

Kerala Forest and Wildlife Department released 'Elephant Population Estimation in Kerala – 2024'

Report is part of a synchronized elephant population estimation in the Southern States (Kerala, Karnataka, and Tamil Nadu).

- Such synchronized exercise is mandated by an **Interstate Coordination Committee (ICC) Charter** established by the three Southern States in response to **rising Human-Elephant Conflict (HEC)**.

Key Highlights

- Elephant population in Kerala **decreased to 1793 elephants** from 1920 elephants in May 2023.
- High death rate (40%) among Juvenile elephants** (aged 10 and below) attributed to the **Elephant Endotheliotropic Herpesviruses (EEHVs)**.
- For mitigating HEC, it recommends **conducting socio-ecological studies** on behaviour of crop raiding animals and a permanent system to assess and monitor HEC.

Indian Elephant (*Elephas maximus*)

- It is one of three subspecies of Asian elephants, the other two being the Sumatran and Sri Lankan elephants.

- India is home to over **60% of the world's elephant population** with **highest population in Karnataka**, followed by Assam and Kerala.

Characteristics

- Life span:** 60-70 years.
- Gestation period:** 20-22 months.
- Reproduction:** A female starts calving at 18-20 years.
- Leader of an elephant group:** Female.
- Threats:** **Habitat Fragmentation** and degradation due to human settlements, expansion of agriculture and industry, **human-elephant conflict, poaching**, etc.
- Conservation Status**
 - Wild Life (Protection) Act, 1972:** Schedule I
 - IUCN status:** Endangered
 - CITES:** Appendix I

Role of Elephants in ecosystem

- Maintain Ecological Balance:** By limiting growth of vegetation, facilitating seed germination, dispersal of plant seeds etc.
- Improves Soil Fertility** by helping in nutrient recycling and maintain grasslands.
- Keystone species:** Positively influence growth of numerous plant and animal species.

Conservation Measures

- Project Elephant:** Launched in 1992 to protect elephants, their habitat & corridors.
- Mitigate HEC:** Electric fences, early warning systems, and beehive fences, etc.
- 33 Elephant Reserves** in 14 major Elephant states.

Goods train derails between Valsad and Surat stations in Gujarat

Earlier, **Chandigarh-Dibrugarh Express** had derailed in **Uttar Pradesh** and last month there was a collision between **the Kanchanjungha Express** and a goods train.

Reasons for Train Accidents

- Under-investment in Railways:** Slow expansion of rail network is leading to severe congestion and safety compromises.
- Derailments:** They're the highest reason for casualties (**1127 derailments during 2017-21**).
- Accidents due to failure of railway staff:** Over 50% of accidents are due to lapses like carelessness in working, non-observance of safety rules, etc.
 - Overworked loco-pilots** exceed stipulated hours, increasing accident risk.
- Unmanned Railway Crossings:** Land (encroachment and rehabilitation) issues and delay in completion of road over bridge/road under bridge.

Measures to improve Rail Safety

- Accelerate adoption of Linke Hoffman Busch (LHB) coaches** to reduce casualties during derailments, as they don't pile up.
- Improve working conditions** and amenities for loco-pilots to enhance performance.
- Standardize the location of signals** based on visibility, braking distance, and train speed.
- Eliminate the remaining unmanned Railway crossings** on metre and narrow gauge tracks.
- Accelerate the deployment** of the **KAVACH** train collision avoidance system.

Steps taken to improve Rail safety

- Following **Justice Khanna Committee** recommendations, a **separate Safety Department** was established, to enhance train operation safety.
- Rashtriya Rail Sanraksha Kosh (2017-18)** for **replacement/renewal/upgradation** of critical safety assets.
- All unmanned level crossings (UMLCs) on the Broad Gauge (BG) route** have been eliminated.
- All locomotives** are equipped with **Vigilance Control Devices (VCD)** to ensure alertness of Loco Pilots.

Minister of Home Affairs chairs 7th apex level meeting of Narco-Coordination Centre (NCORD)

At the meeting, Ministry for Home Affairs launched a toll-free helpline called **MANAS (Madak Padarth Nishedh Asuchna Kendra)**.

- Through it, citizens can connect with Narcotics Control Bureau (NCB) to **share anonymous information** on drug peddling, trafficking or **consult for drug abuse or addiction related issues**.

Illicit Drug Trade in India

- From 2014 to 2024, around **5.43 lakh kilogram of drugs** worth Rs 22,000 crore were seized.
- India is responsible for **around 21% global manufacturing** of internationally controlled psychotropic substances.
- India is the **largest opiate market in South Asia**.
- Narco Terrorism (terrorism funded by drugs trade) is posing threat to national security of India.

Factors helping Illicit Drug Trade

- Role of Internet** and social media in connecting sellers and buyers at local level.
- Emergence of **Cryptocurrencies and Darknet** drug markets.
- Role of Synthetic Drugs** which aids drug manufacturing.

Challenges in handling Drug Trade

- India's location:** Surrounded by Death Triangle (Thailand, Myanmar and Laos) and Death Crescent (Iran, Pakistan and Afghanistan).
- Transnational nature of crime** with illegal Hawala transactions and tax evasion.
- Illicit cultivation of drugs** such as opium in India.

Way Forward

- Cooperation** between international organizations, national Governments, regulatory authorities and private companies.
- Strategic approach** towards demand reduction and disrupting supply chain.

Measures taken by India

- Narcotics Drugs and Psychotropic Substances (NDPS) Act (1985).
- The Prevention of Illicit Traffic in Narcotic Drugs and Psychotropic Substances Act (1988).
- Anti-Narcotics Task Force** in each state/UT.
- Special Task Force** on Dark net and Crypto currency.
- Empowerment of **Border Guarding Forces**, Indian Coast Guard, and Railway Protection Force under NDPS Act.

Union Minister inaugurated National Landslide Forecasting Centre (NLFC) in Kolkata

NLFC is aimed at landslide hazard mitigation in India and will in due course issue **early warning bulletins for all landslide-prone states**, operationalizing the **regional Landslide Early Warning System (LEWS) nationwide by 2030**.

Other Initiatives:

- Bhusanket Web Portal:** Will facilitate dissemination of relevant information on landslide hazards, initiating short-range and medium-range landslide forecasting.
- Bhooskhalan Mobile App:** Quick dissemination of daily landslide forecasts.

About Landslides

- Landslides, a **type of mass wasting**, is defined as the rapid movement of a **mass of rock, debris, or earth down a slope**.
- India's Vulnerability:** Approximately 0.42 million sq. km (12.6% of land area), excluding snow covered area, is prone to landslide hazard.
 - Himalayas and Western Ghats** are particularly susceptible to landslides due to hilly topography and heavy rainfall.
- Causes of landslides**
 - Natural:** Heavy rainfall, undercutting of slopes due to flooding or excavation, earthquakes, snowmelt etc.
 - Anthropogenic:** Overgrazing by cattle, soil erosion due to loss of vegetation, terrain cutting and filling, excessive development etc.
- Effects of landslides:**
 - Loss of life and infrastructure**, cultivable land etc.
 - Disruption of traffic and **isolation of habitations** in hilly regions.
 - Floods** due to diversion of river courses, channel blockages or reducing effectiveness of dams by adding silt load.

Components of National Landslide Risk Management Strategy (2019)

- Hazard Zonation:** Making use of advanced tools such as UAVs, Terrestrial Laser Scanner, and very high-resolution Earth Observation data for zoning.
- Monitoring and EWS:** Fixing of early warning alert thresholds and improvements in early warning practices.
- Preparation of Mountain Zone Regulations:** Formulation of land use policies and enforcement of building regulations.
- Stabilization and Mitigation of Landslide and **Creation of Special Purpose Vehicle (SPV)** for Landslide Management.

Demand for a separate 'Bhil Pradesh'

Bhil tribes are demanding an independent tribal state i.e., **Bhil Pradesh**, comprising parts of Rajasthan, Madhya Pradesh, Gujarat, and Maharashtra.

Factors driving Demand for New States in post-independence India

- **Linguistic diversity:** Creation of Maharashtra and Gujarat in 1960.
- **Cultural identity:** Demand for Statehood for the Gorkhland region of west Bengal.
- **Developmental differences:** Demand for the Vidarbha, region of Maharashtra.
- **Administrative efficiency:** Demand of Harit Pradesh from Uttar Pradesh.

Advantage of smaller state

- **Better Governance:** More focused administration, quicker decision-making and policy implementation etc.
- **Economic Development:** Targeted policies for local needs, better utilization of natural resources, etc.
- **Administrative Efficiency:** Easier management of smaller geographical areas.
- **Other:** Reduced regional disparities, Distribution of power from larger units to smaller ones, etc.

Concerns

- **Administrative challenges:** The initial costs of setting up new state machinery are very high.
- **Conflicts:** Possibility of increased conflict over interstate river water, land borders, etc.
- **Regionalism:** Fragmentation and weakening national unity.
- **Economical Concerns:** Potential financial burden on central government, Smaller markets might be less attractive for large-scale investments, etc.
- **Pandora box: Creation of new states can further lead to the demand for and creation of other new states.**

Constitutional Provisions

- Parliament may by law form a new State by separation of territory from any State or by uniting two or more States or parts of States or by uniting any territory to a part of any State (Article 3)

Also in News



PM SVANidhi Scheme

Madhya Pradesh has secured the first place under the 'Best Performing State' category in PM SVANidhi scheme.

PM SVANidhi (Street Vendor's AtmaNirbhar Nidhi)

- **Central Sector Scheme** under Ministry of Housing and Urban Affairs.
- **Objective:** To facilitate street vendors to access affordable working capital loan for resuming their livelihoods activities, after easing of Covid lockdown.
- **Features**
 - ⊕ Initial working capital loan of up to ₹10,000.
 - ⊕ Interest subsidy on **timely/early repayment @7%**.
 - ⊕ Monthly cashback incentive on **digital transactions**.
- **Targeted beneficiaries:** Street vendors/ hawkers vending in urban areas, as on or before March 24, 2020.

Delhi crime branch busts Interstate kidney transplant racket

- It showcases various problems in curbing the issue of organ trafficking and illegal organ trade across the country.

Reasons

- **High demand and low supply**
 - ⊕ As per National Organ and Tissue Transplant Organization (NOTTO), as on March 2023.
 - ◆ Only 15,561 organ transplants took place in 2022.
 - ◆ Number of patients waiting for organ replacement in the country is 49,745.
- **Poverty-** false promises of high payments, employment.
- **Transnational nature:** Donors and recipients coming from different countries.
- **Low deceased donation rate** as compared to developed countries.
- **Administrative:** inadequacy in present policies regarding organ procurement.

Issues arising out of Illegal organ trade

- **Non consensual,** undermines donor's **health and human rights, leads to organized crime networks.**
- **Ethical Issues** as human body parts are treated as commodities.

Steps to be taken

- **Addressal of the root cause:** Reduce people's vulnerability and raise awareness to donate.
- **Victim protection and assistance:** To cooperate with law enforcement agencies.
- **Uniform legal and ethical guidelines:** For organ donation and transplantation with the vision of "One Nation, One Policy.
- **Fair selection of patients** for waiting lists and allocation of organs.

India's Measures

- **Transplantation of Human Organs and Tissues Act, 1994**
 - ⊕ Regulates removal, storage and transplantation of human organs & tissues for therapeutic purposes and for prevention of commercial dealings in human organs & tissues.
- **Rashtriya Arogya Nidhi (RAN)** provides for financial support upto Rs. 15 lakh to BPL patients for transplantation of Heart, Lung, Liver, Kidney.



Bamboo

'National Symposium on Bamboo' was held to promote sustainable rural livelihoods, women's empowerment and climate resilience through bamboo farming.

About Bamboo

- Bamboo is the **perennial and most diverse plant** (more than 1200 species in world) belongs to **subfamily Bambusoideae** of family Poaceae.
- Found in **tropical, sub-tropical, and mild temperate regions.**
- **Distribution:** In India, Bamboo is **found naturally throughout the country except Kashmir region.**
 - ⊕ **North-Eastern states and West Bengal** accounts for more than 50% of Bamboo resources.
- **Uses:** Construction material, Textile fibers, Musical instruments, Furniture etc.
- **Environmental benefits:** Rapid carbon sequestration, Soil erosion control, water purification etc.



Article 361

Supreme Court agrees to examine constitutional provision granting immunity to Governors

About Article 361

- It's an exception to **Article 14 (right to equality)** where **Presidents or governors are not answerable to any court** for the exercise of powers and duties of their office.
 - However, **Parliament can review the President's conduct** through designated investigative bodies. (**Article 61**)
- They have **immunity from criminal proceedings** while in office and **cannot be arrested or imprisoned** by court order while in office.
- Civil suits** against the President/Governor require **two-month notice** before filing.



The Right of Children to Free and Compulsory Education Act or Right to Education Act (RTE), 2009

Bombay HC overturns Maharashtra govt's exemption of private schools from RTE quota admissions to disadvantaged and economically weaker students.

- HC observed that it was ultra vires of RTE Act and **Article 21 of Constitution**.
 - The **Constitution (Eighty-sixth Amendment) Act, 2002** inserted Article 21-A.
- #### RTE provisions
- The Act makes education a **fundamental right** of every child between the **ages of 6 and 14**.
 - It specifies **minimum norms in elementary schools**.
 - It requires all **private schools to reserve 25% of seats** for children belonging to disadvantaged sections.



Uranium Contamination in Water

New study by Bhabha Atomic Research Centre (BARC) scientists has concluded that **concentration of uranium up to 60 micrograms per litre (µg/l) in drinking water** was entirely safe.

- However, in 2021, **Bureau of Indian Standards (BIS)** had revised the **acceptable level** of uranium concentration in drinking water from 60 µg/l to 30 µg/l.
- #### About Uranium Contamination
- Uranium is a naturally occurring **radioactive element**.
 - It contaminates water due to **geogenic processes, overexploitation of groundwater** and its decline, **nitrate pollution** etc.
 - Harmful impact of high Uranium concentration:** Nephritis (kidney damage), Cancer.



Plastic waste to electronic device

Recent study demonstrated that plastic waste can be converted into electronic devices.

- Researchers developed a chemical process that **converts Styrofoam into the high-value conducting polymer PEDOT: PSS**.
 - PEDOT:PSS is a polymer that has both **electronic and ionic conductivity**.
 - PEDOT:PSS **could be produced by sulfonating polystyrene**, a synthetic plastic found in many types of disposable containers and packaging materials.



National Clean Air Programme (NCAP)

As per a Centre for Science and Environment (CSE), nearly two third of the funds allocated to NCAP were used for dust management.

About NCAP

- Launched by the **Ministry of Environment Forest & Climate Change** in 2019.
- Aim:**
 - Ensure **stringent implementation of mitigation** measures for prevention, control and abatement of air pollution
 - Augment **ambient air quality monitoring network**.
- Targets:**
 - Achieve **20%-30% reduction** in concentrations of **particulate matter by the year 2024, keeping 2017 as the base year**.
 - NCAP covers **Non-Attainment Cities (NACs)** wherein **National Ambient Air Quality Standard (NAAQS)** has exceeded for **5 consecutive years**.



Itanagar Wildlife Sanctuary

New plant species '**Phlogacanthus sudhansusekharii**' has been discovered in Itanagar Wildlife Sanctuary.

About Itanagar Wildlife Sanctuary

- It is located in the **southern-west part of Arunachal Pradesh** and state capital **Itanagar** is located inside the sanctuary.
- Major streams:** Poma, Pam, Pachin, Neorochi and Chingke.
- Habitat:** Mixed evergreen to semi-evergreen forests.
- The sanctuary has also been recognized as an **Important Bird Area** by **Birdlife International** as it lies in **Eastern Himalayas Endemic Bird Area**.
- Fauna:** Asian Elephant, Four species of Hornbills, Tiger, Asiatic Black Bear etc.
- Threats:** Hunting, unorganized urbanization/ settlement, encroachment.

Personality in news



Kadambini Ganguly (1861 – 1923)

Recently, birth anniversary of **Dr. Kadambini Ganguly** was celebrated.

About Kadambini Ganguly (1861 – 1923)

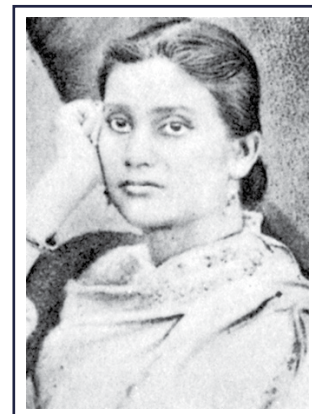
- She was born in 1861 in **Bhagalpur, Bihar**.
- She became **first Indian-educated female doctor**.

Key Contributions

- She was a member of **Brahmo Samaj**.
- She was one of six representatives in the **first female delegation of the 1889 Indian National Congress**.
- In 1906, she helped organize the **Women's Conference in Calcutta**.
- She along with **Kamini Roy** worked for a government committee to enquire about **conditions of women miners in Bihar and Orissa**.
- Her efforts resulted in **India's first Age of Consent Act in 1891**.

Values

- Courage, Determination, Leadership.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI