DAILY CURRENT AFFAIRS 17-07-2025

GS-3

1. **PMKVY (Pradhan Mantri Kaushal Vikas Yojana)**
2. **Unique Identification Authority of India (UIDAI)**
3. **Shanghai Cooperation Organisation**
4. **Genetically Modified (GM) Crops**
5. **Cyber-crimes in India (Lokniti-CSDS Survey)**

PMKVY (Pradhan Mantri Kaushal Vikas Yojana)

Syllabus: GS-3: Indian Economy – Skill development.

Context:

India celebrates 10 years of Pradhan Mantri Kaushal Vikas Yojana (PMKVY), with over 1.63 crore youth trained under the scheme.

Overview:

- **Launched:** 2015
- **Nodal Ministry:** Ministry of Skill Development and Entrepreneurship (MSDE)
- **Part of:** Skill India Mission
- **Objective:** To provide industry-relevant skill training and enhance employability of Indian youth.

Key Components:

- **Short-Term Training (STT):**
  - Duration: 3–6 months
  - Target Group: Fresh entrants (school/college dropouts, unemployed)
  - Coverage: 30+ sectors
- **Recognition of Prior Learning (RPL):**
  - Purpose: Certifies informal sector workers (e.g., weavers, artisans)
  - Focus: Validates existing skills and improves employment prospects
- **Digital Integration under PMKVY 4.0:**
  - **AI-based analytics**
  - **Skill India Digital Hub**
  - **Academic Bank of Credits** for mobility across education/skill ecosystems
- **Focus on Inclusivity:**
  - **Women:** ~45% of beneficiaries
  - **Marginalized Communities:** Significant share from SC, ST, and OBC categories
- **Global & Future Skills:**
  - Sectors: AI, IoT, drones, mechatronics, etc.
  - Also promotes traditional and heritage crafts

- **Innovative Initiatives:**
  - **Skill Hubs:** Vocational training integrated into school curriculum
  - **COVID Warriors Training:** Trained ~1.2 lakh youth in pandemic-related roles

Achievements (as of July 2025):

- Total trained under PMKVY: 1.63 crore
- Trained under all MSDE schemes (2014–2025): 6 crore+
- Under PMKVY 4.0 (FY 2022–25): 25+ lakh
- Under PMKVY 2.0: 1.10 crore (aligned with *Make in India*&*Digital India*)
- Under DDU-GKY: 17 lakh (focused on rural youth)
- Under RSETIs: 56 lakh (entrepreneurship development)

Significance for India:

- Addresses **unemployment** and **skill mismatch**
- Boosts **economic productivity** and **industrial readiness**
- Promotes **inclusive growth** by reaching underprivileged communities
- Supports goals of **Atmanirbhar Bharat** and **Demographic Dividend**

Unique Identification Authority of India (UIDAI)

Syllabus: GS-3; Economic Inclusivity

Context

- Unique Identification Authority of India (UIDAI) has taken proactive measures to maintain the accuracy and integrity of the Aadhaar database by deactivating Aadhaar numbers of deceased persons.

1. Overview of UIDAI

- **Full Form**: Unique Identification Authority of India
- **Established**: **28 January 2009** (via notification by GoI)
- **Statutory Status**: Granted under the **Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016**
- **Parent Ministry**: **Ministry of Electronics & Information Technology (MeitY)**
- **Headquarters**: **New Delhi**

- **First Chairman**: **Nandan Nilekani** (2009-2014)

2. Objectives of UIDAI

- Provide a **unique 12-digit Aadhaar number** to every resident of India.
- Eliminate duplicate and fake identities in government databases.
- Enable **direct benefit transfers (DBT)** to reduce leakages in welfare schemes.
- Facilitate **digital identity authentication** for services (banking, telecom, subsidies).

3. Key Functions of UIDAI

- **Enrollment**: Register residents by collecting biometric (fingerprints, iris scan) and demographic data.
- **Authentication**: Verify identities online via Aadhaar for services.
- **Data Security**: Ensure protection of Aadhaar data under **Aadhaar Act, 2016**.
- **Grievance Redressal**: Handle complaints via **UIDAI helpline (1947)** and online portals.

4. Aadhaar – Key Facts

- **12-digit random number** (no intelligence or classification based on caste, religion, etc.).
- **World's largest biometric ID system** (over **1.3 billion** enrolments as of 2024).
- **Voluntary but mandatory** for certain subsidies and govt schemes.
- **Validity**: Lifetime (no need for renewal).

5. Significance of Aadhaar (UIDAI)

- **Financial Inclusion**: Jan Dhan-Aadhaar-Mobile (**JAM Trinity**) for direct benefit transfers.
- **Elimination of Ghost Beneficiaries**: Saved **₹2.2 lakh crore** (as per govt estimates).
- **Digital India**: Used in **e-KYC, DigiLocker, PAN linkage, SIM verification**.
- **Welfare Schemes**: Used in **PDS, MGNREGA, LPG subsidies, Ayushman Bharat**.

6. Challenges & Criticisms

- **Privacy Concerns**: **Justice K.S. Puttaswamy (Retd.) vs Union of India (2017)** – Supreme Court upheld Aadhaar but imposed restrictions.
- **Data Security Risks**: Cases of **Aadhaar data leaks** reported.
- **Exclusion Errors**: Biometric failures affecting welfare access for poor.

- **Mandatory-Linked Services**: Earlier SC ruled **Aadhaar cannot be mandatory for banking, school admissions, etc.**

7. Important Supreme Court Judgments on Aadhaar

- **2017 (Right to Privacy)**: SC declared privacy a **fundamental right (Article 21)**.
- **2018 (Aadhaar Validity)**:
  - Upheld constitutional validity but **struck down mandatory linking to bank accounts, mobile, schools**.
  - Allowed mandatory use only for **subsidies & welfare schemes**.

Shanghai Cooperation Organisation

Syllabus: GS-3; International Institutions

Context

- The recent visit of external affairs minister, S Jaishankar, to China for the SCO Foreign Ministers' Meeting underscores the importance India places on this multilateral platform, even as it navigates a complex relationship with China.

1. Overview of SCO

- **Established**: 15 June 2001 (evolved from the "Shanghai Five" formed in 1996).
- **Headquarters**: Beijing, China.
- **Type**: Political, Economic, and Security Alliance.
- **Official Languages**: Russian and Chinese.

2. Member States

- **Founding Members (2001)**:
  - China
  - Russia
  - Kazakhstan
  - Kyrgyzstan
  - Tajikistan
  - Uzbekistan (joined later)
- **Expanded Members**:
  - **India** & **Pakistan** (joined in 2017).
  - **Iran** (became a full member in 2023).

- **Observer States**: Afghanistan, Belarus, Mongolia.
- **Dialogue Partners**: Turkey, Sri Lanka, Nepal, Armenia, Azerbaijan, Cambodia, etc.

3. Objectives of SCO

- Strengthening **mutual trust** and **good-neighborly relations**.
- Promoting **economic cooperation**, trade, and investment.
- Enhancing **regional security** (counter-terrorism, separatism, extremism).
- Cooperation in **energy, transportation, technology, and culture**.
- Maintaining **peace and stability** in the region

4. Key Focus Areas

A. Security Cooperation

- **Regional Anti-Terrorist Structure (RATS)**: Based in Tashkent, Uzbekistan.
- Combating **terrorism, drug trafficking, cybercrime**.
- Military exercises (e.g., **Peace Mission** drills).

B. Economic Cooperation

- **SCO Development Bank** (proposed by India).
- **SCO Interbank Consortium** (for project financing).
- Focus on **connectivity projects** (Belt and Road Initiative vs. India's alternatives).

C. Cultural & Humanitarian Cooperation

- SCO Youth Council, SCO Film Festival.
- Education exchanges (SCO University network).

5. India & SCO

- **India's Entry (2017)**: Gained full membership to enhance **Eurasian engagement**.
- **Benefits for India**:
    - Access to Central Asian energy resources.
    - Platform to counter Pakistan-sponsored terrorism.
    - Balancing China's dominance via multilateral diplomacy.
- **Challenges**:
    - China-Pakistan axis within SCO.
    - India's opposition to BRI (conflict with sovereignty issues)

6. Key Facts to Remember

- **SCO covers ~40% of global population**.
- **India chaired SCO in 2023** (hosted meetings in Goa & virtually).
- **SCO vs NATO**: Non-Western security grouping.
- **Afghanistan Issue**: SCO's role in post-US withdrawal stability.

Previous Year Questions (PYQs)

1. **UPSC 2023**: "Discuss India's strategic interests in SCO." (150 words)
2. **KPSC 2022**: "How does SCO contribute to regional security?"

Genetically Modified (GM) Crops

Syllabus: GS-3: Science and Technology – GM crops.

Context:

The Donald Trump administration is exerting pressure on India to open up its market to American soyabean and maize, which are both almost entirely GM produce.

What is Genetic Modification?

- Technology involving **insertion of DNA** into an organism's genome to introduce **new traits**.
- In **plants**, this helps develop traits like **insect resistance** and **herbicide tolerance**.

Top GM Crop Countries (90% global GM cultivation)

1. USA
2. Brazil
3. Argentina
4. India
5. Canada

First GM Crop

- **Flavr Savr Tomato (1994, USA)**: Engineered to **delay ripening**.
- GM tech earlier used in **insulin, vaccines, drugs**.

Objectives of GM Crops

- Pest resistance (e.g., **Bt toxin** production)

- Herbicide tolerance
- Virus resistance
- Reduced tilling = less soil erosion
- Drought resistance
- Enhanced nutrition (**biofortification**)

Bt Genes

- From **Bacillus thuringiensis**.
- Produce **Cry &Cyt toxins** harmful to insect pests (e.g., beetles, caterpillars).
- Engineered into plants like **Bt Cotton**.

Methods of Producing GM Crops

1. Agrobacterium tumefaciens Method

- A. tumefaciens = **"Nature's Genetic Engineer"**
- Causes **crown gall disease** via **Ti plasmid**.
- Plasmid modified to carry **desired gene** into plant genome.

2. Direct Gene Transfer

- Methods: **Gene gun**, **microinjection**, **electroporation**.
- Gene gun: Shoots **DNA-coated gold/tungsten** particles into plant cells.

Advantages of GM Crops

- Faster than **conventional breeding**.
- Introduces **traits across species** boundaries.
- Decreases **chemical pesticide** usage.
- Increases **crop yield** and **farmer income**.
- Enables **no-till farming** → prevents **carbon loss**.
- **Drought tolerance**, **nutritional enhancement**.

Disadvantages/Concerns

- **Horizontal gene transfer**: Spread of resistance genes → risks to humans/ecosystems.
- **Herbicide overuse** → resistant weeds (e.g., **glyphosate resistance**).
- **Pest resistance**: Bt-resistant insects may evolve.
- **Biodiversity reduction** in wild and neighboring crops.

- **Impact on pollinators** (e.g., honeybees).

Applications of GM Technology

- **Biofortification**: e.g., **Golden Rice** with β-carotene.
- **Edible Vaccines**: Lower cost, fewer side effects.
- **Phytoremediation**: Clean toxic pollutants via GM plants.
- **Biofuels**: GM algae/cyanobacteria for **4th-gen biofuels**.

GM Crops in India

Approved for Commercial Cultivation

- **Bt Cotton** (2002): Increased cotton yield & reduced bollworm damage.

Not Approved

- **Bt Brinjal**: Approved in 2009, but placed under **moratorium**.
- **GM Mustard**: Under consideration, trials ongoing, no commercial approval yet.

Regulatory Framework in India

Body	**Function**
RDAC (Recombinant DNA Advisory Committee)	Monitors biotech developments
RCGM (Review Committee on Genetic Manipulation)	Reviews high-risk/field trials
GEAC (Genetic Engineering Appraisal Committee)	Main authority for environmental release (under **MoEFCC**)
SBCC (State Biotechnology Coordination Committee)	Reviews safety at state level

GEAC Safety Tests:

- Molecular characterisation
- Food safety
- Environmental safety (soil impact, pollen flow, etc.)

Current Status

- **Bt Cotton** is the only **commercially approved GM crop** in India.
- Field trials for **Bt Brinjal** and **GM Mustard** are ongoing.

Conclusion

- GM technology is a **powerful agricultural innovation** with benefits in yield, sustainability, and nutrition.
- However, **health, environmental, and biodiversity concerns** necessitate **rigorous regulation and research**.

Cyber-crimes in India (Lokniti-CSDS Survey)

Syllabus: GS-3: Internal Security - Cybersecurity.

Context:

- Delhi recorded over ₹700 crore in financial losses due to cybercrimes in 2024.
- Increasing digital access has led to a surge in cyber fraud incidents, especially among vulnerable groups.

Common Cybercrime Types

- **Phishing Scams** – Deceptive messages/emails to extract confidential data.
- **UPI/Online Payment Frauds** – Fake links or QR codes leading to unauthorized withdrawals.
- **Digital Arrest Scams** – Victims receive fake police or court calls threatening legal action unless money is transferred.
- **Investment/Job Frauds** – Fake online opportunities tricking people into sharing money or data.

Vulnerable Groups

- **Elderly population** – Lower digital literacy and higher trust factor.
- **Domestic workers and informal sector employees** – Limited exposure to cyber safety norms.
- **Low-income families** – Often unaware of secure digital practices.
- **Students and first-time internet users** – Easily influenced by online job or loan offers.

Reasons for High Vulnerability

- **Rapid digitization vs. slow digital literacy** – People are using online platforms without adequate safety awareness.

- **Psychological manipulation** – Use of fear, urgency, or emotional blackmail to extract money.
- **Lack of awareness** – Many users are unaware of how to identify or report cyber frauds.
- **Low reporting rates** – Victims often avoid reporting due to shame, lack of knowledge, or distrust in police response.

Government Measures

- **Cyber awareness in schools** – Daily briefings and awareness drives in government schools.
- **Digital hygiene promotion** – Public campaigns on safe digital practices like password safety and OTP confidentiality.
- **Dedicated cybercrime reporting platforms**:
  - National Cybercrime Reporting Portal.
  - Indian Cyber Crime Coordination Centre (I4C).

Key Concepts for Prelims/Mains

- Cybercrime types and trends in India.
- Role of education and awareness in digital safety.
- Institutional frameworks addressing cybercrime.
- Intersection of socio-economic vulnerability and digital frauds.