



● POLITY

● ECONOMICS

● TECHNOLOGY

● ECOLOGY

AS ISRO CHIEF, V. NARAYANAN WILL HAVE TO HIT THE GROUND RUNNING

SCIENCE AND TECHNOLOGY



Context: The space agency has scheduled significant projects, including the Gaganyaan human spaceflight, Chandrayaan-4, and Bharatiya Antariksha Station. Just days after Dr. V. Narayanan assumes office on January 14, it will proceed with the launch of the GSLV Mk-II/IRNSS-1K mission.

New Role and Major Projects

- **Appointment:**

- To assume charge as Chairman of ISRO on January 14, 2025, succeeding S. Somanath.
- Will also serve as Secretary, Department of Space, and Chairman, Space Commission for a tenure of two years.

- **ISRO's Focus Areas:**

- **Key Projects:**

- Gaganyaan human spaceflight programme.
- Chandrayaan-4 lunar mission.
- Bharatiya Antariksha Station (India's own space station).
- Maiden Venus Orbiter Mission.
- Second Mars mission.

- **Upcoming Launches (2025):**

- GSLV Mk-II/IRNSS-1K (January-end).
- First uncrewed flight of the Gaganyaan mission (G-1).
- Commercial launch using LVM3 vehicle.

- Several experiments linked to the Gaganyaan programme in the pipeline.

Professional Background

- **Education:**

- IIT Kharagpur alumnus:
 - M.Tech. in Cryogenic Engineering (1989, First Rank).
 - Ph.D. in Aerospace Engineering (2001).

- **ISRO Tenure:**

- Joined ISRO in February 1984, initially working on solid propulsion at Vikram Sarabhai Space Centre (VSSC).
- Shifted to Liquid Propulsion Systems Centre (LPSC) in 1989 to specialize in cryogenic propulsion.
- Headed LPSC since January 2018.
- Finalized ISRO's Propulsion Road Map (2017–2037).

- **Key Contributions:**

- Advanced India's capabilities in cryogenic propulsion, making it one of only six nations to achieve self-reliance in this field.
- Played a critical role in flagship missions:
 - Chandrayaan (1, 2, 3).
 - Mangalyaan (Mars Orbiter Mission).
 - Aditya-L1 (solar observation).
 - Gaganyaan programme.

Personal Details

- **Humble Beginnings:**

- Born to a farmer and homemaker in Melakattuvilai, Kanniyakumari district, Tamil Nadu.
- Studied in a Tamil-medium school; his family home received electricity only when he was in Class 9.
- School topper in Class 10.

- **Family:**

- Married to Kavitharaj N.K.
- Children: Daughter Divyaa and son Kalesh.

Vision for ISRO and India's Space Sector

- **Increasing India's Space Presence:**

- Plans to expand from 53 satellites in orbit to meet growing demands in communication, navigation, and Earth observation.
- Advocates for increased private sector and startup participation in space sector reforms.

- **Global Space Economy:**

- Aims to boost India's share in the global space economy from 2% to 10%.

- **International Collaboration:**

- Emphasizes partnerships with spacefaring nations, highlighting mutual respect for technological capabilities.

Legacy and Achievements

- Integral to India's self-reliance in propulsion technologies.
- Visionary leadership shaping ISRO's propulsion and mission road map for decades.
- Consistent focus on societal and strategic applications of space exploration.

India ready to support Maldives in enhancing its defence preparedness, says Rajnath Singh

INTERNATIONAL RELATIONS



Defence Equipment Handover

- India delivered defence equipment and stores to the Maldives at the request of the Maldivian government.
- Reaffirmation of India's readiness to assist the Maldives in defence capability enhancement, aligning with Male's national priorities.

Discussions Between Defence Ministers

- **Participants:**

- Indian Defence Minister Rajnath Singh.
- Maldivian Defence Minister Mohammed Ghassan Maumoon (on his

first visit to India under the new Maldivian government).

- **Focus Areas:**

- **Capability Enhancement:**

- Provision of defence platforms and assets for the Maldives.
 - Augmentation of modern infrastructure and training for defence and security personnel.
- Strengthening the India-Maldives Comprehensive Economic and Maritime Security Partnership.

Statements and Reactions

- **India's Commitment:**

- India remains dedicated to its 'Neighborhood First' policy and the SAGAR (Security and Growth for All in the Region) vision.

- **Maldivian Appreciation:**

- Acknowledgment of India as the "first responder" in times of need.
- Gratitude for India's support in developing modern infrastructure and training for the Maldives National Defence Forces (MNDF).

- **Defence Minister Rajnath Singh:**

- Termed the talks as fruitful and emphasized their role in strengthening bilateral ties and the MNDF's capabilities.

Infrastructure Projects Discussed

- **Ekatha Harbour Project:**

- Foundation stone laid by Rajnath Singh and former Maldivian counterpart Mariya Didi during an official visit in May 2023.
- Includes the development of a Coast Guard Harbour and repair facility at Sifavaru, one of the largest Indian grant-in-aid projects in the Maldives.

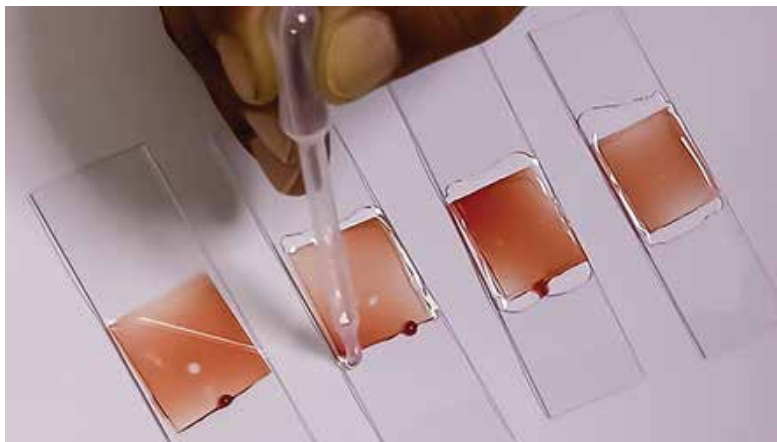
Other Key Events

- Maldivian Defence Minister laid a wreath at the National War Memorial in New Delhi.
- Was accorded a tri-service guard of honour as part of his visit.

This visit and the resulting discussions are expected to further bolster India-Maldives relations, particularly in defence and security cooperation.

ICMR gets low-cost tech to detect iron deficiency

SCIENCE AND TECHNOLOGY



- **Development and Transfer:**

- Developed by researchers at Cornell University.
- Transferred to the Indian Council of Medical Research (ICMR) for integration into programmes targeting:
 - **Anaemia alleviation.**
 - **Women's health.**
 - **Maternal and child health.**
 - **Maternal and child health.**

- **Purpose and Impact:**

- Aims to provide accurate, quick, and affordable assessment of iron deficiency.

- Enables rapid screening and diagnosis at the point of need.
- Addresses a critical health issue in India, where 50% to 70% of pregnant women suffer from anaemia due to iron deficiency.

How It Works:

- Requires a small finger stick and a drop of blood on a test strip (similar to a COVID-19 home test).
- Results are available in a few minutes via a reader.
- Data is uploaded to a clinical database using a mobile phone, wireless tablet, or computer.

Utility for Healthcare Workers:

- Enables on-the-spot interpretation of results.
- Facilitates guidance, triage, referral, or intervention immediately at the point of care.

INTEREST RATE CUTS NOT A SILVER BULLET TO REVIVE THE ECONOMY: CII CHIEF

ECONOMIC DEVELOPMENT



Insights on Addressing Economic Slowdown: Key Points from CII President Sanjiv Puri

- **No Single Solution:**
 - An interest rate cut alone cannot address the economic slowdown.
 - The Union Budget must focus on reviving consumption through:
 - Income tax cuts.
 - Reduction in fuel duties.
- A reforms roadmap to achieve 7% economic growth.
- **Consumption Trends:**
 - Consumption has been subdued this year.
 - Healthy monsoons are expected to boost rural incomes.
 - Easing food inflation may spur consumption in the latter part of 2024-25.
- **Interest Rate Cut:**
 - Industry expects a rate cut, but it is not a silver bullet for flagging consumption or growth.
 - A cut could provide relief by:
 - Reducing EMIs, thereby improving household spending.
 - Directly benefiting sectors reliant on loan-based purchases.
 - Consumption trends may improve within a few quarters as these measures take effect.
- **Decoupling Monetary Policy:**
 - Monetary policy needs to be decoupled from food inflation, which is often influenced by weather-related factors.
 - Tackling food inflation requires building resilience in agriculture.
- **Impact of Food Inflation on Consumption:**
 - Persistent food inflation impacts middle-class consumption patterns due to its significant weight in their expenses.
 - This necessitates long-term solutions for stabilizing food prices.



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IRAQI ARCHAEOLOGISTS PIECE TOGETHER ANCIENT ASSYRIAN TREASURES RAVAGED BY IS

ART AND CULTURE



Restoration Efforts at Iraq's Nimrud Archaeological Site

- **Historical Significance:**

- Nimrud, founded in the 13th century BC as Kalhu, was the second capital of the Assyrian empire and reached its peak in the 9th century BC.
- It housed treasures like bas-reliefs, sculptures, and decorated slabs, including depictions of King Ashurnasirpal II, mythical lamassus, and prisoners.

- **Destruction by IS:**

- In 2015, the Islamic State (IS) destroyed Nimrud's monuments, including the

2,800-year-old temple of Nabu, with bulldozers and explosives.

- Other sites such as the Mosul Museum and Palmyra in Syria were also ravaged.

- **Restoration Efforts:**

- Archaeologists began restoration in 2018 but faced interruptions due to the COVID-19 pandemic, resuming in 2023.
- Over 35,000 fragments have been excavated, with 70% of collection, classification, and identification completed.
- Restoration involves meticulously reassembling artefacts like bas-reliefs, lamassus, and cuneiform-inscribed tablets.

- **Challenges:**

- The task is described as a "complex operation" with about a year of fieldwork remaining before full restoration begins.

- **International Collaboration:**

- Iraqi archaeologists are supported by the Academic Research Institute in Iraq and trained by the Smithsonian Institution, with funding from the United States.

- **Global Heritage:**

- Nimrud's artefacts, termed the "treasures of Mesopotamia," represent humanity's shared history spanning 3,000 years.

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A.P. SET TO HOLD 3-DAY FLAMINGO FESTIVAL

ECOLOGY AND ENVIRONMENT



Flamingo Festival 2025 – Key Highlights

- **Dates and Location:**
 - Scheduled from January 18 to 20, 2025, at Sullurpeta, Tirupati district, Andhra Pradesh.
- **Significance:**
 - Returns after a five-year gap; last held in 2020.
 - Over 200 bird species expected during the season.
- **Event Features:**
 - Conducted across five locations: Nelapattu, B.V. Palem, Atakanithippa, Sri City, and Sullurpeta.
- **Activities include:**
 - Eco-friendly biodiversity sessions at Sri City.
 - Birdwatching at Nelapattu and Atakanithippa.
 - Boating facility at B.V. Palem.
 - Cultural programmes and stalls at Government Junior College, Sullurpeta.
- **Government Initiatives:**
 - Festival to be organised as a State-level event under Chief Minister N. Chandrababu Naidu's directive.
 - Infrastructure developed using Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).
- **Local Focus:**
 - Priority for local residents in participation and addressing eco-sensitive zone issues.
- **Official Supervision:**
 - Site inspected by district Collector S. Venkateswar and officials from tourism and wildlife departments, with directives for successful execution.



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Head Office:
Vedhik IAS Academy
Mercy Estate,
MG Road, Ravipuram,
Ernakulam-682 015,

Corporate office:
Vedhik IAS Academy
Samkalp Bhawan, Plot No.15,
Sector 4, Rama Krishna Puram,
New Delhi, Delhi-110022

Regional office
Vedhik IAS Academy
202, Raheja Chambers, 12,
Museum Road. Bangalore -
560001. Karnataka, India.

GCC Office:
Bobscoedu,
Bobsco Trading & Contracting Co. W. L . L
Office 22, Dream Tower 1,
Road: 2701, Adliya, Kingdom of Bahrain
www.bobscoedu.com