

Weekly Current Affairs (Jan 2026 – Week 1)

Andhra Pradesh Special

Gandikota – “Grand Canyon of India” (Kadapa, AP)

- Spectacular gorge carved by the **Penna River** in **Kadapa district, Andhra Pradesh**.
- Known for steep red sandstone cliffs and dramatic landscape; underdeveloped due to decades of neglect.
- **Gandikota Fort** (12th century) built by Pemmasani Nayaks; later under Vijayanagara, Qutb Shahis, Mughals, Kadapa Nawabs and British.
- Key structures: Madhavaraya Temple, Sri Ranganatha Temple, Jama Masjid, granary, jail, step wells, palaces.
- Maintained by **ASI**.

Exam Angle

AP prepared **Gandikota Master Plan** under **SASCI**; proposals include heritage trails, gorge illumination, sound & light show, tent city, boating, solar systems, and helicopter rides.

Narasapuram Lace Craft (West Godavari, AP)

- Traditional **crochet lace** craft highlighted in **Mann Ki Baat**.
- Women-led heritage handicraft; supports livelihoods and reaches global markets.

NABARD Loan for Amaravati + Road Safety Cess (AP)

- AP Cabinet approved **₹7,387.7 crore** loan from **NABARD** under **NIDA** for infrastructure in Amaravati.
- Approved a **10% Road Safety Cess** on motor vehicles subject to life tax for road safety infrastructure and traffic management.

Polity & Governance

Dulhasti Stage-II Hydropower Project Approved (J&K)

- **260-MW** project on the **Chenab River** in **Kishtwar, Jammu & Kashmir**.
- Approved by **EAC** (MoEFCC) during its 45th meeting (hydel projects).
- Backdrop: Indus basin hydropower push; projects to remember: Sawalkote, Ratle, Bursar, Pakal Dul, Kiru, Kwar, Kirthai I & II.

Supreme Court Pauses Aravalli Definition Ruling

- SC kept in abeyance its Nov 20, 2025 judgment that upheld a restrictive Aravalli definition (100m+ hills and clusters/slope criteria).
- Bench led by Surya Kant took suo motu cognisance; concern: drastic reduction in protected hills (only 1,048 of 12,081 in Rajasthan would qualify).
- Bar on fresh/renewed mining leases without SC permission; proposed a high-powered expert committee.

Why it matters?

Aravallis act as a barrier against Thar Desert expansion and help mitigate pollution in regions including Delhi; definition must be scientific and long-term protective.

Jal Seva Aankalan (Jal Jeevan Mission)

- Gram Panchayat-led digital self-assessment tool under JJM.
- VWSCs and Gram Sabhas assess regularity, adequacy, quality, O&M, and source sustainability.
- Results disclosed via platforms like **eGramSwaraj** and **Meri Panchayat App**.

National Frequency Allocation Plan 2025 (NFAP-2025)

- Released by DoT; comes into force from **30 Dec 2025**.
- Covers frequency range **8.3 kHz to 3000 GHz**.
- Identifies **6425–7125 MHz** mid-band spectrum for **IMT**.
- Allocates **Ka, Q, and V** bands for satellite communications.

Environment & Geography

Silky Soil (Nagapattinam Coast, Tamil Nadu)

- Fine-grained clay (loose soil) with weak load-bearing strength; boats/stones/people sink.
- Linked to sediment discharge (Vennar Basin), shallow continental shelf gradient, and seasonal littoral drift.
- Fisherfolk use tractors to launch/retrieve boats → higher costs and debt stress.

World's Largest Crude Oil Reserves – Venezuela

- Largest proven reserves: ~**303 billion barrels** (as of 2023).
- Oil is mostly **extra-heavy crude**, requiring advanced technology and high investment.
- 2024 production: ~**9.21 lakh barrels/day** (far below 1980s levels).
- Top crude oil producers (2024): **USA, Russia, Saudi Arabia**.

Science & Technology

Next-Generation Antivenom for Snakebite (Nanobody Tech)

- Snakebite causes ~**58,000 deaths/year** in India; major rural public health issue.
- Snakebite envenoming is a **WHO Neglected Tropical Disease**.

Traditional Antivenom (India)

Uses venom from “Big Four” (cobra, krait, Russell’s viper, saw-scaled viper); venom injected into horses in small doses; antibodies extracted and purified.

Limitation: Covers only 4 species; India has 60+ venomous snakes; regional venom variation reduces effectiveness.

New Research (Nature, 2025)

Broad-spectrum antivenom using **nanobodies** derived from alpacas/llamas; genes cloned into bacteria for scalable production without relying on horses.

Alaknanda – Early Spiral Galaxy (JWST)

- Discovered using **James Webb Space Telescope (JWST)** data.
- Identified by **NCRA, Pune** researchers while analysing Uncover survey data.
- Existed **~1.5 billion years** after Big Bang (redshift $z \approx 4$) with spiral arms and rotating disk.

IndiaAI Mission – Scale-up of National AI Capacity

- Allocated **₹10,300+ crore** over 5 years; expanded national AI compute capacity to **38,000 GPUs**.
- AI projected to add **\$1.7 trillion** to India's economy by 2035 (as stated).
- Key initiatives: IndiaAI Compute, AIKosh, IndiaAI Foundation Models, BharatGen, Bhashini, FutureSkills AI, and focus on Safe & Trusted AI.
- India ranks **3rd globally** in AI competitiveness (Stanford's 2025 Global AI Vibrancy Tool as per note).

Economy & Strategic Resources

REPM Manufacturing Scheme (₹7,280 crore)

- Promotes domestic manufacturing of **Sintered Rare Earth Permanent Magnets (REPMs)**.
- Target capacity: **6,000 MTPA** integrated manufacturing across value chain (oxides → finished magnets).
- Supports EVs, renewables, electronics, aerospace & defence; reduces import dependence (especially on China).
- Aligned with **Net Zero 2070** and **National Critical Minerals Mission (NCMM)**.

Rare Earth Elements (REEs) – Strategic Importance

- REEs: 17 elements (15 lanthanides + scandium + yttrium).
- Critical for EV motors, wind turbines, electronics, lasers, fibre optics, catalysts and defence systems.
- **NdFeB magnets** are among the strongest permanent magnets for high-efficiency motors and generators.
- Midstream processing (chemical separation) is most complex and strategic.
- China dominates: ~91% separation/refining and ~94% sintered REPM production (as per note).
- India: ~**6.9 million tonnes** of rare-earth oxide reserves (mainly monazite), challenges in downstream scaling.

India–New Zealand Free Trade Agreement (Dec 2025)

- NZ provides **zero-duty access** to 100% of Indian exports; India liberalises tariffs on 95% of NZ imports (57% duty-free immediately).
- NZ committed **\$20 billion FDI** in India by 2030 across services, skill mobility and jobs (as stated).
- Benefits labour-intensive sectors: textiles, leather, gems & jewellery, engineering goods, processed foods.
- Sensitive sectors protected: dairy and key agricultural products excluded.

Defence & Security

President's Sortie on INS Vaghsheer

- President **Droupadi Murmu** undertook a submarine sortie onboard **INS Vaghsheer** (Kalvari-class) on **28 Dec 2025**.
- Embarked from **Karwar Naval Harbour, Karnataka**; interacted with crew and witnessed demonstrations.
- Second Indian President after **A.P.J. Abdul Kalam** to take a submarine sortie.

INSV Kaundinya – Ancient Maritime Legacy

- Indian Navy launched INSV Kaundinya; constructed using ancient **sewn ship technique**.

- Design inspired by 5th century merchant ship shown in Ajanta Cave 17 murals.
- Named after legendary mariner **Kaundinya I** linked to early India–Southeast Asia maritime ties (Funan tradition).
- Maiden voyage: **Porbandar (Gujarat) → Muscat (Oman)**.

Defence Acquisition Council (DAC) – AoN Approvals

- DAC (chaired by Raksha Mantri Rajnath Singh) granted AoN for procurement proposals worth ~**₹79,000 crore**.
- Covers Indian Army, Navy and Air Force.

Sports & Culture

World Rapid Chess Championship 2025 (Doha, Qatar)

- Open: **Magnus Carlsen** won with 10.5/13 (sixth World Rapid title).
- Women: **Aleksandra Goryachkina** won (defeated Zhu Jiner in blitz playoff).
- India: **Koneru Humpy** and **Arjun Erigaisi** won bronze medals.

Documentary Filmmaker S. Krishnaswamy Passes Away

- Produced 900+ documentary/TV films.
- Magnum opus: **Indus Valley to Indira Gandhi** (1976), traced 5,000 years, shot at 100 locations; rights acquired by Warner Brothers (as stated).
- Awards: **Padma Shri (2009)**, **Dr. V. Shantaram Lifetime Achievement (2020)**.
- Book (2025): **Voyages Retraced: India's Influence in East Asia**.

Quick Revision Table (High-Yield)

Topic	Keyword
AP Tourism	Gandikota • SASCI

Hydropower (J&K)	Dulhasti Stage-II • Chenab • EAC
Public Health	Snakebite • Nanobodies • WHO NTD
Strategic Minerals	REE • REPM • NCMM
Telecom Policy	NFAP-2025 • IMT • Satcom bands
Rural Water	Jal Seva Aankalan • JJM
Space/Astro	Alaknanda • JWST • $z \approx 4$
Defence	INS Vaghsheer • DAC AoN ₹79,000 cr
Sports	World Rapid Chess 2025 • Doha