

### E-CIGARETTES: EDUCATED YOUTH LEADING USERS, FINDS STUDY

#### Why in News?

- More than three years after e-cigarettes were banned in the country (in 2019), a recent medical study found that educated youth are leading the vaping (smoking) habit.

#### What Exactly is an e-Cigarette?

- E-cigarettes are the most common form of **Electronic Nicotine Delivery Systems (ENDS)**, which are basically devices that do not burn or use tobacco leaves.
- Instead, they **vaporise a solution** using a battery and this vapour is then inhaled by the user.
- The main constituents of the solution, in addition to nicotine, are **propylene glycol**, with or without glycerol and flavouring agents.
- While a faster, deeper puff increases nicotine delivery from a conventional cigarette, it **might diminish it from e-cigarettes** due to cooling of the heating element.

#### How does an e-Cigarette Work?

#### Are There Any Health Risks of Using e-Cigarette?

- Once nicotine is used in the solution of an e-cigarette, **the difference between it and a conventional cigarette blurs.**
- The use of nicotine solutions (a highly addictive substance) in e-cigarettes underlines the fact that they can be **equally addictive** as conventional cigarettes.
- In terms of health risks, the **power of an e-cigarette to deliver nicotine determines** how dangerous its use can be.
- Despite not being a carcinogen, nicotine has the potential to **stimulate tumour growth.**
- According to WHO, some solutions in e-Cigarettes and emissions from them are considered to be "toxicants".

#### What is the Ethical Dilemma of Using e-Cigarettes?

- e-Cigarettes were introduced and popularised by forwarding the argument that they are effective in **helping people quit smoking tobacco.**

- However, there are **no concrete large-scale studies** to show their effectiveness in helping people quit smoking.

## STATES FALL SHORT OF TARGETS TO IMPROVE FOREST COVER, QUALITY

### Why in News?

- According to the data accessed via the RTI, against the target of increasing tree cover by around 53,000 hectares (between 2015-16 and 2021-22) under the **Green India Mission (GIM)**, only around 26,000 ha has been achieved.
- Similarly, forest quality improved in only 1.02 lakh ha against target of 1.6 lakh ha under the GIM, which is one of the eight Missions under the **National Action Plan on Climate Change (NAPCC)**.

### National Action Plan on Climate Change (NAPCC):

- The Central government (MoEF&CC), in 2008, had launched the NAPCC outlining existing and future policies and programs addressing **climate mitigation and adaptation**.
- Originally, there were 8 core missions under the NAPCC, and later (2022) 3 new missions were added to the list.
- These 11 missions represent multi-pronged, long term and integrated strategies for achieving key goals in climate change.



### National Mission for a Green India:

- It is one of the eight Missions under the NAPCC (launched in 2014 for a 10-year period), and which aims at protecting, restoring and enhancing India's forest cover and responding to Climate Change.
- The target under the Mission is **10 million ha (5 + 5) on forest and non-forest lands for increasing the forest/tree cover and to improve the quality of existing forest**.

- It envisages a **holistic view of greening** that extends beyond tree planting and focusses on **multiple ecosystem services** such as biodiversity, water, biomass, preserving mangroves, wetlands, critical habitats, etc., along with carbon sequestration.
- GIM also **aims at convergence with complementary schemes and programmes** for better coordination in developing forests and their fringe areas in a sustainable way.
- A **multidisciplinary team**, both from Govt. and NGOs, are mandated to facilitate planning and implementation at cluster/landscape unit level.

## News Summary:

- **India State of the Forest Report 2021:**

- As per the Report, forest and tree cover in the country increased by 2,261 square km since the last assessment in 2019.
- India's **total forest and tree cover was 80.9 million hectares, which accounted for 24.62% of the geographical area of the country.**
- The report said 17 States and Union Territories had more than 33% of their area under forest cover.
- **Madhya Pradesh had the largest forest cover**, followed by Arunachal Pradesh, Chhattisgarh, Odisha and Maharashtra.
- The top five States in terms of forest cover as a percentage of their total geographical area were Mizoram (84.53%), Arunachal Pradesh (79.33%), Meghalaya (76%), Manipur (74.34%) and Nagaland (73.90%).

- **Status of forests in India as per the RTI:**

- From 2015-16 to 2021-22, the Central government (based on submissions from 17 States) had approved a target of increasing tree/forest cover by 53,377 hectares and improving the quality of degraded forest by 1,66,656 ha.
- However, the **tree/forest cover had increased by 26,287 hectares and forest quality improved in only 1,02,096 hectares as of December 31, 2022.**
- For executing these projects, the Central government had allocated Rs 681 crore but only Rs 525 crore had been utilised.

## BLACK VULTURE

An American black vulture was recently spotted in the Delhi NCR region causing a stir amongst birdwatchers and conservationists.



### About Black Vulture:

- Black vultures are most abundant at low elevations. They breed in dense woodlands but usually forage in open habitats.
  - It is mainly found in the northeastern United States to Peru, Central Chile and Uruguay South America.
  - They typically avoid crossing large bodies of water and do not cover long distances.
  - **Conservation status**
  - IUCN Red List: **Least Concern**
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## MUGHAL GARDENS RENAMED AS AMRIT UDYAN

### Why in news?

- The iconic Mughal Gardens at the Rashtrapati Bhavan (President's House) in Delhi have been renamed as Amrit Udyan.
- The cluster of about 15 gardens will collectively be known as Amrit Udyan.
  - Individual gardens within the sprawling Presidential Estate — Herbal Garden, Musical Garden and Spiritual Garden — will retain their names.

### What is the history of Mughal Gardens in India?

- The Mughals were known to appreciate gardens. In Babur Nama, Babur says that his favourite kind of garden is the Persian **Charbagh style** (literally, four gardens).
- Defined by its rectilinear layouts, divided in four equal sections, these gardens can be found across lands previously ruled by the Mughals.
- From the gardens surrounding Humayun's Tomb in Delhi to the Nishat Bagh in Srinagar, all are built in this style – giving them the moniker of Mughal Gardens.

- A defining feature of these gardens is the use of waterways, often to demarcate the various quadrants of the garden.
- These were not only crucial to maintain the flora of the garden, they also were an important part of its aesthetic.
- Fountains were often built, symbolising the cycle of life.

## How did the Rashtrapati Bhavan get Mughal Gardens?

- In 1911, the British decided to shift the Indian capital from Calcutta to Delhi.
- About 4,000 acres of land was acquired to construct the Viceroy's House with **Sir Edwin Lutyens** being given the task of designing the building on Raisina Hill.
- Lutyens' designs combined elements of classical European architecture with Indian styles, producing a unique aesthetic that defines Lutyens' Delhi till date.
- Crucial in the design of the Viceroy's House was a large garden in its rear. The initial plans involved creating a garden with traditional British architecture.
- However, the wife of the then Viceroy wanted something in the Mughal style and urged the planners to create a garden in that style.
- She was inspired by the book **Gardens of the Great Mughals** (1913) by Constance Villiers-Stuart as well as her visits to Mughal gardens in Lahore and Srinagar.

## Evolution of Mughal Garden at Rshtrapati Bhavan

- Though the layout of the garden was in place by 1917, the planting was taken up only in 1928-29. Director of horticulture William Mustoe, who planted the garden, was especially skilled at growing roses and is said to have introduced more than 250 different varieties of hybrid roses gathered from every corner of the world.
- The gardens have evolved over time. While roses remain the star attraction, residents of the Rashtrapati Bhavan have all added their own personal touch to the garden.
- g., C Rajagopalachari, the last Governor General of India, made a political statement when during a period of food shortage in the country, he himself ploughed the lands and dedicated a section of the garden to foodgrains.
- Today, the **Nutrition Garden**, popularly known as Dalikhana, stands in that spot, organically cultivating a variety of vegetables for consumption at the Rashtrapati Bhavan.

- President R Venkatraman added a cactus garden and APJ Abdul Kalam added many theme based gardens-from the musical garden to the spiritual garden.
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## TULASIDAS

Recently, a controversial statement was made by a state minister on the Tulasidas's Ramacharitmanas.

### About Tulasidas:

- Tulsidas, whose real name was Ram Bola Dubey, wrote **the Ramcharitmanas** on the banks of the Ganga in Varanasi.
  - The Ramcharitmanas was written in the 16th century in the **Awadhi dialect**, which is primarily spoken in the districts of Lucknow, Prayagraj, and Ayodhya.
  - He was a contemporary of **Emperor Akbar** and is thought to have corresponded with Abdurrahim Khan-e-Khanan, the son of Akbar's commander Bairam Khan.
  - Tulsidas popularised the story of **Lord Ram** because he wrote in the regional dialect that most people understood.
  - This enraged ancient Sanskrit scholars, and Tulsidas documented his anguish in his Kavitawali.
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## SURGE IN OIL IMPORTS FROM RUSSIA

### Why in news?

- India's trade data for the first eight months of the current fiscal year shows that crude oil imports from Russia jumped by 24.89 million tonnes year over year to 28.13 million tonnes, a staggering seven-fold.

### News Summary: Surge in oil imports from Russia

- An analysis of India's trade data for the first eight months of the FY 2022-23 showed a staggering seven-fold increase in crude oil imports from Russia.

### Key highlights

- **Top 10 supplier of crude oil**

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- **India's oil imports increased**
- India's oil imports for the period rose 6.8% year on year to 151.39 million tonnes.
- **Decline on oil import from traditional oil supplying countries**
- Nine supplying nations saw oil supplies to India fall by around 1 million tonnes or more.
- Nigeria and the US has topped the list, with supply volumes falling by 4.88 million tonnes and 3.79 million tonnes over this period, respectively.
- On the other hand, India's big three West Asian oil suppliers, Iraq, Saudi Arabia, and the UAE, did not see their oil shipments fall significantly.
  - Of the three, only Iraq's oil supplies declined during the period by 1.48 million tonnes, or 4.1%.
  - Oil supplies from Saudi Arabia and the UAE to India increased in April-November.
- **Russia as the second-biggest source of crude for India**
- During this period, Russia displaced major suppliers like Saudi Arabia and the UAE to emerge as the second-biggest source of crude for India.

## Why is India witnessing surge in import of oil from Russia?

- **Opportunity in crisis**
- The Western Countries imposed sanctions on Russia after its invasion in Ukraine. As a result, many countries were forced to avoid Russian oil and gas.
- This created an opportunity for some of the major energy importers like India who sourced Russian crude from the market at special discounts.
  - To capture the opportunity, Indian refiners started floating tenders to buy such discounted oil.
- **Policy decision supporting purchase of Russian crude oil**
- Time and again, India expressed its willingness to opt for Russian energy, being offered at a discount.
- This policy decision is part of promoting India's national interest by ensuring energy security as the oil and gas market continues to witness volatility.
  - India is highly dependent on energy imports as nearly 85 per cent of its crude oil requirement (5 million barrels a day) has to be imported.

- **Additional factors**

- So far Nigeria and US had been the traditional supplier. However, the recent data shows significant decline in the oil import from these two countries.
- Nigeria has been struggling with supply disruptions in the oil and gas sector due to numerous incidents of oil theft, pipeline vandalism, crumbling infrastructure, and maintenance shutdowns.
- US, too, saw some disruptions, particularly weather-related supply interruptions in the critical Gulf of Mexico region.
- Besides supply disruptions, the relatively higher cost of freight and insurance is also responsible for this decline.
  - The ultimate economics of oil determines the purchases by refiners.
  - It includes price of crude, cost of freight, and gross product value or product slate of that grade of crude.

- **Challenges in energy imports**

- Geopolitical developments have posed significant challenges to Indian energy security.
- Owing to sanctions on Iran and Venezuela, India had to stop sourcing oil from Iran and Venezuela. Alternative sources have often come at a higher cost.
- The **jump in oil prices after the Ukraine conflict** further added to these challenges.
- Hence, India has to keep focusing on competitive energy sources and found Russian oil lucrative.

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## SCO FILM FESTIVAL

**Recently, the five-day Shanghai Cooperation Organization's Film Festival opened in Mumbai.**

### **About SCO Film Festival**

- It is being organized by the **National Film Development Corporation**, a Public Sector Undertaking of the **Ministry of Information and Broadcasting**, in association with the SCO Council of Heads of States.
- **Aim:** To build cinematic partnerships, have an exchange of programmes, nurture young filmmaking talent and act as a bridge between the cultures of the Shanghai Cooperation.



- As part of the SCO Film Festival in India, it is endeavoured to showcase selected films from the Members, Observer States and Dialogue partners States.

## Key facts about the Shanghai Cooperation Organization

- The SCO is a permanent **intergovernmental international organisation**. It is a Eurasian political, economic, and security alliance and has been the primary security pillar of the region.
- It was established in 2001 and was preceded by the **Shanghai Five mechanism**.
- The Heads of State Council (HSC) is the supreme decision-making body in the SCO. It meets once a year and adopts decisions and guidelines on all important matters of the organisation.
- The organisation has two permanent bodies:
  - The SCO Secretariat is based in
  - The Executive Committee of the Regional Anti-Terrorist Structure (RATS) is based in Tashkent.
- **Member countries:** India, Kazakhstan, China, Kyrgyzstan, Pakistan, Russia, Tajikistan, and Uzbekistan.
- **Four observer states** Afghanistan, Belarus, Iran and Mongolia.

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## WHAT IS THE JATAR DEUL TEMPLE?

The Archaeological Survey of India (ASI) plans to replace damaged bricks and plant trees as a protective barrier at the Jatar Deul temple in West Bengal to prevent corrosion of the terracotta temple.

### About Jatar Deul temple:

- It is a **Hindu Temple dedicated to Lord Shiva**.
- **Location:** Located at Kankan Dighi Village in **South 24 Parganas District in West Bengal**.
- The Temple stands on a **small hill** in the landscape of the **southern Sundarbans settlements**.
- A **copper plate found near the temple in 1875** suggests that **Raja Joychandra constructed the temple in 975 AD**.
- The temple has been classified as a **Monument of National Importance** by the Archaeological Survey of India (ASI).
- **Structure:**

- This temple is facing towards the east and follows the **Kalingan style of architecture**.
- The temple is built over a **raised platform**.
- It has an **arched gateway leading to the sanctum**.
- The **sanctum is situated below the ground level**.
- The **sanctum houses Lingas, pictures and idols** of various gods & goddesses of Hindu pantheon.
- The **walls of the temple were intricately decorated** with decorative bricks, but most of it is lost due to unplanned reconstruction.

### **Kalingan style of architecture:**

- It is a style of **Hindu architecture** which flourished in the ancient Kalinga previously known as Utkal and part of the kingdom of Magadha or present **eastern Indian state of Odisha**.
- In Kalinga style – the **temple is made up of two structures: a tower and hall**. The Tower is called ‘Deula’, and the hall is called ‘Jagmohan’.
- The style consists of **three distinct types of temples**: Rekha Deula, Pidha Deula and Khakhara Deula. .
- **Rekha Deula**: It is a **tall building with a sikhara**. The Rekha Deula means a **shrine with different parts in a line**. Eg: Rekha Deula in the **Lingraj Temple** of Bhubneshwar.
- **Pidha Deula**: Pidha Deula refers to the **square building with a pyramid-shaped roof, like the vimanas**. Eg: The assembly hall of the **Konark Sun Temple**.
- **Khakhara Deula**: It is altogether a different style of architecture closely appearing **similar to the Dravidian Gopuran design**. The temples of the **feminine deities as Shakti are temple of this type**. Eg: **Baitala temple of Bhubneshwar dedicated to Chamunda**.

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### ASIAN GOLDEN CAT

Officials of the Buxa Tiger Reserve (BTR) in north Bengal said that they were able to capture some pictures of rare and elusive melanistic Asian golden cat in the camera traps.

#### **Why in News?**

- According to the experts, these are the first photographic records of the melanistic Asian golden cat, also known as the Temminck’s cat, from West Bengal.

## About Asian golden cat:

- It is a **medium sized cat with relatively long legs.**
- **Scientific name:** *Catopuma temminckii*
- **Other names:** They are known as the “**fire cat**” in Thailand and Burma, and as the “**rock cat**” in parts of China.
- **Distribution:** The species occurs in **Southeast Asia**, from **Nepal and Tibet** to **Southern China, Sumatra and India.**
- **Habitat:** It prefers **forest habitats** that are **interspersed with rocky areas**, being found in **deciduous, tropical and subtropical evergreen rainforests.**
- Their fur ranges in color from cinnamon to various shades of brown, and also gray and black (**melanistic**).

## Conservation status:

- **IUCN:** “Near threatened”
- **Wildlife (Protection) Act of India, 1972:** Schedule 1

## Buxa Tiger Reserve (BTR):

- **Location:** BTR lies in Alipurduar sub-division of **Jalpaiguri district of West Bengal.**
- Its **northern boundary runs along the international border with Bhutan.**
- It is the **easternmost extension of extreme bio-diverse North-East India** & represents the highly **endemic Indo-Malayan region.**
- The fragile “**Terai Eco-System**” constitutes a part of this Reserve.
- BTR serves as an **international corridor for elephant migration between India and Bhutan.**
- The reserve encompasses as many as eight forest types.
- **Flora:** The main species constitutes trees like **Sal, Champ, Gamar, Simul, Chikrasi.**
- **Fauna:** The main species include **Asian Elephant, Tiger, Gaur, Wild boar, Sambar, Wild dog (Dhole).**