

NATIONAL POLICY FOR RARE DISEASES 2021

Recently, the GST Council said the Integrated Goods and Services Tax (IGST) on medicines and Food for Special Medical Purposes (FSMP) used for treating rare diseases enlisted under the National Policy for Rare Diseases, 2021, will be exempt when imported for personal use.



About National Policy for Rare Diseases 2021:

- It aims to **lower the high cost of treatment for rare diseases** with increased focus on indigenous research.
- It offers financial support for one-time **treatment of up to Rs. 20 lakhs**, introduces a crowd funding mechanism, creates a registry of rare diseases and provides for early detection.
- The rare diseases have been identified and categorized into 3 groups namely
 - **Group 1:** Disorders amenable to **one-time curative treatment**.
 - **Group-2:** Diseases requiring **long term/lifelong treatment** having relatively lower cost of treatment and benefit has been documented in literature and annual or more frequent surveillance is required.
 - **Group 3:** - Diseases for **which definitive treatment** is available but challenges are to make optimal patient selection for benefit, very high cost and lifelong therapy.
- In order to receive financial assistance for treatment of rare disease, the patient of the nearby area may approach the nearest Centre of Excellence to get him assessed and avail the benefits.
- Eight (08) Centres of Excellence (CoEs) have been identified for diagnosis, prevention and treatment of rare diseases.

UNITED NATIONS HUMAN RIGHTS COUNCIL

Recently, India voted in favour of a draft resolution tabled in the UN Human Rights Council that condemns and strongly rejects recent “public and premeditated” acts of desecration of the Holy Quran.



Why in news?

- UN Human Rights Council adopted the draft resolution ‘**Countering religious hatred constituting incitement to discrimination, hostility or violence**’, with 28 members voting in favour, seven abstentions and 12 nations voting against.

Key facts about United Nations Human Rights Council

- It is an **intergovernmental body** within the United Nations whose mission is to promote and **protect human rights around the world**.
- It was created by **the General Assembly** on 15 March 2006 by replacing the Commission on Human Rights.
- It **has 47 members elected** for staggered three-year terms on a regional group basis.
- The members of the Council serve for a period of three years and **are not eligible for immediate re-election after serving two consecutive terms**.
- The Council's Membership is based on **equitable geographical distribution**.
- **Function:**
 - It investigates allegations of breaches of human rights in UN member states, and addresses important thematic human rights issues such as freedom of association and assembly, **freedom of expression, freedom of belief and religion, women's rights, LGBTI rights**, and the rights of racial and ethnic minorities.

[WHAT IS THE ARMED FORCES \(SPECIAL POWERS\) ACT \(AFSPA\)?](#)

According to Army sources, there is a significant limitation for security forces operating without the legal protection provided by the Armed Forces Special Powers Act (AFSPA) in



Manipur.

About Armed Forces (Special Powers) Act (AFSPA):

- It is a law enacted by the Parliament in 1958 which gives armed forces (Army, the Air Force and Central paramilitary forces) the **special powers and immunity to maintain public order in “disturbed areas”**.

- **When is it applied?** It can be applied only after an area has been declared “disturbed” under section 2 of the act.
- **What is a Disturbed area?** An area can be considered to be disturbed due to differences or disputes among different religious, racial, language or regional groups or castes or communities.
- **Who declares an area as disturbed?** Section (3) of AFSPA empowers the **governor of the state/Union territory to issue an official notification declaring** the state or a region within as a “disturbed area”, after which the centre can decide whether to send in armed forces.
- The ‘special powers’ of armed forces under Section 4 are:
 - **Power to use force even to the extent of causing death**, destroy arms / ammunition dumps, fortifications/ shelters / hideouts.
 - **Power to arrest without a warrant.**
 - **Power to seize and search’ without any warrant** any premise.
 - It stipulates that **arrested persons and seized property is to be handed over to the nearest Police Station** with least possible delay.
 - These **armed forces are immune from prosecution unless the Union Government provides sanction** to the prosecuting agencies.

SARISKA TIGER RESERVE

The Supreme Court recently voiced concern over lakhs of devotees visiting the ancient Pandupol temple situated in the core area of Sariska Tiger Reserve.



About Sariska Tiger Reserve:

- **Location:** It is located in the Aravalli hills in the Alwar district of Rajasthan.
- This area was a hunting preserve of the erstwhile Alwar state.
- It was declared as a wildlife reserve in 1955 and then a Tiger Reserve in 1978 under Project Tiger.
- It is the first reserve in the world which successfully relocated tigers.

- Sariska is also famous for old temples, palaces and lakes such as Pandu Pol, Bhangarh Fort, Ajabgarh, Pratapgarh, Siliserh Lake and Jai-Samand Lake.
 - **Topography:** Grasslands, dry deciduous forests, cliffs, and rocky landscapes.
 - **Flora:**
 - Nearly **90% of the area** in the sanctuary is covered with dhok trees.
 - Other species found include **salar, kadaya, gol, ber, Banyan**, gugal, bamboo, kair, adusta etc
 - **Fauna:** A variety of other wild animals like the **leopard, sambhar, chital, nilgai, four-horned antelope, wild boar, rhesus macaque**, langur, hyena and jungle cats are found in the Sariska Tiger Reserve apart from the tiger.
-

WHAT IS THE SOLAR MAXIMUM?

It has been recently reported that the sun is expected to reach “solar maximum” in the next two years.



About Solar Maximum:

- The sun goes through a natural solar cycle approximately every 11 years. The cycle is marked by the increase and decrease of sunspots -- visible as dark blemishes on the sun's surface, or photosphere.
- The greatest number of sunspots in any given solar cycle is designated as "solar maximum." The lowest number is "solar minimum."
- **Impacts:**
 - This increased solar activity can cause extreme space weather events, including solar flares and eruptions.
 - It can also disrupt radio communications and the power grid and have serious health consequences for astronauts.

What is the Solar Cycle?

- The Sun is a huge ball of electrically-charged hot gas. This charged gas moves, generating a powerful magnetic field.
-

- Every 11 years or so, the Sun's magnetic field completely flips. This means that the Sun's north and south poles switch places.
- Then it takes about another 11 years for the Sun's north and south poles to flip back again.
- Thus, the solar cycle is the cycle that the Sun's magnetic field goes through approximately every 11 years.
- The solar cycle affects activity on the surface of the Sun, such as sunspots which are caused by the Sun's magnetic fields.
- As the magnetic fields change, so does the amount of activity on the Sun's surface.
- The beginning of a solar cycle is a solar minimum, or when the Sun has the least sunspots. Over time, solar activity—and the number of sunspots—increases.
- The middle of the solar cycle is the solar maximum, or when the Sun has the most sunspots.
- As the cycle ends, it fades back to the solar minimum and then a new cycle begins.

CHANDRAYAAN-3 LAUNCH: THE TWO MOON MISSIONS, COMPARED

Why in News?

- India's third mission to the moon - **Chandrayaan-3** - will take off on 14th July, 2023.
- The mission aims to achieve what its predecessor - **Chandrayaan-2** could not - land softly on the lunar surface and explore it with a rover.
 - A last-minute glitch led to the failure of the lander's (Vikram) soft landing attempt after a successful orbital insertion.

The Chandrayaan-3 Mission:

- **Chandrayaan-3** ("mooncraft") is a planned 3rd lunar exploration mission by the ISRO to demonstrate end-to-end capability in -
 - **Safe landing** (through the lander Vikram - after Vikram Sarabhai, the father of the Indian space programme) and
 - **Roving** (through the rover Pragyan) on the lunar surface.
- Unlike Chandrayaan-2, it will **not have an orbiter** and its propulsion module will behave like a communications relay satellite.

- Chandrayaan-3 **interplanetary** mission has **three major modules**: the Propulsion module, Lander module, and Rover.
- ISRO plans to launch the third moon mission in mid-July aboard the **LVM3** (formerly GSLV Mk-III) rocket from Sriharikota.

Comparing Chandrayaan 2 and 3 Missions:

SHOOTING FOR THE MOON: 2019, 2013	
CHANDRAYAAN-2	CHANDRAYAAN-3
COMPONENTS Orbiter, Lander, Rover	COMPONENTS Propulsion module, Lander, Rover
EXPERIMENTS ON BOARD ■ 8 on Orbiter, 4 on Lander, 2 on Rover	EXPERIMENTS ON BOARD ■ Same experiments on Lander as Rover as Chandrayaan-2 ■ New experimental payload added to propulsion module
WEIGHT Orbiter 2,379 kg Lander 1,471 kg Rover 27 kg (travels 500 m) Payload total 3,850 kg	WEIGHT Propulsion module 2,145 kg Lander 1740.86 kg (including rover) Rover 26 kg Payload total 3,900 kg
MISSION LIFE ORBITER: Planned 1 year, estimated 7 years LANDER, ROVER: 1 lunar day	MISSION LIFE PROPULSION MODULE: 3 to 6 months LANDER, ROVER: 1 lunar day
LANDING SITE 70.9 degree S 22.7 degree E; high plain between two craters, Manzinus C and Simpelius N	LANDING SITE 69.36 degree S, 32.34 degree E; slightly off the site for Chandrayaan-2
DAYS TO MOON Around Earth 23 days Towards Moon 7 days Around Moon 13 days Lander separation, de-boasting, powered descent: 5 days TOTAL: 48 DAYS	DAYS TO MOON 42 DAYS, SOONER THAN CHANDRAYAAN-2
LANDER 5 thrusters; was to land in a 500mX 500 m space; was using pictures taken then and there to assess landing site	LANDER 4 thrusters; stronger legs; built w/ redundancies for more scenarios, using data already generated by the C2 orbiter; additional solar panels

Changes in the Mission, Design:

- Instead of a success-based design in Chandrayaan-2, ISRO scientists are doing a **failure-based design in Chandrayaan-3**.
- **One, the landing area has been expanded.** Instead of trying to reach a specific 500mx500m patch for landing as targeted by Chandrayaan-2, the current mission has been given instructions to land safely anywhere in a 4kmx2.4km area.
- **Second, the lander has been provided more fuel** so it can travel longer distances to the landing site or an alternate landing site, if need be.
- **Third, the lander will no longer depend only on the pictures** it clicks during the descent to determine a landing site.
 - **High resolution images from the Chandrayaan-2 orbiter** have been fed into the lander and it will click images just to confirm that it has reached the correct location.
- **Then, changes have also been made to the physical structure of the lander.**
 - The central thruster on the lander has been removed, reducing the number from five to four.
 - The legs have been made sturdier to ensure it can land even at a higher velocity.
 - More solar panels have been added to the body of the lander.

Chandrayaan-3 Payloads:

- **The propulsion module:** It has Spectro-polarimetry of HAbitable Planet Earth (**SHAPE**) payload to look for smaller planets that might be habitable in the reflected light.

- **Lander payloads:** It will have 4 payloads -
 - Radio Anatomy of Moon Bound Hypersensitive ionosphere and Atmosphere (**RAMBHA**) - a passive experiment (from NASA) to help accurately measure the distance between Earth and moon.
 - Chandra's Surface Thermophysical Experiment (**ChaSTE**) to measure the thermal conductivity and temperature;
 - Instrument for Lunar Seismic Activity (**ILSA**) for measuring the seismicity around the landing site;
 - Langmuir Probe (**LP**) to estimate the plasma density and its variations.
 - **Rover payloads:** Alpha Particle X-ray Spectrometer (**APXS**) and Laser Induced Breakdown Spectroscope (**LIBS**) for deriving the elemental composition in the vicinity of the landing site.
-

INDIA-FRANCE BILATERAL RELATIONSHIP

Why in News?

- Expansion of bilateral defence ties is expected to be a key focus of Prime Minister Narendra Modi's two-day visit to France, beginning July 13.

India-France Bilateral Relationship:

- India and France have traditionally close and friendly relations.
- The current golden period in India-France ties can be traced to the **1998 nuclear tests**, when France was the first major power to open talks with India, which evolved into a strategic dialogue.
 - France had also opposed imposing sanctions on India.
- In 1998, the two countries entered into **Strategic Partnership**.
 - The areas of defence cooperation, space cooperation and civil nuclear cooperation constitute the three principal pillars of our Strategic Partnership
- Apart from these traditional fields of cooperation, India and France are increasingly engaged in new areas of cooperation like climate change, sustainable growth and development, the International Solar Alliance etc.

- France supports India's bid for permanent membership of the **United Nations Security Council** as well as its entry into the **Nuclear Suppliers Group**.

Economic Cooperation:

- From January to December 2021, the India-France bilateral trade in goods (excluding military equipment) stood at **USD 14 billion**.
 - India's exports to France were valued at USD 7.47 billion and India's imports from France were valued at USD 6.55 billion.
 - Hence, India has a trade surplus relationship with France.
- France is the **11th largest foreign investor in India** with a total FDI stock of USD 10.3 billion from April 2000 to September 2022.

Defence Cooperation:

- During President Emmanuel Macron's visit to India, the two countries decided to create an annual defence dialogue at the Ministerial level.
- The three services have regular defence exercises –
 - **Exercise Varuna** (Navy),
 - **Exercise Garuda** (Air Force),
 - **Exercise Shakti** (Army)
- As per the Stockholm International Peace Research Institute (SIPRI), between 2018 and 2022, **France was India's second largest arms supplier**, accounting for 29% of the country's imports.
 - Russia accounted for nearly half (45%) of India's arms imports during the same period.

FINANCE COMMISSIONS AND ITS OBJECTIVES

- **Finance Commission**
 - It is **constitutional body for giving recommendations on distribution of tax revenues** between the Union and the States and amongst the States themselves.
 - The Finance Commission is **constituted by the President under Article 280** of the Constitution.
 - It is **constituted at the end of every fifth year** or earlier, as deemed necessary by the President.
-

- Parliament may by law determine the requisite qualifications for appointment of members of the Commission and the procedure of their selection. On account of this, **The Finance Commission (Miscellaneous Provisions) Act, 1951** was passed.
 - **Objectives**
 - **It plays a crucial role in determining the fiscal framework** for resource allocation between the Union and state governments.
 - FC's recommendations consist of three key areas: **vertical devolution, horizontal distribution, and grant-in-aid.**
 - **Vertical devolution** focuses on Union to state transfers
 - **Horizontal distribution** involves the allocation of resources between states based on a specific formula.
 - **Grant-in-aid, covered under Article 275**, includes such sums as Parliament may by law provide and shall be charged on the Consolidated Fund of India. Different sums may be fixed for different states, as per their needs.
 - There is a **distinction between grants (Article 282) and grant-in-aid**, as the latter operates at arm's length and offers more flexibility in terms of control.
-