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BUSINESS STANDARD

Page 1

T-30 AND B-30

(Syllabus: GS Paper 3 - Economy)

Sebi likely to scrap small town-linked incentive for MFs

This comes amid concerns about misuse of framework

ABHISHEK KUMAR
Mumbai, 24 February

The Securities and Exchange Board of India (Sebi) is likely to scrap an incentive it allows fund houses for mobilising assets from smaller centres — called Beyond 30 (B30) in industry parlance. At present, mutual funds can charge up to 30 basis points over and above the total expense ratio (TER) on assets garnered from such places.

Any city or town that does not fall into the so-called T30 category, or the top 30 centres in terms of assets under management (AUM), is part of B30. The B-30 incentive was introduced in 2018 to boost the penetration of MFs in smaller cities. According to sources, Sebi is planning to discontinue the B30 incentive and allow a one-time fee for distributors bringing new investors, irrespective of the location. However, the one-time fee will form part of the TER. This could leave fund houses with little room to pay extra incentives to distributors.

The regulator's planned move follows concerns about the misuse of the current framework by distributors to generate higher income. As the B30 incentive is paid only in the first year of investment, certain distributors allegedly resort to shifting investors' money from one fund to another every year to continue receiving the incentive.

Sebi, which has undertaken a comprehensive study of fees and expenses charged by MFs, has discussed these issues with the MF advisory committee and sought views from the industry body Association of Mutual Funds in India (Amfi) and individual fund houses, said people in the know.

A query sent to Sebi on the issue remained unanswered.

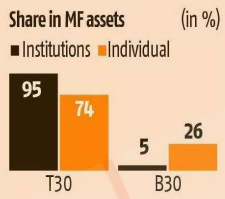
TER is the total expenses incurred by a fund house in managing a scheme.

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URBAN CONCENTRATION

74% of individual MF assets are from top 30 cities





Note: T30: Top 30 cities; B30: Beyond 30 (smaller cities); January-end data; SIP: Systematic investment plan; AUM: Assets under management; Source: Amfi

Context: The Securities and Exchange Board of India (Sebi) is likely to scrap an incentive it allows fund houses for mobilising assets from smaller centres - called **Beyond 30 (B30)** in industry parlance.

Key Points

- At present, mutual funds can **charge up to 30 basis points over** and above the **total expense ratio (TER)** on assets garnered from such place.
- MFs charge up to 2.5 percent on equity funds on an average. So, mutual funds or distributors who got inflows from B30 cities were allowed to charge an additional 30 basis points.
- TER is the **total expenses incurred by a fund house** in managing a scheme.

T-30 and B-30

- **About**: T30 refers to the top 30 **geographical locations** in India and B30 refers to the locations beyond the top 30.
- **B-30**: Any city or town that does not fall into the so called T30 category, or the **top 30 centres in terms of assets under management (AUM)**, is part of B30.
  - The **B30 incentive was introduced in 2018** to boost the penetration of MFs in smaller cities.
  - B30 incentive is **payable only if investment has come from retail investors.**
  - SEBI rules say that retail investors are those **who invest up to Rs. 2 lakh** per transaction.
- **T-15 and B-15**: T15 refers to the top 15 cities and B15 refers to beyond the top 15 cities.
  - **B15 cities are those which are beyond these top 15 cities** - New Delhi (including NCR), Mumbai (including Thane & Navi Mumbai), Kolkata, Chennai, Bangalore, Ahmedabad, Baroda, Chandigarh, Hyderabad, Jaipur, Kanpur, Lucknow, Panjim, Pune and Surat.

PIB FEB 25

e-SHRAM PORTAL

(Syllabus: GS Paper 3 - Economy & Infrastructure)

Ministry of Labour and Employment initiates matching of the eShram beneficiaries' data with the Ration Card (National Food Security Act (NFSA)) data

Context: The **eShram portal** has received unprecedented response from the unorganised/migrant workers of the country and as on 24th February 2023, over 28.60 crore workers have registered on the eShram portal.

- Out of total 28.60 crore eShram registrants, about 20.63 crore eShram registrants are registered in **National Food Security Act (NFSA) database of Department of Food and Public Distribution(DFPD)** and about 7.96 core eShram registrants are yet to get registered on NFSA data.

Key Points

- The eShram portal was launched on 26th August 2021 by the **Ministry of Labour & Employment** to create a National Database of the unorganised/migrant workers and to provide them with a Universal Account Number (UAN).
- One of the **objective of the eShram portal is to extend the benefits of social security and welfare schemes** to unorganised workers especially migrant workers, and to identify workers who are deprived of the various benefits of the welfare schemes of the Central and/or State Government due to lack of awareness or otherwise.
    - With this objective, Ministry of Labour & Employment initiated matching of the eShram beneficiaries' data with the **Ration Card (National Food Security Act (NFSA))** data available with the Department of Food and Public Distribution(DFPD).
    - The complete data set of Ration card was made available by the DFPD to the Ministry of Labour & Employment.
- Ministry of Labour and Employment is conveying the details of all eShram registered unorganised/migrant workers who are not yet **registered on NFSA to DFPD** so that these eShram registrants may also be included under database of DFPD as per their eligibility.
    - This initiative will ensure that **Ration Card benefits under NFSA** is made available to all eligible workers registered on eShram.
- The eShram portal is already **integrated with National Career Service (NCS) portal** and more than 10 lakh eShram registrants have registered on NCS to get benefits of domestic as well as international jobs available on NCS portal.
- eShram portal is also **integrated with Pradhan Mantri Shram Yogi Maan-dhan (PM- SYM)** portal to facilitate eShram registrants getting benefit of pension scheme of Ministry of Labour & Employment.

e-SHRAM Portal

- **Launch**: The portal was **launched on August 26, 2021.**
- **Aim**: with the aim of creating a **national database of unorganised workers (NDUW).**
- **Nodal Ministry**: Ministry of **Labour & Employment.**
- **e-Shram Card:** Workers will be provided with an e-SHRAM card which will have a **12 digit unique number.**
    - The details of workers will also be shared by the state government and departments.
- **Single window:** This will be a **single-point reference to help authorities** reach out to and track workers in the informal sector, and offer welfare in times of crisis.
- **Beneficiaries**: The database will include **construction workers, migrant workers, gig and platform workers,** street vendors, domestic workers, agriculture workers, migrant workers and similar other sub-groups of unorganised workers.
- **Self enrolment**: It will be **available in public for open access** where workers can self-enrol through Aadhaar and mobile numbers.

INDIAN EXPRESS

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BUDGET 2023 ON AGRICULTURE

(Syllabus: GS Paper 3 - Agriculture)

PM: Agriculture budget rose 5 times since 2014 to Rs 1.25 lakh cr

PRESS TRUST OF INDIA
NEW DELHI, FEBRUARY 24

THE AGRICULTURE sector's annual budget has increased five-fold to Rs 1.25 lakh crore since 2014, Prime Minister Narendra Modi said on Friday, as he stressed that his government is focusing on progress of the farm sector and working to reduce import dependence of food items like edible oils.

The Prime Minister was addressing a post-budget webinar on 'Agriculture and Cooperatives'. It is the second of a series of 12 post-budget webinars organized by the government to seek ideas and suggestions for the effective implementation of the initiatives announced in the 2023 Budget.

Modi also outlined the various steps announced in the budget to attract young talent in the sector, and expansion of the cooperative sector across the country.

He stressed that various decisions are being taken to promote the agricultural sector so that the nation becomes 'atmanirbhar' and the funds used for imports can reach farmers. "Before we came to power in 2014, the budget for the agriculture sector was less than Rs 25,000 crore. Today the country's agriculture budget is more than Rs 1.25 lakh crore," the Prime Minister said.

Context: India's agriculture sector's annual budget has **increased five-fold to Rs 1.25 lakh crore since 2014,** Prime Minister said.

- The PM was addressing a **post-budget webinar on 'Agriculture and Cooperatives'.**
- It is the second of a series of 12 post-budget webinars organized by the government to seek ideas and suggestions for effective implementation of the initiatives announced in the Union Budget 2023.

Budget 2023 Allocation for Agriculture Sector

- **PM Kisan:** Out of this, provision of **Rs. 60,000 crore** has been made for the Government's ambitious scheme, – the Pradhan Mantri Kisan Samman Nidhi (PM-Kisan).
- **Kisan Credit Card (KCC):** There are about 86 per cent small farmers in the country, who have been greatly benefited through the Kisan Credit Card (KCC).
  - This time, **Rs 23,000 crores** has been allocated for this, to enable our farmer brothers and sisters to continue to avail its benefit.
- **Agricultural Loan**: Focusing on Animal Husbandry, Dairy and Fisheries, the **agricultural loan target has been increased to Rs 20 lakh crore.**
- **Digital Agriculture Mission**: Provision of **Rs 450 crore** has been made for the Digital Agriculture Mission started by the Government.
  - About Rs. 600 crore allocated for the **promotion of Agriculture sector through technology.**
- **Natural Farming**: A provision of Rs 459 crore has been made to make **Natural Farming a mass movement.**
  - In 3 years, 1 crore farmers will be supported for Natural Farming, for which 10,000 Bio Input Research Centers will be opened.
- **Farmers Producer Organizations (FPOs):** While organizing Small and Medium Farmers through FPOs, a target has been set to provide them all facilities related to agriculture, for **which 10,000 new FPOs are being constituted.**
  - This FPO is a revolutionary step in the direction of raising the standard of living of small and medium farmers, whose benefits have started percolating to these farmers.
  - In order to maintain the same momentum in the future, a budget provision of Rs 955 crore has been earmarked for the formation of new FPOs this year.
  - The **Agriculture Infra Fund** and **Pradhan Mantri Fasal Bima Yojana**, beneficial for the farmers, are also being promoted.
- **Food and nutritional security**: It is one of the priorities of the Union Government, for which the budget has been **hiked to Rs 1,623 crore.**
- **Startup Ecosystem**: Priority will be given to Startups related to agriculture.
  - The **Agriculture Accelerator Fund** will be set up to encourage agri-startups by young entrepreneurs, for which Rs 500 crore has been allocated over a period of 5 years.
- **Millets to be known as Shri-Anna**: India is at the forefront of programmes to popularize Srianna.
  - The **Indian Millets Research Centre, Hyderabad** will be promoted as a Center of Excellence, so that it can excel at the global level as well.
- **Horticulture Development:** For the development of Horticulture sector, the budget has been **increased to Rs 2,200 crore.**
- **Agri-Cooperatives**: To fulfil the vision of "**Sahakar Se Samriddhi",** the Government plans to establish decentralized storage capacity and set up multiple cooperative societies in uncovered villages over the next 5 years.

PIB FEB 25

DEKHO APNA DESH

(Syllabus: GS Paper 3 - Tourism Sector)

IRCTC to operate Baba Saheb Ambedkar Yatra tour package under "Dekho Apna Desh" initiative

Context: IRCTC will be operating Baba Saheb Ambedkar Yatra tour package under **"Dekho Apna Desh" initiative,**covering some of the prominent sites associated with the life of Dr Bhim Rao Ambedkar.

Key Points

- The tour, **Baba Saheb Ambedkar Yatra,** designed by IRCTC, aims to highlight the places and destinations, connected with the life of Ambedkar.
- The First journey of the Baba Saheb Ambedkar Yatra will be from New Delhi in April 2023.
- Under "Dekho Apna Desh" initiative, Ministry of Railways along with Indian Railways Catering and Tourism Corporation (IRCTC),is operating Bharat Gaurav Tourist Trains on various theme based circuits across India.
- The proposed Bharat Gaurav Tourist train tour starts from Delhi and the first halt is **Dr. Ambedkar Nagar (Mhow) in Madhya Pradesh, the birthplace of Baba Saheb (Bhim Janam Bhoomi)** then the train moves to Nagpur railway station where tourists proceed to visit Deekshabhoomi, a consecrated monument of **Navayana Buddhis**m.

Dekho Apna Desh initiative

- **About**: On April 14, 2020, the **Ministry of Tourism** launched "Dekho Apna Desh".
  - It is a **webinar** that caters in-depth information about tourist destinations in the country.
  - It also provides details about **culture and heritage of India.**
- **Objectives**: The scheme aims to **increase domestic tourism of India** and under this plan, around 50 destinations in the country will be developed and promoted to attract tourists.
- **Features**: Under the scheme, travellers will get to enjoy several **benefits in hotel rates, travel and entrance fees.**
- **Financial support:** The 'Dekho Apna Desh' scheme will provide financial assistance to **those travelling to less frequented or far off destinations.**

DTE FEB 25

THRIPS AND APHIDS

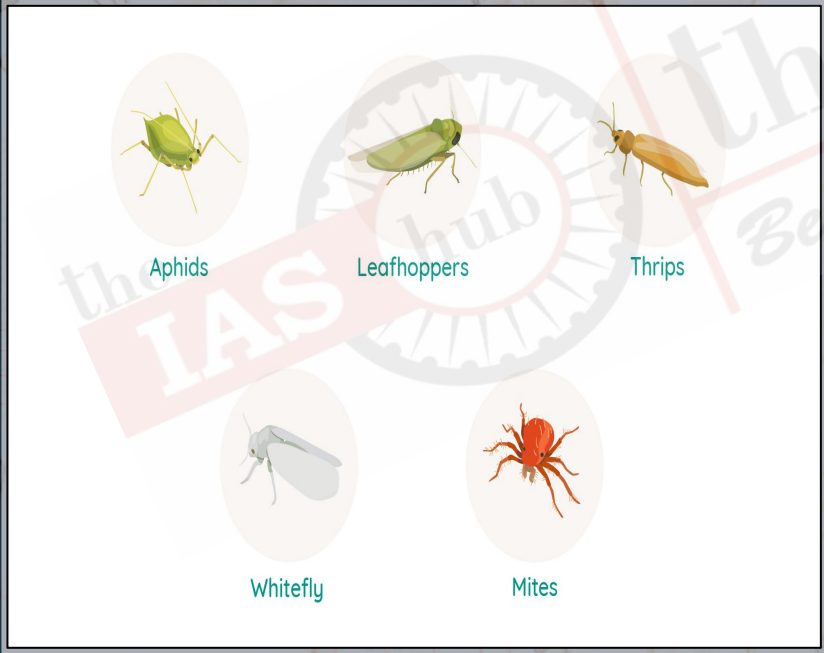
(Syllabus: GS Paper 3 - Agriculture)

Aphid, thrips threaten vegetable crops, pulses as February temperatures soar across north India

Ideal weather conditions for pest attacks unusually early in the year

By Himanshu Nitnaware
Published: Friday 24 February 2023





Context: Scientists have now warned the ongoing weather conditions are likely to threaten the vegetable crops and pulse yield with attacks by **pests like aphids and thrips.**

- **Warm and dry weather conditions** prevailing in north and northeast India are ideal for the growth of insects.
- India has 34.32 million hectares of area under wheat, 4.62 million hectares under rice and 16.78 million hectares under pulses, according to government data gathered on February 3, 2023.

Key Points

- Aphids are **small insects** that pierce live plants and suck on their sap.
  - Aphids are small sap-sucking insects and **members of the superfamily Aphidoidea.**
  - Common names include **greenfly and blackfly.**
  - Aphids are **distributed worldwide**, but are most common in **temperate zones.**
  - Aphid population grows where **weather extremities** exist between day and night temperatures.
- **Thrips (order Thysanoptera)** are minute (mostly 1 mm (0.039 in) long or less), slender insects with fringed wings and unique asymmetrical mouthparts.
  - They fly only weakly and their feathery wings are unsuitable for conventional flight; instead, thrips exploit an unusual mechanism, clap and fling, to create lift using an unsteady circulation pattern with transient vortices near the wings.
  - Thrips are a **functionally diverse group,** with nearly half of the known species being fungivorous.

TIMES OF INDIA

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BAILABLE AND NON-BAILABLE OFFENCES

(Syllabus: GS Paper 2 - Polity & Governance)

29 yrs on, NBW against cops in Rampur Tiraha firing, rape

Mohammad.Dilshad
@timesgroup.com

Muzaffarnagar: A court in Muzaffarnagar has issued non-bailable warrants (NBWs) against 23 police personnel for not appearing before it in a 29-year-old case. The accused cops from UP allegedly opened fire on unarmed activists who were on their way to Delhi for a rally in support of separate state of Uttarakhand — which was a part of UP then — at Rampur Tiraha crossing in 1994. Uttarakhand was carved out of UP in 2000.

Six cases were subsequently registered against the accused police personnel for the violence in 1994. Half a dozen people had died in the incident and some women were raped — minors were not spared either — and assaulted in the ensuing clashes.

The special additional district and sessions judge, Shakti Singh, has now asked the police to produce the 23 accused cops on March 3.

Advocate Anurag Verma, convenor of Uttarakhand Andolan Sangharsh Samiti, a social organisation, said on Friday: "Following the HC's direction, the case was recently transferred to ADJ-7 court from a Pocso court. In October 1994, six cases were registered at Chhapar police station in Muzaffarnagar.

23 FACE ACTION

Months later, CBI investigated the cases and filed chargesheets in all six of them. Four are being heard in the lower court, while two others are in the sessions court."

In the present case, the CBI had filed charges against 23 cops under IPC sections 376-G (gangrape), 392 (robbery), 323 (voluntarily causing hurt) and 120-B (criminal conspiracy), Verma said, pointing out that Thursday's NBWs by court are for these specific charges.

Context: A court in Muzaffarnagar has issued **non-bailable warrants (NBWs) against 23 police personnel** for not appearing before it in a 29-year-old case.

- The accused cops from UP **allegedly opened fire on unarmed activists** who were on their way to Delhi for a rally in support of separate state of Uttarakhand - which was a part of UP then - at Rampur Tiraha crossing in 1994.

Bailable and non-bailable offences

- **Bailable offences**: According to **Section 2(a) of CrPC** bailable offence means an offence that is classified as bailable in the First Schedule of the Code, or which is classified as bailable under any other law.
  - An accused can claim bail as a **matter of right** if he is accused of committing a bailable offence.
  - The police officer or any other authority has **no right to reject the bail** if the accused is ready to furnish bail.
  - Under **Section 436 of CrPC 1973**, a person accused of a bailable offence at any time while under arrest without a warrant and at any stage of the proceedings has the right to be released on bail.
- **Non-bailable offences:** A non-bailable offence is defined as **any offence which is not a bailable offence.**
  - A person accused of a non-bailable offence **cannot claim bail as a right.**
  - A person accused of non-bailable offences **can be granted bail** provided the accused does not qualify the **following conditions:**
    - There are reasonable grounds to believe that he has c**ommitted an offence punishable with death penalty or life imprisonment.**
    - That the accused has **committed a cognizable offence** and he had been previously convicted of an offence punishable with death, imprisonment for life or imprisonment of seven years or more or if the accused been convicted on two or more instances of a cognizable and non-bailable offence.

DTE

FEB 25

BLUE FOOD

(Syllabus: GS Paper 3 - Env & Eco)



Context: Blue food, **sourced from aquatic environments**, can reduce nutritional deficiencies and contribute to employment and export revenue in India.

Key points

- **Blue foods** are important for the economies, livelihoods, nutritional security and cultures of people in many countries.
  - It also involves **Capture Fisheries.**
  - Capture fisheries refers to all kinds of harvesting of naturally occurring living resources in both marine and freshwater environments.
- Compared to terrestrial meat, blue foods **generate lower emissions.**
- They can also **contribute to the health, well-being and livelihoods** of rural communities.
- India can use aquatic foods to **address B12 and omega-3 deficiencies**.
- A priority focus would be to **support the sustainable production of aquatic foods** with a high nutrient density, such as small fish consumed whole (like mola in Bangladesh), or sardine-like small pelagic fish, which can be harvested sustainably with appropriate regulation.
- A group of international researchers, including an expert from India, present **four ways blue foods can help achieve food system ambitions across nations.** These include:
  - Ensuring supplies of critical nutrients.
  - Providing healthy alternatives to terrestrial meat.
  - Reducing dietary environmental footprints.
  - Safeguarding blue food contributions to nutrition, just economies and livelihoods under a changing climate.

Blue Food Assessment 2021

- **About**: A report titled **Environmental performance of blue foods** has stated that the Aquatic or blue foods can be made more environmentally sustainable than they are now.
  - The report is published as part of the **Blue Food Assessment (BFA)**.
- **BFA**: It is a collaboration between **Sweden-based Stockholm Resilience Centre, United States-based Stanford University and the non-profit EAT.**

THE HINDU Page 1

ORANGUTANS

(Syllabus: GS Paper 3 - Env & Eco)

Orangutans smuggled via Chennai, four policemen suspended

The Hindu Bureau
CHENNAI

A gang smuggling at least eight orangutans has escaped through Chennai, allegedly with the help of some police personnel. Following the incident, four personnel, including a Sub-Inspector, have been placed under suspension.

Sources said a fortnight ago, SI Ashok and constables Mahesh, Krishnamoorthy and Vallarasu, all attached to the Red Hills police station in Chennai, intercepted a vehicle carrying the orangutans. The smugglers bribed some of the police personnel, who let the gang proceed. Senior officers later got a tip-off about the incident. An inquiry has been ordered.

Orangutans, a critically endangered species, are native to the rainforests of Malaysia and Indonesia.

Context: A gang smuggling at least eight o**rangutans - great apes native to the rainforests of Malaysia and Indonesia -** has escaped through Chennai, allegedly with the aid of some police personnel.

Orangutans

- **About**: The name orangutan means **"man of the forest"** in the Malay language.
  - Orangutans, with distinctive red fur, are the **largest arboreal mammal,** spending most of their time in trees.
  - Orangutans travel by **moving from one tree to another,** and usually avoid climbing down to the ground.
  - They are considered to be **among the most intelligent primates.**
  - They can **live up to 45 years** in the wild and even more in zoos.
- **Habitat**: They are **native to Indonesia and Malaysia** and at present are found only in the rainforests of Borneo and Sumatra.
- **Three species:** Bornean, Sumatran and Tapanuli
  - They differ a little in appearance and behavior.
  - All three kinds of orangutans are listed as **"Critically Endangered**" by the United Nations-affiliated International Union for Conservation of Nature (IUCN).
  - The Bornean and Sumatran species have shaggy reddish fur, Sumatran orangutans have longer facial hair.
  - Sumatran orangutans are also reported to have closer social bonds.
  - The Sumatran orangutan is almost exclusively arboreal, spending most of their time in trees.
- **Orangutans in India:** India's **only orangutan, 'Binny'**, has passed away at the age of 41 at Nandankanan Zoological Park in Odisha in 2019.

THE HINDU Page 7

SIMULATED CREW MODULE

(Syllabus: GS Paper 3 - Sci & Tech)

Hyderabad-based company builds simulated crew module for Gaganyaan

The Hindu Bureau
HYDERABAD



Major milestone: Dr. S. Unnikrishnan Nair, right, participating in the handing over of simulated crew module on Friday. MOHD ARIF

The country's human space flight programme 'Gaganyaan' has achieved a major milestone when the very first indigenous simulated crew module (SCM), built by Hyderabad-based Manjira Machine Builders, was handed over to director of Vikram Sarabhai Space Centre, Thiruvananthapuram, S. Unnikrishnan Nair by its manging director Ch. V.N. Sai Prakash at Patancheru in Hyderabad on Friday.

Indian Space Research Organisation (ISRO) chairman S. Somanath, in a video message from Mumbai, congratulated the engineers of VSSC, other allied organisations and the private firm that has built the 2.7 metres high, 3.1 metres wide and weighing 3.5 tonnes crew module based on aluminium alloy and steel in six months following precise specifications and design.

"A test vehicle launch is waiting at the Satish Dhawan Space Centre (SDSC) in Sriharikota for this module for simulating the escape vehicle exercise for the unmanned flight. It has been an arduous task in getting the configurations and integration of hardware and software systems right from the design to fabrication and manufacturing," he pointed out.

Mr. Nair said that scientists and MMB engineers led by Adarsh had worked hard in assembling and integrating the simulated crew module from the design stage with the remaining acoustic, vibration testing and other things, to be done at the launch centre.

Context: The country's human space flight programme 'Gaganyaan' has achieved a major milestone when the very first **indigenous Simulated Crew Module (SCM),** built by Hyderabad-based Manjira Machine Builders (MMB), was handed over to director of Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram.

- The SCM is an **unpressurised crew module** where the interfaces of major systems like parachute systems and pyros are simulated.
- It is 2.7 metres high, 3.1 metres wide and 3.5 tonnes heavy crew module based on **aluminium alloy and steel.**

Gaganyaan Mission

- **About**: The Gaganyaan project envisages demonstration of **human spaceflight** capability by launching a crew of three members to an **orbit of 400 km** for a three day mission and bringing them back safely to earth, by landing in Indian sea waters.
- **Trail Year**: The first trial (uncrewed flight) for Gaganyaan is being planned by the **end of 2023 or early 2024.**
  - This will be **followed by sending Vyom Mitra,** a humanoid and then with the crew onboard.
- **First human spaceflight mission:** This manned mission will be the first of ISRO's human spaceflight missions.
  - The **US, Russia and China** are the only three countries to have conducted human spaceflights yet.
- **Launched by**: ISRO's **Geosynchronous Satellite Launch Vehicle** GSLV Mk III (3 stages heavy-lift vehicle).

DST

FEB 25

EPILEPSY

(Syllabus: GS Paper 3 - Sci & Tech)

New study offers hope for children suffering from intractable epilepsy

Context: A new study has unravelled mechanisms that lead to certain **epilepsies of genetic origin in pediatric population**, providing hope for a larger cohort of children suffering from related brain disorders.

- Infants with genetic mutations in an intracellular signaling pathway called **PI3K-AKT-MTOR pathway** often suffer from a range of brain malformations and epilepsy that is mostly non-responsive to conventional anti-seizure medications.
- Drugs targeting **MTOR complexe**s, such as rapamycin analogues, were observed to be considerably effective to a subset of children harbouring mutations mainly in those complexes.
- Currently, most of these young patients are **left at the mercy of invasive recurrent brain surgeries.**

Findings of the study

- Scientists focused on other mutations of **PI3K-AKT-MTOR pathway** and identified acute mechanisms that are MTOR-independent, with the help of preclinical drug assays.
- They found that acute inhibition of **PI3K or AKT, but not MTOR activity**, suppresses the intrinsic hyperactivity of the mutant neurons.
- These acute mechanisms are distinct from those causing neuronal hyperactivity in other **AKT/MTOR epileptic models** and define parameters to facilitate the development of new molecularly rational therapeutic interventions for different types of intractable epilepsy.
- This research has **bridged basic neurobiology and translational biomedical research,** that can be the precursor for modern precision medicine. It also highlighted the relevance of repurposing of cancer drugs to treat neurodevelopmental disorders.
- This preclinical study provides a foundation to build novel targeted therapeutics towards betterment of livelihood of numerous children suffering from rare brain disorders, including intractable epilepsy.

Epilepsy

- **About**: It is a **central nervous system (neurological) disorder** in which brain activity becomes abnormal, causing seizures or periods of unusual behaviour, sensations, and sometimes loss of awareness.
  - Epilepsy is defined as having **two or more unprovoked seizures.**
  - **Anyone can develop epilepsy,** but it's more common in young children and older adults.
- **Origin**: Epilepsy is one of the world's oldest recognized conditions, with written **records dating back to 4000 BCE.**
- **Status**: Around 50 million people worldwide have epilepsy, making it one of the most common neurological diseases globally.
  - In India, **nearly 60 lakh people have epilepsy.**
- **Treatment**: There's **no cure for epilepsy,** but the disorder can be managed with medications and other strategies.

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