

UPSC Daily Current Affairs | One Liners 05-03-2025

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Bilateral Relations

India-Japan S&T Collaboration

• Indo-Japan S&T cooperation was formalized through Inter-Governmental Agreement signed in 1985.

• **Indo-Japan Joint S&T Committee** – Is the *apex body* which provides vision and direction to the cooperative S&T activities.

• The committee is Co-chaired by Department of Science & Technology (DST) India and Ministry of Foreign Affairs (MoFA), Japan.

• **Celebrated on** – India's <u>National Science Day (28 Feb, 2025)</u> at Indian Embassy, Tokyo in Japan.

• **Collaboration in** – Artificial Intelligence (AI), Machine Learning, Quantum Technology, and Space.

Economy

India's Research and Development (R&D) Spending

• **R&D funding** – Led to India's Gross Expenditure on Research and Development (GERD) *more than doubling* in the last decade (i.e Rs 60,196 cr-Rs 1,27,381 cr).

• It is shaping the future economy in artificial intelligence, biotechnology, and quantum computing.

• **Atmanirbhar Bharat** – It is not only investing in research but also ensuring that these innovations are seamlessly transitioned from labs to industries, strengthening the foundation of <u>Atmanirbhar Bharat</u>.

<u>Navratna Status</u>

• Navratnas – It is a 2^{nd} category of the central government-owned 'Ratna' companies, placed between the Maharatnas and the Miniratnas based on criteria.

• Navratna status in Indian Railways (IR):

• Indian Railway Catering and Tourism Corporation (IRCTC) – 25th

• Indian Railway Finance Corporation (IRFC) - 26th

• **IR CPSEs** – Totally <u>12</u>, out of which 7 are listed Central Public Sector Enterprises (CPSEs) have Navratna status.

Agriculture

Central Plantation Crops Research Institute (CPCRI)

• Established in – <u>1970</u>, under the Indian Council of Agricultural Research (ICAR).

• Headquarters - Kasaragod district, Kerala.

• It is one of the agricultural research institutes in the National Agricultural Research System (NARS).

• It is mandatory for the Institute to conduct research on *coconut, arecanut, Palmyrah and cocoa*.

Environment

<u>Vantara</u>

• **About** – It is a *large-scale animal (wildlife) rescue center*, that operates through caves, conservation, and rehabilitation measures.

- Located in Jamnagar, <u>Gujarat</u>.
- Established by Reliance Industries and Reliance Foundation.
- Area 3,000 acres.

• Fauna – It is home to over 2,000 animals across 43 species.

Carbon Intensity (CI)

Recently, China lowered its carbon intensity by 3.4% in 2024, by missing its target of 3.9%.
About - It is a useful way to <u>measure how much carbon a particular sector is emitting</u> and how it has increased or decreased over time.

• **Measurement** – An entire country's carbon intensity can be calculated by <u>dividing the</u> growth in GDP per capita by the amount of carbon dioxide emitted.

Science

<u>Agentic AI</u>

• **About** – It is meant to *automate tasks for users* so that they do not have to prompt the systems to take actions for them.

• It has the potential to be the next multi-billion business.

• Amazon Web Services (AWS) – It forms a new group to focus on agentic Artificial Intelligence (AI).

Small Modular Reactors (SMRs)

• **SMR** – It is an advanced nuclear reactors that have a power capacity of up to <u>300 MW (e)</u> <u>per unit</u>.

• **Deployed in** – Industrial zones, remote areas, and hard-to-abate sectors like cement and steel manufacturing.

• India's aim - To develop at least 5 indigenously SMRs by 2033.

Miscellaneous

Penshurst Estate

• Established in - 1875.

• Located in - Peerumade hills of Idukki, Kerala.

• It is <u>Kerala's 1st commercial tea plantation</u> industry that has reached a historic milestone of 150 years.

• **FY2023-24** – It was ranked 1^{st} in South India for tea productivity per hectare, yielding 4,735 kg per hectare.

Mobile World Congress (MWC) 2025

• About - It is the *world's biggest mobile industry trade show*.

• Location - Barcelona, Spain.

• **Agenda** – It's the place where leaders of business, nations, and startups come together to <u>set the agenda for the year ahead</u>.

• Tech and telecom companies gearing up to launch new smartphones, AI hardware, and concept devices.

