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INDIAN EXPRESS

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# RIGHT TO VOTE

## (Syllabus: GS Paper 2 - Polity & Governance)

# Jammu admin rescinds order on registration of new voters

## Row over bid to enrol voters after year's residential status

ARUN SHARMA
JAMMU, OCTOBER 13

A DAY after issuing the order on enrolling new voters, sparking a political row in the Union Territory, Jammu district authorities have withdrawn the direction authorising tehsildars, or revenue officials, to issue certificate of residence to people residing in the district for more than a year to enable their registration as voters.

The decision to withdraw the order was taken late Wednesday evening, *The Indian Express* has learnt from top sources in the district administration.

On Tuesday, Deputy Commissioner and District Election Officer for Jammu, Avny Lavasa, had issued the order to benefit people residing in a particular tehsil of Jammu district for more than a year but who lacked any documentary proof of residence to get registered as voters in the ongoing special summary revision of electoral rolls in Jammu and Kashmir. The order had led to strong opposition from non-BJP mainstream parties in the Union Territory.

On Thursday, the decision to withdraw the order again led to contrasting reactions from the BJP and its opposition Peoples Alliance for Gupkar Declaration (PAGD) leaders.

J&K BJP chief Ravinder Raina said that although the order has been withdrawn, as per Constitutional provisions, "no one can stop anybody from getting registered as a voter at a particular place".

In contrast, Congress chief spokesperson for UT, Ravinder Sharma, pointed out that the party is not opposed to enrolment of new voters as per provisions of the law, but it had protested what he called was the Jammu administration's attempts to "register even those who already were registered as voters elsewhere the country", and who were in Jammu temporarily for work.

Senior leader of CPI(M) and PAGD spokesperson, M Y Tarigami, questioned the issuance of such an order in the first place. "It is surprising that such an unwarranted order was issued. If the order is revoked, a copy should be immediately shared with the public," he told PTI.

BJP's Raina and Congress's Sharma both quoted the Representation of the People (RP) Act, 1951, to prove their contention.

Raina said that as per provisions of the law, any long-residing resident of a place is entitled to shift his/her vote to the place of stay from his/her place of birth. "There is nothing wrong (in the now-rescinded order). The Constitution of India gives one the right to get enrolled as a voter at the place of his/her choice," he said.

Quoting provisions of RP Act, Congress's Sharma maintained that even owning a house at a particular place does not bring a person in the category of "ordinarily residing" at the place if one's permanent residence is somewhere else.

By enrolling people as voters in Jammu on the ground of their stay for more than one year without any mechanism to check whether they have shifted permanently from their previous place of residence and have cancelleed voter registration there, the administration would be "virtually creating a set of floating voters", he said.

These same voters, the Congress leader argued, could move to another state or UT for work in future and get themselves enrolled as voters in the new place of residence after staying there for just over an year.

**Context:** The Jammu authorities authorised tehsildars, or revenue officials, to issue certificate of residence In an effort to ensure that no eligible voter is left behind.

**Right to vote in India**

- **Article 326 of the Constitution:** guarantees the right to vote to **every citizen above the age of 18 years**, unless disqualified by any law.
- **Section 62 of the RPA,1951:** ensures that **every person who is in the electoral roll** of that constituency is entitled to vote.
- **Under the Citizenship Act 1955**: All citizens, regardless of their race, color, or previous condition of subjugation have the right to vote.
- **Eligibility to become voters**: As per the Election Commission of India, citizens are eligible to become voters under the following conditions:
  - Every citizen who is 18 years old on the qualifying date unless disqualified, is eligible to be enrolled.
  - Enrollment only at ordinary place of residence.
  - Enrollment only at one place.
  - Overseas Indian deemed to be ordinarily resident at the address given in passport.
  - Service voters deemed to be ordinarily resident at their home address.
- **Identity proof**
  - Once a citizen is eligible to vote and has enrolled as a voter, a **voter slip from the election commission will be issued** which confirms the citizen's name on the voter list.
    - This slip, **along with a photo ID proof recognized by the Election Commission**, can act as a voter card.
  - If a **person does not have a voter ID card**, they **can use other documents** specified by the Election Commission.
    - A filled voter registration form
    - Copy of proof of residence
    - Copy of proof of age and identity
    - Two recent passport-size photographs

LIVEMINT



# GST E-WAY BILL

## (Syllabus: GS Paper 3 - Economy)

# E-way bills shoot up to record high

Gireesh Chandra Prasad
gireesh.p@livemint.com
NEW DELHI

Electronic permits for transporting goods within and across states (e-way bills) shot up to a record high of over 84 million in September, signalling a strong boost to economic activity in the festive season.

The increase in e-way bills also points to further improvement in goods and services tax (GST) receipts in October.

GST revenue receipts in October will be reported on 1 November. Official data available from Goods and Service Tax Network, the non-profit company that processes GST returns, showed that over 84 million e-way bills were generated in September.

E-way bill generation, which had seen a spike in March this year, leading to a record-high GST collection of nearly ₹1.69 trillion in April, has since remained more or less steady and saw a further pickup from June.

Experts said festive demand is at play. "In our view, the uptick in GST e-way bills implies manufacturers expect healthy festive demand. What remains to be seen is whether the positive sentiments sustain. There is an element of pent-up demand of two years that is supporting spending this festive season," said Aditi Nayar, chief economist at rating agency ICRA Ltd.

Besides festive demand, tax authorities' tracking of eco-

TURN TO PAGE 6

**Context**: Electronic permits for transporting goods within and across states (e-way bills) shot up to a record high of over 84 million in September.

**GST e-way bill**

- **Electronic Way (E-Way) Bill**: usually a unique bill number generated for the specific consignment involving the movement of goods.
- **Mandatory**: Under the Goods and Services Tax (GST) regime, EWBs are mandatory for inter-state transportation of **goods valued over Rs. 50,000 for sales beyond 10 km** from April 2018, with the exemption to precious items such as gold.
- **Validity**: The permits for conventional cargo (other than over-dimensional carve) are **valid for one day for the movement of goods for 100 km**, and in the same proportion for the following days.
    - **Validity of the e-way bill cannot be extended but a commissioner may extend** the validity period only through issuing notification for certain categories of goods.
- **Penalty without a valid e-way bill : A fine of Rs 10,000 or amount of tax sought to be evaded**, whichever is higher, may be imposed by tax authorities.
    - Goods, and the vehicle transporting them, **can be detained or seized**.
- **No re-generation: An e-way bill can be regenerated by the transporter before expiry, but, if the e-way bill has expired, the system won't allow regeneration linked to the same invoice.**
- **E-Way Bill Rules: every supplier requires prior online registration on the e-way bill portal** for the movement of goods.
    - Tax officials have the power to **scrutinise the e-way bill at any point during transit to check tax evasion**.
- **E-Way Bill Integration with FASTag, RFID**: In 2021, the Union Government has **integrated the E-Way Bill (EWB) system with FasTag and Radio Frequency Identification (RFID) technology.**

THE HINDU Page 1

# ISRO'S LAUNCH VEHICLES

## (Syllabus: GS Paper 3 - Sci & Tech)

# ISRO's own Next-Gen Launch Vehicle may assume PSLV's role

**The Hindu Bureau**
THIRUVANANTHAPURAM

The Indian Space Research Organisation (ISRO) is developing a Next-Gen Launch Vehicle (NGLV), which will one day replace operational systems like the Polar Satellite Launch Vehicle (PSLV), ISRO Chairman S. Somanath has said.

PSLV, often dubbed the 'trusted workhorse', "will have to retire" one day, Mr. Somanath said during a three-day Engineers Conclave 2022, which opened at the Liquid Propulsion Systems Centre, Valiyamala, on Thursday.

In NGLV, ISRO is understood to be looking at a cost-efficient, three-stage, reusable heavy-lift vehicle with a payload capability of 10 tonnes to Geostationary Transfer Orbit. NGLV will feature semi-cryogenic propulsion for the booster stages which is cheaper and efficient, he said.

"We believe at least 10 tonne capability to GTO is needed. Correspondingly, the Low Earth Orbit (LEO) capability will be twice that. However, payload capability will be lower when the rocket is reusable," he said.

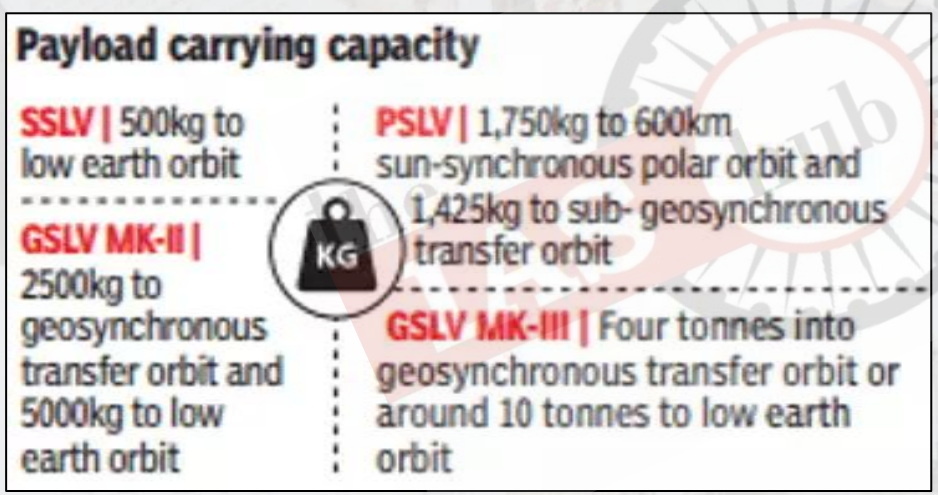


ISRO's existing PSLV will continue to be used in operations as long as there is a demand for it, said Mr. Somanath. S.R. RAGHUNATHAN

**Simple, robust design**

NGLV will feature a simple, robust design that allows bulk manufacturing, modularity in systems, sub-systems and stages and minimal turnaround time.

Potential uses will be in the areas of launching communication satellites, deep space missions, future human spaceflight and cargo missions.




**Context**: The Indian Space Research Organisation (ISRO) is developing a Next-Gen Launch Vehicle (NGLV), which will one day replace operational systems like the Polar Satellite Launch Vehicle (PSLV).

**ISRO's Launch Vehicles**

- **ISRO currently uses two launch vehicles**: PSLV and GSLV (Geosynchronous Satellite Launch Vehicle).
- **PSLV**
  - **Launched in 1994**: It is a third-generation rocket launcher designed, manufactured and operated by the ISRO.
  - **Key feature**: It is the first Indian launch vehicle to be equipped with liquid stages.
  - **Four stage launching system:**
    - **First stage**: A large solid rocket motor forming the first stage,
    - **Second stage**: An earth storable liquid stage as the second stage,
    - **Third stage:** A high performance solid rocket motor as third stage, and
    - **Fourth stage**: A liquid stage with engines as fourth stage.
  - **Payload Carrying capacity:**: ISRO built five variants of the PSLV based on the payload capacities varying from 600 kg in low earth orbit (LEO) to 1,900kg in a sun-synchronous orbit (SSO).
  - **Achievements**: It successfully launched two spacecraft – **Chandrayaan-1** in 2008 and **Mars Orbiter Spacecraft** in 2013 – that later traveled to Moon and Mars respectively.
- **GSLV**
  - **Origin**: GSLV project was initiated in 1990 with the objective of acquiring an Indian launch capability for geosynchronous satellites.
  - **Three stage launching system:**
    - **First Stage**:It is a solid stage which provides lift off to the rocket.
    - **Second Stage:** It is a Liquid Stage.
    - **Third Stage:** The third stage is the Cryogenic stage. This stage provides a good amount of thrust so that we can put satellites in a geostationary orbit.
  - **Payload Carrying capacity**: It is designed to carry satellites weighing 4 tons into Geosynchronous Transfer Orbit (GTO).
    - It can carry satellites weighing 10 tons to Low Earth Orbit (LEO) – at an altitude of 600 kms.

TIMES OF INDIA

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# MONEY LAUNDERING

(Syllabus: GS Paper 3 - Internal Security)

## ED arrests IAS officer, 3 others; intimidation tactics, says Baghel

**Raipur:** The Enforcement Directorate (ED) on Thursday arrested Chhattisgarh IAS officer Sameer Vishnoi and three others following searches at 40 locations in the state over the past three days. CM **Bhupesh Baghel** called it 'intimidation tactics' and accused BJP of misusing central agencies.



All four have been booked under Prevention of Money Laundering Act (PMLA). Additional district and sessions judge Ajay Singh Rajput remanded the accused in eight days' ED custody late in the evening. During the hearing, the court was told that ED has seized cash, gold and diamond from the premises of the IAS officer.

Vishnoi, a 2009-batch IAS officer, is an IIT-Kanpur alumnus. He was questioned by ED in Raipur after the searches on his premises.

His wife, Preeti Vishnoi, and other family members met CM Bhupesh Baghel on Thursday after the arrest and alleged that ED officials have threatened to ruin his career. She said her husband has a liver ailment, hypertension and migraine yet he was not given even food and water for a long time.

Baghel mounted a blistering attack on the central agencies, asking why ED has not yet disclosed details of the seizures made during the searches. "They should have disclosed from whom they have seized cash, property and other things during the raid. Selective leaks and attributing it to sources is aimed at defamation," Baghel said.

On the same day Raigarh district collector Ranu Sahu, whose official residence was among those searched by ED, wrote to the agency after being incommunicado for two days. The three others arrested by ED were identified as Raipur-based businessman Sunil Agrawal, Navneet Tiwari and lawyer Laxmikant Tiwari—all close aides or relatives of businessman Suryakant Tiwari, who was earlier picked up for questioning by ED and I-T. TNN

**Context**: ED arrested IAS officers in money laundering case in Chhattisgarh.

### Money Laundering

- **Money Laundering**: It refers to the conversion or misrepresentation of money which has been illegally obtained by unlawful sources and methods.
- **Criminal offence in India**: charges in this instance refer to statutory provisions of the **Prevention of Money Laundering Act, 2002.**

### Prevention of Money Laundering Act (PMLA)

- **Origin**: The Prevention of Money Laundering Act (PMLA) was enacted by the Indian Parliament in 2002 to prevent money laundering in India.
- **Applicability**: The PMLA is **applicable to all persons** which include individuals, companies, firms, partnership firms, associations of persons or incorporations and any agency, office or branch owned or controlled by any of the above-mentioned persons.
- **Power given to the government**: The Act enables government authorities to confiscate property and/or assets earned from illegal sources and through money laundering.
- **Burden of proof**: Under the PMLA, the **burden of proof lies with the accused**, who has to prove that the suspect property/assets have not been obtained through proceeds of crime.
- **Authorities that can Investigate under PMLA**: The **Enforcement Directorate (ED) is responsible for investigating offences** under the PMLA.
    - The Financial Intelligence Unit – India (FIU-IND) is the national agency that receives, processes, analyses and disseminates information related to suspect financial transactions.

### Vienna Convention

- The PMLA was enacted in response to **India's global commitment (Vienna Convention)** to combat the menace of money laundering. These include:
    - United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances 1988
    - Basel Statement of Principles, 1989
    - Forty Recommendations of the Financial Action Task Force on Money Laundering, 1990
    - Political Declaration and Global Program of Action adopted by the United Nations General Assembly in 1990

ECONOMIC TIMES

Page 1

# DBT SCHEMES

## (Syllabus: GS Paper Government Policies and Interventions)

# India's Direct Benefit Transfer Scheme is a Logistical Marvel: IMF

Says use of unique ID system Aadhaar striking

Our Bureau

**Bengaluru:** A senior official of the International Monetary Fund (IMF) has applauded India for its seamless direct benefit transfer programme.

India's case is "quite impressive" given the "sheer size" of the country, said Paolo Mauro, deputy director of the fiscal affairs department, responding to a question on its successful implementation by the government.

Mauro was addressing a news conference during the 2022 annual meeting of the IMF and the World Bank Group in Washington.

"If I look at the case of India, it is actually quite impressive. In fact, just because of the sheer size of the country, it is a logistical marvel how these programmes that seek to help people who are at low-income levels reach literally hundreds of millions of people," Mauro said. These programmes specifically target women, the elderly, and farmers, he added.

"Perhaps, the interesting part is that in these examples there is a lot of technological innovation. In the case of India, one thing that is striking is the use of the unique identification system, the Aadhaar," he added.

**DBT Scheme**

IMF'S PAOLO MAURO SAYS...

**There is** a lot of technological innovation

**It is** a logistical marvel how these programmes reach literally hundreds of millions

**These programmes** specifically target women, the elderly and farmers

**Being innovative** in identifying people, deploying funds through mobile banking... This is something countries can learn from each other



fers through digital means, deploying funds through, again, mobile banking. This is something that countries can learn from each other. We also try here to be a little bit of a convening place where people can compare these types of experiences," he said.

**Context:** International Monetary Fund (IMF) has applauded India for its seamless direct benefit transfer programme.

**DBT Schemes**

- **DBT Scheme**: It was started on 1st January, 2013 with the aim of reforming Government delivery system in welfare schemes for simpler and faster flow of information/funds and reduction of leakage.
  - In DBT, **benefit or subsidy is directly transferred to citizens living below the poverty line.**
- **First district:** inaugurated at Gollaprolu in East Godavari district on 6 January 2013.
  - The **first phase of DBT was launched in 43 districts,** covering scholarships and social security pensions initially.
- **Nodal authority:** The Central Plan Scheme Monitoring System (CPSMS), **being implemented by the Office of Controller General of Accounts**, acts as the common platform for routing DBT.
  - CPSMS can be used for the preparation of the beneficiary list, digitally signing the same and processing of payments in the bank accounts of the beneficiary using the Aadhaar Payment Bridge.
  - **Aadhar is not mandatory** to access benefits under DBT.
- **Current status:** At present, 317 Central sector (CS) and Centrally sponsored schemes (CSS) from 53 Ministries have been on boarded on the DBT Bharat Portal.
- **Major Central schemes seeded with DBT:**
  - PM Kisan Samman Nidhi (PM-KISAN)
  - Mahatma Gandhi National Rural Employment Guarantee Scheme
  - Pradhan Mantri Matru Vandana Yojana
  - PMAY-G
  - Direct Benefit Transfer for LPG
  - National Child Labour Project
  - Student Scholarship

BUSINESS STANDARD
Page 4

# Mahatma Gandhi National Rural Employment Guarantee Scheme

## (Syllabus: GS Paper Government Policies and Interventions)

# MGNREGS helped people stay afloat during Covid-19: Report

RAGHAV AGGARWAL
New Delhi, 13 October

MGNREGS compensated nearly 20-80 per cent of the income loss during the Covid-19 pandemic, showed a report released on Thursday. According to the Employment Guarantee during Covid-19 study, three out of five households surveyed said that the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), 2005, contributed positively to overall development in their village. The study was conducted across four states — Maharashtra, Madhya Pradesh, Bihar, and Karnataka — by Azim Premji University, National Consortium of Civil Society Organisations on NREGA, and Collaborative Research and Dissemination.

"A conservative estimate yields that the allocations in the surveyed blocks should have been three times the amount that was actually allocated in the year after lockdown to fulfil the true extent of work demand," said Azim Premji University faculty member Rajendran Narayanan, a co-author of the study.

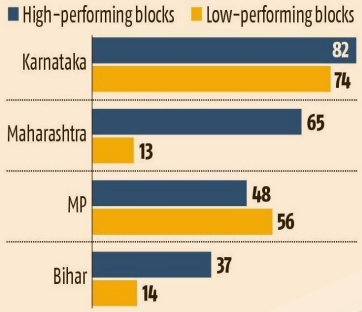
In the high-performance blocks in Karnataka and Madhya Pradesh, over 50 per cent of people said that MGNREGS earnings made a difference to their financial situation. High-performing blocks were the ones given the highest performance ratings by the management information system of the government. In Maharashtra, 96 per cent of people believed that they would have reduced their food consumption if it was not for MGNREGS earnings. Meanwhile, eight out of 10 households want the scheme to be extended to give employment to 100 days per person per year.

However, during the lockdown, the government rationed the number of days that people were allowed to work under the scheme. At one point, it was 7 days as compared to the usual 100 days.

A majority of people in all the surveyed states said that they could not work due to the inadequate amount of work available. The budgetary allocation for the scheme has gone up in recent years.

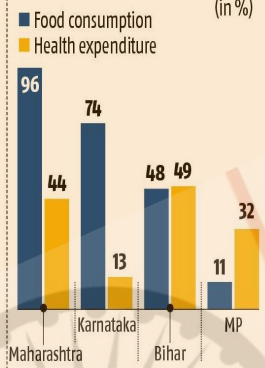
### LIFELINE IN A PANDEMIC

**People who believe MGNREGS improved their financial situation** (in %)




Note: High-performing blocks are the ones given the highest performance ratings by the management information system of the government, while low-performing blocks are the ones given the lowest performance ratings
Source: Employment Guarantee during Covid-19 report

**People who would have cut expenditure without MGNREGS** (in %)




Source: Employment Guarantee during Covid-19 report

**Funds allocated in Union Budget for MGNREGS** (in ₹ crore)




Source: Ministry of Rural Development

**Context**: According to the Employment Guarantee during Covid-19 study, MGNREGS compensated nearly 20-80 per cent of the income loss during the Covid-19 pandemic.

**Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)**

- **MGNREG scheme**: enacted through Mahatma Gandhi National Rural Employment Guarantee act (MGNREGA) on August 25, 2005.
- **Nodal Ministry: The Ministry of Rural Development (MRD)**, Govt of India is monitoring the entire implementation of this scheme in association with state governments.
- **Implementation agency**: It is the **Gram Sabha and the Gram Panchayat** which approves the shelf of works under MGNREGA and fix their priority.
- **Provides a legal guarantee:** for 100 days of employment in every financial year to adult members of any rural household willing to do public work-related unskilled manual work at the statutory minimum wage.
  - **Within 15 days of submitting the application** or from the day work is demanded, wage employment will be provided to the applicant.
  - Receipt of wages within 15 days of work done.
  - **Wages must be paid** according to the statutory minimum wages specified for agricultural labourers in the state **under the Minimum Wages Act, 1948**.
  - **At least one-third of beneficiaries have to be women.**
- **Right to get unemployment allowance:** In case employment is not provided within 15 days of submitting the application or from the date when work is sought.
- **Mandatory social audit**: Social Audit of MGNREGA works is mandatory, which lends to accountability and transparency.
- **Eligibility Criteria**
  - Must be Citizen of India to seek MGNREGA benefits.
  - Job seeker has completed 18 years of age at the time of application.
  - The applicant must be part of a local household (i.e. application must be made with local Gram Panchayat).
  - Applicant must volunteer for unskilled labour.

PIB

Oct 14

# INDIAN COMPUTER EMERGENCY RESPONSE TEAM (CERT-IN)

(Syllabus: GS Paper 3 - Internal Security)

## CERT-In and Power-CSIRTs jointly conduct Cyber Security Exercise "PowerEX-2022"

## Theme: "Defending Cyber induced disruption in IT & OT Infrastructure"

**Context:** Indian Computer Emergency Response Team (CERT-In) in collaboration with Power-CSIRTs (Computer Security Incident Response Teams in Power sector), successfully designed & conducted the Cyber Security Exercise "PowerEX" for 193 invited Power Sector Utilities.

**Indian Computer Emergency Response Team (CERT-In)**

- **CERT-In**: It is an organisation of the **Ministry of Electronics and Information Technology** with the objective of securing Indian cyberspace.
- **Functions**: It is the nodal agency which deals with cybersecurity threats like hacking and phishing.
    - CERT-IN provides **Incident Prevention and Response Services** as well as **Security Quality Management Services.**
- **Power**: **empowered under Section 70B of the Information Technology Act** to collect, analyse and disseminate information on cyber security incidents.
- **Mandates of the CERT-In:**
    - **Mandatorily Enable Logs**: It mandates all service providers, intermediaries, data centres, corporates and government organisations to mandatorily enable logs of all their ICT (Information and Communication Technology) systems.
    - **Connect and Synchronize all ICT systems**: To ensure the chain of events is accurately reflected in the time frame, service providers have been asked to connect and synchronize all their ICT systems clocks to the Network Time Protocol (NTP) Server of the National Informatics Centre (NIC) or National Physical Laboratory (NPL).
    - **Requires Maintaining Records:** It also require virtual asset, exchange, and custodian wallet providers to maintain records on KYC and financial transactions for a period of five years.

**Other Initiatives for Cyber Security**

- Cyber Surakshit Bharat Initiative
- Cyber Swachhta Kendra
- Online cybercrime reporting portal
- Indian Cyber Crime Coordination Centre (I4C)
- National Critical Information Infrastructure Protection Centre (NCIIPC)
- Information Technology Act, 2000
- National Cyber Security Strategy 2020

DOWN TO EARTH

August 14

# BLACK HOLE

## (Syllabus: GS Paper 3 - Sci & Tech)

SCIENCE & TECHNOLOGY

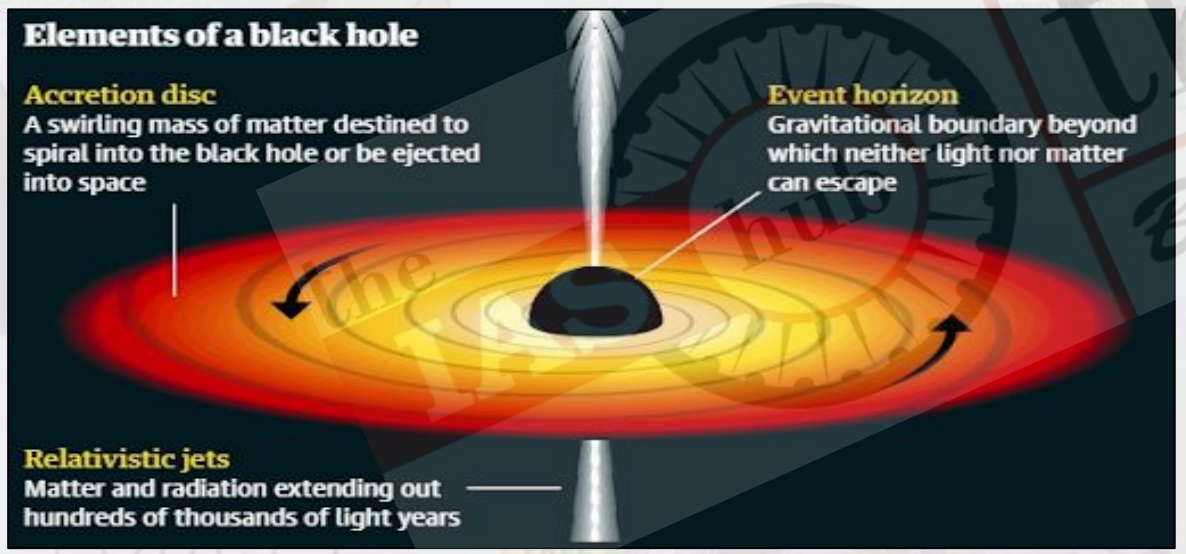
### Indian researchers spot rare supermassive black hole, opens new avenues for star formation research

Researchers speculate that jets fired by supermassive black holes will likely suppress future star formation

NEXT NEWS ›

By Rohini Krishnamurthy
Published: Thursday 13 October 2022






**Context**: A rare supermassive black hole has been spotted by a team of Indian researchers, according to a recent study.

**Key points**

- The **monster black hole is about one billion light years away** from the Earth.
- **Supermassive black holes create powerful jet**s of radiation and particles.
  - They are **located at the centre of galaxies**.
- The supermassive black hole occupies the centre of the RAD 12 galaxy, which is elliptical or egg-shaped.
  - **RAD 12 is in the process of merging with another galaxy**, RAD 12b, in the next one billion years.
  - RAD 12b, which is also elliptical, is bigger and brighter than RAD 12.
  - The jet is bigger than its host, RAD 12.
  - It resembles a 440 thousand light-years-long mushroom.
- **Significance**: It may **help scientists study why star formation does not occur in elliptical galaxies.**
  - Star formation requires extremely cooled gas, usually forged in a cloud of interstellar gas and dust.
  - Temperatures in these regions range from -253.15°C-263.15°C.
  - Theoretically, jets remove cold gas and suppress star formation.
  - Usually, jet collision scatters gas and produces ionised gas.

**Black Hole**

- **About**: It refers to a point in space where the matter is so compressed as to create a gravity field from which even light cannot escape.
- **Concept evolution:** The concept was theorized by **Albert Einstein** in 1915 and the term 'black hole' was coined in the mid-1960s by American physicist **John Archibald Wheeler.**
- **Belong to two categories:**
  - One category r**anges between a few solar masses and tens of solar masses**. These are thought to form when massive stars die.
  - The other category is of **supermassive black holes.** These range from hundreds of thousands to billions of times that of the sun from the Solar system to which Earth belongs.
- **Merger effect:** Gravitational waves are created when two black holes orbit each other and merge.

DOWN TO EARTH

August 14

# LEAD POISONING

## (Syllabus: GS Paper 3 - Env & Eco)

HEALTH

### India bears world's highest health, economic burden due to lead poisoning: Centre

Bihar, Uttar Pradesh, Madhya Pradesh, Jharkhand, Chhattisgarh and Andhra Pradesh have highest average blood lead levels, a CSIR and Niti Aayog report has shown

NEXT NEWS >

By Taran Deol
Published: Wednesday 12 October 2022



**Context**: A 2020 report by the United Nations Children's Fund (UNICEF) and non-profit Pure Earth had found India to be home to a major chunk of the 800 million children poisoned by lead globally.

**Key points**

- **India's status**: India bears the **world's highest health and economic burden due to lead poisoning**. (Niti Aayog and the Council of Scientific & Industrial Research (CSIR) report).
  - **Bihar, Uttar Pradesh, Madhya Pradesh, Jharkhand, Chhattisgarh and Andhra Pradesh** had the highest average blood lead levels (BLL) among Indian states.
  - These states account for 40 percent of India's population that is plagued with this poor health indicator.
- **Sources**: Battery recycling, occupational sources such as lead mining, smelting, welding, soldering and automobile repatriating, adulterated spices, cosmetics and traditional medicines.
- **Impact**: lead poisoning shaved off an estimated **five per cent of Indian Gross Domestic Product (GDP)** due to lower economic productivity and reduced lifetime earnings.

**Lead Poisoning**

- **About**: Lead poisoning or chronic intoxication is caused by the absorption of Lead in the system and is characterised especially by fatigue, abdominal pain, nausea, diarrhoea, loss of appetite, anaemia, a dark line along the gums, and muscle paralysis or weakness of limbs.
- **Vulnerable sections**: Children younger than 6 years are especially vulnerable to lead poisoning, which can severely affect mental and physical development. At very high levels, lead poisoning can be fatal.
- **Effects:**Lead exposure also causes anaemia, hypertension, renal impairment, immunotoxicity and toxicity to the reproductive organs.
- **Occupational and environmental sources:**
  - **Inhalation of lead particles** generated by burning materials containing lead, for example during smelting, recycling, stripping leaded paint and using leaded aviation fuel, and
  - **Ingestion of lead-contaminated** dust, water (from leaded pipes) and food (from lead-glazed or lead-soldered containers).

**Lead**

- **Naturally occurring** toxic metal found in the Earth's crust.
- Lead in the body is distributed to the brain, liver, kidney and bones. It is stored in the teeth and bones, where it accumulates over time.
- **Lead exposure is preventable**.

**Initiatives Taken**

- **India**: The Ministry of Environment, Forest and Climate Change (MOEFCC) has passed a notification as "**Regulation on Lead contents in Household and Decorative Paints Rules, 2016**" and has **prohibited manufacture, trade, import as well as export of household and decorative paints containing lead or lead compounds** in excess of 90 Parts Per Million (PPM).
- **Globally**
  - Lead as **one of 10 chemicals of major public health concern** by the World Health Organization (WHO).
  - WHO has joined with the **United Nations Environment Programme to form the Global Alliance to Eliminate Lead Paint.**
  - WHO is also a partner in a **project funded by the Global Environment Facility (GEF)** that **aims to support at least 40 countries in enacting legally binding controls on lead paint.**

PIB

Oct 14

# GRAMEEN UDYAMI PROJECT

(Syllabus: GS Paper Government Policies and Interventions)

## Skill India certifies candidates trained under Grameen Udyami Project to boost skill development in tribal communities

## A total of 165 students were felicitated at the ceremony

**Context:** To propel economic prosperity in India's tribal communities and bring them to the forefront, the Ministry of Skill Development and Entrepreneurship (MSDE) felicitated 165 students under the second phase of **Grameen Udyami project, a National Skill Development Corporation (NSDC) funded initiative.**

**Grameen Udyami Project**

- **About**: It is a unique multi skilling project, funded by NSDC that **aims to train 450 tribal students in Madhya Pradesh and Jharkhand.**
  - The project is **being implemented in six states** - Maharashtra, Rajasthan, Chhattisgarh, Madhya Pradesh, Jharkhand, and Gujarat.
- **Two phases:**
  - **Phase -1**: Candidates were mobilized from rural and tribal areas of Maharashtra, Rajasthan, Chhattisgarh, Madhya Pradesh, and Gujarat.
  - **Phase-2:** The phase-II of the pilot project launched in Ranchi, which is being implemented by Yuva Vikas Society, through Seva Bharti Kendra in Ranchi.
- **Training**: The training under the project will be conducted in the following Job roles which are relevant to the local economy.
  - Electrician & Solar PV Installation Technician.
  - Plumbing & Masonry.
  - Two-Wheeler Repair & Maintenance.
  - IT/ITES with e-Governance.
  - Farm Mechanization.

**National Skill Development Corporation (NSDC)**

- **About**: It is a non-profit public limited company established on July 31, 2008, under Section 25 of the Companies Act, 1956.
- **Nodal Ministry**: The **Ministry of Finance established NSDC** as a Public Private Partnership (PPP) model.
- **Government stakes**: The Government of India, through the **Ministry of Skill Development and Entrepreneurship (MSDE), owns 49% of NSDC,** while the private sector owns the remaining 51%.
- **Functions**: The organisation **provides funding to develop scalable and successful initiatives for vocational training.**

# THANK YOU!

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