

Bihar's Annual Flood Crisis | Bihar | 04 Oct 2024

Why in News?

Bihar faces devastating <u>floods</u> every year due to its unique geography and decades-old <u>flood</u> control methods.

Key Points

Flood-Prone Nature of Bihar

- Bihar is India's most flood-prone state, with **76% of North Bihar's** population affected.
- The region is crisscrossed by both <u>snow-fed and rain-fed rivers</u>, increasing flood risk.
- Bihar is located below Nepal, with <u>Himalayan rivers</u> (Kosi, Gandak, Bagmati) flowing into the state.
- These rivers carry high sediment loads due to loose Himalayan soil, leading to overflow during heavy rains.
- Impact of Embankments:
 - Embankments along rivers like Kosi were built in the 1950s to control flooding.
 - Embankments narrowed river channels, leading to sediment buildup and higher riverbeds, making the rivers more prone to overflow.
 - Kosi, known as the "sorrow of Bihar," floods annually despite embankments.

Recent Flooding (2024):

- Heavy rainfall and Nepal's release of water from the Kosi barrage led to severe floods in North Bihar.
- Embankments have breached in several districts, affecting 11.84 lakh people.
- The **Birpur barrage** released **6.6 lakh cusecs of water**, the highest in six decades.

Economic and Social Impact:

- Flooding results in crop loss, livestock destruction, damage to infrastructure, and forced migration.
- Bihar government spends Rs 1,000 crore annually on flood relief and management.

Proposed Solutions:

- Structural: Proposals for dams and additional barrages on Kosi and other rivers.
- **Non-structural:** Enhancing flood warnings, improving reaction times, public awareness, and training to mitigate flood effects.

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Kashmir on the Verge of a New Era: GOC 15 Corps | Jammu & Kashmir | 04 Oct 2024

Why in News?

Recently, Lt Gen Rajiv Ghai, <u>General Officer Commanding (GOC) 15 Corps</u>, reflects on the evolving security situation and development in <u>Kashmir</u>, outlining challenges and future prospects.

Key Points

- GOC (General Officer Commanding) 15 Corps:
 - The GOC 15 Corps is the commanding officer of the Indian Army's <u>Chinar Corps</u>, responsible for overseeing military operations in the Kashmir Valley and parts of Jammu and Kashmir.
 - The Corps plays a crucial role in <u>counter-insurgency</u>, border security, and maintaining peace in the region.
- Recent Developments in Kashmir:
 - Kashmir is at the cusp of **a "new beginning,**" with significant development and a stable security situation over the past year and a half.
 - Security forces, including Chinar Corps, J&K Police, and <u>CAPEs</u>, have worked together to maintain peace and stability.
 - No new militant recruitment in the **last 18 months**; active militant numbers have decreased to approximately 80.
 - The success of a robust <u>counter-insurgency campaign</u> has reduced terrorism-related

incidents significantly.

 Modern technology, including AIOS (Automated Integrated Operating Systems), has been employed to prevent cross-border infiltration.

Challenges:

- Maintaining the current peaceful and stable situation remains the biggest challenge for security forces.
- The security grid, including counter-infiltration and counter-terrorism measures, must be sustained to consolidate peace in the coming years.
- Way Forward:
 - Strengthening Intelligence and Surveillance: Enhancing real-time intelligence sharing and deploying advanced surveillance technologies will help security forces anticipate and prevent potential threats, reducing the risk of infiltration and terrorism.
 - Community Engagement and Capacity Building: Building trust with local communities through development initiatives, social outreach, and improved governance can foster cooperation, making counter-terrorism efforts more effective while ensuring long-term stability in the region.

"Radio Man of India" Sets Record | Uttar Pradesh | 04 Oct 2024 ion

Why in News?

Ram Singh Boudh from Uttar Pradesh sets a Guinness World Record with his unique radio collection, preserving the legacy of radios.

Key Points

World Record Radio Collection:

- Ram Singh Boudh, famously known as the "Radio Man of India," has amassed a collection of 1,257 unique radios, dating from the **1920s to 2010.**
- His collection surpassed the previous world record of 625 radios held by M Prakash.
- Prime Minister's Recognition:
 - Boudh's passion for preserving the legacy of radios gained national recognition when the Prime Minister mentioned him during the Mann Ki Baat radio program in November 2023.
 - PM Modi highlighted Boudh's dedication to keeping radios relevant, noting that his efforts sparked greater curiosity about his collection.
 - The Prime Minister acknowledged that Mann Ki Baat itself has revitalized interest in radios and Akashvani (All India Radio), making them popular once again in many households.

Radio Spectrum

- The radio spectrum (also known as Radio Frequency or RF) is a part of the <u>electromagnetic</u> spectrum, electromagnetic waves in this frequency range are called radio frequency bands or simply 'radio waves'.
 - Radio waves have the longest wavelengths in the electromagnetic spectrum. These were discovered by Heinrich Hertz in the late 1880s.
- RF bands spread in the range between 30 kHz and 300 GHz (alternative point of view offers) coverage 3 KHz - 300 GHz).

	maritime radio, navigation	maritime radio, navigation	AM radio, aviation radio navigation	shortwave radio	VHF television, FM radio	UHF television, mobile phones, GPS, Wi-Fi, 4G	satellite communi- cations, Wi-Fi	radio, astronomy, satellite, com- munications
	VLF	LF	MF	HF	VHF	UHF	SHF	EHF
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FMDA Launches Groundwater and Humidity Monitoring Project | Haryana | 04 Oct 2024

Why in News?

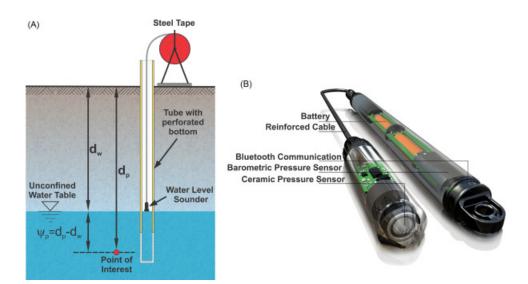
Recently, The **Faridabad Metropolitan Development Authority (FMDA)** has introduced a project to monitor <u>groundwater</u> and <u>humidity levels</u>, aiming to address <u>water depletion issues</u>.

Key Points

- Project Overview:
 - The FMDA plans to install 100 plezometers in urban areas of Faridabad to monitor groundwater and underground humidity levels.
 - The project, costing around Rs 9.5 crore, is part of a pilot initiative also being launched in Gurugram.
 - These instruments will provide **real-time data**, **helping authorities understand groundwater conditions** and contributing factors for its depletion.
- Technological Setup:
 - Piezometers, specialized sensing devices, will measure groundwater pressure and humidity across a radius of 1,000 meters per unit.
 - The system will provide 24/7 monitoring, allowing for online data tracking. This technology, developed by APCOS Limited (formerly Water and Power Consultancy Services), falls under the <u>Ministry of Jal Shakti.</u>

Piezometer

- A piezometer is a tube with an open bottom that measures the pressure of groundwater or the pressure of a body of water against the sides of its container.
 - The word piezometer comes from the Greek prefix piezo-, meaning "pressure," and the root meter, meaning "to measure".



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The Vision