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Current Affairs - 19 December 2024

CRIME AND CRIMINAL TRACKING NETWORK AND SYSTEMS (CCTNS)



- It is a **centralized online platform** conceptualized under the Ministry of Home Affairs.

- Launched in **2009** with a budget of ₹2,000 crore, it is part of India's **National e-Governance Plan**.
- It aims to establish a **comprehensive and integrated system** to enhance the efficiency and transparency of police operations at the **police station level**.
- Classified as a **Mission Mode Project (MMP)**, the system provides law enforcement with tools for **investigation, data analytics, policymaking**, and delivering **citizen-centric services**.

Key Features of CCTNS:

- **Nationwide integration:** It connects all **17,130 police stations** across 28 states and 8 Union Territories. Recently achieved 100% deployment, including in remote areas like Manipur, Nagaland, and Lakshadweep.
- **Comprehensive crime database:** Stores records of **accused persons, habitual offenders, proclaimed offenders**, and crime-related data such as missing persons and stolen vehicles.
- **Analytical tools:** Generates **crime statistics** and detailed reports for analysis at the police station level.
- **Citizen services:** Enables tracking of complaints, verification requests, and case updates, making police processes more accessible.
- **Enhanced scope:** Integrated with the **Integrated Criminal Justice System (ICJS)**, connecting police data with **courts, prisons, prosecution, forensics, and fingerprint databases**.

Key Modifications Under New Criminal Laws:

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- CCTNS plays a pivotal role in implementing the **new criminal laws introduced on July 1, 2024:**
 - **Bharatiya Nyaya Sanhita** (replaces Indian Penal Code, 1860).
 - **Bharatiya Sakshya Adhinyam** (replaces Indian Evidence Act, 1872).
 - **Bharatiya Nagarik Suraksha Sanhita** (replaces Code of Criminal Procedure, 1898).
- **Key updates include:**
 - **Mandatory videography:** Crime scene videography and forensic evidence collection in cases punishable by over seven years.
 - **Forensic investigations:** Biological samples collected upon request of investigating officers.
 - **Arrest transparency:**
 - Senior officer approval required for arrests in specific cases.
 - Arrest information communicated to relatives and displayed publicly.
 - **Case monitoring:** Victims updated on investigation progress within **90 days**.
 - **Digital reporting:** Daily diaries sent to magistrates fortnightly.

About National Crime Records Bureau (NCRB):

- **Established:** 1986, under the **Ministry of Home Affairs (MHA)**.
 - **Purpose:** Acts as the central repository for crime and criminal data in India.
 - **Headquarters:** New Delhi.
 - **Responsible for:**
 - Collecting and analyzing crime statistics.
 - Managing the **Central Finger Print Bureau**, which maintains a national database of fingerprints.
 - Publishing key reports like **Crime in India, Accidental Deaths & Suicides**, and **Prison Statistics**.
 - Providing technical support in areas like **Digital Forensics** and **Network Security**.
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TUBERCULOSIS



- Tuberculosis (TB) is a bacterial infection caused by **Mycobacterium tuberculosis**, which primarily affects the lungs.
- TB is a **curable and preventable disease** if detected early and treated appropriately.
- There are two types of TB infections:
 - **Latent TB**: In this state, the bacteria remain inactive in the body and cause no symptoms. It is not contagious but can become active.
 - **Active TB**: In this condition, the bacteria cause symptoms and can be transmitted to others.
- Globally, **one-quarter of the population** is estimated to have latent TB.
- Individuals infected with TB bacteria have a **5-15% lifetime risk** of developing the disease.
- People with **compromised immune systems**—such as those with **HIV, malnutrition, diabetes**, or those who use **tobacco**—have a significantly higher risk of falling ill with TB.

Transmission of Tuberculosis:

- TB spreads from person to person through the air.
- When a person with lung TB **coughs, sneezes, or spits**, TB bacteria are released into the air.
- Even inhaling a few droplets of contaminated air can cause an infection.

Focus on High-Risk Groups and Areas:

- **Targeted Demographics**: Groups include **students, youth, corporate employees**, and laborers in **brick kilns, mines, construction sites, tea gardens**, and more.
- **High-risk districts**: **347 districts** include **38 tribal areas, 27 mining zones, and 47 aspirational districts**. States with the highest number of districts in the campaign: **Karnataka (31), Maharashtra (30), and Madhya Pradesh (23)**.



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MILKWEED FIBER



- It is the **seed fiber** obtained from **milkweed plant**.
 - Milkweed (*Asclepias syriaca*) plant belongs to the genus *Asclepias* of the family *Asclepiadaceae* and is also known as **stubborn weed**.
 - In India, it is found as a wild plant in the **Rajasthan, Karnataka and Tamil Nadu**.
 - Milkweed contains an abundance of milk sap in its leaves, stems and pods.
- **Properties of Milkweed fiber:** It contains **oily material and lignin**, a woody plant substance, which makes them too brittle for spinning. It has a **hydrophobic–oleophobic surface** due to the natural waxes found on the surface of the fiber.
- **Applications:**
 - It is used in **paper industries**.
 - In addition, it is also used as an **insulative filling material**.
 - It is used in such water-safety equipment as life jackets and belts.
 - Researchers discovered that it readily absorbs oil while simultaneously repelling water, thus making it an effective fiber to help clean up oil spills.

DIRECTORATE GENERAL OF COMMERCIAL INTELLIGENCE AND STATISTICS



- It is the premier organization of Government of India for **collection, compilation and dissemination of India's trade statistics** and commercial information.
 - The Organization traces its origin to a statistical branch established in the Finance Department of the **Government of India way back in 1862**.

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- **Sir William W. Hunter** was the first DG of the DGCI & S or the Director General of Statistics as he was designated, back in 1871.
 - **Functions:**
 - It is entrusted with the work of **collecting, compiling and publishing/disseminating trade statistics** and various types of commercial information required by the policy makers, researchers, importers, exporters, traders as well as overseas buyers.
 - It is the first large scale data processing organization functioning as a nodal agency for Export & Import data in the country.
 - It also compiles and publishes the **inland Trade Statistics** covering **inter-State movements of goods** by rail, river and air on yearly basis.
 - It is headed by the **Director General**, an Additional Secretary level officer of Indian Statistical Services (ISS).
 - **Nodal Ministry:** It works under the Ministry of Commerce & Industry.
 - **Headquarter: Kolkata**
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GANGES RIVER DOLPHIN



- It is a **freshwater species** and one of the few river dolphins found in the world.
- **Habitat:** It is mainly found in the **Ganges-Brahmaputra-Meghna and Karnaphuli-Sangu** river systems of Nepal, India, and Bangladesh.
- **Other names:** Blind dolphin, Ganges dolphin, Ganges susu, Hihu, Side-swimming dolphin, South Asian River Dolphin, etc.
- It serves as an **umbrella species** for the river systems and it has been recognized as India's National Aquatic Animal.
- **Appearance:** It has a long thin snout, rounded belly, stocky body and large flippers are characteristics of the Ganges River dolphin.

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- **Features:**
 - They can **only live in freshwater** and is essentially blind. They **hunt by emitting ultrasonic sounds**, which bounces off of fish and other prey.
 - They have a highly developed bio-sonar system that facilitates them to hunt for fish even in murky waters.
 - Being a mammal, the Ganges River dolphin cannot breathe in the water and must surface every 30-120 seconds. Because of the sound it produces when breathing, the animal is **popularly referred to as the 'Susu'**.
- **Conservation status:**
 - **IUCN:** Endangered
 - **CITES:** Appendix I
 - **Wildlife (Protection) Act 1972:** Schedule-I

KISAN KAVACH



- It is first-of-its-kind **anti-pesticide bodysuit** designed to protect farmers from the harmful effects of pesticide exposure.
- The suit is intended to protect farm labourers from imbibing the pesticides they spray. Several of the common pesticides are potential neurotoxins and detrimental to health.
- It is developed by the **Biotechnology Research and Innovation Council (BRIC-inStem), Bangalore**, in collaboration with Sepio Health Pvt. Ltd.
- **Features:**
 - The kit consists of a trouser, pullover, and a face-cover **made of 'oxime fabric'** that can chemically breakdown any of the common pesticides that get sprayed onto cloth or body during spraying operations.
 - This prevents chemicals from leaching into the skin. The price per kit is ₹4,000.



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- **Working:** This Kisan Kavach fabric can deactivate pesticides upon contact through **nucleophilic mediated hydrolysis**, thereby preventing pesticide-induced toxicity and lethality.
- The kit retains its potency in a wide temperature range, under UV-light exposure and was protective even after 150 washes.

POTENTIAL REASONS FOR DISCONTINUATION OF THE SOVEREIGN GOLD SCHEME

- Introduced in 2015 under the Gold Monetization Scheme, SGBs are government securities issued by RBI on behalf of the Government of India.
- These are debt securities linked to the value of gold.
- SGBs are denominated in grams of gold. They are substitutes for holding physical gold.
- Investors have to pay the issue price in cash and the bonds will be redeemed in cash on maturity.

ISSUANCE To be issued by Reserve Bank of India on behalf of the Government		
ELIGIBILITY The bonds will be restricted for sale to resident Indian entities including individuals, HUFs, trusts, universities, charitable institutions		
DENOMINATION The bonds will be denominated in multiples of grams of gold with a basic unit of 1 gram		
TENOR The tenor of the bond will be for a period of 8 years with call option from 5th year to be exercised on the interest payment dates		
TAXATION Interest on the bonds shall be taxable as per the provision of Income Tax Act, 1961 (43 of 1961). Physical gold rules apply to capital gains tax too		
SALES CHANNEL Bonds will be sold through banks and designated Post Offices, as may be notified, either directly or through agents		
MINIMUM SIZE Minimum permissible investment will be 2 units (i.e. 2 grams of gold)		
MAXIMUM LIMIT Not more than 500 grams per person per fiscal year (April-March). A self-declaration to this effect will be obtained		

• Features

- Each unit represents one gram of gold and offers a fixed interest rate of 2.5% per annum, credited semi-annually.

- These bonds can be traded in the secondary market and are redeemable in Indian rupees based on the average closing price of 999 purity gold from the last three business days before maturity.

• Benefits

- Key benefits include protection against market price fluctuations, redemption flexibility after five years (with an eight-year tenor), and lower risks and costs compared to holding physical gold.

Concerns regarding sovereign gold bonds

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- **High Cost of Financing Fiscal Deficit**
 - The government views financing the fiscal deficit through SGBs as costly, with limited benefits in terms of physical gold collection.
 - The number of SGB tranches has been consciously reduced over time—from 10 per year to just two.
- **Impact of Reduced Customs Duty on Gold**
 - In July 2024, the government lowered the customs duty on gold from 15% to 6%, leading to a drop in gold prices and a surge in demand.
 - This aligns with the government's objective to boost gold demand but diminishes the need for SGBs as an investment option.
- **Decline in SGB Issuances and Borrowing Targets**
 - Gross SGB issuances for FY 2024-25 were reduced to Rs 18,500 crore from Rs 29,638 crore in the interim budget.
 - Net borrowing through SGBs was also cut to Rs 15,000 crore from the earlier Rs 26,138 crore.
 - No new issuances of SGBs have been made so far in FY 2024-25.
- **SGB Redemption Performance**
 - SGB Series I (2016-17) matured in August 2024, providing a return of over 120% on the initial investment, with redemption prices rising from Rs 3,119 to Rs 6,938.
 - SGB Series II bonds redeemed in March 2024 yielded a 126.4% return over the investment value, excluding interest.
 - Premature redemption for bonds issued between May 2017 and March 2020 has been scheduled from October 2024 to March 2025.

Conclusion

Given the limited benefits of SGBs as an investment option and their high financing costs, the government is reevaluating the scheme's continuation.



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GANDHI SAGAR WILDLIFE SANCTUARY



- **Location:** It is situated in **northwestern Madhya Pradesh**, along the **Madhya Pradesh-Rajasthan border** and lies within the **Khathiar-Gir dry deciduous forests ecoregion**.

Key features:

- Declared a sanctuary in **1974**, covering an area of **368 sq. km**.
- The **Chambal River** flows through the sanctuary, dividing it into two parts.
- It is a designated **Important Bird and Biodiversity Area (IBA)**.

Topography and Vegetation: The sanctuary includes **hills, plateaus**, and the **catchment area of the Gandhi Sagar Dam**. Vegetation types:

- **Northern tropical dry deciduous forest.**
- **Northern tropical dry mixed deciduous forest.**
- **Dry deciduous scrub.**
- **Principal tree species: Khair, Salai, Kardhai, Dhawda, Tendu, and Palash.**

Fauna:

- **Herbivores:** Chinkara, Nilgai, and Spotted Deer.
- **Carnivores:** Indian Leopard, Striped Hyena, and Jackal.
- Aquatic species include **crocodiles, fish, otters, and turtles.**

Historical and Cultural Importance: The sanctuary houses sites of historical and archaeological significance, such as **Chaurasigarh, Chaturbhujnath Temple, Bhadkaji rock paintings, Hinglajgarh Fort and Taxakeshwar Temple.**
