the IAS hub
Be Your Dream.

DECEMBER
24

CRUX 10

10 News. 10 Sources. One Place



THE HINDU
ET
BS
TOI
The Indian EXPRESS
livemint
pib
DownToEarth
FORTNIGHTLY ON POLITICS OF DEVELOPMENT, ENVIRONMENT AND HEALTH
Science Reporter
सत्यमेव जयते
विज्ञान एवं प्रौद्योगिकी मंत्रालय
MINISTRY OF SCIENCE AND TECHNOLOGY

Table of Contents

1. Vokkaliga Community
2. Centrally Protected Monuments
3. One Rank One Pension
4. Standing Committee on Finance
5. Covid Vaccine iNCOVACC
6. Startup India Seed Fund Scheme
7. MSP for Copra
8. Vainu Bappu Observatory
9. Institute of Fisheries Education
10. Extinction of Diving Birds

THE HINDU Page 5

VOKKALIGA COMMUNITY

(Syllabus: GS Paper 2 - Polity & Governance)

Vokkaliga legislators of Karnataka want hike in reservation for community

The Hindu Bureau
BELAGAVI

Close on the heels of the dominant Panchamasali sub-sect of Lingayat community organising a rally demanding increase in reservation, Ministers and legislators belonging to another dominant community – Vokkaligas – petitioned Karnataka Chief Minister Basavaraj Bommai on Friday seeking bigger share in quota.

A delegation of Vokkaliga legislators, including prominent Ministers, demanded that the reservation for 3-A group, in which the Vokkaligas have been placed, should be increased from 4% to 12%.

The delegation argued that the present quota level for the community is meagre when compared with its population. The entire reservation allocated for the community is 4% though the Vokkaligas account for an estimated 16% of the population of Karnataka.

The delegation expressed concern that Kunchitigas, Bunts and Reddies, who are sub-sects of the Vokkaliga community, were not included in the reservation list of the Centre. They urged the Chief Minister to take appropriate measures in this regard.

The Chief Minister said the Karnataka Permanent Backward Classes Commission had been instructed to submit a report at the earliest to help take a decision in this regard.

The Chief Minister pointed out that Adichunchanagiri Math seer Nirmalanandanatha swamiji had already submitted a petition in this regard.

The petition had been forwarded to the Commission on November 29 for suitable action, he said.

Context: A delegation of **Vokkaliga** legislators in Karnataka, including prominent Ministers, demanded that the reservation for 3A group, in which the Vokkaligas have been placed, should be increased from 4% to 12%.

Key Points

- **Issue**: The delegation argued that the **present quota level for the community** is meagre when compared with its population.
  - The delegation expressed concern that **Kunchitigas, Bunts and Reddies**, who are sub-sects of the Vokkaliga community, were not included in the reservation list of the Centre.
- **Reservation allocated**: The entire **reservation allocated for the community is 4%** though the Vokkaligas account for an estimated **16% of the population of Karnataka.**
  - While the **3A group comprise 20% of the total population** of Karnataka, Vokkaligas are eligible for only 4% reservation.
  - When compared to the total population of the Vokkaliga community, the reservation given to them in education and employment is less.

Vokkaliga Community

- **About**: Vokkaliga is a community of **closely- related castes.**
- **Distribution**: They are majorly present in the state of **Karnataka**.
  - They are also presented in the state of **Tamilnadu in minor numbers.**
- **Historical aspects:** They have **historical, political and demographic dominance** in old mysore region.
  - It is even believed that the **Rashtrakutas and Western Gangas** were of Vokkaliga origin.
- **Common names:** Vokkaligas commonly carry names such as **Gowda, Hegdeand**.
- **Agricultural caste:** Before the **20th century Vokkaligas** were the landed gentry and agricultural caste of Karnataka.
  - They, along with the Lingayats, owned most of the **cultivated land in the state.**

THE HINDU Page 10

CENTRALLY PROTECTED MONUMENTS

(Syllabus: GS Paper 1 - Art & Culture)

U.P. and T.N. struggle with encroachment in Centrally protected monuments, sites

A total of 356 heritage structures have encroachments across the country, Tourism and Culture Minister Kishan Reddy told the Rajya Sabha; regular inspections being conducted by ASI officials

The Hindu Bureau
NEW DELHI

Uttar Pradesh has the largest number of Centrally Protected Monuments that have been encroached upon, closely followed by Tamil Nadu.

While 75 protected monument sites have been enroached upon in Uttar Pradesh, the corresponding number for Tamil Nadu is 74, Minister for Tourism and Culture G. Kishan Reddy told the Rajya Sabha.

Uttar Pradesh also has the largest number of Centrally Protected monuments in the country at 743, while Tamil Nadu has 412.

A total of 356 such heritage structures have encroachments across the country, Mr. Reddy said in reply to a question by Congress MP Mukul Wasnik. In 2019, the government had informed the Rajya Sabha that there were 321 protected monuments whose sites had been infringed.

Karnataka and Maharashtra are third and fourth with 48 and 46 such monuments, respectively, hosting encroachments. Gujarat has 35 protected monuments that have been invaded.

India has a total of 3,695 Centrally Protected Monuments or Sites in the country, under the protection of the Archaeological Survey of India (ASI). The monuments are regularly inspected by the ASI officials to assess their present condition. Necessary conservation and preservation works are taken up as per the requirement, he said.

The House was told that among the various action taken by the ASI are filing police complaints, issuing show-cause notices to defaulters for the removal of the said encroachments, and issuing demolition orders to the Collector for the demolition or removal of the said encroachments.

The ASI regulates construction around the protected monuments through the Ancient Monuments and Archaeological Sites and Remains (Amendment) Act, 2010. The Act prohibits construction within 100 metres of a protected monument.

The next 300-metre radius is regulated too. Proposed amendments seek to do away with the ban on construction within 100 metres of a monument and only regulate construction within 100-200 metres, under the Act that protects monuments and sites over 100 years old.

This is expected to give more powers to the ASI on the encroachments.

Slow seige

The removal of encroachments is a continuous process and action is being taken by the Archaeological Society of India, the Culture Ministry said in Parliament



Temporary structures set up in the premises of the Fort Gateway (Main Guard Gate) in Tiruchi.

States with the most number of monuments encroached upon

- Uttar Pradesh: 75
- Tamil Nadu: 74
- Karnataka: 48
- Maharashtra: 46
- Gujarat: 35
- Rajasthan: 22

Context: Uttar Pradesh has the largest number of **Centrally Protected Monuments** which have been encroached upon, closely followed by Tamil Nadu.

- While 75 protected monument sites have been trespassed in Uttar Pradesh, the corresponding number for Tamil Nadu is 74, the Minister for Tourism and Culture told the Rajya Sabha.

Key Points

- India has a total of **3,695 Centrally Protected Monuments or Sites** in the country, under the protection of the Archaeological Survey of India (ASI).
- **Uttar Pradesh has the largest number** of Centrally Protected monuments in the country at 743, while Tamil Nadu has 412.
- **Karnataka and Maharashtra are third and fourth** with 48 and 46 such monuments which are encroached upon. Gujarat has 35 protected monuments that have been invaded.

Ancient Monuments and Archaeological Sites and Remains Act (AMASR), 1958

- **About**: The Act was introduced in 1958 for **safeguarding the cultural heritage** of the country.
- **Objective**: To **protect ancient and historical monuments** and archaeological sites and remains of national importance.
- **Key provisions:**
  - The act r**egulates the archaeological excavations** and the protection of sculptures, carvings and other like objects.
  - The **Act prohibits construction in 'prohibited areas'**, an area of 100 meters around protected monuments.
    - The central government **can extend the prohibited area** beyond 100 meters.
  - The **Archaeological Survey of India** functions under the provisions of the act.
    - The ASI **regulates construction around the protected monuments** through the Ancient Monuments and Archaeological Sites and Remains (Amendment) Act, 2010.

INDIAN EXPRESS

Page 7

ONE RANK ONE PENSION

(Syllabus: GS Paper 2 - Govt. Policies & Interventions)

Cabinet nod for revision in pensions paid under OROP

EXPRESS NEWS SERVICE
NEW DELHI, DECEMBER 23

THE UNION Cabinet on Friday approved a revision in the pensions paid to retired defence personnel and their families under One Rank One Pension (OROP) at an annual additional expenditure of Rs 8,450 crore and arrears of Rs 23,638 crore.

At a meeting chaired by Prime Minister Narendra Modi, the Cabinet approved the increase that would be applicable from July 1, 2019.

"Pension of the past pensioners would be re-fixed on the basis of average of minimum and maximum pension of defence forces retirees of calendar year 2018 in the same rank with the same length of service," a government statement said.

The revision would be applicable to all retired defence personnel up to June 30, 2019, but not including those who took pre-mature retirement till July 1, 2014. The government said the revision would benefit over 25.13 lakh pensioners, including 4.52 lakh more recent retirees, and their families.

"Pension for those drawing above the average shall be protected. The benefit would also be extended to family pensioners, including war widows and disabled pensioners," the statement read.

The arrears would be paid in four half-yearly installments, except for those who receive special, liberalised family pension and gallantry award winners, who will get it in one installment.

The total arrears from July 1, 2019 to June 30, 2022 amounted to Rs.23,638 crore and this expenditure was "over and above the ongoing expenditure on account of OROP", the statement said.

"The government took a historic decision to implement OROP for the defence forces personnel/family pensioners and issued policy letter on November 07, 2015 for revision of pension w.e.f. July 01, 2014. In the said policy letter, it was mentioned that in future, the pension would be re-fixed every 5 years. Approx. Rs 57,000 crore has been spent @Rs 7,123 crore per year in eight years in the implementation of OROP," the statement read.

Context: THE Union Cabinet approved a revision in the pensions paid to retired defence personnel and their families under **One Rank One Pension (OROP)** at an annual additional expenditure of Rs 8,450 crore and arrears of Rs 23,638 crore.

One Rank One Pension (OROP)

- **About**: OROP implies the payment of the **same pension to armed forces** personnel for the same rank and the same length of service, irrespective of the date of retirement.
- **Background**: Since independence, the model of deciding pensions for the armed forces had been the **'one rank one pension' model for 26 years**.
  - In 1973, the Indira Gandhi-led government **terminated the OROP model.** Also, the Third Pay Commission reduced the pensions of soldiers while increasing the pensions of civilians.
  - In 1986, the **Rajiv Gandhi-led government implemented the Rank Pay Scheme** in the wake of the Fourth Pay Commission.
    - This brought the basic pays of seven officer ranks in the army (and their equivalents in the navy and the air force) down by fixed amounts designated as rank pay.
    - This caused reduced pensions for many personnel of the armed forces in 1986 and later years.
    - Also, this caused an asymmetry in the pay scales of armed forces officers and their equivalent officers in the Indian Police Force (IPS).
- **Koshiyari Committee:** A **10 member all-party parliamentary panel** formed under the chairmanship of Bhagat Singh Koshiyari.
  - The **Committee accepted the veterans' demand of OROP** and stated that equal pension should be paid for an equal length of service of the same rank, irrespective of the retirement date.
  - Also, any future increase in the pension rate should be automatically passed on to the past pensioners.
  - Finally, in 2014, the government passed the **order of implementation of the OROP scheme.**
- **Current Status:** As per the order of the government, the pension of the past pensioners would be **re-fixed on the basis of pension of retirees** of the calendar year 2013 and the benefit will be effective with effect from January 2014.
- **Coverage**: Armed Forces Personnel **who had retired till 30th june 2014** are covered under it.
  - **Uttar Pradesh and Punjab** have the highest number of OROP beneficiaries.

ECONOMIC TIMES

Page 9

STANDING COMMITTEE ON FINANCE REPORT

(Syllabus: GS Paper 3 - Economy & Infrastructure)

House Panel Calls for a Fair Deal Between Digital Firms, News Cos

Panel proposes that there must be regulatory provisions to ensure fair process

Our Bureau

Chennai: A parliamentary panel has proposed that there must be regulatory provisions to ensure that news publishers are able to sign contracts with the so-called 'Systemically Important Digital Intermediaries' (SIDIs) through a fair and transparent process.

The panel has called for classifying leading entities that can negatively influence competitive conduct in the digital ecosystem as 'Systemically Important Digital Intermediaries' (SIDIs), based on their revenue, market capitalisation and number of active business and end users.

"India has diverse and numerous news publishers who get advertising revenues primarily through SIDIs," the committee said in a report, adding that regulatory provisions must ensure that "news publishers are able to establish contracts with these SIDIs through a fair and transparent process."

The advertising business of Big Tech companies, it said, is a 'monopolist threat' as it owns every step in a system that connects ad sellers and buyers, which gives it an 'unfair edge over the market.'

"The Committee recommends that a SIDI should not possess for the purpose of providing online advertising services, personal data of end users using services of third parties that make use of core services of the platform," according to the report. "It should provide advertisers information on a daily basis, regarding price paid by the advertiser and the remuneration received by the publisher."

Further, the Committee said that a SIDI should provide advertisers and publishers with access to performance measurement tools of the gatekeeper and data necessary for advertisers and publishers to carry out an independent verification of advertisements inventory, including aggregated and non-aggregated data.

In their submissions before the panel, industry representatives said that a Big Tech company is the dominant player in search advertising. All websites would have the Big Tech company crawlers (a program used by search engines to collect data from the internet) placed on its website so that they get traffic through the big tech company search results.

"By requiring advertisers to place crawlers in their websites, the big tech company has been able to not just perform the best in terms of Search Advertising but also amass copious amounts of consumer/user activity and data," they said.

The suggestions are part of the Standing Committee on Finance's report on 'Anti-Competitive Practices by Big Tech Companies' tabled in Parliament on Thursday.

House Panel Findings



Ad business of big tech companies is a 'monopolist threat'

Big Tech owns every step in a system that connects ad sellers and buyers, which gives it an 'unfair edge over the market'

Panel calls for classifying leading entities in the digital ecosystem as 'Systemically Important Digital Intermediaries' (SIDIs)

Context: A parliamentary panel has proposed that there must be **regulatory provisions** to ensure that news publishers are able to sign contracts with the so-called **'Systemically Important Digital Intermediaries' (SIDIs)** through a fair and transparent process.

- The **Standing Committee on Finance** has presented a report on 'Anti-Competitive Practices by Big Tech Companies' which was tabled in Parliament on December 22.

Key Recommendations

- The committee has asked digital market entities to **desist from "anti-steering", "deep discounting", "self preferencing", "search & ranking preferencing"** and other practices that will impact competition in the market.
- **Anti-steering provisions** are clauses whereby a platform prevents the business users of the platforms from 'steering' its consumers to offers other than those provided by the platform that may be cheaper or otherwise potentially attractive alternative in terms of a better interface.
- A **Digital Competition Act** is needed to ensure a fair, transparent and contestable digital ecosystem, which will be a boom not only for the country and its nascent start-ups economy but also for the entire world.
- The panel has called for classifying leading entities that can negatively influence competitive conduct in the digital ecosystem as **'Systemically Important Digital Intermediaries' (SIDIs)** based on their revenue, market capitalisation and number of active business and end users.
- Further, the SIDI within certain fixed months of its online platform being designated as **'Systemically Important Digital Intermediary'**, and thereafter annually submit a report to CCI describing in a detailed and transparent manner the measures it has implemented to comply with its mandatory obligations.
- The Committee stressed on **identifying SIDIs** based on their revenues, market capitalisation and number of active business & end-users.
- The SIDI operator should also publish on its website a **non-confidential summary** of the report.
- A **specialised digital markets unit** should be established within Competition Commission of India (CCI) staffed with skilled experts, academics and attorneys.
- The said unit will **closely monitor SIDIs and provide recommendations** to the central government on designating SIDIs, among other activities, Putting ex ante obligations on SIDIs, the Committee recommended that SIDI should refrain from imposing anti-steering provisions upon business users of the platform.

TIMES OF INDIA

Page 1

COVID VACCINE INCOVACC

(Syllabus: GS Paper 3 - Sci & Tech)

BB's nasal vax, 9th to get nod against Covid, will be used as booster dose

Durgesh Nandan Jha & Swati Bharadwaj | TNN

New Delhi/Hyderabad: India's first intranasal Covid vaccine iNCOVACC has been approved by the health ministry as a booster or precautionary dose for those aged 18 years and above. The vaccine will be added to the CoWin app — a web platform for vaccination registration in the country — soon, after which people can register for it.

Union health minister Mansukh Mandaviya on Friday announced that Bharat Biotech's iNCOVACC would be added to the CoWin app by evening and be available at private hospitals to start with. However, the vaccine was yet to be added to the app till late evening (8.30 pm).

While attempts to reach Bharat Biotech officials, including its chairman and managing director Dr Krishna Ella, failed, **TOI** learnt that the government and the company are yet to work out the nitty-gritty of pricing. The vaccine cannot be added to CoWin till the price for the private and government supply is decided and stocks are available in hospitals, sources said.

The vaccine, which was developed in collaboration with Washington University at St Louis, is a recombinant replication deficient adenovirus vectored vaccine with a pre-fusion stabilised spike protein.

▶Taken afer 4-wk gap, P 18

YET TO SHOW ON COWIN, PRICE NOT FIXED

- Delay in nasal vax being put on CoWin platform reportedly because price isn't settled yet
- BB and govt have to agree on a price for the vax



FOUR CURRENTLY ON OFFER

- 9 Covid vax so far cleared for emergency use (**ones marked in bold are available**)
- **Covishield & Covaxin** cleared in Jan 2021, Russia's Sputnik in Apr 2021 (and rolled out for use briefly from May)
- Other vax approved so far include ZyCoV-D (Aug '21), Sputnik Light & Bio E (Feb '22), Bharat Bio's intranasal (Nov)
- **Corbevax & Covovax** (Dec '21)

Sensex falls 981pts over virus jitters

Fears about spread of Covid pulled down sensex by 981 points — its biggest single-session loss in the last three months — on Friday, bringing it below the 60k mark and closing at 59,845 points, nearly a two-month low. P 25

37m Covid cases in a day in China?

About 37 million people in China may have been infected with Covid on a single day this week, said estimates from its top health authority. The previous daily record was about 4 million, set in January in South Africa. P 23

95% have 2 shots, but only 1 in 4 booster

Coverage of the initial two shots of vaccine is near total for India's adult population and close to 95% for all those aged 12 years or older. However, barely 50% of the elderly, the most vulnerable section of the population, have taken booster shots. Less than a quarter of the total eligible population have done so nationally. In states like Jharkhand, not even one in 10 have. FLAP OPP

India doing fine, Covid surge unlikely: Kang

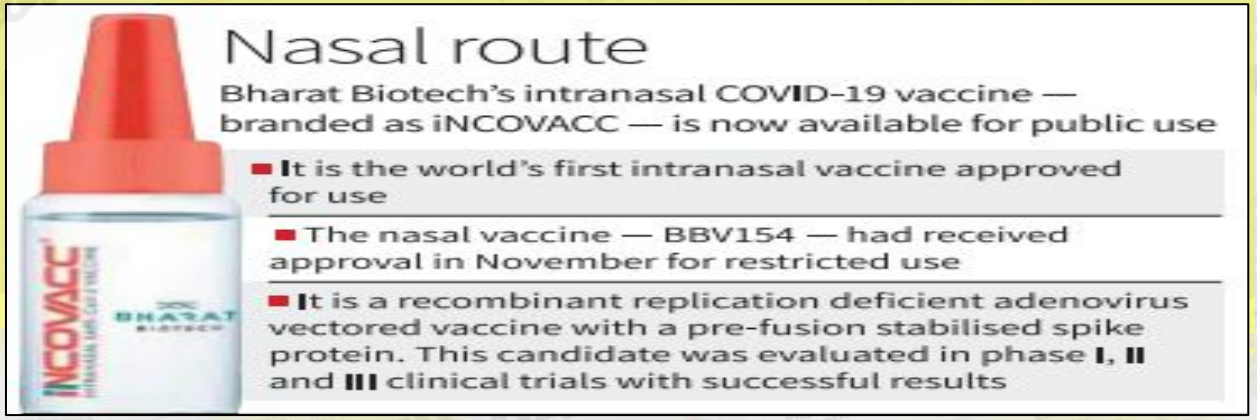
In a series of tweets on Friday, virologist Gagandeep Kang said, "At the moment, India is doing fine. We have (only a) few cases, have had XBB & BF.7 for a while and they have not driven an upsurge in India. In the absence of an even more highly infectious variant, I do not expect a surge...Travel, wear a mask if you are worried (not China at the moment)." P 17

Context: **India's first intranasal Covid vaccine iNCOVACC** has been approved by the health ministry as a booster or precautionary dose for those aged 18 years and above.

- This vaccine has been named **ChAd36-SARS-CoV-S COVID-19 (Chimpanzee Adenovirus Vectored) Recombinant Nasal Vaccine** for COVID-19.

Covid vaccine iNCOVACC

- **About**: This is a new intranasal vaccine that is given **without the help of a needle (injection).**
- **Developed by**: It was developed by **Bharat Biotech**, in association with the University of Washington.
- **Key Features:** It is a **2-shot vaccine.**
  - This vaccine enhances the **broad immune response.**
  - It is the first of its kind **needle-free vaccine.**
  - It **inactivates IgG, mucosal IgA and T cell responses**, and inhibits infection.
  - Unlike inactivated vaccines like Covaxin, the iNCOVACC has been developed using a **viral vector platform**. A recombinant adenovector has been used as the vector.
  - It can **increase the thin mucus membrane** immune cells of the nose and mouth, from where the Sars-CoV-2 virus enters the body.
  - It can **prevent the virus from replicating** upon its entry and spreading to the lungs and other parts of the body.



PIB

Dec 24

STARTUP INDIA SEED FUND SCHEME

(Syllabus: GS Paper 2 - Govt. Policies & Interventions)

656 Startups Supported by Approved Incubators under Startup India Seed Fund Scheme (SISFS)

Context: Information about **Startup India Seed Fund Scheme (SISFS)** was provided by Minister of State in the Ministry of Commerce and Industry in a reply to a parliamentary question.

Startup India Seed Fund Scheme (SISFS)

- **About**: The **Startup India Seed Fund Scheme** aims to provide financial assistance to startups for proof of concept, prototype development, product trials, market entry and commercialisation.
  - This scheme is in line with the **Atma Nirbhar Bharat Campaign** launched in May 2020.
- **Origin**: On February 5, **2021**, the Government of India made an official announcement about the approval of SISFS.
  - It has been approved for a **period of four years** and was implemented with effect from April 1, 2021.
- **Nodal Ministry**: Ministry of **Commerce and Industry.**
- **Corpus**: Rs. 945 Crore corpus will be **divided over the next 4 years** for providing seed funding to eligible startups through eligible incubators across India.
  - Seed funding or seed-stage funding is a **very initial investment.**
  - Generally, investors often get an equity stake in **exchange for the capital invested.**
  - In case the founders use their savings to start up a business, it is called **bootstrapping**.
- **Experts Advisory Committee (EAC)**: As per provisions under SISFS, the Government has constituted an Experts Advisory Committee (EAC) which i**s responsible for the overall execution and monitoring of the SISFS.**
  - The EAC **evaluates and selects incubators** for funds under the Scheme.
  - These incubators thereon select the startups **based on certain parameters** outlined in Scheme guidelines.
  - 126 incubators have been approved and these incubators have selected 656 startups under the Scheme as on 30th November 2022.
- **Eligibility criteria:**
  - The startup must be recognised by the **Department for Promotion of Industry and Internal Trade (DPIIT).**
  - It must have incorporated **not more than 2 years** ago at the time of application.
  - **Preference would be given to startups** creating innovative solutions in sectors such as social impact, waste management, water management, financial inclusion, education, agriculture, food processing, biotechnology, healthcare, energy, mobility, defence, space, railways, oil and gas, textiles, etc.
  - The startup **should not have received more than Rs 10 lakh of monetary support** under any other Central or State Government scheme.
  - Shareholding by Indian promoters in the startup **should be at least 51%** at the time of application to the incubator for the scheme.

PIB

Dec 24

MSP FOR COPRA

(Syllabus: GS Paper 3 - Agriculture)

Cabinet approves Minimum Support prices for copra for 2023 season

Context: The Cabinet Committee on Economic Affairs chaired by Prime Minister has **approved Minimum Support Prices (MSPs) for copra** for 2023 season.

- The approval is based on recommendations of the Commission for Agricultural Costs and Prices and views of major coconut growing states.

Key Points

- Copra refers to the **dried coconut kernels** from which coconut oil is expelled.
- **National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) and National Cooperative Consumers' Federation (NCCF)** will continue to act as Central Nodal Agencies (CNAs) for procurement of copra and de-husked coconut under Price Support Scheme (PSS).
- As of now, **CACP recommends MSPs of 23 commodities**, which comprise:
  - **7 cereals**: paddy, wheat, maize, sorghum, pearl millet, barley and ragi.
  - **5 pulses**: gram, tur, moong, urad, lentil.
  - **7 oilseeds**: groundnut, rapeseed-mustard, soyabean, seasmum, sunflower, safflower, nigerseed.
  - **4 commercial crops**: copra, sugarcane, cotton and raw jute.

MSP

- MSP is an **agricultural product price** which is set by the Government of India.
- On this price, the government **purchases the commodities directly from the farmer.**
- The MSP is **not enforceable by law.**
- MSP seeks to **safeguard the farmer interest** by providing them a minimum profit for their harvest in case the open market has lesser price than the actual cost incurred.
- The price of the 23 commodities is **set by the government twice a year.**
- The MSP is fixed based on the recommendations of the **Commission for Agricultural Costs and Prices (CACP).**
- CACP sets the price since 2009 on the **basis of cost of production, demand & supply**, price fluctuations, market price trends, international market prices and agricultural wage rate.

DST

Dec 24

VAINU BAPPU OBSERVATORY

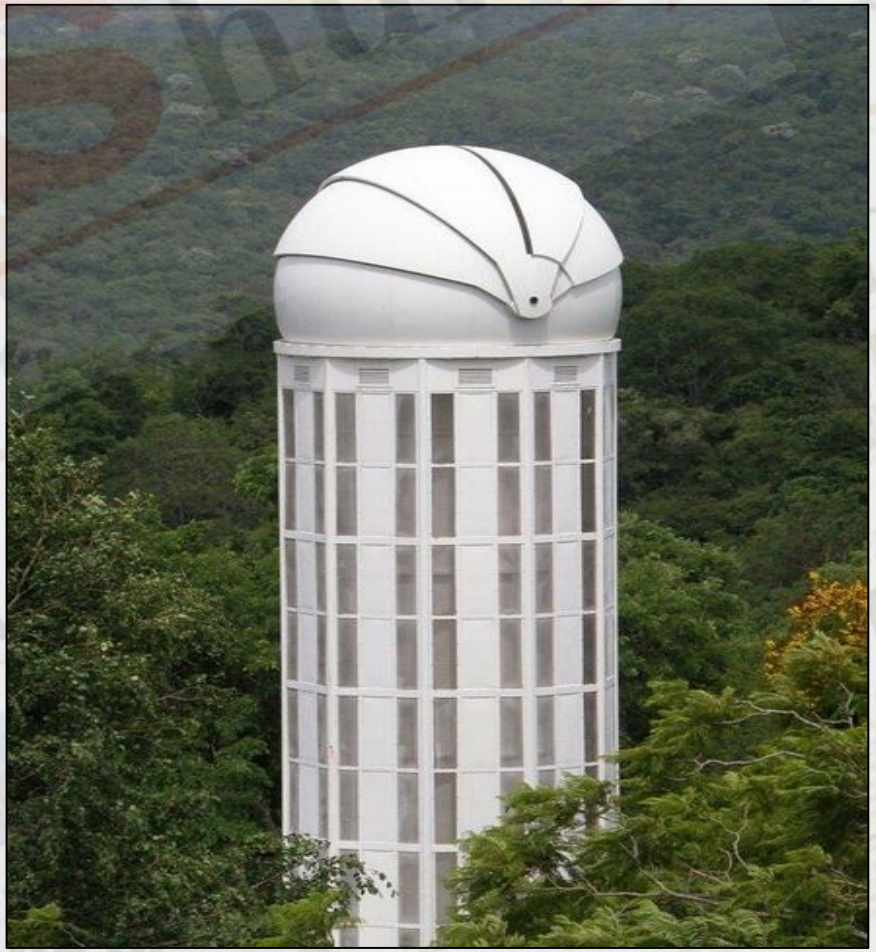
(Syllabus: GS Paper 3 - Sci & Tech)

Stellar discoveries of the 40-inch telescope at the Vainu Bappu Observatory in Kavalur highlighted at 50-year celebration

Context: The several stellar discoveries of the 40-inch telescope at the **Vainu Bappu Observatory** in Kavalur, Tamil Nadu, were highlighted at the celebration of its 50 years of operation on 15-16 December.

Key Points

- **About**: The telescope set up by **Professor Vainu Bappu** has played a significant role in astronomy.
- **Location**: It is located at **Kavalurin the Javadi Hills, near Vaniyambadi in Tirupathur district** in the Indian state of Tamil Nadu.
- **Major discoveries:** The presence of **rings around the planet Uranus**, a new satellite of Uranus, the presence of an atmosphere around **Ganymede** which is a satellite of Jupiter.
    - Other important research conducted with this telescope includes the discovery and study of many **'Be stars', Lithium depletion in giant stars, optical variability in Blazars**, the dynamics of the famous supernova SN 1987A and so on.
- **Owned and operated by**: The telescope in the observatory under the **Indian Institute of Astrophysics (IIA)**, an institute of the Department of Science and Technology (DST).
- **Significance**: It continues to be relevant because of the backend instruments that engineers and astronomers built over the last 50 years to keep the telescope **competitive among its peers.**
- **Key developments**: Starting from the **Cassegrain photometer and Echelle spectrograph** in 1976, the new grating spectrograph in 1978, the fast-chopping polarimeter in 1988 with its replacement in 2016, and the latest Near-Infrared Spectroscopy (NIR) photometer in 2021, the observatory has constantly been upgrading its facilities.
- **Ongoing programmes:** Observations of stars, star clusters, novae, supernovae, blazars, galaxies, optical imaging of gamma-ray burst fields, stellar populations, solar system objects and many others.



DTE

Dec 24

CENTRAL INSTITUTE OF FISHERIES EDUCATION

(Syllabus: GS Paper 2 - Govt. Policies & Interventions)

Fisheries institute spent Rs 10.18 crore on old vessel but didn't use it for student learning: CAG

The average utilisation of the vessel in a year was just five days between 2014-15 & 2020-21

NEXT NEWS >

By Shagun
Published: Friday 23 December 2022



Context: The **Central Institute of Fisheries Education (CIFE)** spent Rs 10.18 crore on repair of a vessel, which had lived its life but still deprived students of research and training activities in high sea conditions as part of their course, revealed an audit by the Comptroller and Auditor General of India (CAG).

Key Points

- CIFE procured a ship - **MFV Saraswati (vessel)** - in 1982 valuing Rs 3.60 crore for research and training of the students admitted in CIFE.
- The vessel remained **unutilised** to a significant extent in the last seven years.
- The average utilisation of the vessel in a year was **just five days between 2014-15 and 2020-21** as against the mandated 45 days, primarily due to shortage of staff.

Central Institute of Fisheries Education

- **About**: A **Deemed to be University** and institution of higher learning for fisheries science in Mumbai, India.
  - A deemed university or deemed-to-be-university is an **accreditation granted to higher educational institutions** in India by the Department of Higher Education under the Ministry of Education.
- **Origin**: CIFE was **instituted in 1961** originally as an inservice training centre to impart proficient training and education to fisheries professionals so as to equip them to face the growing challenges in the fisheries sector.
  - The institute is one of four deemed to be universities **operating under the Indian Council for Agricultural Research (ICAR).**
  - The other three being the Indian Veterinary Research Institute (IVRI), the National Dairy Research Institute (NDRI) and the Indian Agriculture Research Institute (IARI).
- **Nodal Agency:** Under the administrative control of the **Indian Council for Agricultural Research.**
  - The Indian Council of Agricultural Research (ICAR) is an **autonomous organisation under the Department of Agricultural Research and Education (DARE),** Ministry of Agriculture and Farmers Welfare , Government of India.
- **5 centres**: A total of five centres operate under CIFE, including ones at ICAR CIFE Rohtak centre at Rohtak in Haryana state, Kolkata in West Bengal state, Kakinada in Andhra Pradesh state, Pawarkheda in Madhya Pradesh state and Motihari in Bihar state.
- **Education programs**: It **provides postgraduate and doctoral-level education** in the field of fisheries and agriculture.

ICAR institutions

- 4 Deemed Universities
- 65 ICAR Institutions
- 14 National Research Centres
- 6 National Bureaux
- 13 Directorates/Project Directorates

SCIENCE REPORTER

Dec 24

EXTINCTION OF DIVING BIRDS

(Syllabus: GS Paper 3 - Env & Eco)

Diving birds are more prone to extinction, says new study

Press Release





Context: Diving birds like penguins, puffins and cormorants may be **more prone to extinction than non-diving birds,** according to a new study by the Milner Centre for Evolution at the University of Bath.

- This is because they are highly specialised and therefore less able to adapt to changing environments than other birds.

Key points

- The **ability to dive is quite rare in birds**, with less than a third of the 727 species of water birds using this way of hunting for food.
- **Wing divers**, such as penguins and puffins, use their wings to propel themselves through the water. These birds tend to have larger body sizes adapted for swimming.
- Birds that **"foot dive"**, such as cormorants, kick their feet to swim and are similarly larger in body size to the wing divers.
- **"Plunge divers",** such as gulls and gannets, dive vertically from the air to catch their prey. The researchers found these species tended to be more constrained in their body size, as they were better adapted for flying than swimming.
- Whilst the research found **no significant difference in speciation rate for diving birds** versus non-diving species, they also found that many diving birds appeared to be more prone to extinction than non-diving species.

Diving bird

- **About**: Diving birds are birds which **plunge into the water to catch fish or other prey.**
  - Such birds may enter the **water from flight**, such as pelicans, gannets and tropicbirds; or they may dive from the surface of the water, such as the diving ducks, cormorants and penguins.
  - They **evolved from birds already adapted for swimming** that were equipped with such adaptations as lobed or webbed feet for propulsion.
- **Types**:
  - **Foot-propelled diving birds:** Some diving birds, for example the extinct Hesperornithes of the Cretaceous Period, propelled themselves with their feet.
    - They were large, streamlined, and flightless birds with teeth for grasping slippery prey.
    - Today, cormorants (family Phalacrocoracidae), loons (Gaviidae), and grebes (Podicipedidae) are the major groups of foot-propelled diving birds.
  - **Wing-propelled diving birds**: Most notably the penguins (Sphenisciformes), dippers (Cinclus) and auks (Alcidae).
  - **Plunge-diving birds**: Plunge-diving is a special form of foraging that involves a transition from air to water.

THANK YOU!

t.me/theiashub

/mkyadav

www.theiashub.com/daily-quiz

9560082909