

## Bihar Special

### Sunita Devi

#### Why in the news?

Sunita Devi, village head from Mahuwa Panchayat, East Champaran, is invited as a special guest for the flag hoisting ceremony by Prime Minister Narendra Modi on Independence Day in New Delhi.

#### ❖ Background:

- Sunita Devi was elected village head in the 2021 panchayat elections.
- She is one of nine female representatives from Bihar invited to the Independence Day celebration.

#### ❖ Sunita Devi's Achievements:

- Constructed a gate on the Indo-Nepal border with the Ashoka Chakra emblem.
- Developed an Anganwadi center and fortified the four walls of Katgenwa High School under MNREGA schemes.

#### ❖ Other Invited Guests:

- Rekha Devi (Buxar)
- Akanksha Basu (Khagaria)
- Simran Raj (Jehanabad)
- Sueta Singh (Rohtas)
- Baby Devi (Samastipur)
- Bharti Kumari (Kadhar)
- Ruby Soab (Araria)
- Gunjan Devi (Soran)

## Economy

### National High-Speed Road Corridors

#### Why in the news?

The government approved eight high-speed road corridor projects with a total length of 936 km and an investment of ₹50,655 crore.

#### Approved Projects:

#### ❖ Agra-Gwalior Corridor:

- 6-lane, 88 km corridor.
- Enhances connectivity to key tourist destinations in Uttar Pradesh and Madhya Pradesh.

#### ❖ Kharagpur-Moregram Corridor:

- 4-lane, 231 km corridor.
- Improves connectivity between West Bengal, Odisha, Andhra Pradesh, and North-Eastern India.

#### ❖ Tharad-Deesa-Mehsana-Ahmedabad Corridor:

- 6-lane, 214 km corridor.
- Provides connectivity between key national corridors in Gujarat, aiding freight transport from Punjab, Haryana, and Rajasthan to Maharashtra ports.

- ❖ **Ayodhya Ring Road:**
  - 68 km access-controlled ring road.
  - Facilitates fast movement of pilgrims to the Ram Mandir.
- ❖ **Pathalgaon-Gumla Section of Raipur-Ranchi Corridor:**
  - 137 km corridor.
  - Enhances connectivity between mining areas and industrial zones in Chhattisgarh and Jharkhand.
- ❖ **Kanpur Ring Road:**
  - 47 km 6-lane ring road.
  - Completes the ring road around Kanpur.
- ❖ **Northern Guwahati Bypass and Guwahati Bypass Improvement:**
  - 121 km bypass and widening project.
  - Includes the construction of a major bridge over the Brahmaputra River.
- ❖ **Nashik Phata-Khed Elevated Corridor:**
  - 30 km elevated corridor.
  - Provides high-speed connectivity for traffic between Pune and Nashik, and alleviates congestion around Pimpri-Chinchwad.

## Environment And Geography

### Mahi-Banswara Nuclear Power Plant

#### Why in the news?

NTPC Ltd and Nuclear Power Corporation of India (NPCIL), through their joint venture Anushakti Vidhyut Nigam Ltd, plan to invite bids for the 2,800-MW Mahi Banswara nuclear power project in Rajasthan this financial year.

#### Background:

- ❖ In March 2024, NTPC signed a supplementary joint venture agreement with NPCIL to jointly develop the 2,800 MW Mahi-Banswara nuclear power plant and 1,400 MW Chutka Madhya Pradesh Atomic Power projects.

#### About Mahi Banswara Rajasthan Atomic Power Plant (MBRAPP)

##### ❖ Location:

- MBRAPP will be located in the Banswara district of Rajasthan, India.
- The site is near the banks of the Mahi River.

##### ❖ Installed Capacity:

- The plant will have an installed capacity of 4 x 700 MWe (megawatts electrical), totaling 2,800 MW.

- ❖ **Reactor Technology:**
  - The project will use Indigenous Pressurized Heavy Water Reactor (PHWR) technology.

### About Chutka Madhya Pradesh Atomic Power Project

- ❖ **Location:**
  - The project is planned to be situated in Narayanganj Tahsil, Mandla, Madhya Pradesh, India.
- ❖ **Capacity:**
  - The power plant will consist of two units.
  - Each unit is designed to generate 2x700 MW, totaling 1,400 MW.
- ❖ **Reactor Technology:**
  - The project will use Pressurized Heavy Water Reactor (PHWR) technology.

### NTPC'S NUCLEAR POWER PLAN

At present, the share of nuclear power in India's electricity mix is only **2%**

India has **6,780 MW** installed capacity of nuclear power plants

NTPC Ltd, India's biggest electricity generating company, currently has no operational nuclear power plant

ASHVINI (Anushakti Vidhyut Nigam Limited) - a joint venture between NTPC and Nuclear Power Corporation of India (NPCIL) - has been created to build nuclear power capacity

#### NTPC's NUCLEAR TARGETS

2032 **2,000 MW**

2035 **4,200 MW**

2050 **20,000 MW**

#### NUCLEAR PLANTS IN THE ANVIL

**1,400 MW** plant in Chutka, Madhya Pradesh

**2,800 MW** plant in Mahi Banswara, Rajasthan

### Science And Technology

#### Captain Subhanshu Shukla: Fifth Indian-origin astronaut

#### Why in the news?

Group Captain Subhanshu Shukla, 39, has been selected as the 'prime' astronaut for the Axiom-4 mission, a collaboration between India and the United States [the first ISRO-NASA mission to the International Space Station (ISS)].

- ❖ Group Captain Prasanth Balakrishnan Nair, 48, is the backup astronaut for this mission. Nair will take over if Shukla is unable to go.
- ❖ Shukla will become the fifth Indian-origin astronaut and only the second Indian national to go to space.

#### Pioneers of Indian-Origin Astronauts

- ❖ **Rakesh Sharma:**
  - First Indian national in space (1984, Soyuz-T11 mission).
  - Famous for saying India looked "Sare jahaan se accha" (Better than the whole world) from space.
- ❖ **Kalpana Chawla:**
  - First Indian-origin woman in space (1997, Columbia).
  - Died in 2003 during Columbia's re-entry.

❖ **Sunita Williams:**

- Held records for longest spacewalk and most spacewalks by a woman.
- Participated in three space expeditions.

❖ **Raja Chari:**

- Trained as an astronaut at NASA since 2017.
- Part of the Artemis team aiming for lunar missions.
- Commanded a spaceflight in the Space-X crew 3 mission.

**Axiom-4 Mission**

❖ **Mission Details:**

- Axiom-4, the fourth mission by Axiom Space in collaboration with NASA, will be launched by a SpaceX rocket.

- Apart from Shukla, astronauts from Poland, Hungary, and the United States will join the mission.
- They will stay docked with the ISS for 14 days, carrying cargo and supplies.



**News in Short**

- ❖ Lieutenant Colonel Kabilan Sai Ashok has made history by becoming India's youngest Olympic boxing referee for the Paris 2024 Olympics.



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