



2021 Report on International Religious Freedom

For Prelims: 2021 Report on International Religious Freedom

For Mains: Effect of Policies & Politics of Countries on India's Interests, Religious Freedom in India and relation Issues

Why in News?

Recently, the 2021 Report on **International Religious Freedom (IRF)** was released by the US Department of State.

- The document is distinct from the IRF report released by the [US Commission on International Religious Freedom \(USCIRF\)](#).
- USCIRF is an **independent, bipartisan federal government entity** while the IRF is part of the US State Department. The former's report holds a statutory obligation.

What is the US Office of International Religious Freedom?

- **History:**
 - In 1998, the then-US President Bill Clinton **signed the International Religious Freedom Act (IRFA, 1998) into law.**
 - The Act led to the creation of the Office of International Religious Freedom headed by an Ambassador-at-Large within the State Department of the US government, and the establishment of a **US Commission on International Religious Freedom (USCIRF).**
- **Purpose:**
 - The US Office of International Religious Freedom (IRF) monitors **religiously motivated abuses, harassment, and discrimination globally.**
 - Additionally, it **recommends, develops and implements policies** and programs to address the mentioned concerns.
 - The IRF also mentions that it **assists emerging democracies globally to implement freedom of religion and conscience.**
 - Further, **identify and denounce regimes** that persecute on the basis of religion and assist NGOs globally in promoting religious freedom.

What are the Key Highlights of the Report?

- **India:**
 - **Rising Attacks:**
 - India has seen an **increase in attacks on people** (due to religious intolerance) and places of worship.
 - Attacks on members of religious minority communities, including killings, assaults, and intimidation, occurred throughout the year.
 - These included incidents of 'cow vigilantism' against non-Hindus based on allegations of cow slaughter or trade in beef.
 - **Anti-Conversion laws:**

- The India segment also **highlights [anti-conversion laws in the country](#)**, noting that **28 states have these laws** and arrests were made under them.
- It also notes that **several State governments announced plans to introduce anti-conversion laws.**
- **Arrests by Police:**
 - Police arrested **non-Hindus for making comments in the media** or on social media that were considered offensive to Hindus or Hinduism.
- **Suspected Terrorists Targeted:**
 - There have been attacks in Jammu and Kashmir targeting and killing civilians and migrants, including Hindu migrant workers from Bihar.
 - As per reports, **this caused extensive fear in the Hindu and Sikh communities**, leading to an exodus of migrants from the area.
- **Lynching:**
 - Incidents of lynching of Muslims in Tripura, Rajasthan, and Jammu and Kashmir in 2021 are also mentioned.
- **Foreign Contributions Regulations Act:**
 - **[Foreign Contributions Regulations Act](#)** was used by the government to constrain the functioning of **[Non-Governmental Organisations \(NGOs\)](#)**.
 - The government claims that the Act is used to strengthen oversight and accountability of foreign NGOs.
- **World:**
 - **About:**
 - **Vietnam and Nigeria have been cited as countries** where religious expression was being curtailed.
 - **Another set of examples of countries with religious freedom restrictions** cited include US ally Saudi Arabia, as well as China, Pakistan and Afghanistan.
 - China continues its genocide and repression of predominantly **[Muslim Uyghurs](#)** and other religious minority groups.
 - In Pakistan, many persons have been accused of **[blasphemy](#)**, or sentenced to death by courts in 2021.
 - **Progress Made:**
 - **Morocco, Timor Leste, Taiwan and Iraq** as examples of countries where progress had been made on religious freedom.
 - Some countries were not respecting the **“basic rights” of citizens** - including by using apostasy and blasphemy laws and curtailing religious expression - such as by restricting religious attire.

What is the State of Freedom of Religion in India?

- Freedom of religion in India is a **fundamental right guaranteed by Article 25-28** of the Constitution of India.
 - **[Article 25](#)** (Freedom of conscience and free profession, practice and propagation of religion).
 - **[Article 26](#)** (Freedom to manage religious affairs).
 - **[Article 27](#)** (Freedom as to payment of taxes for promotion of any religion).
 - **[Article 28](#)** (Freedom as to attendance at religious instruction or religious worship in certain educational institutions).
- Further, **[Article 29 and 30 of the Constitution](#)** deal with the protection of interests of minorities.

[Source: TH](#)

China's Expansion in the Pacific Island Countries

For Prelims: EEZs, Pacific Ocean, Indo-Pacific, Quadrilateral Security Dialogue, Blue Economy

For Mains: Pacific Islands Countries and its Significance, India-PICs Relations, Global Groupings

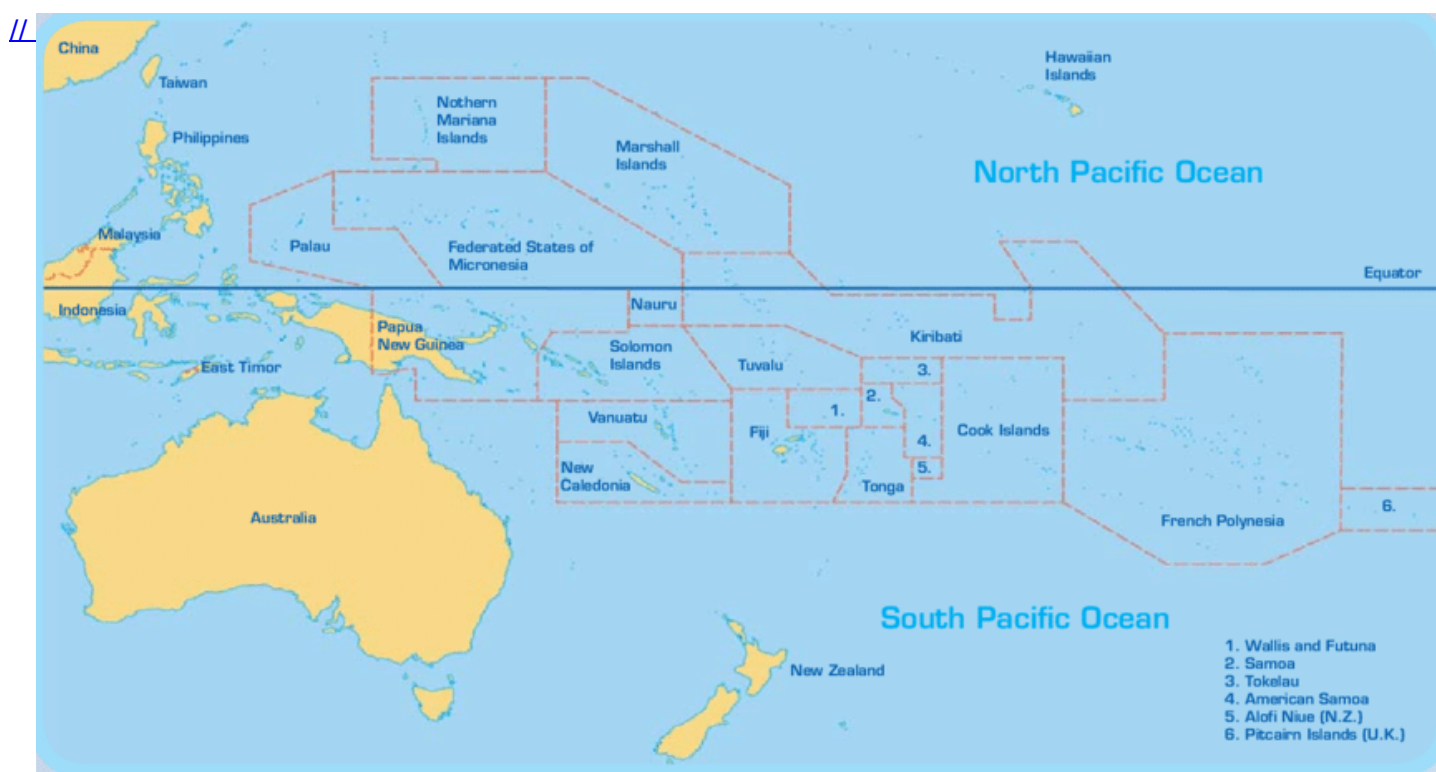
Why in News?

The Foreign Minister of China is currently on a **visit to ten Pacific Island Countries (PICs)** and has co-hosted with Fiji the Second China-Pacific Island Countries Foreign Ministers Meeting.

- However, China's effort to push through a comprehensive framework deal **failed to gain consensus among the PICs at the meeting.**
- In April 2022, China signed a **controversial [security deal with the Solomon Islands](#)**, which raised regional concerns.

What are Pacific Islands Countries?

- The Pacific Island Countries are a **cluster of 14 states which are located largely in the tropical zone of the Pacific Ocean** between Asia, Australia and the Americas.
 - They include Cook Islands, Fiji, Kiribati, Republic of Marshall Islands, Federated States of Micronesia (FSM), Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.



What is the Significance of the PICs?

- **Largest Exclusive Economic Zones (EEZs):**
 - The islands are **divided on the basis of physical and human geography** into three distinct parts — **Micronesia, Melanesia and Polynesia.**
 - Despite their small land area, the **islands are spread out over a wide swath of the**

Pacific Ocean.

- As a result, though they are some of the smallest and least populated states, they have **some of the largest [Exclusive Economic Zones \(EEZs\)](#) in the world.**
- **Economic Potential:**
 - Large EEZs have a **great deal of economic potential** since they can be used to exploit the wealth of fisheries, energy, minerals, and other marine resources present there.
 - Hence, they prefer to be **identified as Big Ocean States, rather than Small Island States.**
 - In fact, Kiribati and FSM, both PICs, have EEZs larger than that of India.
- **Role in Major Power Rivalry:**
 - These **countries have played an important role in major power rivalry** as springboards for power projection and laboratories for developing and demonstrating strategic capabilities.
 - The **major powers of the colonial era competed with each other** to gain control over these strategic territories.
 - The Pacific islands also **acted as one of the major theatres of conflict** during the [Second World War](#) — between imperial Japan and the U.S.
- **Major Nuclear Weapon Test Sites:**
 - **Some of the major nuclear weapon test sites of the U.S., the U.K. and France were located here** due to the remoteness of these islands from the Soviet Union and major population centres of the world.
- **Potential Vote Bank:**
 - The 14 PICs, **bound together by shared economic and security concerns**, account for as many votes in the United Nations, and act as a potential vote bank for major powers to mobilise international opinion.

What is the Significance of PICs for China?

- **Become an Effective Blue Water Capable Navy:**
 - The PICs lie in the **natural line of expansion of China's maritime interest** and naval power.
 - They are **located beyond China's 'First Island Chain'**, which represents the country's first threshold of maritime expansion.
 - The PICs are **located geostrategically** in what is referred to by China as its **'Far Seas'**, the control of which will make China an **effective Blue Water capable Navy** — an essential prerequisite for becoming a superpower.
- **Countering Quad:**
 - The **need to influence the PICs have become an even more pressing matter for China** at a time when the [Quadrilateral Security Dialogue](#) has emerged as a major force in the [Indo-Pacific](#) vis-à-vis China.
- **Role of Taiwan:**
 - Apart from the vast marine richness of the PICs, the [Taiwan](#) factor plays a major role in **China's Pacific calculus.**
 - **China, which considers Taiwan to be a breakaway territory**, is preparing for what seems like an inevitable military invasion.
 - In this context, **it becomes important to break Western domination of island chains** of the Pacific which could impede reunification.
 - Wooing the PICs away from the West and Taiwan **will therefore make the goal of Taiwan's reunification easier for China.**
 - China has been successful in getting diplomatic recognition from 10 out of the 14 PICs through its economic largesse.
 - Only four PICs — Tuvalu, Palau, Marshall Islands and Nauru, currently recognise Taiwan.

What are the Implications of China's Latest Move?

- **May Drag PICs into Major power Conflicts:**
 - The **PICs as a collective did not agree to China's extensive and ambitious proposals**, and therefore China failed to get a consensus on the deal.

- Signing the economic and security deal proposed by China, **could have negative implications for the sovereignty and unity of PICs** and may drag them into major power conflicts in the future.
- **Made Traditional Powers in the Region More Cautious:**
 - The **intensification of China's diplomacy towards the Pacific Islands** have made the powers who have traditionally controlled the regional dynamics like the US and Australia more cautious.
 - The US has **started revisiting its diplomatic priority for the region** ever since the China-Solomon Islands deal.
 - The role played by the US in mobilising opposition against China's proposed deal could not be ruled out as the **Federated States of Micronesia (FSM)** is the only country which recognises China and at the same time is part of the Compact of Free Association with the US.
 - The Federated States of Micronesia is a country spread across the western Pacific Ocean comprising more than 600 islands.

What are the Highlights of the India-PICs Relations?

- **About:**
 - India's interaction with the PICs is **still largely driven by the presence of sizeable Indian Diaspora** in the region.
 - Nearly 40% of Fiji's population is of Indian origin and about 3000 Indians living in Papua New Guinea at present.
 - In terms of institutional engagements, India participates in the [Pacific Island Forum \(PIF\)](#) as one of the key dialogue partners of the Forum.
 - The most important development in facilitating India's interaction with the PICs in recent years has been the formation of an action-oriented [Forum for India and Pacific Islands Cooperation \(FIPIC\)](#).
 - FIPIC, a multinational grouping, was launched in 2014.
- **Areas of Cooperation:**
 - **Blue Economy:**
 - The PICs with their **resource-rich EEZs can be attractive sources of natural resources like Liquefied natural gas (LNG) and hydrocarbons** to fuel India's growing economy and can also provide new markets.
 - India can engage with these countries particularly, given its own emphasise on the idea of '[Blue Economy](#)'.
 - **Climate Change and Sustainable Development:**
 - The geography of these island countries makes them vulnerable to the adverse effects of climate challenges.
 - The increasing soil salinity due to the [rising sea level](#) threatens the low lying island states, also giving rise to the problem of displacement.
 - Therefore, [climate change and sustainable development](#) are **crucial areas of concern** where a closer partnership can be developed for effective and concrete solutions.
 - **Disaster Management:**
 - Most of the Pacific Island countries are prone to a variety of natural disasters, with widespread social, economic and environmental consequences.
 - India can assist in building capacities of Disaster Risk Resilience.
 - In September 2017, India launched Climate Early Warning Systems in seven PICs.

Way Forward

- PICs while geographically small yet they have **considerable economic, strategic and political significance** in international affairs.
- The recent efforts to engage with the region have brought India much closer to these countries.
- India's **approach towards the PICs focuses on a transparent, need-based approach and inclusive relationship** with the region based on shared values and a shared future.
- In the coming years **India's engagement with the PICs is expected to grow deeper** with the third FIPIC summit scheduled to be held soon.

Trincomalee Port of Sri Lanka

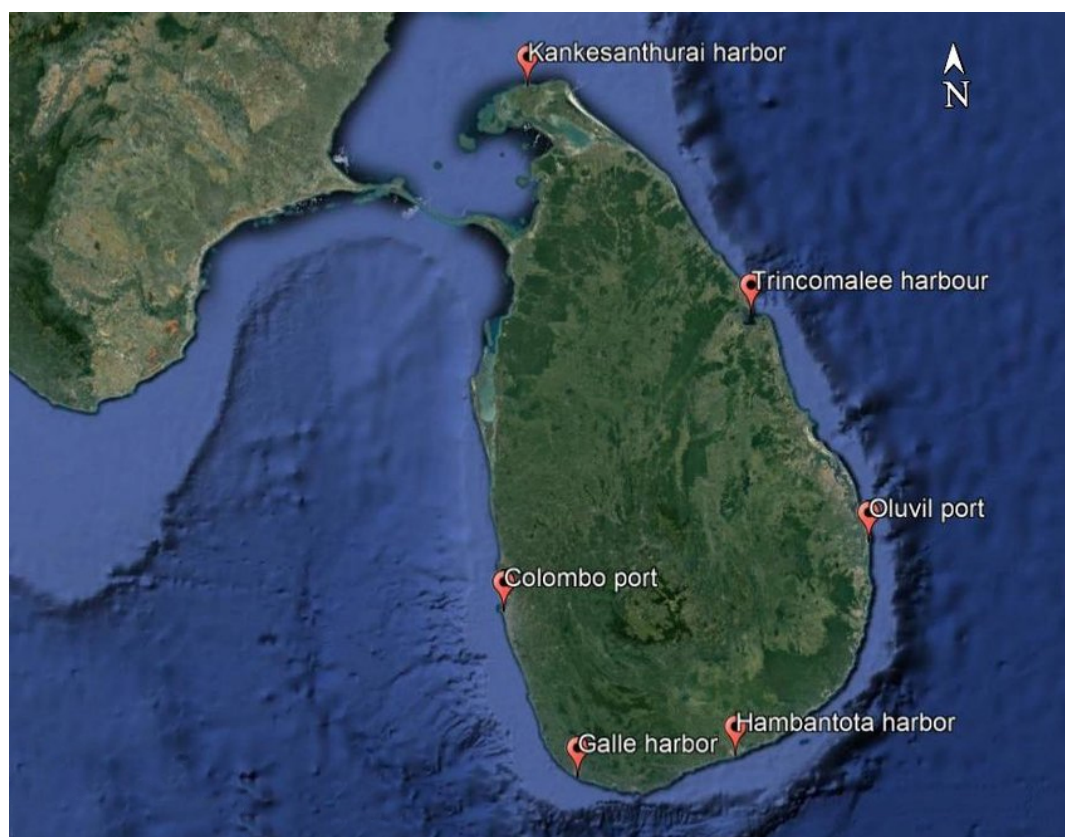
For Prelims: Trincomalee port, Special Economic Zone, Hambantota port

For Mains: Issues and Challenges of India - Sri Lanka relationship, Developments in the Indian Ocean Region, Effect of Policies & Politics of Countries on India's Interests

Why in News?

Sri Lanka plans to develop Trincomalee port into an industrial hub that would spark global interest.

- The proposal is a long-standing plan to monetise land that belongs to the **Sri Lanka Port Authority**, by getting foreign and local investment for **a special economic zone, an industrial park, or an energy hub.**



What are the Key Highlights?

- **About Trincomalee Port:**
 - Trincomalee harbour is **on the northeastern coast of Sri Lanka**. It is situated on a peninsula in Trincomalee Bay—formerly called Koddiyar Bay.
 - Trincomalee is the **nearest port to Chennai, India**.
- **Significance of the Port:**
 - **Geopolitical and Strategic Significance:** The location of this port in Indian ocean has

strategic significance, it has been of interest to several countries, including India, Japan and the US.

- Japan commissioned the **2020 ADB (Asian Development Bank) study** on the development of Trincomalee port.
- **Dedicated Port Terminal:** Trincomalee already has several dedicated port terminals —it has Lanka Indian Oil Company facility, Tokyo Cement facility, and grain facility for a flour factory, and a tea terminal.
 - There is also a **jetty for bulk cargo such as coal, gypsum and cement.**
- **Decongest Other Ports:** This development will decongest and help in offloading operations at Colombo Port which will increase the supply chain.
- **Non-Containerised Cargo Traffic:** This would also entail the development of the port for non-containerised cargo traffic, such as cement, coal or other industrial raw material.

What does the deal mean for India?

- **Natural Harbour:** It offers one of Asia's finest natural harbours which India will benefit from.
- **Balance China's influence:** This port will serve as a way to balance China's influence in the Indian Ocean Region. China already has access to **Hambantota Port**, so Trincomalee port is important for India.
- **Maritime Trade Routes:** If Indian companies engage in this development, it will enhance Indian maritime trade routes in the region.
 - Earlier this year, **Lanka Indian Oil Company and Ceylon Petroleum Corporation** signed an agreement to develop a massive oil storage tank farm built during British rule at Trincomalee. This agreement will benefit from this deal.

Way Forward

- Trincomalee port with its key benefits of natural deep-water, shelter, unique tourist places and ample land for industrial and logistics in the proximity of the port was ideally placed to service the projected growth of maritime cargo trade in the region, especially regarding the development of ports in Bangladesh and Myanmar and on India's eastern sea board.
- A Trincomalee port joint project with India will make sense in terms of Sri Lanka's domestic ethnic considerations.
- If the project is successful then it will help Sri Lanka from Debt Trap of China.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Q. Consider the following pairs: (2018)

Regions sometimes - Country mentioned in news

1. Catalonia — Spain
2. Crimea — Hungary
3. Mindanao — Philippines
4. Oromia — Nigeria

Which of the pairs given above are correctly matched?

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

Ans: (c)

Exp:

- Catalonia is in Spain. It is an autonomous region in North-east Spain with a distinct history dating back almost 1,000 years. It initiated a referendum for independence from Spain in October 2017 and unilaterally declared independence. **Hence, pair 1 is correctly matched.**
- Crimea was a Ukrainian territory which was annexed by Russia in 2014. **Hence, pair 2 is not correctly matched.**
- Mindanao is the second largest island in the Philippines. Hundreds of pro-Islamic State militants seized parts of the predominantly Islamic city of Marawi in Mindanao in May 2017. **Hence, pair 3 is correctly matched.**
- Oromia region is inhabited primarily by the Oromo ethnic group, the largest ethnic group in Ethiopia. There were clashes between Oromo and Somali ethnic groups in December 2016 following territorial disputes between the two communities in Ethiopia. **Hence, pair 4 is not correctly matched.**
- Therefore, option (c) is the correct answer.

[Source: IE](#)

Industry Transition Dialogue between India and Sweden

For Prelims: 'Stockholm+50', LeadIT, COP27, UN Climate Action Summit, UNEP

For Mains: India-Sweden Relation, Bilateral Groupings & Agreements, Groupings & Agreements Involving India and/or Affecting India's Interests

Why in News?

Recently, India and Sweden hosted the **Industry Transition Dialogue** in Stockholm, as a part of their joint initiative i.e. **Leadership for Industry Transition (LeadIT)**.

- This high level dialogue has contributed to the UN Conference [‘Stockholm+50’](#) and set the agenda for COP27 (Climate Change).

What is LeadIT?

- **About:**
 - The LeadIT initiative **lays specific focus on hard to abate sectors** that are key stakeholders in the global climate action and require specific interventions.
 - It gathers **countries and companies that are committed to action** to achieve the [Paris Agreement](#).
 - It was launched by the **governments of Sweden and India at the UN Climate Action Summit** in 2019 and is supported by the [World Economic Forum](#).
 - LeadIT members subscribe to the notion that energy-intensive industry can and must progress on low-carbon pathways, aiming to achieve [net-zero carbon emissions](#) by 2050.
- **Members:**
 - The total membership of LeadIT is 37 including countries and companies together.
 - Japan and South Africa, the latest members of the initiative.

What are the Highlights of India - Sweden Relations?

▪ **Political Relations:**

- Diplomatic relations were **established in 1948** and steadily strengthened over the decades.
- The first **India-Nordic Summit** (India, Sweden, Norway, Finland, Iceland and Denmark) took place in the year 2018 in Sweden.
- Sweden also participated in the **First India Nordic Baltic** (including Estonia, Latvia and Lithuania) Conclave co-chaired by India in November 2020.
- In May 2022, the **Prime Minister of India held a [series of bilateral meetings](#)** with his counterparts from Denmark, Norway, Sweden, Iceland and Finland.

▪ **Multilateral Engagement:**

- In the 1980s India and Sweden worked together on nuclear disarmament issues within the framework of the **'Six Nation Peace Summit'** (that also included Argentina, Greece, Mexico and Tanzania).
- At the UN General Assembly, **India and Sweden present an annual Joint Statement on Humanitarian Affairs.**
- In 2013, during the Swedish Presidency, India joined the **[Arctic Council](#)** as an Observer at the Kiruna Ministerial Meeting.

▪ **Economic and Commercial relations:**

- **India is Sweden's third-largest trade partner** after China and Japan in Asia.
- Trade in goods and services has increased from USD 3 billion (2016) to USD 4.5 billion (2019).

▪ **Defence and Aerospace (Sweden-India Joint Action Plan 2018):**

- It highlights collaboration on space research, technology, innovation, and applications.



Way Forward

- Being a member of the [European Union](#), Sweden can play an important role in India's **partnership** with the EU and EU countries.
- Strategic engagements, bilateral trade and investment scenarios are expected to embolden shared economic progress under mutually beneficial nomenclature.

[Source: PIB](#)

Gun Control Legislation

For Prelims: Arms (Amendment) Act 2019

For Mains: Challenges and Issues related to Society, Arms (Amendment) Act 2019

Why in News?

The United States recently witnessed two episodes of mass shootings in a span of 11 days that killed more than 30 people including elementary school children.

- US recorded a total of 24,576 homicides in 2020, of which approximately 79%, or 19,384 incidents, involved the use of a firearm.
- Regulation of firearms in the US is convened through the shared authority between the federal, State and local governments.
- The US Supreme Court previously held that the second amendment of the US Constitution protects the right to “keep and bear arms” for self-defence, whilst federal courts argue about a potential infringement if federal, state and local firearm regulations circumvent this right.

What is the Gun Control Legislation of India?

- **The Arms Act, 1959:**
 - **About:** It aims to be as extensive as possible to cover all aspects relating to the acquisition, possession, manufacture, sale, import, export, and transport of arms and ammunition in India.
 - **Requirements for Acquiring Gun License:**
 - The **minimum age requirement** for acquiring a gun license in India **is 21 years**.
 - The applicant **must not have been convicted of any offence involving violence or moral turpitude five years prior** to commencing the application, not of an ‘unsound mind’ and not a threat to public safety and peace.
 - **Property qualification is not a criterion** for acquiring gun license.
 - Upon receiving an application, the **licensing authority (i.e., the Home Ministry)**, asks the officer in-charge of the nearest police station to submit a report about the applicant after thorough vetting within a prescribed time.
 - **Other Features of the Act:**
 - It defines ‘**prohibited arms**’ as those that **either discharge any noxious liquid or gas, or weapons** that seek pressure to be applied on a trigger for discharge.
 - It allow the use of smooth bore gun with a barrel of not less than 20 inches for crop protection or sport.
 - No entity is permitted to sell or transfer any firearm which does not bear the name of the maker, manufacturer’s number or any other visible or stamped identification mark.
- **Amendment to the Arms Act:**
 - The Arms Act amended in 2019 reduces the number of firearms that an individual can procure from 3 to 2.
 - The **validity of the license has been increased from the present 3 years to 5 years**.
 - It also **enlists specific provisions** on curtailing the use of licensed weapons to ensure social harmony.
 - **Punishment:** The **punishment of imprisonment is increased between 7 and 14 years**, along with a fine for the offense of acquisition, possession or carrying of prohibited ammunition without a license.
 - It prohibits the conversion of one category of firearms to another without a license.
 - Unlawful manufacture, sale and transfer are liable **for an imprisonment term not less than seven years** which could be extended to life, with a fine.

Way Forward

- One way is to impose severe gun controls and severely restrict who can buy or own a weapon. **American laws are too loose** and too lenient in this regard.
- India too needs to review and tighten laws relating to the acquisition and possession of firearms.

Proposal of Appellate Committees for Social Media Grievance

For Prelims: Grievance Appellate Committee, IT Rules, 2021.

For Mains: Need for Amendments to the IT Rules, 2021.

Why in News?

Recently, a proposal for setting up '**Grievance Appellate Committees**' for hearing appeals regarding social media posts has been put forward by the government of India.

What are the Grievance Appellate Committees?

▪ About:

- One or more '**Grievance Appellate Committees**' will be constituted by the Central Government as per the draft of the proposed amendments to the [IT Rules, 2021](#).
- The appellate committees will be **dealing with appeals by users against the decision of the Grievance Officer** appointed by the social media intermediary.
- The committee will comprise **a chairperson and other members appointed by the Central government**.

▪ Working:

- Any person aggrieved by an order of the Grievance Officer appointed by a social media network may appeal to the Grievance Appellate Committee **within 30 days of receipt of communication from the Grievance Officer**.
- The Grievance Appellate Committee shall deal with such appeal expeditiously and shall make an endeavour to dispose of the appeal finally within 30 calendar days from the date of receipt of the appeal.
- Every **order** passed by the Grievance Appellate Committee shall be **complied with by the intermediary concerned**.

What is the Need for Grievance Appellate Committees?

- In 2021, multiple stand-offs over content moderation and takedown happened between the government and the [social media platforms](#).
 - **Twitter accounts** of news websites, actors, political workers and bloggers, posting messages in support of the farmers' agitation were **blocked following government orders**.
- As Internet access continues to rapidly expand in India, new issues related to the government policies also keep emerging. Therefore, it becomes necessary to **address the gaps** to deal with such issues.

What are the IT rules, 2021?

▪ About:

- The **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules** were notified by the government in 2021.

▪ Key Features:

- Social media intermediaries, with registered users in India above a notified threshold, have

been classified as **Significant Social Media Intermediaries (SSMIs)**.

- SSMIs are required to **appoint compliance personnel, enable identification of the first originator of the information and deploy technology-based measures for content identification.**
- All intermediaries are required to provide a **grievance redressal mechanism for resolving complaints from users or victims.**
- A **framework for the regulation of content** has been prescribed by online publishers of news and current affairs content, and curated audio-visual content.
- A **three-tier grievance redressal mechanism with varying levels of self-regulation** has been prescribed for publishers.

SOCIAL MEDIA

- Identify 'first originator' of content that authorities consider anti-national
- Appoint grievance officer, resolve complaints in 15 days
- File monthly compliance report on complaints received, action taken

DIGITAL NEWS

- Follow Press Council of India, Cable TV Networks (Regulation) Act norms.
- Self-regulatory bodies to oversee adherence to Code of Ethics
- I&B Ministry to form panel, oversight mechanism

OTT PLATFORMS

- Self-classify content into five age-based categories: U (universal), U/A 7+ (years), U/A 13+, U/A 16+, and A.

- Parental locks for any content classified as U/A 13+ or above.
- Age verification mechanism for content classified as 'A' (adult)

▪ Key Issues:

- The rules may be going **beyond the powers delegated under the IT Act, 2000** in certain cases like providing for the **regulation of SSMIs** and online publishers, and requiring **certain intermediaries to identify the first originator of the information.**
- Grounds for **restricting online content are overbroad and may affect freedom of speech.**
- There are **no procedural safeguards** for requests by law enforcement agencies for information under the possession of intermediaries.
- Requiring messaging services to enable the identification of the first originator of information on its platform may adversely affect the **privacy of individuals.**

UPSC Civil Services Examination, Previous Year Question

Q. In India, it is legally mandatory for which of the following to report on cyber security incidents? (2017)

1. Service providers
2. Data centres
3. Body corporate

Select the correct answer using the code given below:

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

Ans: (d)

- According to section 70B of the Information Technology Act, 2000 (IT Act), the Union Government by notification should appoint an agency named Indian Computer Emergency Response Team (CERT-In) to serve as the national agency for incident response.
- The Union Government under section 70B of the IT Act, 2000 established and notified rules of CERT-In in 2014. According to Rule 12(1)(a), it is mandatory for service providers, intermediaries, data centers and corporate bodies to report cyber security incidences to CERT-In within a reasonable time of occurrence of the incident. **Hence, 1, 2 and 3 are correct.**
- **Therefore, option (d) is the correct answer.**

[Source: TH](#)

Tracking SDG 7

For Prelims: Energy Progress Report, Energy Efficiency, Clean Fuel, SDGs

For Mains: Findings of Energy Progress Report and Recommendations, Renewable Energy, SDGs

Why in News?

Recently, the **Tracking SDG 7 - The Energy Progress Report 2022** was released which showed that the [Russia-Ukraine war](#) and [Covid-19 crisis](#) have **considerably slowed down efforts towards attaining the Seventh Sustainable Development Goal (SDG 7) target.**

- The **Energy Progress Report is a product of close collaboration among the five SDG 7 custodian agencies** in the form of a specially constituted Steering Group:
 - [International Energy Agency \(IEA\)](#), [International Renewable Energy Agency \(IRENA\)](#), [United Nations Statistics Division \(UNSD\)](#), [World Bank](#), [World Health Organization \(WHO\)](#).
- SDG 7 has a target of universal access to clean and affordable energy by 2030.

Note

- The annual SDG 7 tracking report includes the official dashboard of global, regional and national progress on **four key energy targets**:
 - **7.1:** Ensuring universal access to electricity and clean cooking solutions,
 - **7.2:** Substantially increasing the share of renewable energy,
 - **7.3:** Doubling progress on energy efficiency,

- **7.A:** Increasing international collaboration in support of clean and renewable energy.

What are the Findings?

▪ Access to electricity (7.1):

- The share of the world's population with access to electricity **rose from 83% in 2010 to 91% in 2020**, increasing the number of people with access by 1.3 billion globally.
- The number **without access declined from 1.2 billion people in 2010 to 733 million in 2020**.
- However, the **pace of progress in electrification has slowed in recent years** which may be explained by the increasing complexity of reaching more remote and poorer unserved populations and the **unprecedented impact of the Covid-19 pandemic**.
 - At current rates of progress, the **world will reach only 92% electrification by 2030**.

▪ Clean cooking (7.1):

- The share of the global population with **access to [clean cooking fuels](#) and technologies rose to 69% in 2020**, an increase of 3% points over last year 2021.
- However, **population growth outpaced much of the gains in access, particularly in [Sub-Saharan Africa](#)**.
- As a result, the total number of people lacking access to clean cooking has remained relatively stagnant for decades. The increase was primarily driven by advancements in access to large, populous countries in Asia.

▪ Renewables (7.2):

- While the share of renewable capacity expansion rose by a record amount in 2021, the positive global and regional trajectories mask the fact that **countries where new capacity additions lagged were those most in need of increased access**.
- Moreover, rising commodity, energy and shipping prices, as well as restrictive trade measures, have **increased the cost of producing and transporting [solar photovoltaic \(PV\) modules](#), wind turbines, and biofuels**, adding uncertainty for future renewable energy projects.

▪ Energy efficiency (7.3):

- SDG 7.3 aims to double the global rate of annual improvement in primary energy intensity—the amount of energy used per unit of wealth created—to 2.6% in 2010–30 versus 1990–2010.
- From 2010 to 2019, global annual improvements in energy intensity averaged around 1.9%, well below the target.

▪ International Financial Flows (7.A):

- International public financial flows to developing countries in support of clean energy **decreased for the second year in a row**, falling to USD 10.9 billion in 2019, **despite the immense needs for sustainable development in most countries and growing urgency of climate change**.
- Overall, the level of **financing remains below what is needed to reach SDG 7**, particularly in the most vulnerable and least developed countries.

INDICATOR	2010	LATEST YEAR
 <p>7.1.1 proportion of population with access to electricity</p>	<p>1.2 billion people without access to electricity</p>	<p>733 million people without access to electricity (2020)</p>
 <p>7.1.2 Proportion of population with primary reliance on clean fuels and technology for cooking</p>	<p>3 billion people without access to clean cooking</p>	<p>2.4 billion people without access to clean cooking (2020)</p>
 <p>7.2.1 Renewable energy share in total final energy consumption</p>	<p>16.1% share of total final energy consumption from renewables</p>	<p>17.7% share of total final energy consumption from renewables (2019)</p>
 <p>7.3.1 Energy intensity measured as a ratio of primary</p>	<p>5.6 MJ/USD primary energy intensity</p>	<p>4.7 MJ/USD primary energy intensity (2019)</p>
 <p>7.a.1 International financial flows to developing countries in support of clean energy research and development and renewable energy</p>	<p>11.2 USD billion international financial flows to developing countries in support of clean energy</p>	<p>10.9 USD billion international financial flows to developing countries in support of clean energy (2019)</p>

What are the Recommendations?

- **Access to Electricity:** Meeting the 2030 target requires **increasing the number of new connections to 100 million a year.**
- **Clean Cooking:** A multisectoral, coordinated effort is needed to achieve the SDG 7 target of universal access to clean cooking by 2030.
 - It is critical that the **global community learns from the successes and challenges faced by countries** that have attempted to design and implement clean household energy policies.
- **Renewables:** Ensuring universal access to affordable, reliable, sustainable, and modern energy implies accelerated deployment of renewable energy sources for electricity, heat, and transport.
 - Renewable shares need to reach well over 30% of 'total final energy consumption' by 2030, up from 18% in 2019, to be on track for reaching net-zero energy emissions by 2050.

- **Energy Efficiency:** The rate of energy efficiency needs to be higher—consistently over 4% for the rest of this decade—if the **world is to reach [net-zero emissions](#)** from the energy sector by 2050.
- **International Financial Flows:** Energy efficiency policies and investment need to be scaled up significantly to bring the SDG 7.3 target within reach.

UPSC Civil Services Examination, Previous Year Questions

Q. Consider the following statements: (2016)

1. The Sustainable Development Goals were first proposed in 1972 by a global think tank called the 'Club of Rome'.
2. The Sustainable Development Goals have to be achieved by 2030.

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: (b)

Exp:

- The 17 Sustainable Development Goals (SDGs), also known as the Global Goals, are a universal call for action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.
- They are built upon the success of the Millennium Development Goals, including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities.
- The goals are interconnected - often the key to success on one will involve tackling issues more commonly associated with another.
- Adopted in 2015, SDGs came into effect in January 2016. They are meant to be achieved by 2030. **Hence, statement 2 is correct.**
- The SDGs were born at the United Nations Conference on Sustainable Development in Rio de Janeiro in 2012. The Club of Rome advocated resource conservation for the first time in a more systematic way in 1968. **Hence, statement 1 is not correct.**
- Therefore, option (b) is the correct answer

Source: DTE

Biomass Electricity

For Prelims: Renewable Energy, Biomass electricity, Pyrolysis, Gasification

For Mains: Renewable energy, Government initiatives for Renewable Energy

Why in News?

Recently, **a new biomass-based boiler technology was launched in India** (Kurukshetra, Haryana) that claims to accommodate all kinds of agricultural residue as fuel and can be greener and may also help reduce the burden of [stubble burning](#).

- Biomass-based electricity is gaining the attention of regulators and policy makers, as the country moves towards power generation that is not carbon-intensive.
- Around 2.6% of the country's electricity demand is met by biomass.

What are the Key Highlights?

- **Features of the Biomass-based Boiler:**
 - The new boiler had **a capacity of 75 tonnes per hour** and generated **15 megawatts of electricity**.
 - This new **Denmark-based technology** allows the plant to fire a wide range of fuels with less fuel preparation and handling.
 - This combustion technology is advantageous because of the **vibrating grate**.
 - The grate of a steam boiler supports the solid fuel in the furnace.
 - Vibrating grate accommodates **biomass of every density**.
 - The moisture content of the fuel, however, has to be 15-20%
 - Since the vibrating grate supports firing agro residue of any size, it **saves energy consumed for processing biomass for energy generation**.
- **Advantages over Conventional Boilers:**
 - The existing conventional boilers are designed **only for specific types of agro residue** such as paddy husk, paddy straw, mustard, etc and thus restrict the biomass contribution in energy generation.
 - While vibrating grate boiler technology can be a solution for firing any kind of biomass.

What is Biomass?

- **About**
 - Biomass is renewable organic material that comes from plants and animals.
- **Uses**
 - Biomass is used for facility heating, electric power generation, and combined heat and power.
- **Methods to convert Biomass to Electricity:** Biomass can be converted into electric power through several methods.:
 - **Combustion of biomass material:**
 - The most common is direct combustion of biomass material, such as agricultural waste or woody materials.
 - **Gasification:**
 - Gasification produces a synthesis gas with usable energy content by heating the biomass with less oxygen than needed for complete combustion.
 - **Pyrolysis:**
 - Pyrolysis yields bio-oil by rapidly heating the biomass in the absence of oxygen.
 - **Anaerobic digestion:**
 - Anaerobic digestion produces a renewable natural gas when organic matter is decomposed by bacteria in the absence of oxygen.
 - Very wet wastes, like animal and human wastes, are converted into a medium-energy content gas in an anaerobic digester.
- **Advantages:**
 - Compared to many other renewable energy options, biomass has the advantage of **dispatchability**, meaning it is **controllable and available when needed**.
- **Disadvantages:**
 - The fuel needs to be procured, delivered, stored, and paid for.
 - Also, biomass combustion produces emissions, which must be carefully monitored and controlled to comply with regulations.
- **Government Initiatives:**
 - **Biomass power & cogeneration programme** is implemented with the main objective of promoting technologies for optimum use of country's biomass resources for grid power

- generation.
- The Union Ministry of New and Renewable Energy (MNRE) announced **central financial assistance** for projects utilising biomass like bagasse, agro-based industrial residue, crop residues, wood produced through energy plantations, weeds as well as wood waste produced in industrial operations for power generation.
 - The move was aimed at enhancing biomass combustion in a controlled environment for energy production.

UPSC Civil Services Examination, Previous Year Question

Q. With reference to the usefulness of the by-products of sugar industry, which of the following statements is/are correct? (2013)

1. Bagasse can be used as biomass fuel for the generation of energy.
2. Molasses can be used as one of the feedstocks for the production of synthetic chemical fertilizers.
3. Molasses can be used for the production of ethanol.

Select the correct answer using the codes given below:

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

Ans: (c)

Exp:

- There are four main by-products of sugar industry, which are cane tops, bagasse, filter muds and molasses.
- Sugarcane bagasse is a highly promising source of biomass for the establishment of a bio-based economy. Bagasse can be used to produce electricity, ethanol, paper board and chemicals such as Vanillin. **Hence, statement 1 is correct.**
- Molasses is a by-product of refined sugar. It is used for alcohol production. It has several important roles in livestock feeding due to the nutritive, appetizing and physical properties of its sugar contents. It can also be used for the production of ethanol, spirit and alcohol among other products. **Hence, statement 3 is correct.**
- Molasses is used as one of the feedstocks for the production of organic, but not chemical fertilizers. **Hence, statement 2 is not correct.**
- Therefore, option (c) is the correct answer

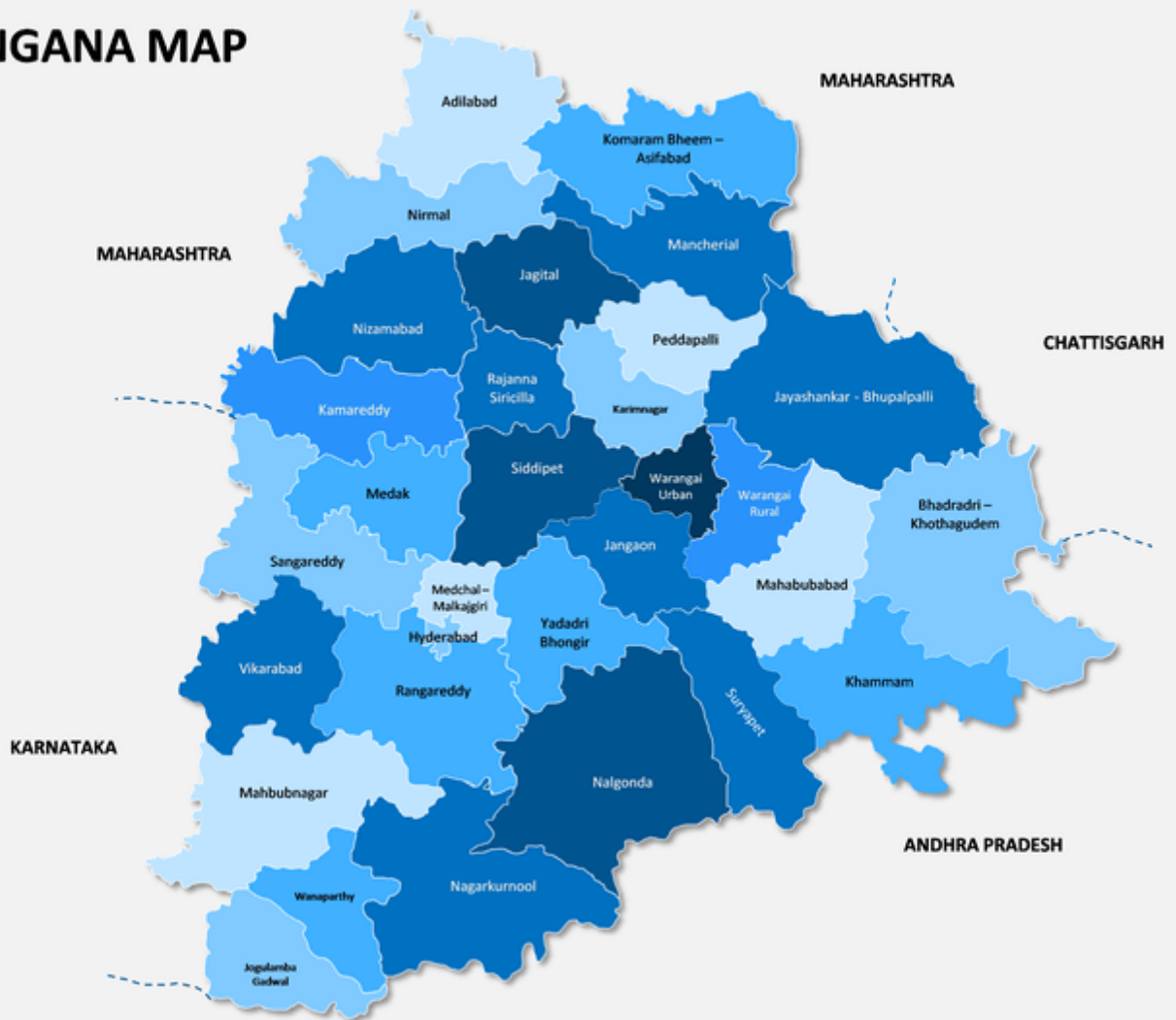
Source: DTE

Telangana Formation Day

Why in News?

- Telangana's Governor greeted the people of the state on [Telangana formation day](#) (2nd June).

TELANGANA MAP



What are the Key Points about Telangana?

▪ About:

- On 2nd June, 2014 the northwestern part of Andhra Pradesh was separated and 29th state Telangana was created.
- The **Andhra State Act (1953)** formed the first linguistic state of India, known as the state of Andhra, by taking out the Telugu speaking areas from the State of Madras (now Tamil Nadu).
- The **States Reorganisation Act (1956)** merged the Telugu-speaking areas of Hyderabad state with the Andhra state to create the enlarged Andhra Pradesh state.
- The **Andhra Pradesh Reorganisation Act (2014)** bifurcated Andhra Pradesh into two separate states, namely, the **Andhra Pradesh (residuary)** and the **Telangana**.

▪ Capital:

- Hyderabad

▪ Borders:

- Telangana is surrounded by Maharashtra and Chhattisgarh in the North, Karnataka in the West and Andhra Pradesh in the South and East directions.

▪ Four Icons of Telangana:

- **State Bird** - Palapitta (Indian Roller or Blue Jay).
- **State Animal** - Jinka (Deer).
- **State Tree** - Jammi Chettu (Prosopis Cineraria).
- **State Flower** - Tangedu (Tanner's Cassia).

▪ Popular Festivals:

- The Hindu festivals like **Ugadi, Srirama Navami, Bonalu, Vinayaka Chaturthi, Dasara, Deepavali, Sankranti, Holi, Mahashivaratri** are celebrated with pomp, gaiety

and devotion.

- **Dasara** is the main festival with the epithet 'pedda panduga'.

▪ **Global Recognition:**

- **Ramappa Temple**, at Mulugu district presents the distinct style of Kakatiyas. The foundation of this temple is "**sandbox technique**". It is a **UNESCO World Heritage Site**.
- Sadarmatt anicut across river Godavari in Nirmal district and Pedda Cheruvu in Kamareddy district are in the [ICID Register of Heritage Irrigation Structures](#).

▪ **National Parks:**

- Kasu Brahmananda Reddy National Park
- Mahavir Harina Vanasthali National Park
- Mrugavani National Park

▪ **Wild Life Sanctuaries:**

- Kinnersani Wildlife Sanctuary
- Eturnagaram Wildlife Sanctuary
- **Kawal Tiger Reserve**
- Lanja Madugu Siwaram Wildlife Sanctuary
- Manjeera Crocodile Wildlife Sanctuary
- **Nagarjuna Sagar-Srisailem** Wildlife Sanctuary
- **Pakhal** Wildlife Sanctuary
- **Pocharam** Wildlife Sanctuary
- **Pranahita** Wildlife Sanctuary

▪ **Water Dispute:**

- **Krishna River Dispute**

▪ **Other Related Initiative:**

- Telangana approved the use of the [Indian Council of Medical Research \(ICMR\) devised Drone-Based Vaccine Delivery Model, i-drone](#) for delivering vaccines in remote areas.

[Source: TH](#)

Painted Leopard Gecko

Why in News?

Recently, researchers have identified a new colorful species of leopard geckos named *Eublepharis pictus*, also known as the Painted Leopard Gecko, earlier it was thought to belong to a known species.



What are the Findings?

- The new species **differs from all members of the genus *Eublepharis* except for *E hardwickii*.**
 - Eublepharis is a genus of terrestrial geckos native to eastern and southwestern Asia.
- The new species lives in dry evergreen forests mixed with scrub and meadows. It is strictly **nocturnal, actively foraging along trails in the forest after dusk.**
- Researchers had **initially identified the specimen as an East Indian Leopard Gecko (*Eublepharis hardwickii*).** This new species appears to be common in the forests of Andhra Pradesh and Odisha.
 - Geographically the two species **appear to be separated by the Brahmani River.**
- The gecko genus Eublepharis **now has 7 species.**
- Based on IUCN (International Union for the Conservation of Nature) conservation prioritization criteria, the researchers suggested it to list as Near Threatened (NT).
- More research may also encourage better protection of biodiversity in the area. The Eastern Ghats are severely under-surveyed, and dedicated efforts will help recognise it as a biodiversity hotspot.

What are Geckos?

- **About:**
 - Geckos are reptiles and are found on all continents except Antarctica. These colorful lizards have adapted to habitats from rainforests, to deserts, to cold mountain slopes.
 - Most geckos are nocturnal, which means they are active at night, but day geckos are active during the day and depend on insects, fruits, and flower nectar.
 - Geckos are spread across six families: Carphodactylidae, Diplodactylidae, Eublepharidae, Gekkonidae, Phyllodactylidae, and Sphaerodactylidae.
- **Other Species of Gecko in India:**
 - Indian Golden Gecko (family Gekkonidae) is native to India (Tamil Nadu, Orissa, Andhra Pradesh). It is listed in **Schedule 1 of WPA (Wildlife Protection Act).**
 - **IUCN Red List:** Least Concern (LC)
 - Tokay Gecko (family Gekkonidae) is widespread in the Indo-Malayan region **Protection Status:**
 - Schedule 4 of WPA.
 - IUCN Red List: Least Concern (LC).

[Source: IE](#)
