



Seven Maoists Killed in Bijapur | Chhattisgarh | 25 May 2024

Why in News?

Recently, seven [Maoists](#) were killed in an encounter with security forces on the **inter-district border of Narayanpur and Bijapur districts** in Chhattisgarh.

Key Points

- The encounter took place in the jurisdiction of Barsur police station in Dantewada just 10 kilometers inside Abujhmad forest area.
- The force of around 1,000 personnel consisted of **Bastar Fighters** and [District Reserve Guards \(DRG\)](#) with teams of **Special Task Force (STF)**.

Naxalism in India

- The term Naxalism derives its name from the village **Naxalbari of West Bengal**.
- It originated as rebellion against local landlords who bashed a peasant over a land dispute. The rebellion was initiated in 1967, with an objective of rightful redistribution of the land to working peasants under the leadership of **Kanu Sanyal** and **Jagan Santhal**.
- Started in West Bengal, the movement has spread across Eastern India; in less developed areas of states such as Chhattisgarh, Odisha and Andhra Pradesh.
- It is considered that Naxals support **Maoist political sentiments and ideology**.
 - Maoism is a form of communism developed by Mao Tse Tung. It is a doctrine to capture State power through a combination of armed insurgency, mass mobilization and strategic alliances.

Gurugram in Top 50 List of Startup Cities | Haryana | 25 May 2024

Why in News?

Recently, **PitchBook** unveiled its **global Venture Capital ecosystem** rankings for 2024, showcasing the top 50 startup cities worldwide and providing insights into the development of these ecosystems.

Key Points

- Three Indian cities have featured among the top 50 startup cities globally, with Mumbai at 32nd place, Bengaluru at 34th, and **Gurugram at 48th**.
- The global startup ecosystem has seen a significant increase in innovation and growth in recent years.
 - As a result, global investors are **exploring opportunities** in new countries, with **startups**

securing substantial funding and valuations reaching multi-billion-dollar levels, and cities worldwide are actively competing to establish themselves as prominent hubs for startups.

- PitchBook is the leading resource for **comprehensive data, research and insights spanning the global capital markets.**
- It is a financial data and software company with offices in **London, New York, San Francisco and Seattle.**

Fire at Union Carbide Factory | Madhya Pradesh | 25 May 2024

Why in News?

Recently, a **massive fire** broke out at the **Union Carbide factory in Bhopal**. The factory is where [methyl isocyanate](#) gas leaked in 1984, killing thousands of people and disabling millions.

Key Points

- The fire was brought under control after about an hour. Its cause is yet to be ascertained.
- The locals expressed their fear about the potential effects of toxic smoke on their bodies.
- The factory was shut down after the [1984 gas tragedy](#).

Bhopal gas tragedy

- **About:**

- The **Bhopal gas tragedy** was one of the **worst industrial accidents in history that occurred on the night of 2-3 December 1984** at the **Union Carbide India Limited (UCIL) pesticide plant in Bhopal, MP.**
- It exposed people and animals to the highly toxic gas **methyl isocyanate (MIC)**, causing immediate and long-term health effects and deaths.

- **Causes of Gas Leak:**

- The exact cause of the gas leak is still disputed between corporate negligence or employee sabotage. However, some of the factors that contributed to the disaster are:
 - The **UCIL plant was storing large quantities of MIC, a highly reactive and volatile chemical**, in **poorly maintained tanks.**
 - The plant was operating with **reduced staff and safety standards** due to financial losses and market competition.
 - The **plant was located in a densely populated area with no proper emergency plans** or warning systems for the nearby residents.
 - On the night of the disaster, **a large amount of water entered one of the MIC storage tanks (E610)**, either due to a faulty valve or a deliberate act of sabotage by a disgruntled worker.
 - This triggered an [exothermic reaction](#) that **increased the temperature and pressure inside the tank**, causing it to rupture and release a large cloud of MIC gas into the atmosphere.

Heatstroke Kills Hundreds of Bats in Madhya Pradesh | Madhya Pradesh | 25 May 2024

Why in News?

According to the sources, **Heatstroke** has killed hundreds of **bats** in **Jhabua district** of Madhya Pradesh.

Key Points

- According to the deputy director (veterinary), approximately 250 bats died due to the heatstroke.
- He explained that **bats are nocturnal creatures** and typically **seek refuge** in their designated trees **early in the morning**.

Bats

- India is home to 135 bat species. Bats are **nocturnal animals**.
- Bats normally **feed on fruits**, helping in **pollination by seed dispersal** but also cause **agricultural losses and hence are regarded as vermin**.
- The **population of bats** has declined worldwide due to **poaching, meat consumption, use in traditional medicines, climate change, environmental pollution, and biological invasions**.

PMC Issues Notice for Spreading Pollution | Uttar Pradesh | 25 May 2024

Why in News?

The **Prayagraj Municipal Corporation (PMC)** has issued notices to nine departments including **Prayagraj Development Authority (PDA), Public Works Department (PWD), North Central Railway (NCR), Jal Nigam** for affecting the **air quality** in Smart City Prayagraj.

Key Points

- The notice includes the writ number from the [Department of Environment, Forest, and Climate Change](#) and advises implementing measures such as using **green curtains to cover construction sites**, regularly **spraying water with sprinkler machines**, employing mechanized road sweeping, and using mist guns to minimize dust.
- An official from the PMC stated that the **rise in air pollution in the city is a result of ongoing construction activities**. To address public concerns, notices have been sent to the relevant departments.
 - Failure to comply with the instructions may lead to further enforcement actions in accordance with the regulations.

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Air Pollutants

Sulphur Dioxide (SO₂)



It comes from the consumption of fossil fuels (oil, coal and natural gas). Reacts with water to form acid rain.

Impact: Causes respiratory problems.

Ozone (O₃)



Secondary pollutant formed from other pollutants (NO_x and VOC) under the action of the sun.

Impact: Irritation of the eye and respiratory mucous membranes, asthma attacks.

Nitrogen Dioxide (NO₂)



Emissions from road transport, industry and energy production sectors. Contributes to Ozone and PM formation.

Impact: Chronic lung disease.

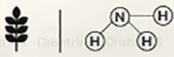
Carbon Monoxide (CO)



It is a product of the incomplete combustion of carbon-containing compounds.

Impact: Fatigue, confusion, and dizziness due to inadequate oxygen delivery to the brain.

Ammonia (NH₃)



Produced by the metabolism of amino acids and other compounds which contain nitrogen.

Impact: Immediate burning of the eyes, nose, throat and respiratory tract and can result in blindness, lung damage.

Lead (Pb)



Released as a waste product from extraction of metals such as silver, platinum, and iron from their respective ores.

Impact: Anemia, weakness, and kidney and brain damage.

Particulate Matter (PM)



PM10: Inhalable particles, with diameters that are generally 10 micrometers and smaller.

PM2.5: Fine inhalable particles, with diameters that are generally 2.5 micrometers and smaller.

Source: Emitted from construction sites, unpaved roads, fields, fires.

Impact: Irregular heartbeat, aggravated asthma, decreased lung function.

Note: These major air pollutants are included in the Air quality index for which short-term National Ambient Air Quality Standards are prescribed.

