Current Affairs 12-07-2025

Credit - Drishti Ias

Exploring the Opportunities and Challenges of GM Crops

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For Prelims: Genetically modified (GM) Mustard , Genetically Modified crops, Bt cotton, Drought-tolerant maize varieties, Golden Rice, C4 rice, Genetic Engineering Appraisal Committee , Environment Protection Act,1986 , Intellectual Property Rights

For Mains: Regulatory Framework for GM Crops in India, Benefits and Issues Related to GM Crops

Source: FE

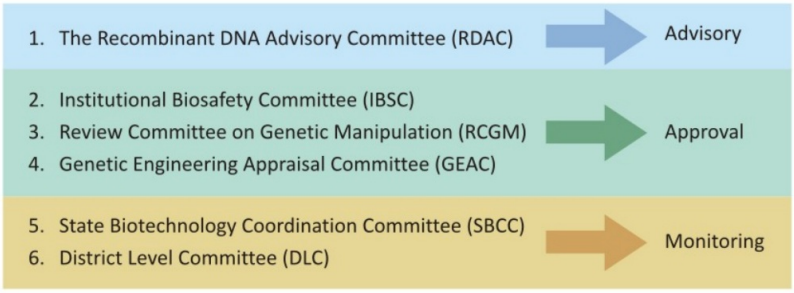
Why in News?

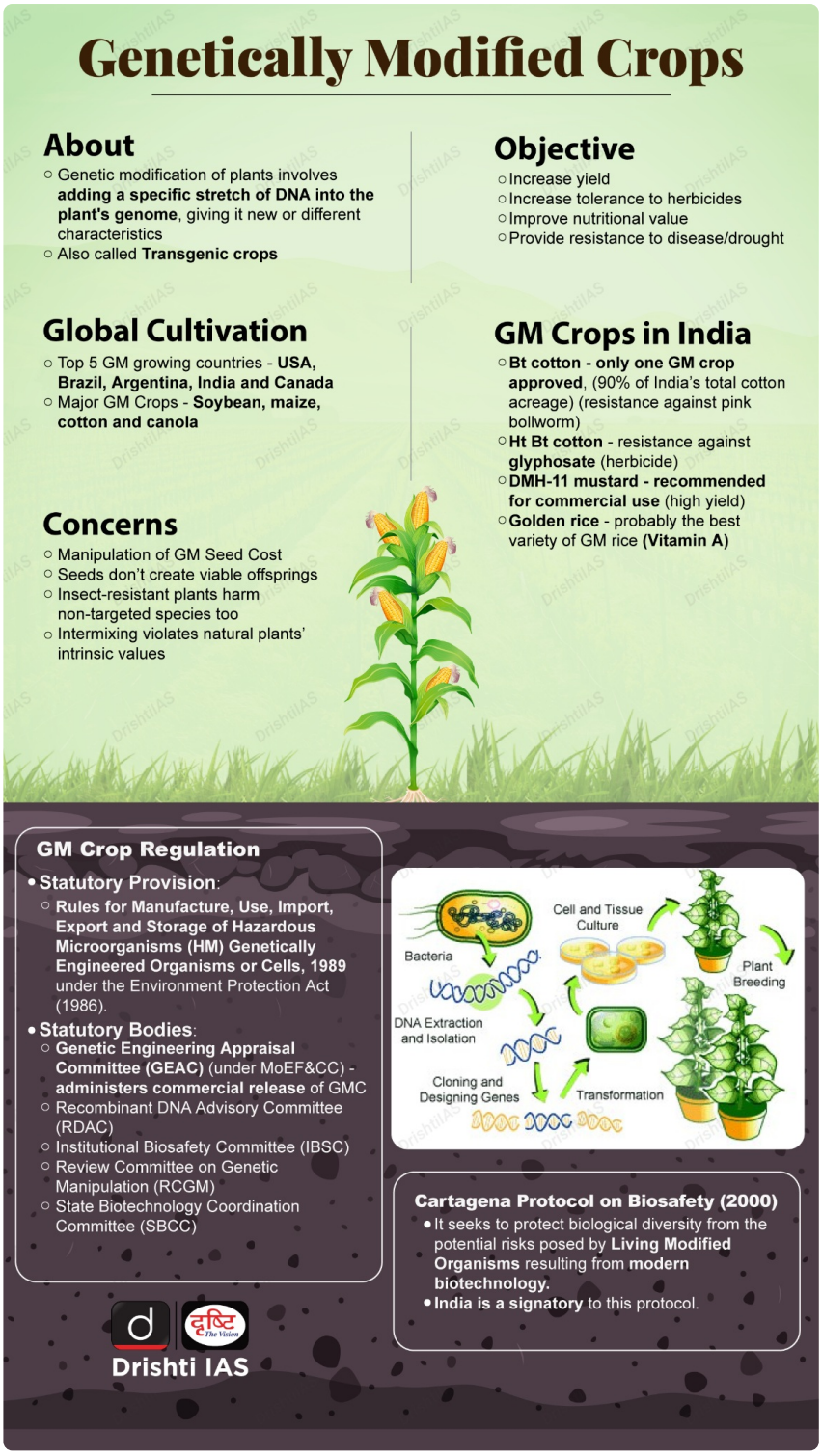
Amid ongoing trade negotiations, the US is pushing India to open its agriculture market to **genetically modified (GM) crops** . However, India has firmly stated that agriculture and dairy are 'sacrosanct red lines,' warning that allowing GM crop imports could threaten farmers' livelihoods and food safety.

What are Genetically Modified (GM) Crops?

- **About: Genetically Modified (GM) crops** are plants whose **DNA is altered** using modern **genetic engineering technology** to **introduce or enhance desirable traits** such as **pest resistance, drought tolerance, or nutritional enhancement.**
- **Global Adoption:** GM crops were first **commercialized in the USA in 1994** with the **Flavr Savr tomato** , engineered to **delay ripening** .
  - As per the **International Service for the Acquisition of Agri-biotech Applications (ISAAA)** , by **2019** , over **17 million farmers** across **29 countries** cultivated more than **190 million hectares** of GM crops.
- **Regulatory Framework in India:** GM crops in India are regulated under the **"Rules for the Manufacture, Use, Import, Export and Storage of Hazardous Microorganisms, Genetically Engineered Organisms or Cells" (Rules, 1989)** under the **Environment Protection Act,1986**
  - It provides a **comprehensive regulatory framework** for all activities involving **GMOs** , covering **research and large-scale use** , including **manufacture, import, storage, sale, and export** .
  - They apply to **genetically engineered organisms, related products, food items** , and extend to **new gene technologies** like **cell hybridization and genetic engineering** , forming the basis of

India's **biosafety regime** .





What is the Status of GM Crop Adoption in India?

- **Approved GM Crop: Bt cotton** is the **only genetically modified crop approved** for commercial cultivation in India (since **2002**). It now covers **over 90%** of India's cotton area, around **12 million**

hectares .

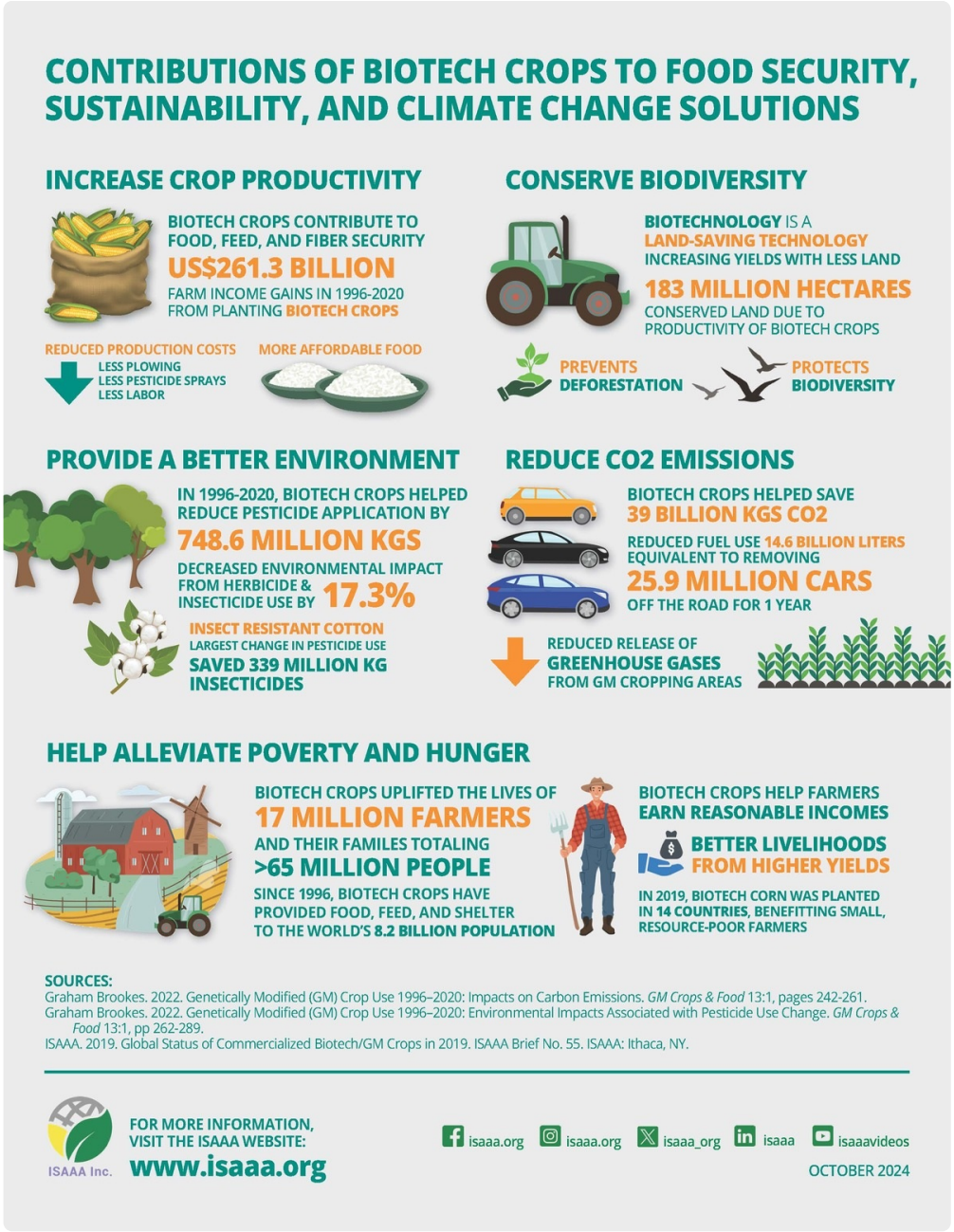
- Bt cotton led to a **193% increase in production** between 2002 and 2014, making India the **second-largest global cotton exporter** by 2011–12.
- It also contributed to **higher farmer incomes** and **reduced pesticide use** .
- Since 2015, cotton yields have **declined** from **566 kg/ha (2013–14)** to around **436 kg/ha (2023–24)** .
- India now lags behind **China and Brazil** , with **pest resurgence** and **absence of updated GM traits** cited as key reasons.

- **Pending GM Crop Approvals** :
  - **Bt Brinjal:** Approved by the **Genetic Engineering Appraisal Committee (GEAC)** in **2009** , but placed under an ongoing **moratorium** due to public and political concerns.
  - **HT-Bt Cotton (Herbicide Tolerant): It is** a **herbicide-tolerant** GM variant, is **not approved** for commercial use in India but is **illegally cultivated** in several states, including **Gujarat, Maharashtra, Telangana, and Andhra Pradesh** . It is estimated to cover **15–25% of total cotton acreage** .
  - **GM Mustard (DMH-11):** Granted **environmental clearance in 2022** , but its **commercial release is on hold** pending **Supreme Court** and regulatory approvals.
  - **Other Crops:** GM variants of **chickpea, pigeonpea, and sugarcane** are at different stages of **research, field trials** , and regulatory **deliberation** .

What are the Key Benefits of Genetically Modified (GM) Crops?

- **Enhanced Pest & Disease Resistance:** GM crops like **Bt cotton** produce their own insecticides, effectively controlling pests like **bollworms** .
  - Reduced pesticide use **lowers costs, improves yields, and minimizes environmental harm** , especially in pest-prone regions.
- **Climate Resilience & Resource Efficiency:** GM crops are developed to withstand **drought, salinity, and heat** , making them vital in the context of **climate change** .
  - For instance, **drought-tolerant maize** in **Kenya** has improved yields in dry seasons.
  - Additionally, GM crops like **C4 rice** and nitrogen-efficient variants aim to **maximize output** while using **less water, fertilizer, and land** .
- **Nutritional Enhancement (Biofortification):** GM technology enables the development of crops fortified with essential nutrients, addressing **hidden hunger** .
  - Eg: **Golden Rice** (beta-carotene for Vitamin A), **iron-rich rice** , and **zinc-enhanced wheat** , targeting malnutrition in countries with **limited dietary diversity** and poor access to micronutrients.
- **Reduced Post-Harvest Losses:** GM crops with **extended shelf life** (**Flavr Savr tomato**) help reduce **post-harvest losses** , especially in regions lacking refrigeration and cold storage.
  - Herbicide-tolerant crops enable **no-till farming** , reducing **soil erosion** , **carbon emissions** , and preserving **ecosystem health** by minimizing pesticide use.
- **Innovations in Medicine & Environmental Cleanup:** GM crops are being researched for **biopharming** i.e producing **vaccines and therapeutic compounds** in plants like bananas and potatoes, potentially lowering healthcare costs and increasing access.
  - Moreover, **phytoremediation** (use of plants to **clean up environmental pollutants**) using GM

plants such as **modified poplars** helps absorb **heavy metals and toxins** .



What are the Key Challenges in GM Crop Adoption in India?

- **Environmental and Health Concerns:** GM crops may cause **gene flow to wild species** , leading to herbicide-resistant **superweeds** , while **Bt crops** can harm non-target insects and reduce **biodiversity** through monoculture.
  - Health concerns include potential **allergens** , **nutritional changes** , and long-term safety highlighted by the **StarLink corn incident (2000)** , where animal-feed-only GM corn entered the human food chain.
- **Regulatory and Policy Constraints:** India's GM crop approvals are delayed due to **regulatory opacity** , **prolonged moratoriums** , and **political hesitancy** , even for scientifically cleared crops like **Bt brinjal** and **GM mustard** .
  - Policies such as the **Cotton Seed Price Control Order (2015)** and **mandatory tech transfer provisions** have **discouraged private R&D** , hindering biotech innovation.
- **Socio-Economic and Ethical Issues:** There are concerns over **market concentration** , **seed**

dependence , and **high input costs** for small farmers.

- Ethical issues such as **“playing God”** , **food sovereignty** , and **community rights** challenge public acceptance.
- Cases like Monsanto’s (US-based agricultural biotech company) enforcement of **Intellectual Property Rights** **over GM seeds** has led to global disputes over **trait fees** , **seed sovereignty** , and **patentability** , in **India** , the **US** and **Canada** .

- **Coexistence, Contamination, and Illegal Cultivation:** Coexistence of **GM and non-GM crops** poses challenges due to **cross-pollination** , risking **organic certification** and **market access** (**Oregon GM wheat case, 2013**).
  - In India, **HT-Bt cotton** is **illegally cultivated** on up to **25% of cotton acreage** , leading to **biosafety risks** and a **black market for unregulated seeds** .
- **Resistance Development & Global Competitiveness:** Overuse of GM traits has triggered **pest and weed resistance** , diminishing the effectiveness of **Bt cotton** and **glyphosate-tolerant crops** , requiring constant innovation.
  - India’s **declining cotton exports** and turning **net importer in 2024–25** signal a loss of **global competitiveness** due to delayed GM adoption and innovation stagnation.

What Measures Should be Taken for Responsible Adoption of GM Crops in India?

- **Transparent, Science-Based Regulation:** India should **restructure** its GM crop approval process to be **time-bound, evidence-based** , and managed by an **independent authority** with **multi-stakeholder input** .
  - Ensure **transparent field trials** with **public data access** and **independent oversight** , along with **long-term impact studies** and **regular ecological reviews** to address **biosafety and biodiversity** .
- **Strengthen PPP & Indigenous R&D:** Promote **collaborative biotech research** through a **Public-Private Partnerships (PPP) framework** that balances **innovation with public interest** . Reform disincentives like the **Cotton Seed Price Control Order (2015)** and **mandatory tech transfer norms** .
  - Support development of **region-specific GM crops** suited to Indian conditions and nutrition needs, with **clear IPR-sharing mechanisms** and increased **funding for biofortified crop R&D** .
- **Inclusive and Responsible GM Crop Governance:** Adopt **farmer-centric policies** ensuring access to **quality seeds, training, insurance, and participatio** n in decision-making, while preventing **seed monopolies** and preserving **indigenous varieties** through a national gene bank.
  - Ensure **coexistence of GM and non-GM crops** via **buffer zones and isolation** distances, and implement **robust GM labeling** , **public awareness, and strict enforcement against illegal cultivation.**
- **Global Standards & Nutrition Focus:** Engage in **international forums** to harmonize **biosafety norms** and **trade regulations** . Prioritize **biofortified GM crops** like **Golden Rice** , **iron-rich pulses** , and **zinc-enriched wheat** to address **micronutrient deficiencies** . Launch **pilot programs** with **health experts** to demonstrate **tangible health benefits** .

Conclusion

India's GM crop journey, marked by the success of **Bt cotton** and a prolonged policy deadlock reflects the tension between **scientific potential** and **regulatory hesitation** . In the face of **climate challenges** , **nutritional deficiencies** , and **trade vulnerabilities** , a **science-driven** , **farmer-focused** , and **innovation-enabling** approach is essential. As former PM **Atal Bihari Vajpayee** rightly said, *"What IT is to India, BT is to Bharat"* , a vision that must now be translated into action.

Drishti Mains Question

How can genetically modified crops contribute to India's food and nutritional security amid climate change and growing population? Evaluate the potential and risks associated with their widespread adoption.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q1. Other than resistance to pests, what are the prospects for which genetically engineered plants have been created? (2012)

1. To enable them to withstand drought
2. To increase the nutritive value of the produce
3. To enable them to grow and do photosynthesis in spaceships and space stations
4. To increase their shelf life

Select the correct answer using the codes given below:

(a) 1 and 2 only

(b) 3 and 4 only

(c) 1, 2 and 4 only

(d) 1, 2, 3 and 4

Ans: (c)

Q2. Bollgard I and Bollgard II technologies are mentioned in the context of (2021)

(a) clonal propagation of crop plants

(b) developing genetically modified crop plants

(c) production of plant growth substances

(d) production of biofertilizers

Ans: (b)

Mains

Q. How can biotechnology help to improve the living standards of farmers? (2019)

World Population Day 2025 and India's Youth

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For Prelims: World Population Day , **Demographic Dividend** , **National Youth Policy 2014** , **Startup India** , **National Service Scheme (NSS)** , **Unemployment** , **Pradhan Mantri Kaushal Vikas Yojana** .

For Mains : Opportunities and challenges related to the youth population in India, Steps needed to empower them.

Source: TH

Why in News?

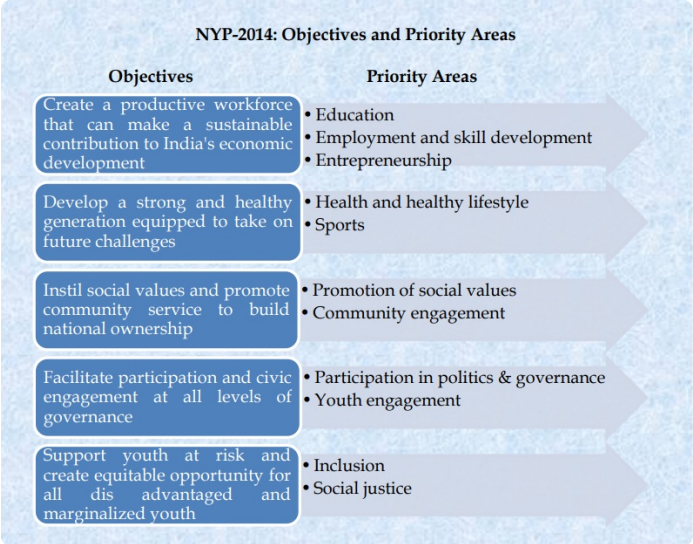
World Population Day , observed on **11 th July** , was established by the **UN in 1989** to raise awareness about **population issues** and **reproductive health rights** .

- The **theme** for World Population Day 2025 is **“Empowering young people to create the families they want in a fair and hopeful world,”** which focuses on **empowering youth** to make informed choices about **sexual and reproductive health** .

What is the Status of Youth in India?

- **Youth Demographic Profile:** According to **UNICEF** , India has the **world’s largest youth population** , with **371 million** people in the **15 to 29 age group.**
  - As per the **Technical Group on Population Projections (2021)** , **youth (15–29 years)** accounted for **27.2%** of the population in 2021, but are projected to decline to **22.7% by 2036** .
- **Demographic Significance:** A large **youth population** enhances **workforce participation** and reduces **dependency ratios** , creating a **demographic dividend** for growth.
- **Policy & Governance: Department of Youth Affairs** , under the **Ministry of Youth Affairs and Sports** , is the **nodal agency** for youth-related policies and programs.
  - Its twin objectives are **personality development** and **nation-building** .
- **Evolution of Youth Policy:**
  - **National Youth Policy, 1988:** It was India’s first structured youth policy, stressing their **role in national development** and focusing on **personality and skill development** .
  - **National Youth Policy 2003:** The **National Youth Policy 2003** , replacing the 1988 policy, defined **youth as 13–35 years** and aimed to promote **patriotism** , **social justice** , and **national integration** .

- **National Youth Policy 2014:** **National Youth Policy 2014** **replaced the 2003 policy** , defines **youth as 15–29 years** , and envisions **empowering them to realize their full potential** and enable **India to excel on the global stage** . It outlined **5 key objectives** and **11 priority areas** .



- **National Youth Policy 2024:** The Government has updated the **National Youth Policy (NYP) 2014** and released a draft for **NYP 2024** , outlining a **10-year vision** for youth development aligned with the **Sustainable Development Goals (SDGs). Key highlights are:**
  - Roadmap to achieve youth development goals by **2030** .
  - Alignment with **NEP 2020** to enhance **career and life skills** .
  - Promotion of **leadership** , **volunteering** , and **technology-driven empowerment** .
  - Focus on **mental and reproductive health** , **sports** , and **fitness** .
  - Commitment to **safety** , **justice** , and support for **marginalized youth** .

What Opportunities Does India's Youth Population Present?

- **Demographic Dividend Advantage:** A **youth-dominated population** leads to a **lower dependency ratio** and more **economically active citizens** , which can boost **GDP growth** and **per capita income** .
  - According to the **World Bank** and **NITI Aayog** , tapping this potential could add **up to USD 1 trillion to India’s GDP by 2030.**
- **Innovation and Entrepreneurship:** Driven by **young entrepreneurs** , India’s **startup ecosystem** has flourished, with the **Startup India** **initiative** playing a key role in promoting a **youth-led culture of innovation.**
- **Global Workforce Advantage:** India’s **youth workforce** can address **global talent shortages** in sectors like **tech, healthcare, and engineering** , while **competitive labor costs** position the country as a prime hub for **manufacturing and services** .
  - E.g., Facing an ageing population, **Germany** and Japan are turning to **India** to fill its **labour gap** with **skilled workers.**
- **Social & Cultural Influence:** Indian **youth are challenging stereotypes** , advancing **gender equality** , and leading **social change** , while also expanding **India’s soft power** globally through **films** , **music** , and **digital content** .

- E.g., Youth-led movements like **Pinjra Tod** (Break the Cage) fight for women's rights and freedom.

- **Strengthening Democracy:** Engaging **youth** through initiatives like the **National Service Scheme (NSS)** fosters **civic awareness** , **leadership** , and strengthens **democratic accountability** .
  - E..g, Through **Swachh Bharat Abhiyan** , the **Prime Minister** mobilized **youth** as key drivers of **cleanliness** , **behavioural change** , and **community leadership.**

What are the Key Challenges Faced by Youth in India?

- **Sexual & Reproductive Health Issues:** India faces a **high rate of unintended pregnancies (36%)** and **unmet reproductive goals (30%)** , with **23% experiencing both** .
  - Though **child marriage has declined** , it still exists at **23.3%** nationally (**NFHS-5**).
- **Gender Inequality: Patriarchal norms** limit **young women's autonomy** in **education** , **employment** , and decision-making, with many lacking access to **gender-sensitive workplaces** , **skills training** , and **financial independence** .
- **Mental Health Crisis:** Youth are facing a **mental health crisis** marked by **increasing stress, anxiety, and depression** , along with a **lack of accessible support** and **persistent stigma** .
  - In **2020-22, India** recorded over **60,700 deaths** due to suicide in the **15–29 age group** , the highest in the world.
- **Employment Crisis:** A **skill mismatch** between **education and job market needs** has led to **rising unemployment among educated youth** , while many are forced into **unstable gig economy jobs with limited benefits** .
- **Substance Abuse:** Youth are increasingly vulnerable to **drug addiction** , driven by **peer pressure** and **stress** , with a **lack of adequate rehabilitation facilities** worsening the issue.

Government's Initiatives Related to Youth

- **National Youth Policy-2014**
- **Pradhan Mantri Kaushal Vikas Yojana**
- **YUVA: Prime Minister's Scheme For Mentoring Young Authors**
- **PM-DAKSH (Pradhan Mantri Dakshta Aur Kushalta Sampann Hitgrahi)**
- **Pradhan Mantri Mudra Yojana**

What Steps Should Be Taken to Empower Youth in India?

- **Education Revolution:** Promote **critical thinking** , **creativity** , and **problem-solving** by overhauling rote learning under the **National Education Policy 2020** , ensure **digital literacy** , and integrate **vocational training** into school curricula.
- **Job-Linked Skill Development:** Encourage **apprenticeship opportunities** in large companies under **PM National Apprenticeship Promotion Scheme (PM-NAPS)** , launch **upskilling missions** in emerging sectors, and promote **youth entrepreneurship** through financial support.
- **Healthcare Access:** Establish accessible **mental health support** , ensure **nutrition security** through

fortified meals, and enhance **reproductive health services with free contraceptives in rural areas.**

- **Sports & Arts Infrastructure:** Expand **sports and arts infrastructure** by strengthening rural training facilities, offering **financial support to young artists** , and promoting **international cultural exchange programs** for talented youth.
- **Digital Empowerment** : Bridge the **digital divide** by expanding internet access, building **youth digital skills** , and strengthening **Digital India** for inclusive digital growth.

Conclusion

India’s **youth** , the world’s **largest** , offer a transformative **demographic dividend** . To harness this potential, India must address challenges like **unemployment** , **mental health** , and **gender gaps** while boosting **education** , **skills** , and **innovation** . Strategic **policies** and **inclusive growth** can empower youth to drive India’s **global rise** , ensuring **sustainable development** and **equitable progress** .

Drishti Mains Question:

Discuss the challenges faced by India’s youth in realizing their full potential. Suggest measures to convert these challenges into opportunities.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. Disguised unemployment generally means (2013)

(a) large number of people remain unemployed

(b) alternative employment is not available

(c) marginal productivity of labour is zero

(d) productivity of workers is low

Ans: (c)

Mains

Q. Most of the unemployment in India is structural in nature. Examine the methodology adopted to compute unemployment in the country and suggest improvements. (2023)

Q. The nature of economic growth in India in recent times is often described as jobless growth. Do you agree with this view? Give arguments in favor of your answer. (2015)

Initiatives Driving the Agricultural Growth in India

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Source: PIB

Why in News?

At the **16 th Agriculture Leadership Conclave** , the Union Minister of Commerce and Industry, highlighted major initiatives driving agricultural growth in India, focusing on soil health, credit access, digital innovation, and global trade.

What are the Initiatives Driving the Agricultural Growth in India?

- **Minimum Support Price (MSP) Enhancements:** **MSP** for several crops has seen significant increases, with pulses and oilseeds witnessing up to 98% higher MSP, directly benefiting farmers by ensuring remunerative prices for their produce.
  - This policy aims to reduce farmers' vulnerabilities to market fluctuations and provide a financial cushion for their efforts.
- **Soil Health Cards:** Over **25 crore** **Soil Health Cards** have been distributed. SHCs provide farmers with vital information on the health of their soil, guiding them on the type and amount of fertilisers to use, thereby improving crop yield and reducing over-reliance on harmful chemicals.
- **Kisan Credit Card (KCC):** Ensures wider access to **crop loans and agricultural credit** , supporting timely inputs and farm activities.
  - As of 2024, there are 7.75 crore active **KCC accounts** with Rs 9.81 lakh crore in outstanding loans. Additionally, 1.24 lakh KCCs have been issued for fisheries and 44.4 lakh for animal husbandry activities.
- **PM-KISAN Samman Nidhi:** It is a **Central Sector scheme** with 100% funding from Government of India. Under the scheme an income support of 6,000/- per year in three equal installments will be provided to all land holding farmer families.
  - The fund will be directly transferred to the bank accounts of the beneficiaries.
  - As of 2024, **11.8 crore farmers have received financial assistance** , making it one of the world’s largest **Direct Benefit Transfer (DBT)** schemes.
- **e-NAM Integration: 1,400 mandis** have been linked with the **electronic National Agriculture Market (e-NAM)** to improve transparency and price realisation.
- **Fertiliser Subsidies:** The Indian government budgeted over **Rs 1.67 lakh crore– nearly 70% of India's agriculture budget–** for fertiliser subsidy for the financial year 2025-26. Fertiliser subsidies are nearly 40% of India's total subsidy spending.
- **Free Trade Agreements (FTAs):** India’s **FTAs** with **Australia, UAE, EFTA nations, and the UK** have opened up new international markets for Indian agri-products.
- **Digital Agriculture:** Emphasis on **AI, geospatial tech, weather forecasting, and vertical farming**

to modernize the farm sector.

  - The **Digital Agriculture Mission** , approved in 2024, aims to build a farmer-centric digital ecosystem. It includes key components like **AgriStack,** which digitizes farmers' data, land, and crop details to ensure access to services like credit and insurance.

- **Support to Farmer Producer Organisations (FPOs):** The **"Formation and Promotion of 10,000 FPOs" scheme,** launched in 2020, aims to empower small and marginal farmers by collectivising them for better market access, reduced input costs, and improved incomes.
  - As of February 2025, around 30 lakh farmers (40% women) have joined FPOs.
  - FPOs are supported by multiple ministries including Agriculture, and Food Processing. A **dedicated Credit Guarantee Fund** ensures improved credit access, enhancing the viability of FPOs and boosting rural entrepreneurship.
- **Agri-Exports and Value Addition:** India's agriculture and fisheries exports have reached Rs 4.5 lakh crore and hold the potential to scale up to Rs 20 lakh crore.
- **Infrastructure and Irrigation:** Investments in **warehousing, cold chains, drip irrigation** , and organic/natural farming practices are being scaled up.
  - The **Agricultural Infrastructure Fund (AIF) scheme** , has been expanded to strengthen agrarian infrastructure through broader project eligibility, including viable community farming assets, integrated processing projects, and convergence with **PM-KUSUM** to promote clean energy.
  - From 2015-2025, 96.97 lakh ha has been covered under micro irrigation through **Per Drop More Crop (PDMC) Scheme,** which includes 46.37 lakh ha under drip irrigation and 50.60 lakh ha under sprinkler irrigation.

India's Agricultural Growth

- The **agriculture & allied sector grew at 5% annually** (FY17–FY23), with gross value added (GVA) share rising from 24.38% (2014-15) to 30.23% (2022-23). Agriculture income rose by 5.23% annually over the last decade.
- In FY24, India's agri-food exports reached USD 46.44 billion (11.7% of total exports). The share of processed food rose from 14.9% in FY18 to 23.4% in FY24, highlighting growing value addition.

Drishti Mains Question:

Critically assess India's integrated approach towards agricultural growth and increasing the farmers' income.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Mains

Q. Explain various types of revolutions, took place in Agriculture after Independence in India. How have these revolutions helped in poverty alleviation and food security in India? **(2017)**

Q. Given the vulnerability of Indian agriculture to vagaries of nature, discuss the need for crop insurance and bring out the salient features of the Pradhan Mantri Fasal Bima Yojana (PMFBY). **(2016)**

International Criminal Court (ICC)

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Source: IE

The **International Criminal Court (ICC)** has issued arrest warrants against **Taliban** leaders under **Article 7(1)(h) of the Rome Statute** for **crimes against humanity,** citing systematic **gender and political persecution** in Afghanistan.

International Criminal Court (ICC)

- **About:** ICC is the **world's first permanent international court** established to **prosecute individuals** for the **most serious crimes of global concern** .
  - It is headquartered in **Hague, Netherlands** and governed by the **Rome Statute** , which is the **founding treaty of the ICC,** adopted on **17 th July 1998** and entered into force on **1 st July 2002** .
- **Crimes Under ICC:** The **Rome Statute** grants the ICC jurisdiction over 4 core international crimes- **Genocide, Crimes against Humanity, War Crimes, Crime of Aggression.**
- **Jurisdiction & Mandate:** The ICC prosecutes **individuals** , not states, for grave international crimes and cover **crimes committed after 1 st July 2002** , the date the **Rome Statute** came into effect.
  - It acts **only when national jurisdictions are unwilling or unable** to prosecute.
  - The Court has jurisdiction **in countries that are parties to the Rome Statute** , or in **non-member states if referred by the UN Security Council (UNSC)** .
- **Parties to ICC:**
  - The **Rome Statute** has been ratified by **125 countries** , including the **UK and most European nations** . Over **30 others have signed** but not yet ratified the treaty.
  - Afghanistan has been a member since 2003, while **India** , along with countries like the **US, Israel, China** are **not parties** to the **ICC.**
    - India has raised objections due to concerns over **sovereignty** and the **UNSC's referral powers** within the Court's framework.
- **Structure:** The **Presidency** , **Judicial Divisions** , **Office of the Prosecutor** and the **Registry** are its 4 main organs.
  - The **Assembly of States Parties (ASP),** consisting of representatives from **member states,** provides **legislative oversight and ensures proper governance of the ICC.**
- **Enforcement:** The ICC **lacks its own police** or **enforcement mechanism** and relies on voluntary cooperation of member states for arresting and surrendering accused individuals, freezing assets, and implementing its sentences.

Differences between the ICJ and the ICC

The International Court of Justice (ICJ) and the International Criminal Court (ICC) are two courts with different functions within the international legal system.

	ICJ International Court of Justice	ICC International Criminal Court
Established	1945	2002
UN-relationship	Highest court of the UN	Not part of the UN
Location	The Hague, the Netherlands	The Hague, the Netherlands
Jurisdiction	UN member-states	Individuals
Types of cases	Legal disputes between states and requests for advisory opinions on legal questions	Prosecutes individuals for the most serious crimes as per the Rome Statute
Appeals	No	Yes
Enforcement power	None - relies on the UN Security Council to uphold judgements, with permanent members having veto power	None - relies on cooperation from member states to enforce its decisions

Read More: International Criminal Court (ICC) , ICJ Proceedings: South Africa vs. Israel

INS Nistar

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Source: PIB

The **Indian Navy** has inducted **INS Nistar** , its first **indigenously built Diving Support Vessel (DSV)** , delivered by **Hindustan Shipyard Limited (HSL), Visakhapatnam** .

- A **DSV** is a **specialized naval ship** designed for **underwater operations** , including **diver deployment, rescue missions** , and **submarine crew recovery** .

INS Nistar

- **Technical Specifications:** It measures approximately **120 metres in length** with a **displacement of around 10,000 tonnes** .
  - It has an **endurance of over 60 days at sea** , is **capable of supporting helicopter operations** , and is equipped with a **15-tonne subsea crane** to facilitate deep-sea recovery missions.
- **Operational Capabilities:** INS Nistar functions as the **Mother Ship for Deep Submergence Rescue Vessels (DSRV)** for submarine rescue, features a **Dynamic Positioning System (DPS)** for precise station-keeping, **Side-Scan SONAR** for seabed mapping, and supports **search, recovery, diving, and salvage operations** .
  - Upon commissioning, the vessel will be inducted into the **Eastern Naval Command** to enhance capabilities in **deep-sea diving** and **submarine** **rescue operations** .
    - The Indian Navy is organized into **3 major commands** : **Western, Eastern, and Southern Naval Commands** .
- **Legacy and Significance:** INS Nistar continues the legacy of the original vessel acquired from the **USSR in 1969** (decommissioned in 1989), significantly enhancing **India’s submarine rescue capability** , reinforcing **strategic maritime autonomy** , and strengthening India’s role as a **net security provider in the Indian Ocean Region (IOR)** , which supports India’s **SAGAR (Security and Growth for All in the Region)** initiative.

Read More: INS Nirdeshak

Revival of Lotus in Wular Lake

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Source: IE

After three decades of ecological dormancy caused by the 1992 flood, lotus flowers have once again begun blooming in Kashmir's Wular Lake due to focused conservation efforts led by **Wular Conservation and Management Authority (WUCMA)** .

- **Lotus stems** (locally called *Nadru*) couldn't grow since **1992** as **seeds were buried under heavy silt** , but the **rhizomes** (*creeping root stalks*) **survived deep below** and **sprouted once the silt was removed.**

Wular Lake

- **About:** It is the **largest freshwater lake in India** and the **second largest in Asia** (after **Lake Baikal** in Siberia, Russia), located between **Bandipora** and **Sopore** in **Jammu & Kashmir** .
- **Geography:** It is located at the **foothills of the Haramuk Mountain** and is **fed by the Jhelum River** along with **25 other streams** that feed it.
  - It has a small island in its centre called the **Zaina Lank** , constructed by **Zainul-Abi-Din** , **8 th sultan** of Kashmir.
- **Ecological Importance:** In **1990** , it was **designated as a Wetland of International Importance** under the **Ramsar Convention** .
- **Geology:** The **basin of the lake** was **formed due to tectonic activity.** It is also believed to be a **remnant** of the **ancient Satisar Lake.**
- **Avian Fauna: Wular Lake** is home to **56 bird species** , **39 fish species** , and **over 20 types of plants** .
  - Notable **migratory bird species** found here include the **White-bellied Heron** , **Pink-headed Duck** , **Baer's Pochard** , and the **Kashmir Catfish** .

Lotus (*Nelumbo Nucifera*)

- The lotus is a **perennial plant** with **bowl-shaped flowers** that have petals with an 8 to 12 inch diameter.
  - It is an **aquatic plant** that thrives in **nutrient-rich, murky conditions** .
- It comes in shades of **pink hues, yellow or white** .
- It is recognised as the **national flower of India** . The lotus is a recurring motif of **Hindu and Buddhist religions.**

Read More: Disputes Related to Indus Water Treaty

Himalayas and Kashmir’s Climate Shift

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Source: PIB

A recent **palaeobotanical study** conducted by **scientists from the Birbal Sahni Institute of Palaeosciences (BSIP),** Lucknow, has revealed that the **Kashmir Valley** , currently known for its **cool Mediterranean-type climate** , was **once a warm and humid subtropical region** approximately 4 million years ago.

- **BSIP was founded in 1946** to promote research in palaeobotany, and **its foundation stone was laid by Prime Minister Jawaharlal Nehru** in 1949. It received **UNESCO** support (1951–53) and became an autonomous body in **1969** , funded by the **Department of Science and Technology (DST).**

Study on Kashmir’s Climate Shift

- **About the Study:** The study, based on a **historic fossil leaf** collection at BSIP, was prompted by a **climatic mismatch** between s **ubtropical fossil specimen** s and **Kashmir’s present-day temperate flora,** leading to a **fresh investigatio** n into the valley’s ancient climate.
- **Scientific Techniques Used:** To reconstruct Kashmir’s palaeoclimate, the study used two key methods- **CLAMP (Climate Leaf Analysis Multivariate Program)** , which analyzed **leaf morphology** (shape, size, margins) to estimate past **temperature and rainfall** , and the **Coexistence Approach** , which compared **fossil taxa** with their **modern relatives** to infer ancient **climate ranges** .
- **Key Findings: Fossilized leaves** from the **Karewa sediments from Kashmir** indicate that the valley once supported a **lush subtropical forest** .
  - Many fossils resemble modern species from **warm and humid climates** , contrasting sharply with today's **alpine and coniferous vegetation** .
  - The study attributes this climatic shift to the **tectonic uplift of the Pir Panjal Range** , part of the **sub-Himalayan system** .
    - This uplift acted as a **geological barrier** , blocking the **Indian summer monsoon** , thereby reducing rainfall and transforming the region’s climate over geological timescales.
- **Significance of the Study:** The study enhances **climate modelling** by linking **tectonic activity with ecosystem change** , highlights the **sensitivity of Himalayan ecosystems** , and offers analogues for understanding **monsoon dynamics** , **glacial melt** , and **topography interactions** .
  - It underscores the **policy relevance of palaeoclimate research** for **biodiversity conservation** , **disaster preparedness** , and **sustainable development** in fragile mountain regions.

Read More: Himalayas More Prone to Extreme Weather Events

Global HIV/AIDS Fight at Risk

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Source: IE

According to the **UNAIDS ,** a sudden halt in US funding for the **President's Emergency Plan for AIDS Relief (PEPFAR)** threatens to reverse decades of progress in the **fight against HIV/AIDS .**

- In **January 2025** , the **US** suddenly **withdrew** its **USD 4 billion pledge** , potentially leading to **4 million more AIDS-related deaths** and **6 million new HIV infections** by **2029** .
- A breakthrough injectable drug, **Yeztugo** , shows **100% prevention efficacy** — but the **high price is** keeping it out of reach for most low- and middle-income countries.
- **PEPFAR** , launched in **2003** , aims at **preventing Human Immunodeficiency Virus (HIV) infections** , and saves lives.
- **UNAIDS (Joint United Nations Programme on HIV/AIDS)** is the UN's leading global agency dedicated to:
  - **Ending AIDS** as a public health threat by **2030**
  - **Coordinating** HIV response across **11 UN agencies** (e.g., WHO, UNICEF, World Bank)
  - Advocating for equitable access to **prevention, treatment, and care** .

Read More: **US Agency for International Development**