



PRATUSH Telescope

[Source: TH](#)

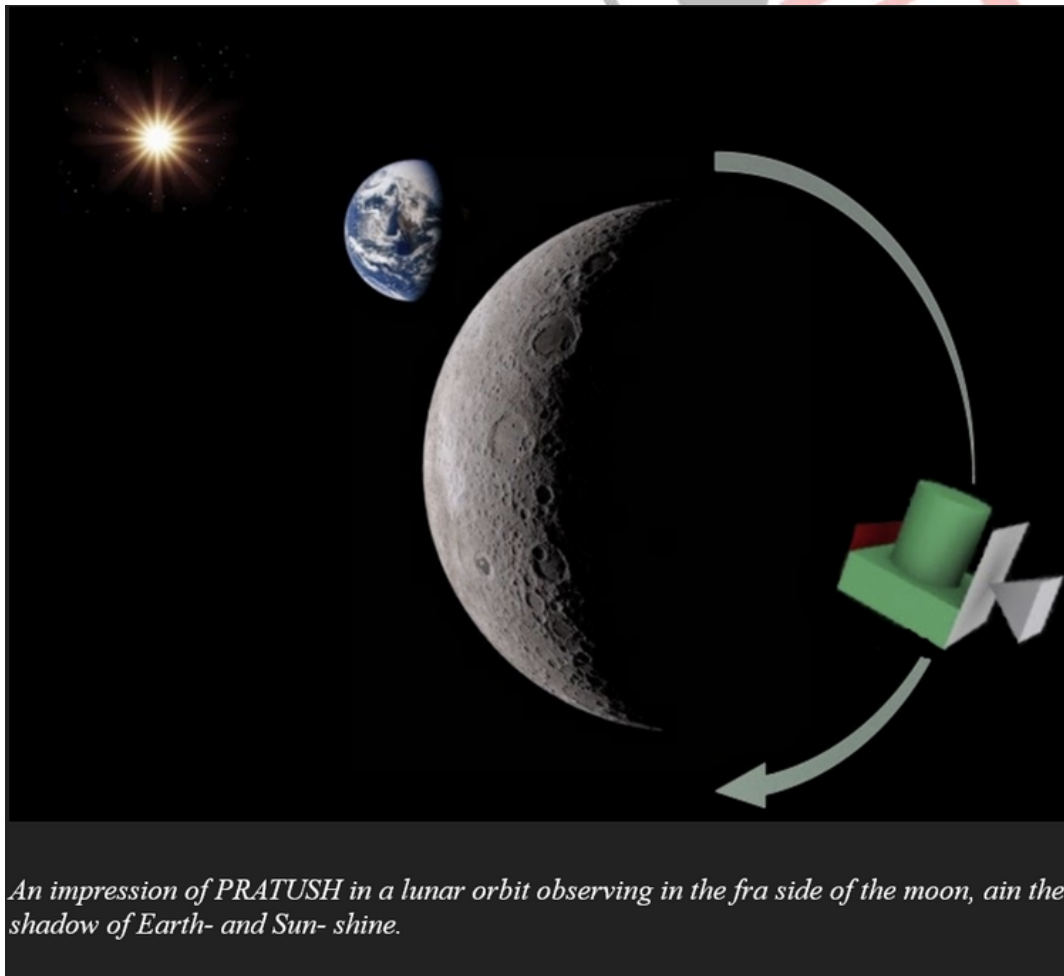
Why in the News?

Astronomers globally are anticipating a new era of exploration with **high-resolution telescopes** set to be placed on the moon and in orbit around it. Various proposals, like **India's PRATUSH (Probing Reionization of the Universe using Signal from Hydrogen)**, aim to open this new window to the universe.

What is PRATUSH?

- **About:**

- PRATUSH is a **radio telescope** designed to be placed on the far side of the moon. It is built by Raman Research Institute (RRI), Bengaluru **and** [Indian Space Research Organisation \(ISRO\)](#).



- **Objective:**

- It aims to uncover the timing and characteristics of the first stars' formation in the universe, including the colour of the light during **Cosmic Dawn**.
- It will unveil the evolution of our early universe from its initial cold gas state to the formation of stars, galaxies, and the universe as we observe it today **post-Big Bang**.
 - The Cosmic Dawn marks the period when the **first sources of radiation**, such as stars and galaxies, formed in the universe.
- **Capabilities:**
 - PRATUSH will carry advanced radio equipment covering a wide frequency range from **30 to 250 MHz**.
 - It will observe large sky areas continuously, recording detailed radio spectra with a resolution of **100 kHz**.
 - It includes a **custom-designed antenna, analog receiver, and digital correlator** for high-resolution spectral analysis.
 - The goal is to achieve a sensitivity level of a few millikelvin with precise Millikelvins (mK) are a unit of measurement used to express temperature on the Kelvin scale, where **1 millikelvin is equal to 1000 of a Kelvin**.
 - It is designed for a **two-year mission** in a circumlunar orbit to avoid interference and achieve optimal radio sky measurements.

What are the Other Global Missions Related to Telescopes on the Moon?

- **Lunar Surface Electromagnetic Experiment (LuSEE) Night Project:** It is a collaboration between [NASA](#) and **Berkeley Lab** and aims to land on the moon's far side. It is scheduled for launch in December 2025.
- **NASA's Long-Baseline Optical Imaging Interferometer:** It will be launched in parts and be assembled on the moon's far side.
 - It will study magnetic activity in stars and galaxies using visible and ultraviolet wavelengths.
- **ESA's Argonaut:** European Space Agency plans to launch a [Radio Telescope](#) aboard its lunar lander, 'Argonaut', by 2030, along with other projects focusing on **gravitational wave detection** and **infrared observations**.
- **China's Moon-Orbiting Radio Telescope:** China is set to launch a moon-orbiting radio telescope in **2026**, positioning itself **at the forefront of lunar exploration** and astronomical research.
 - The **Queqiao-2 satellite**, deployed in lunar orbit, carries a 4.2-meter antenna for radio astronomy.

What are Telescopes?

- **About:** Telescopes are devices designed to gather and focus light to form **magnified images of distant objects**.
 - Developed over centuries, with early telescopes credited to inventors like Galileo Galilei and Johannes Kepler in the 17th century.
- **Function:** Telescopes **gather and magnify light from space**, allowing astronomers to study celestial objects in detail.
 - They help observe distant objects, map the sky, study cosmic events, detect exoplanets, and **explore different wavelengths of electromagnetic radiation**, enhancing our understanding of the universe.
 - Telescopes use **lenses or mirrors** to collect and concentrate light, resulting in an enlarged and **clearer view of celestial objects**.
- **Types of Telescopes:**
 - **Catadioptric or Compound Telescopes:** Combine both lenses and mirrors for focusing light.
 - Examples: **Schmidt-Cassegrain and Maksutov-Cassegrain telescopes**.
 - **Radio Telescopes:** Detect radio waves emitted by celestial objects. Comprise large dish antennas and receivers.

- Example: Giant Metrewave Radio Telescope (GMRT), Pune.
- **Space Telescopes:** It is a telescope in outer space used to observe astronomical objects.
 - Examples: [Hubble Space Telescope](#) (a reflecting telescope) and the [James Webb Space Telescope](#)(a reflecting telescope).

Note

NASA is planning the next big space telescope, called the **Habitable Worlds Observatory (HWO)**. This telescope focuses on **ultraviolet, visible, and near-infrared wavelengths**, ideal for searching for potentially habitable exoplanets. The project is currently in its initial development phase.

UPSC Civil Service Examination, Previous Year Questions(PYQs)

Prelims:

Q 1. In the context of space technology, what is “Bhuvan”, recently in the news? (2010)

- A.** A mini-satellite launched by ISRO to promote distance education in India
- B.** The name given to the next Moon Impact Probe, for Chandrayan-II
- C.** A geoportal of ISRO with 3D imaging capabilities of India
- D.** A space telescope developed by India

Ans: C

Q.2 In the context of modern scientific research, consider the following statements about ‘IceCube’, a particle detector located at South Pole, which was recently in the news: (2015)

1. It is the world’s largest neutrino detector, encompassing a cubic kilometre of ice.
2. It is a powerful telescope to search for dark matter.
3. It is buried deep in the ice.

Which of the statements given above is/are correct ?

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

Ans: D

CDP-SURAKSHA

For Prelims: About CDP-Suraksha, Status of Horticulture in India, Technology in Agriculture.

For Mains: Role of technology in [doubling the income of farmers](#), [Farm subsidies](#) related Issues and Way Forward, Investment in Agriculture, Agricultural Reforms.

[Source: IE](#)

Why in News?

Recently, the Central government has launched a new platform called **CDP-SURAKSHA to disburse subsidies to horticulture farmers** under the [Cluster Development Programme \(CDP\)](#).

- This will boost the growth of India's horticulture sector, which contributes nearly **one-third** to the agriculture [gross value addition \(GVA\)](#).

What is CDP-SURAKSHA?

▪ About:

- SURAKSHA stands for **“System for Unified Resource Allocation, Knowledge, and Secure Horticulture Assistance.”**
- The platform will allow an instant disbursement of subsidies to farmers in their bank accounts by utilising the [e-RUPI](#) voucher from the [National Payments Corporation of India \(NPCI\)](#).
- It has features such as database integration with [PM-KISAN](#), cloud-based server space from NIC, [UIDAI](#) validation, eRUPI integration, local government directory (LGD), content management system, [geotagging, and geo-fencing](#).

▪ Working:

- The platform allows access to farmers, vendors, implementing agencies (IA), cluster development agencies (CDAs), and officials of the [National Horticulture Board \(NHB\)](#).
- A farmer can login using their mobile number, place an order and contribute their share of the cost of planting material.
- After payment, an [e-RUPI](#) voucher will be generated. This voucher will then be received by a vendor, who will provide the required planting material to the farmer.
- After the delivery of material, farmers have to verify the delivery through geo-tagged photos and videos of their field.
- After verification, the implementing agencies (IA) will release the money to the vendor for the e-RUPI voucher. The vendor will be required to upload an invoice of the payment on the portal.
- The IA will collect all the documents and share them with the CDA for subsidy release, then only the subsidy will be released to the IA.
- However, the farmer, who raised the demand for the plant material using the platform, can avail of the subsidy at the first stage only.

What is e-Rupee?

- It is a **one-time payment mechanism** that enables **users to redeem the voucher without a card, digital payments app or internet banking access**, at the merchants accepting [UPI e-Prepaid Vouchers](#).
- The e-RUPI would be shared with the beneficiaries for a specific purpose or activity by organisations via SMS or QR code.

A cashless and contactless instrument for digital payment: e-RUPI

About e-RUPI

- **Developer:** e-RUPI is developed by the National Payments Corporation of India (NPCI) which also developed the Unified Payments Interface (UPI) platform and the Bharat Interface for Money (BHIM).
- **Functioning of e-RUPI:** It is basically a digital voucher which a person receives on phone in the form of an SMS or QR code.
 - It is a pre-paid voucher, which the person can then go and redeem at any centre that accepts it.
 - It can be easily used even by those who use basic feature phones.
- **Significance:** Even the smallest of online payments can be tracked down, ensuring that no misuse of payments occur.
 - It is therefore expected to play a major role in strengthening Direct Benefit transfer (DBT) schemes.



What is the Status of the Horticulture Sector in India?

- India is the **2nd largest** producer of fruits and vegetables.
- Fruits and vegetables account for almost 90% of the total horticulture production in the country.
- The Indian horticulture sector contributes about 33% to the agriculture **Gross Value Added (GVA)** making a very significant contribution to the Indian economy.
- India is currently producing about 320.48 million tons of horticulture produce which has surpassed the food grain production, that too from a much smaller area (25.66 million Ha. for horticulture against 127.6 M. ha. for food grains).
 - The **productivity of horticulture crops is much higher compared to the productivity of food grains** (12.49 tones/ha against 2.23 tones/ha.).
- According to the **Food and Agricultural Organisation (FAO)**, India leads in the production of certain vegetables (ginger and okra) and fruits (banana, mangoes and papaya).

- In terms of **exports, India is ranked 14th in vegetables and 23rd in fruits**, and its share in the global horticultural market is a mere 1%.
- Bangladesh, UAE, Nepal, Netherlands, Malaysia, Sri Lanka, the UK, Oman, and Qatar are the major export destinations for fresh fruits and vegetables.
- Around **15-20% of the fruits and vegetables in India are wasted** along the supply chain or at a consumer level, contributing to **greenhouse gas emissions (GHGs)**.

What is the Cluster Development Program (CDP)?

- **About:**
 - It is a **central sector programme** aimed at growing and developing identified horticulture clusters to make them globally competitive.
 - **A horticulture cluster** is a regional/geographical concentration of targeted horticulture crops.
- **Implementation:**
 - It will be implemented by the **National Horticulture Board (NHB)** of the Ministry of Agriculture and Farmers' Welfare.
 - In a pilot phase, the programme will be implemented in 12 horticulture clusters, out of the total **55 clusters** selected for the programme.
 - These clusters will be implemented through **Cluster Development Agencies (CDAs)** which are appointed on the recommendations of the respective State/UT Government.
- **Objectives:**
 - To address all major issues related to the Indian **horticulture sector** including pre-production, production, post-harvest management, logistics, marketing and branding.
 - CDP **aims to improve exports of targeted crops by about 20%** and create **cluster-specific brands to enhance the competitiveness of cluster crops**.
 - To leverage geographical specialisation and promote integrated and market-led development of horticulture clusters.
 - To converge with other initiatives of the Government such as the **Agriculture Infrastructure Fund**.
- **Examples:**
 - Some **clusters identified for the implementation of CDP** are:
 - Siphahijala (Tripura) for pineapple
 - Solapur (Maharashtra) and Chitradurga (Karnataka) for pomegranate
 - West Jaintia Hills (Meghalaya) for turmeric.

What are the Challenges Faced by the Horticulture Sector?

- **Production Challenges:** Such as small operational landholdings, lack of irrigation facilities and poor soil management, threat of pests etc.
- **Institutional Challenges:** The limited outreach of **farm insurance** and **farm mechanisation**, combined with a **lack of access to institutional credit** for small and marginal farmers, contribute to lower investment in the sector.
- **Climate Change:** Climate change-related events such as changing weather patterns, droughts, floods, and other natural disasters, are another significant challenge that can lead to crop failures and losses.
- **Farmers Producer Organisation (FPO):** Weak **FPOs** are also the sector's challenges, limiting farmers' ability to benefit fully from the opportunities available.
- **Infrastructural Issues:** Other challenges such as the **perishable nature** of fruits and vegetables, **Poor logistics** and lack of equitable **cold storage and warehousing** facilities, a **lack of guidance** for farmers on which crops to plant, resulting in overproduction of certain commodities and shortages of others.

What Initiatives have been Taken for for the Development of the Horticulture Sector?

- **National Horticulture Board (NHB):**
 - It was set up by the Government of India in **1984** as an Autonomous organization under

the administrative control of the **Ministry of Agriculture and Farmers Welfare.**

- It aims to improve the **integrated development of the Horticulture industry** and to help in coordinating, and sustaining the production and processing of fruits and vegetables.
- **Cluster Development Programme:**
 - It aims to promote the integrated and market-led development of pre-production, production, post-harvest, logistics, branding, and marketing activities by leveraging the geographical specialisation of horticulture clusters
- **CHAMAN (Coordinated Horticulture Assessment and Management using geoinformatics):**
 - Under this project, sound methodology for estimation of Horticulture crops is being developed and implemented on pilot basis using **Sample Survey methodology** and **Remote Sensing** technology.
- **Mission for Integrated Development of Horticulture (MIDH):**
 - It is a **centrally sponsored scheme** for the holistic growth of the horticulture sector covering fruits, vegetables, root & tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashews, cocoa and bamboo.
 - **Subschemes:**
 - National Horticulture Mission (NHM)
 - **Horticulture Mission for North East and Himalayan States (HMNEH)**
 - National Horticulture Board (NHB)
 - Coconut Development Board (CDB)
 - **Central Institute of Horticulture (CIH), Nagaland.**
- **Horticulture Area Production Information System (HAPIS):**
 - This is a web portal for the online submission of district-level data pertaining to area and production of horticulture crops.
- **Pradhan Mantri Krishi Sinchayee Yojana (PMKSY):**
 - It is addressing the irrigation problem which aims to promote the development of **irrigation infrastructure, expand the cultivable areas**, and enhance on-farm water efficiency.

Way Forward

- To enhance the productivity of this sector and to improve the livelihood of farmers, the **effective and timely disbursement of subsidies is essential.**
- There is tremendous scope for **enhancing the productivity of Indian horticulture** which is imperative to cater to the **country's estimated demand of 650 Million MT of fruits and vegetables by the year 2050.**

Drishti Mains Question:

Q. Discuss the sustainability of providing subsidies as a solution to various issues in India, and analyse whether it imposes a burden on the fiscal purse. Support your argument with relevant examples.

UPSC Civil Services Examination Previous Year Questions (PYQs)

Q1. Under the Kisan Credit Card scheme, short-term credit support is given to farmers for which of the following purposes? (2020)

1. Working capital for maintenance of farm assets
2. Purchase of combine harvesters, tractors and mini trucks
3. Consumption requirements of farm households
4. Post-harvest expenses
5. Construction of family house and setting up of village cold storage facility

Select the correct answer using the code given below:

(a) 1, 2 and 5 only

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

Ans: (b)

Mains:

Q. Assess the role of the National Horticulture Mission (NHM) in boosting the production, productivity and income of horticulture farms. How far has it succeeded in increasing the income of farmers? **(2018)**

Israel's Air Defence System

Source: IE

Why in News?

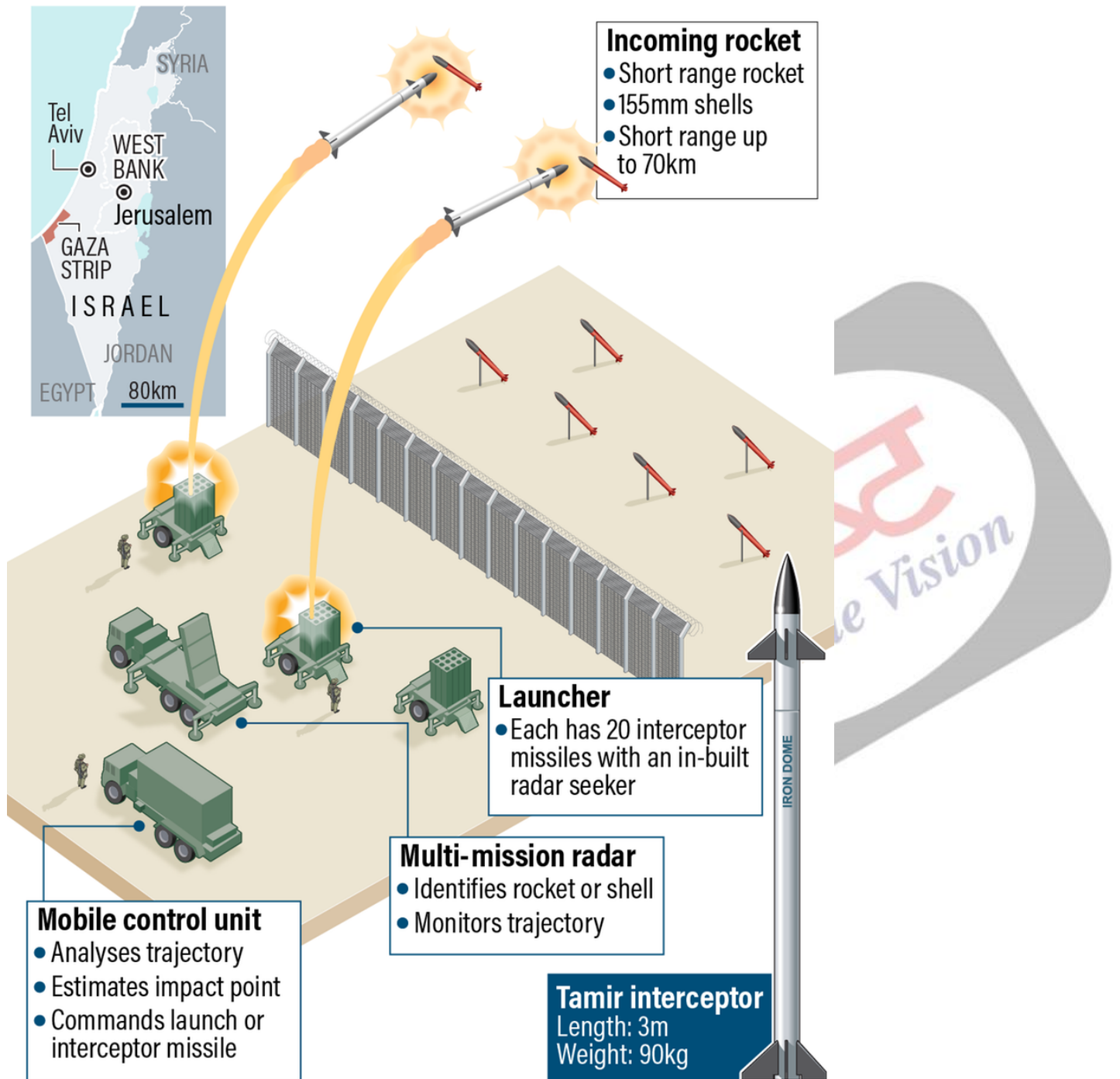
Recently, Israel's multi-layered air defence system defended the country from a major attack, as Iran launched over 300 armed drones and long-range missiles.

What are the Key Facts About Israel's Air Defense System?

- **Air defence systems** are basically shields against threats from the sky. They are a combination of different technologies that work together to **spot, track, and destroy** incoming aircraft, missiles, or drones.
 - Israel's air defense system consists of **Iron Dome** and **C-Dome**.
- **Iron Dome:**
 - It is a **short-range, ground-to-air, air defence system of Israel**.
 - The Iron Dome has **three main systems** that work together to provide a shield over the area where it is deployed.
 - **Radar:** It has a detection and tracking radar to spot any incoming threats.
 - **Weapon Control:** It has a **battle management and weapon control system (BMC)**.
 - **Missile Fire:** It also has a missile firing unit. The BMC basically liaises between the radar and the interceptor missile.
 - It is **used for countering rockets, artillery & mortars** as well as aircraft, helicopters and **Unmanned Aerial Vehicles (UAV)**.
 - It is capable of being used in **all weather conditions**, including during the day and night. It **claims a success rate of over 90%**.
 - It **can protect deployed and manoeuvring forces**, as well as the forward operating base (FOB) and urban areas, against a wide range of indirect and aerial threats.

ISRAEL'S IRON DOME DEFENCE SYSTEM

Mobile system to intercept rockets with range of 4-70km



▪ C-Dome:

- It is a **naval version** of [Israel's Iron Dome](#) air defence system, used to shield against rocket and missile attacks.
- It was **first unveiled in 2014** and declared operational in November 2022.
- It works similarly to the Iron Dome, except that it is mounted on ships.
- It is **mounted on Sa'ar 6-class corvettes, and German-made warships**, and uses the **same interceptor** as the Iron Dome.
 - Unlike the Iron Dome, which has its dedicated radar, the C-Dome is integrated into the ship's radar to detect incoming targets.
- It ensures **full-circular vessel protection** and **high kill probability** against a full

spectrum of modern threats—maritime and coastal.

Similar Air Defense System of India:

- **Indrajaal:**
 - **India's first indigenous drone defence dome** called “**Indrajaal**” was designed and developed by **Hyderabad-based technology R&D firm Grene Robotics**.
 - It has the capability to **autonomously protect an area of 1000-2000 sq km** against the aerial threats by assessing and acting on aerial threats such as Unmanned Aerial Vehicles (UAVs), loitering munitions, and Low- Radar Cross Section (RCS) targets.
 - It will not only provide protection to defence bases but it will be **beneficial for linear infrastructures like international borders** against advanced weaponry.
- **S-400 Triumph Missile System:**
 - The **S-400 Triumph** is a **mobile, surface-to-air missile system (SAM)** designed by **Russia**. It is one of the most dangerous operationally deployed **modern long-range SAM (MLR SAM)** in the world, considered much ahead of the [US-developed Terminal High Altitude Area Defense System \(THAAD\)](#).
 - The system can **engage all types of aerial targets** including aircraft, unmanned aerial vehicles (UAV) and ballistic and cruise missiles **within a range of 400km, at an altitude of up to 30km**.
 - The system **can track 100 airborne targets** and engage six of them simultaneously.

Read More: [Iron Dome](#), [Israel-Palestine Conflict](#)

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims:

Q 1. Which one of the following countries of South-West Asia does not open out to the Mediterranean Sea? (2015)

- (a) Syria
- (b) Jordan
- (c) Lebanon
- (d) Israel

Ans: (b)

Mains:

Q1. ‘Too little cash, too much politics, leaves UNESCO fighting for life.’ Discuss the statement in the light of US’ withdrawal and its accusation of the cultural body as being ‘anti-Israel bias’. **(2019)**

Q2 . “India’s relations with Israel have, of late, acquired a depth and diversity, which cannot be rolled back.” Discuss. **(2018)**

India’s New Post Office in Antarctica

For Prelims: [National Centre for Polar and Ocean Research \(NCPOR\)](#), Indian Institute of Tropical Meteorology (IITM), Himadri, [Dakshin Gangotri](#), [Maitri North](#), Indian Antarctic Program, [Antarctic Treaty System](#)

For Mains: Significance of India's Research Station in Antarctica

Source: IE

Why in News?

Recently, the [Department of Posts](#) opened a second branch of the post office at the [Bharati research station](#) in Antarctica after almost four decades.

- Letters intended for [Antarctica](#) will now be addressed with a **new experimental PIN code, MH-1718**, typical for a new branch.
- **Currently, Maitri and Bharati are the two active research stations** that India operates in Antarctica.

What is the Significance of India's Post Office in Antarctica?

- **Historical Context:**
 - In 1984, India set up its **first post office** in Antarctica at [Dakshin Gangotri](#) (India's first research stations).
 - Unfortunately, in 1988-89, Dakshin Gangotri was submerged in ice and was subsequently **decommissioned**.
- **Continuing the Tradition:**
 - India established another post office at the [Maitri research station](#) in **Antarctica** on 26th January 1990.
 - India's two Antarctic research bases, **Maitri and Bharati**, though are 3,000 km apart but both come under the **Goa postal division**.
- **Operational Process:**
 - Letters meant for the post office in Antarctica are sent to the [National Centre for Polar and Ocean Research \(NCPOR\) in Goa](#).
 - When a scientific expedition to Antarctica departs from NCPOR, a researcher carries the consignment of letters.
 - At the research base, the letters are 'cancelled', brought back, and returned via post.
 - The term 'cancellation' **refers to the mark placed** on a stamp or postal stationery to render it useless for reuse.
- **Strategic Presence:**
 - The existence of an Indian post office in Antarctica serves a **strategic purpose**.
 - Typically, an Indian post office operates within Indian territory. Antarctica, being foreign and neutral under the [Antarctic Treaty](#), provides a unique opportunity to **assert India's presence** on the continent.
 - It **symbolises India's commitment** to scientific exploration and environmental stewardship.
- **Antarctica's Governance:**
 - The **Antarctic Treaty** neutralises territorial claims, **prohibits military operations** and nuclear tests, and emphasises scientific discovery.
 - Having an Indian post office in this foreign land **aligns with the treaty's spirit**.

What is India's Antarctic Programme?

- **About:**
 - It is a **scientific research and exploration program** under the National Centre for

Antarctic and Ocean Research (NCPOR). It started in 1981 when the first Indian expedition to Antarctica was made.

- NCPOR was **established in 1998**.

▪ **Dakshin Gangotri:**

- **Dakshin Gangotri** was the **first Indian scientific research base** station established in Antarctica, as a part of the Indian Antarctic Program.
- However, it **was submerged** in ice in 1988-89 and was subsequently **decommissioned**.

▪ **Maitri:**

- **Maitri** is India's **second permanent research station** in Antarctica. It was built and finished in 1989.
- Maitri is situated in the rocky mountainous region called **Schirmacher Oasis**. India also built a **freshwater lake** around Maitri known as [Lake Priyadarshini](#).

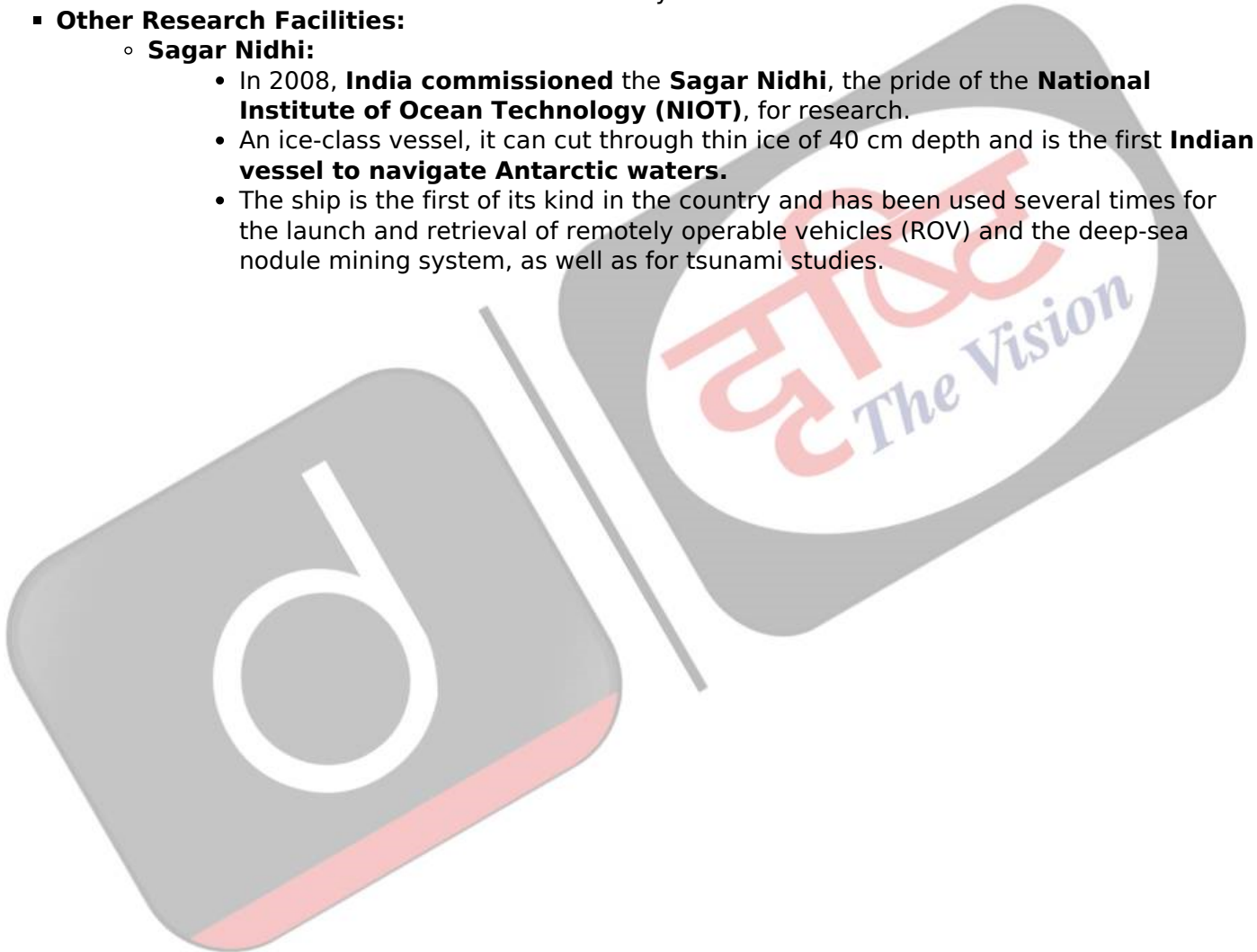
▪ **Bharti:**

- **Bharti, India's latest research station operation since 2012**. It has been constructed to help researchers work in safety despite the harsh weather.
- It is India's first committed research facility and is located about 3000 km east of Maitri.

▪ **Other Research Facilities:**

◦ **Sagar Nidhi:**

- In 2008, **India commissioned** the **Sagar Nidhi**, the pride of the **National Institute of Ocean Technology (NIOT)**, for research.
- An ice-class vessel, it can cut through thin ice of 40 cm depth and is the first **Indian vessel to navigate Antarctic waters**.
- The ship is the first of its kind in the country and has been used several times for the launch and retrieval of remotely operable vehicles (ROV) and the deep-sea nodule mining system, as well as for tsunami studies.



INDIAN RESEARCH STATION IN ANTARCTICA



What is the Antarctic Treaty System?

▪ About:

- It is the whole complex of arrangements made to **regulate relations** among states in the Antarctic.
- Its purpose is to **ensure in the interests of all mankind** that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord.
- It is a global achievement and has been a hallmark of **international cooperation** for more than 50 years.
- These agreements are **legally binding** and purpose-built for the unique geographical, environmental, and political characteristics of the Antarctic and form a robust international **governance framework** for the region.

▪ Challenges:

- While the Antarctic Treaty has been able to successfully respond to a range of challenges, circumstances are radically different in the 2020s compared to the 1950s.
 - Antarctica is much more accessible, partly due to technology but also **climate change**. More countries now have substantive interests in the continent than the original 12.
 - Some global resources are becoming scarce, especially oil. There is considerable speculation regarding **nations' interests in Antarctic resources, particularly fisheries and minerals**.
 - Therefore, all of the treaty signatories, but especially those with significant stakes in the continent, need to give the future of the treaty more attention.
- **Major International Agreements of the Treaty System:**
 - The 1959 Antarctic Treaty
 - The 1972 Convention for the Conservation of Antarctic Seals
 - The 1980 Convention on the Conservation of Antarctic Marine Living Resources
 - The 1991 Protocol on Environmental Protection to the Antarctic Treaty

National Centre for Polar and Ocean Research (NCPOR)

- It was established as an **autonomous Research and Development** Institution of the **Ministry of Earth Sciences** on the 25th May 1998.
- Earlier known as the National Centre for Antarctic and Ocean Research (NCAOR), NCPOR is India's premier R&D institution responsible for the country's research activities in the Polar and Southern Ocean realms.
- It is the **nodal agency** for planning, promotion, coordination and execution of the entire gamut of polar and southern ocean scientific research in the country as well as for the associated logistics activities.
- Its responsibilities include:
 - Management and upkeep of the **Indian Antarctic Research Bases "Maitri" and "Bharati", and the Indian Arctic base "Himadri"**.
 - Management of the **Ministry's research vessel ORV Sagar Kanya** as well as the other research vessels chartered by the Ministry.
 - The Ocean Research Vehicle (ORV) Sagar Kanya is a versatile ocean observing platform equipped with technologically advanced scientific equipment and related facilities.
- **It is located in the state of Goa.**

Drishti Mains Question:

Q. What are the key achievements and challenges faced by India in its Antarctic endeavours? Also, explain how India's presence in Antarctica contributes to its global standing and scientific capabilities.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims:

Q. On 21st June, the Sun (2019)

- (a) does not set below the horizon at the Arctic Circle
- (b) does not set below the horizon at Antarctic Circle
- (c) shines vertically overhead at noon on the Equator
- (d) shines vertically overhead at the Tropic of Capricorn

Ans: (a)

Mains:

Q. How do the melting of the Arctic ice and glaciers of the Antarctic differently affect the weather patterns and human activities on the Earth? Explain.(2021)

Q. Why is India taking keen interest in resources of Arctic region?(2018)

CWG Stares at Uncertain Future

Source: IE

Recently, Malaysia rejected the offer to host the [Commonwealth Games \(CWG\)](#) citing **short notice and insufficient funds**.

- The **Commonwealth Games (CWG)** is a **quadrennial international** multi-sport event among athletes from the Commonwealth of Nations, which mostly consists of territories of the former British Empire.

Commonwealth Nations:

- The [Commonwealth](#) is a collective of **56 countries, primarily former British colonies**.
 - **Established in 1949** by the **London Declaration**.
 - Members are mainly situated in Africa, the Americas, Asia, and the Pacific, with notable emerging economies.
- It was created as the **British Commonwealth of Nations** through the **Balfour Declaration of 1926**.
- The **chief institutions** of the organisation are **Commonwealth Secretariat and Commonwealth Foundation** which focuses on **intergovernmental aspects and non-governmental relations** among member states respectively.
- The Commonwealth consists of **both Republics and Realms**.
 - The **British monarch is the Head of State for the realms**, whereas the republics are ruled by elected governments except in the case of five countries — Brunei Darussalam, Eswatini, Lesotho, Malaysia, and Tonga — each a self-governed monarchy.
 - The **realms** are Antigua and Barbuda, Australia, the Bahamas, Belize, Canada, Grenada, etc.

Read more: [Future of the Commonwealth](#)

PDF Reference URL: <https://www.drishtias.com/current-affairs-news-analysis-editorials/news-analysis/19-04-2024/print>