing airstrips**.

Key Points

- Under the flagship [Regional Connectivity Scheme \(RCS\)](#), apart from the 14 state-owned airstrips marked for immediate development, the state is taking steps to **operationalise 225 routes**.
 - Six airstrips namely **Aligarh, Azamgarh, Chitrakoot, Shravasti, Moradabad, and Sonbhadra** are being **upgraded to handle the flights** under the RCS.
 - The state has allocated a **budget of about Rs 28,000 crore** in the current financial year 2024-25 (FY25) **for the civil aviation infrastructure** for airstrips modernisation, land acquisition, and more.
- Uttar Pradesh witnessed a **rise of 20% in the number of flyers** in FY24, indicating a sharp uptick in aviation growth in leisure and business [tourism](#).
 - The government is also promoting helicopter taxis in major tourist hotspots under the [Public-Private Partnership \(PPP\) mode](#).
 - In 2023, UP Tourism signed an agreement with Rajas Aerosports And Adventures to operate heliports for 30 years between Agra and Mathura.
- **UP has emerged as the most favoured tourist destination**, logging a 50% jump in tourist inflow to 480 million in 2023.

Regional Connectivity Scheme

- **About:**
 - [UDAN \(Ude Desh Ka Aam Nagarik\)](#) was launched by the Ministry of Civil Aviation for regional airport development and **regional connectivity enhancement**.
 - It is a part of the [National Civil Aviation Policy 2016](#).
 - The scheme is applicable for a **period of 10 years**.
 - **Objectives:**
 - Improve the air connectivity to remote and regional areas of India.
 - Development of remote areas and enhancing trade and commerce and tourism expansion.
 - Enable common people to access air travel with affordable rates.
 - Employment creation in the aviation sector.
 - **Key Features:**
 - Under the scheme, airlines have to cap airfares for 50% of the total seats at Rs. 2,500 per hour of flight.
 - This would be achieved through:
 - A financial stimulus in the form of concessions from Central and State governments and airport operators and
 - [Viability Gap Funding \(VGF\)](#) – A government grant provided to the airlines to bridge the gap between the cost of operations and expected revenue.
 - Regional Connectivity Fund (RCF) was created to meet the viability gap funding requirements under the scheme.
 - The partner State Governments (other than UTs and NER states where contribution will be 10%) would contribute a 20% share to this fund.
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Chhattisgarh Mandated GST E-Way Bill Provisions | Chhattisgarh | 29 May 2024

Why in News?

Recently, **Chhattisgarh government** has issued a notification **mandating generation of e-way bills for all intra-state goods movement worth over Rs. 50,000**, eliminating previous exemptions for some goods.

- E-Way Bill is a **compliance mechanism** wherein by way of a digital interface the person causing the movement of goods uploads the relevant information prior to the commencement of movement of goods and generates an **e-way bill on the [Goods and Services Tax \(GST\)](#) portal**.

Key Points

- Initially, **exceptions were given to simplify the movement** of specific items within districts, but these have been **taken back to improve adherence and decrease fraudulent behaviors**.
- This **change in policy comes after six years** of adjusting to the **e-way bill system**, which was initially **implemented in 2018**. The period of getting used to the system has allowed businesses and transporters to become familiar with it, leading to the elimination of exemptions.
 - Eliminating these exemptions is intended to address problems like circular trading and fake billing, which have taken advantage of the previous leniencies.
- The goal is to **promote fair competition, enhance ITC collection, and create a level playing field for legitimate businesses**.

Electronic Way (e-way) Bill

- An electronic way bill or 'e-way bill' system offers the **technological framework to track intra-state as well as inter-state movements of goods of value exceeding Rs 50,000, for sales beyond 10 km** in the GST regime.
- When an e-way bill is generated, **a unique E-way Bill Number (EBN) is allocated** and is available to the supplier, recipient, and the transporter.
- It was launched to:
 - Facilitate faster movement of goods.
 - Improve the turnaround time of vehicles.
 - Help the logistics industry by increasing the average distances travelled and reducing the travel time as well as costs.

Madhya Pradesh STSF Seizes Exotics | Madhya Pradesh | 29 May 2024

Why in News?

Recently, the **Madhya Pradesh State Tiger Strike Force (STSF)** seized an **iguana and an emperor scorpion** during a raid in Dewas district. This action marks the first enforcement of **Rule 49 M** of the

amended [Wildlife Protection Act \(1972\)](#).

- **Section 49 M** provides for the registration of possession, transfer, and reporting of birth and death of living scheduled animal species listed in the Appendices of **CITES and Schedule IV** of the Act.

Key Points

- Both species are categorized in **Appendix II of Schedule IV of the WPA 1972** and [CITES regulations](#), necessitating particular permits for trading and keeping in captivity.
 - The saved animals are presently being kept safe at the **Kamala Nehru Zoological Museum in Indore**.
- This incident coincides with the recent introduction of the **Living Animal Species (Reporting and Registration) Rules 2024** requires online registration of ownership, birth, and death of CITES-listed animals on the [PARIVESH portal](#) by **August 31, 2024**.
 - Failure to comply will lead to legal consequences.

Living Animal Species (Reporting and Registration) Rules, 2024

- **Key Provisions:**
 - It states that **all persons possessing a living specimen** of any of the **listed animal species** are **required to apply for registrations** of such possession within a period of six months from the date of commencement of these rules and thereafter within 30 of coming into possession of such animal species to the concerned State Chief Wildlife Warden, through the **PARIVESH 2.0 portal**.
 - These species are listed under the **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)**.
 - This registration requirement also applies to any transfer of the animals or birth of offspring from them, with the Rule prescribing the process for such registration.

PARIVESH Portal

- **PARIVESH** is a web-based application which has been developed for **online submission and monitoring** of the proposals submitted by the proponents for seeking **Environment, Forest, Wildlife and Coastal Regulation Zones (CRZ)** Clearances from Central, State and district level authorities.

Prehistoric Artifacts Found in Madhya Pradesh | Madhya Pradesh | 29 May 2024

Why in News?

Recently, a discovery was made in [National Fossil Park at Ghugwa](#), Madhya Pradesh, where a team of **archaeologists** from **Ashoka University in Sonapat**, conducting research in **Bandhavgarh National Park and Tiger Reserve**, found **prehistoric artifacts** made from **fossil wood**.

Key Points

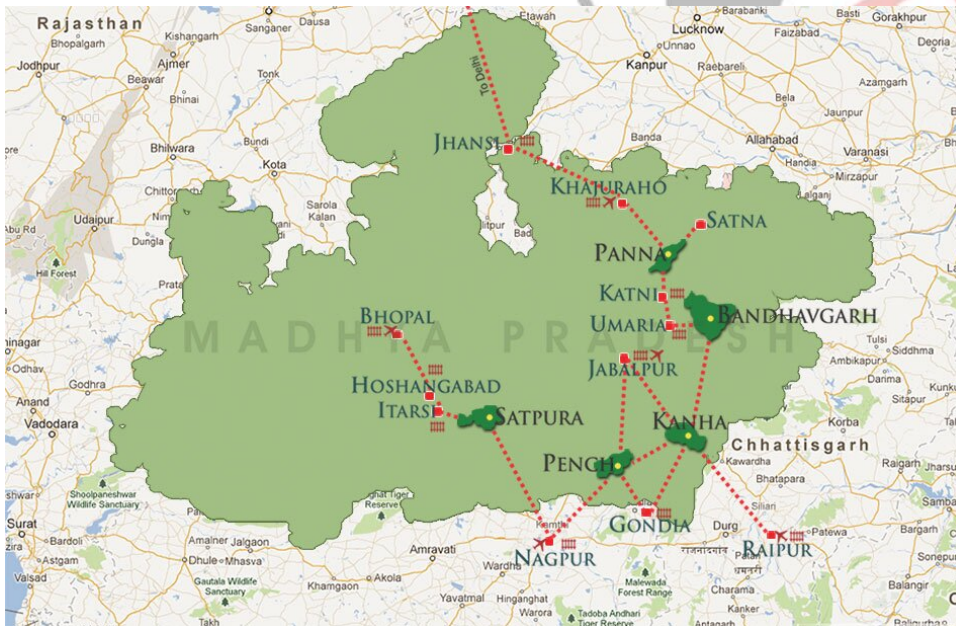
- This finding indicates that [prehistoric nomadic people](#) utilized the petrified tree logs as **resources** for crafting their tools and objects.

- **Tools crafted from fossil wood are not common in India** and are a rarity, with only a few instances **found in Tamil Nadu, Rajasthan, and Tripura.**
 - While the age of the artifacts discovered at Ghugwa remains uncertain, researchers estimate they are at least 10,000 years old.
 - These artifacts consisted of mid-sized flakes measuring about five cm in length.
 - Additionally, some [microliths](#), approximately two cm long, were also unearthed in the vicinity.
- Madhya Pradesh has many ancient locations, such as **Bhimbetka, a [United Nations Educational, Scientific and Cultural Organization \(UNESCO\) World Heritage site.](#) Hathnora, where the skull fragment known as the Narmada woman was discovered,** in addition to sites like **Neemtone, Pilikarar, and Mahadeo Piparia.**
 - These areas mainly showcase **tools made from** materials such as **quartzite, chert, and sandstone.**
- However, a recent finding in the fossil park indicates that **our predecessors also made use of fossil wood,** indicating that they did not rely solely on stone resources.

Ghugwa National Fossils Park

- It is situated 70 km from **Dindori in village Ghugwa.**
- It is nestled in an area of 75 acres of land where attractive and rare fossils of leaves and trees are waiting to be explored.
- This **National Park has plants in fossil form** that existed in India anywhere **between 40 million and 150 million years ago.**

Bandhavgarh Tiger Reserve



- **About:** In 1968, it was notified as a national park and in **1993 was declared a tiger reserve under the [Project Tiger](#) Network** at the neighbouring Panpatha Sanctuary.
- **Geographical Aspect:** It resides on the extreme **north eastern border of Madhya Pradesh and the northern edges of the Satpura** mountain ranges.
- **Climate:** Tropical monsoon climatic zone.
- **Biodiversity:** There is a large number of tigers in the core zone. There are more than 22 species of mammals and 250 species of birds.
 - Species Found: Asiatic Jackal, Bengal Fox, Sloth Bear, Striped Hyena, Leopard and Tiger, Wild Pigs, Nilgai, Chinkara and Gaur (a herbivore and the only coarse feeder).

Aravalli Fire | Haryana | 29 May 2024

Why in News?

As temperatures rose, a [forest fire](#) broke out in the [Aravallis](#) near **Surajkund in Faridabad**.

- Despite the fire department successfully putting out the flames within half an hour, locals claimed that **several acres of land and trees had already been burnt**.

Key Points

- Aravallis are fold mountains of which rocks are formed primarily of folded crust, when two convergent plates move towards each other by the process called orogenic movement.
 - The Aravallis of **Northwestern India**, one of the oldest fold mountains of the world, now form residual mountains with an elevation of 300m to 900m. They stretch for a distance of 800 km. from **Himmatnagar in Gujarat to Delhi, spanning Haryana, Rajasthan, Gujarat, and Delhi, the 692 kilometre**.
 - The hidden limb of the Aravallis that extends from Delhi to Haridwar creates a divide between the drainage of rivers of the Ganga and the Indus.
- The Aravallis date back to millions of years when a pre-Indian subcontinent collided with the mainland **Eurasian Plate**. Carbon dating has shown that copper and other metals mined in the ranges date back to at least 5th century BC.
- The mountains are divided into two main ranges - the **Sambhar Sirohi Range** and the **Sambhar Khetri Range** in Rajasthan, where their extension is about 560 km.

PDF Reference URL: <https://www.drishtiias.com/statepcs/29-05-2024/print>