Islamic State-Khorasan

Why in News?

Recently, a terror attack at **Moscow's Crocus City Hall** claimed over 137 lives, reigniting concerns about the resurgence of the **Islamic State (IS)** and its growing terror capabilities.

- Experts believe the attack was likely carried out by **IS Khorasan (IS-K), the group's Afghanistan-Pakistan branch.**

What is the Islamic State-Khorasan (IS-K)?

- **IS-K:**
    - **IS-K, the Afghanistan-based arm of the IS,** has been responsible for recent attacks, including the twin bombings in Kerman, Iran.
    - Established in Afghanistan's Nangarhar province in 2015, IS-K comprises **Central Asian militants** and has gained prominence since the Taliban's return to power in August 2021.
    - IS-K targets **Afghanistan's Shia minority** and seeks to recruit radicalised youths from Central Asia and Afghanistan's Tajik and Uzbek minorities.
    - IS-K utilises **anti-Russian and anti-Iranian propaganda** to recruit among Central Asians, Afghans, and Pakistanis.
        - Geopolitical instability in Afghanistan and parts of West Asia provides fertile ground for IS-K to regroup and launch attacks.
- **Security Challenges for Russia:**
    - Russia, hosting thousands of Central Asian migrant labourers, faces a serious security challenge due to IS-K's activities.
    - Russia faces pressure to enhance security measures and address the root causes fueling IS-K's resurgence.

Islamic State:

- The Islamic State (IS) also known as the **Islamic State of Iraq and Syria (ISIS) and the Islamic State in Iraq and the Levant (ISIL)**, is a **Salafi-Jihadist militant organisation.**
- It is a **transnational Sunni insurgent group** operating primarily in western Iraq and eastern Syria that seeks to establish an **Islamic caliphate in Iraq and Syria** and to create a global Salafi-Jihadist movement.
- IS claimed the establishment of a **"province" in India called "Wilayah of Hind".**

Prominent India-Centric Terror Organizations in Pakistan

Name	Formation	FTO Design-ation	About	Status in India as per the Unlawful Activities (Prevention) Act, 1967
Lashkar-e-Taiba (LET)	Late 1980s	2001	Responsible for major **2008 attacks in Mumbai** and numerous other high-profile attacks.	Banned
Jaish-e-Mohammed	2000	2001	Along with LET, it was responsible for the **2001**	Banned

(JEM)			attack on the Indian parliament.	
Harakat-ul Jihad Islami (HUJI)	1980	2010	Initially formed to fight the Soviet army, later redirected efforts toward India. Operates in Afghanistan, Pakistan, Bangladesh, and India, **seeking annexation of Kashmir into Pakistan.**	Banned
Harkat-ul-Mujahideen (HUM)	1985	1997	Operates mainly from **Pak-Occupied Kashmir and some Pakistani cities.**	Banned
Hizb-ul Mujahideen	1989	2017	The militant wing of **Pakistan's largest Islamist political party,** and is one of the largest and oldest militant groups operating in Jammu and Kashmir.	Banned
Al Qaeda	1988	1999	Operates primarily from former Federally Administered Tribal Areas in Karachi, and Afghanistan.	Banned

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims

Q. Hand-in-Hand 2007' a joint anti-terrorism military training was held by the officers of the Indian Army and officers of the Army of which one of the following countries? (2008)

(a) China
(b) Japan
(c) Russia
(d) USA

Ans: (a)

UP Board of Madarsa Education Act, 2004

For Prelims: Secularism**,** Fundamental Rights**,** Right to Education (RTE) Act, 2009**,** Sarva Shiksha Abhiyan **,** PM SHRI Schools

For Mains: Education, Government Policies & Interventions, Issues Arising Out of Design & Implementation of Policies

Source: IE

Why in News?

The Allahabad **High Court (HC)** has struck down the **Uttar Pradesh Board of Madarsa Education Act, 2004, as unconstitutional.**

What is the Uttar Pradesh Board of Madarsa Education Act, 2004?

- **Overview of the Act:**
    - The Act aimed to regulate and govern the functioning of **madrasas (Islamic educational institutions)** in the state of Uttar Pradesh.
        - It provided a framework for the establishment, recognition, curriculum, and administration of madrasas across Uttar Pradesh.
        - Under this Act, the **Uttar Pradesh Board of Madarsa Education** was established to oversee and supervise the activities of madrasas in the state.
- **Concerns Regarding the Act:**
    - **Constitutional Violation:**
        - The act has been deemed **unconstitutional by the Allahabad HC,** as it **promotes education segregated along religious lines,** contradicting the **principle of secularism** enshrined in the Indian Constitution and **fundamental rights.**
        - The Act's provisions were criticised for failing to **ensure quality compulsory education up to the age of 14 years,** as mandated by **Article 21 A of the Constitution.**
        - Concerns were raised regarding the exclusion of madrasas from the **Right to Education (RTE) Act, 2009** potentially depriving students of **universal and quality school education.**
    - **Limited Curriculum:**
        - Upon examination of madrasa syllabi, the court noted a curriculum **heavily focused on Islamic studies,** with limited emphasis on modern subjects.
        - Students were required to **study Islam** and its doctrines to progress, **with modern subjects** often included as optional or offered minimally.
    - **Conflict with Higher Education Standards:**
        - The Act was deemed to conflict with **Section 22 of the** University Grants Commission (UGC) Act, 1956, raising questions about its compatibility with **higher education standards.**
- **High Court Ruling:**
    - The Allahabad HC declared the **Uttar Pradesh Board of Madarsa Education Act, 2004** unconstitutional due to violations of secular principles and fundamental rights.
        - It directed the **state government to accommodate madrasa students in recognised regular schools** and raised concerns about the limited curriculum focused on Islamic studies.
    - The ruling highlighted potential adverse effects on students' access to quality education and prompted legal arguments regarding constitutional violations.

What are the Constitutional Provisions Regarding Education in India?

Provisions	Article
The State shall endeavour to **provide early childhood care and education for all children** until they complete the **age of six years**	Article 45
The **86th Constitutional Amendment Act of 2002**, provided the Right to Education as a fundamental right in Part III of the Constitution and made education a fundamental right for children **between the ages of six and fourteen.**	**Article 21A**
Promotion of education and economic interests of Scheduled Castes, Scheduled Tribes, and other weaker sections of the people.	Article 46
Freedom to attend religious education in certain educational institutions established under an **endowment or trust and administered by the state.**	Article 28
Education of minorities, protection of interests of minorities	Article 29

Right of minorities to establish and administer educational institutions	Article 30
Parents and guardians must provide educational opportunities for their children between the ages of 6 and 14.	Article 51A(k)

What are the Initiatives Related to Education?

- **Sarva Shiksha Abhiyan (SSA)**
- **Rashtriya Madhyamik Shiksha Abhiyan.**
- **Rashtriya Uchhattar Shiksha Abhiyan (RUSA)**
- **National Programme on Technology Enhanced Learning.**
- **PRAGYATA**
- **Mid-Day Meal Scheme**
- **Beti Bachao Beti Padhao**
- **PM SHRI Schools**

Drishti Mains Question:

Q. Analyse the challenges arising from the design and implementation of government policies in the education sector.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims

Q. Which of the following provisions of the Constitution does India have a bearing on Education? (2012)

1. Directive Principles of State Policy
2. Rural and Urban Local Bodies
3. Fifth Schedule
4. Sixth Schedule
5. Seventh Schedule

Select the correct answer using the codes given below:

(a) 1 and 2 only
(b) 3, 4 and 5 only
(c) 1, 2 and 5 only
(d) 1, 2, 3, 4 and 5

Ans- (d)

Mains

Q1. How have digital initiatives in India contributed to the functioning of the education system in the country? Elaborate on your answer. **(2020)**

Q2. Discuss the main objectives of Population Education and point out the measures to achieve them in India in detail. **(2021)**

Solar Waste Management

Source: IE

Why in News?

Recently, a report titled **'Enabling a Circular Economy in India's Solar Industry – Assessing the Solar Waste Quantum'** shed light on India's escalating **solar waste** crisis.

- The study was conducted by the **Ministry of New and Renewable Energy (MNRE)** in collaboration with experts from the **Council on Energy, Environment and Water** (a leading not-for-profit policy research institution in Asia)

What are the Key Highlights of the Report?

- **Solar Waste Projection:** The current solar capacity of India, as of FY23, has generated about **100 kilotonnes** (kt) of cumulative waste, which will increase to 340 kt by 2030.
  - This volume will increase 32 times by 2050 resulting in about 19000 kt of cumulative waste.
  - **77% of the cumulative waste generated by 2050** will be due to new capacities.
- **State-wise Contribution:** Around 67% of the projected waste by 2030 is expected to be produced by five states: **Rajasthan, Gujarat, Karnataka, Tamil Nadu, and Andhra Pradesh.**
  - Rajasthan will account for 24% of the waste generated by 2030, followed by Gujarat accounting for 16%, and Karnataka accounting for 12%.
- **Critical Minerals Content:** Discarded solar modules contain **critical minerals** essential for India's economic development and national security, including silicon, copper, tellurium, and cadmium.
  - The projected 340 kt of waste by 2030 is estimated to comprise **10 kt of silicon, 12-18 tonnes of silver, and 16 tonnes of cadmium and tellurium.**
- **Recommendations:**
  - The MNRE should maintain and periodically update a database of the installed solar capacity (containing details such as module technology, manufacturer, commissioning date, etc.) for accurate mapping of plausible waste generation centres.
  - The Ministry of Environment, Forest and Climate Change should issue guidelines for **collecting and storing solar waste.**
    - Furthermore, it should **promote the safe and efficient processing of stored waste.**
  - Solar cell and module producers should start developing **waste collection** and **storage centres** to adhere to the responsibilities assigned in the **Electronic Waste Management Rules 2022.**

What is Solar Waste?

- **About:** Solar waste is any waste generated during the **manufacturing of solar modules, or discarded modules and scrap** from manufacturing processes.
  - Modules are discarded at the end of their functional life or due to damages from transportation, handling, and installation.
  - Improper handling and landfilling of solar waste should be avoided. Proper treatment is necessary to **reclaim valuable minerals and prevent** the leaching of toxic materials like

lead and cadmium.

- **Potential Recyclability of Solar Waste:** Approximately **80% of solar panel components, including glass and metal frames, are recyclable**, according to the **International Renewable Energy Agency (IRENA).**
  - Solar waste can be recycled to recover materials like glass, aluminium, copper, silicon and silver.
  - Recycling can be broadly categorised into **mechanical, thermal and chemical processes.**
    - Each process helps in the recovery of specific minerals of varying purity grades.
- **Challenges of Solar Waste Recycling in India:**
  - **Lack of Policy Framework:** The absence of specific comprehensive laws governing solar waste management hinders the establishment of standardised recycling practices and may contribute to inconsistent recycling efforts.
  - **Complex Composition & Difficulty in Separation:** Solar panels contain various materials like silicon, glass, aluminium, and toxic elements like lead and cadmium.
    - Separating these components for effective recycling requires specialised technology, which is often expensive and not widely available in India.
  - **Informal Sector Involvement:** A large portion of solar waste ends up with informal recyclers who lack proper safety measures and often resort to environmentally harmful practices.
  - **Limited Market for Recycled Materials:** In India, lack of adequate demand for materials such as silicon wafers or glass cullet from recycled panels undermines the economic feasibility of recycling efforts.

What are India's Initiatives Related to Solar Energy?

- **National Solar Mission**
- **Solar Park Scheme**
- **Rooftop Solar Scheme**
- **PM-KUSUM scheme**
- **PM-Surya Ghar Muft Bijli Yojna**
- **International Solar Alliance**

How can India Manage Solar Waste Effectively ?

- **Stringent Regulatory Framework:** India can create a comprehensive regulatory framework to guide collection, recycling, and material-specific recovery targets for solar waste.
  - The framework can also encourage incentives like green certificates **to encourage recycling and mineral recovery.**
  - It should also include developing and implementing comprehensive policies to **promote** circular economy **principles** within the solar industry, encouraging resource efficiency, recycling, and reuse.
- **Formalisation of Informal Recyclers:** Integrating **informal recyclers into the formal system** through **training programs** and providing them with proper equipment. This ensures safe, environmentally sound practices and also provides them a secured employment.
- **Solar Panel Refurbishment and Second Life:** . By establishing dedicated refurbishment facilities, India can **clean, repair, and retest slightly damaged panels**, diverting them from the waste stream and providing affordable options for consumers.
- **Solar-waste Entrepreneurship:** Encouraging and incentivising green innovators to design and prototype new sustainable products using recycled solar materials, thereby fostering creativity and effective utilisation.

What are Electronic Waste Management Rules 2022?

- **About:** The management of E-Waste in India is presently regulated under E-Waste (Management) Rules, 2022 under the Environment Protection Act, 1986

- It includes waste management of solar PV modules, panels, and cells.
- **Applicability:** These rules apply to everyone involved in the life cycle of e-waste, including manufacturers, producers, refurbishers, dismantlers, and recyclers.
- **Key Features:**
  - **Extended Producer Responsibility (EPR):** Producers are obligated to fulfil specific recycling targets for the e-waste they introduce into the market. This is achieved through a system of **EPR certificates.**
  - **Solar E-Waste Management:** Producers are mandated to store the waste generated from **solar PV modules and cells** up to 2034 – 2035 as per guidelines laid down by the **Central Pollution Control Board (CPCB).**
    - The rules also mandate the filing of annual returns on the e-waste management portal up to 2034 – 2035.
  - **Hazardous Substances**: It mandates that every producer of Electrical and Electronic Equipment (EEE) and their components shall ensure that their products do not contain **lead, mercury and other hazardous substances** beyond the maximum prescribed concentration.
- **Exceptions:** The rules do not apply to the following:
  - Waste batteries regulated by the Battery Waste Management Rules, 2022
  - Packaging plastics governed by the Plastic Waste Management Rules, 2016
  - Micro enterprises defined in the Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006)
  - Radioactive wastes covered by the provisions of the Atomic Energy Act, 1962 (33 of 1962) and its rules.

Drishti Mains Question:

Assess the consequences of limited recycling infrastructure on India's renewable energy objectives and sustainable development goals especially considering the increasing amount of solar waste.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. Consider the following statements: (2016)

1. The International Solar Alliance was launched at the United Nations Climate Change Conference in 2015.
2. The Alliance includes all the member countries of the United Nations.

Which of the statements given above is/are correct?

(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Ans: (a)

Mains

Q. India has immense potential of solar energy though there are regional variations in its developments. Elaborate. **(2020)**

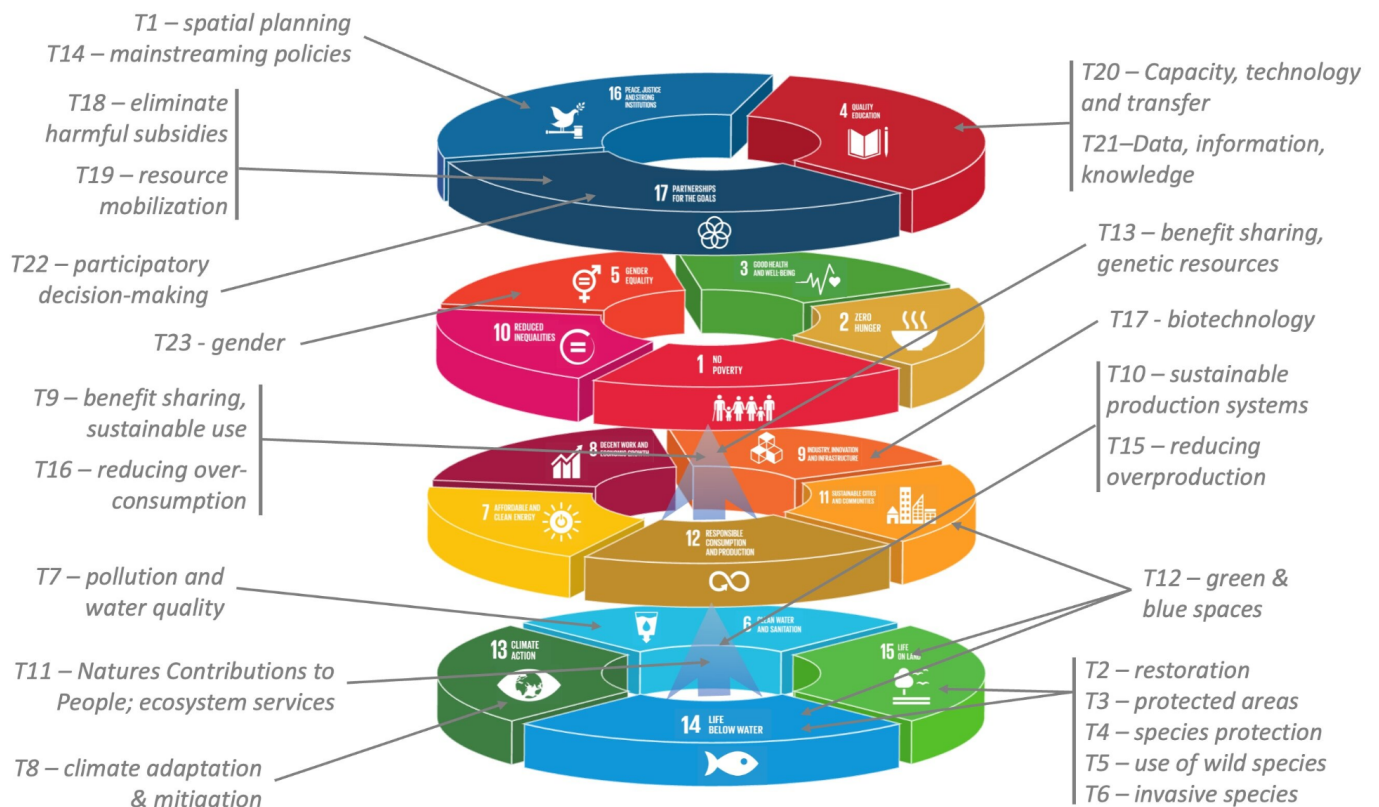# Kunming-Montreal GBF Implications for India's Indigenous Tribes

Source: TH

Why in News?

A recent symposium organised by the University of Arizona highlighted concerns about the **Kunming-Montreal Global Biodiversity Framework (GBF)** and its potential impact, particularly on **India's indigenous tribes.**

What is the Kunming-Montreal Global Biodiversity Framework?

- **About:** The Kunming-Montreal GBF was adopted during the **15th meeting of the Conference of the Parties to the UN Convention on Biological Diversity** in December 2022.
    - It aims to support the achievement of **sustainable development goals** and build on previous strategic plans.
    - The framework sets **four goals for 2050 and 23 targets for 2030,** covering planning, monitoring, reporting, finance, and capacity development.
        - Target 3 of the GBF aims to **increase protected areas to at least 30% of the world's terrestrial area by 2030, compared to the current 16%.**
    - All parties (including India) are committed to setting national targets to implement the GBF.

T1 – spatial planning
T14 – mainstreaming policies

T18 – eliminate harmful subsidies

T19 – resource mobilization

T22 – participatory decision-making

T23 - gender

T9 – benefit sharing, sustainable use

T16 – reducing over-consumption

T7 – pollution and water quality

T11 – Natures Contributions to People; ecosystem services

T8 – climate adaptation & mitigation

T20 – Capacity, technology and transfer

T21–Data, information, knowledge

T13 – benefit sharing, genetic resources

T17 - biotechnology

T10 – sustainable production systems

T15 – reducing overproduction

T12 – green & blue spaces

T2 – restoration
T3 – protected areas
T4 – species protection
T5 – use of wild species
T6 – invasive species

- **India's Progress:**
  - **Target 3 - 30x30:** India reports bringing 22% of its terrestrial area and 5% of marine and coastal areas under the **Protected Area Network.**
    - While India shows progress in expanding protected areas, concerns arise over legal definitions and diversions of these areas for non-conservation purposes.
    - **India's Forest (Conservation) Amendment Act of 2023** expanded the definition of forest activities to include commercial ventures such as zoos and ecotourism, reflecting a commitment to sustainable development.
      - However, the **Supreme Court** has issued directives that require any proposal for establishing zoos and safaris within forest areas(excluding protected areas) to **receive prior approval from the court.**
  - **Other** Effective Area-Based Conservation Measures (OECMs)**:** India identifies 14 categories of OECMs, including citizen-led initiatives, but the voluntary nature of their declaration raises questions about legal protection.

What Could be the Implication of Forest Expansion on India's Indigenous Tribes?

- **Implication**: Forest Expansion under GBF targets may restrict traditional land use **practices and livelihoods of indigenous communities** relying on natural resources, leading to increased poverty and food insecurity among indigenous populations.
  - About **84%** of India's **national parks** were established in areas inhabited by the indigenous peoples and meeting the GBF targets will threaten their existence.
- **Related Recent Instances**: Upgrading initiatives such as the **Kumbhalgarh Wildlife Sanctuary, Rajasthan to a** tiger reserve could displace 162 tribal villages.
  - Expansion plans for the **Nauradehi Sanctuary in Madhya Pradesh** may affect 62 predominantly tribal villages.
  - The notification for the **Barak Bhuban Wildlife Sanctuary** in Assam poses risks to Khasis, Dimasas, and other indigenous groups.

Note

This negative trend is also evident in other Southeast Asian countries where indigenous peoples face denial of basic rights in protected areas. Instances include **denial of housing, health, education, electricity, and security** to indigenous peoples in places like **Indonesia's Ujungkulon National Park.**

How India can Utilise Indigenous Tribes in Biodiversity Conservation?

- **Preserving Cultural Heritage through Ecotourism:** Supporting **ecotourism initiatives led by indigenous communities,** fostering cultural preservation and generating income.
  - A standout example is the **Wayanad tribal heritage villages in Kerala,** where community-led eco-tourism projects have not only boosted income but also safeguarded wildlife and empowered local communities.
- **Integrating Traditional and Professional Knowledge:** Government can leverage traditional knowledge of indigenous tribes like the **Khasi and Jaintia tribes of Meghalaya** have a rich tradition of protecting "sacred groves**(areas of natural vegetation that are preserved through local taboos and sanctions)."**
  - Integrating this knowledge with scientific surveys by institutions like the **Wildlife Institute of India (WII)** can create comprehensive conservation plans.
- **Promoting Co-Management Models:** Expanding **co-management models like the West Bengal Joint Forest Management (JFM) program** where indigenous communities work alongside forest departments to manage protected areas. This leverages their knowledge and fosters a sense of ownership.

Way Forward

- **Free, Prior, and Informed Consent:** The Indian government uphold Upholding Free, Prior, and Informed Consent (FPIC) which is a mandatory requirement before establishing protected areas on tribal lands under the **Panchayats (Extension to Scheduled Areas) Act,1996 .**
- **Social Impact Assessment:** Conducting **social impact assessments** to understand the potential impact of protected area expansion on existing livelihoods.
  - Following the example of **Namibia's Communal Conservancy program**, co-management models can be established for protected areas.
  - These models grant indigenous communities a stake in wildlife management, incentivizing sustainable practices.
- **Aligning Policies with International Standards:** India must align its national policies with **United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) principles** ensuring that indigenous rights and knowledge systems are respected along with sincere conservation efforts.

> **_Drishti Mains Question:_**
>
> Q. Assess the potential threats posed by Kunming-Montreal GBF Implications for India's Indigenous Tribes.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q. "Momentum for Change: Climate Neutral Now" is an initiative launched by (2018)

(a) The Intergovernmental Panel on Climate Change
(b) The UNEP Secretariat
(c) The UNFCCC Secretariat
(d) The World Meteorological Organisation

Ans: (c)

PDF Refernece URL: