

PRAYAS4IAS

AN INITIATIVE BY THE PRAYAS INDIA

JULY WEEK 4

PEGASUS



July (Week 4)

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Prelims

NATIONAL

Pegasus Spyware

(Source: [The Hindu](#))

Context: Former Congress president Rahul Gandhi, former Election Commissioner Ashok Lavasa, election strategist Prashant Kishor, Trinamool Congress leader Abhishek Banerjee and Union Ministers Ashwini Vaishnaw and Prahlad Patel appeared on a leaked list of “potential” or actual targets for spying by the Israeli company NSO’s Pegasus spyware, news website The Wire and other international publications.

What is Pegasus?

- The highly advanced ‘Pegasus’ is a spyware – a malicious software created by Israeli-based cyber intelligence firm NSO Group to hack computers and smartphones in order to gather data and serve it to a third party. The reason it is malicious is that it gathers data without the consent of the person.
- However, NSO Group had claimed that their motive was to ‘develop best-in-class technology to help government agencies detect and prevent terrorism and crime’.
- Pegasus spyware first came to light in 2016, when an Arab activist received a suspicious message on his iPhone.
- Subsequently, Apple had released a software update to patch up the loophole used by Pegasus to hack phones. A year later, similar leaks were found in Android phones.
- In 2019, Facebook filed a case against NSO for creating Pegasus, which had infected the devices of many prominent figures. WhatsApp, which is owned by Facebook, had said that Indian journalists and human rights activists were among those globally spied upon using Pegasus spyware.

How is Pegasus used to hack a phone?

- Deemed as one of the “most sophisticated” hacking tools, Pegasus is so seamless that a phone user might have no clue that their device had been compromised.

WHAT IS PEGASUS?

Built and marketed by Israeli company NSO, Pegasus is a spyware that infects devices and spies on the victim by transferring data to a master server in an unauthorised manner. The company claims to sell it only to “vetted foreign governments” worldwide

#QUIXPLAINED

 **EXPRESS**
explained.

HOW DOES IT WORK?

● Pegasus, in the very basic form, can infect devices that are connected to the internet. Some updated versions, experts claim, can also infect phones even without the victim clicking on any links or messages

● Most spyware and stalkerware apps disguise themselves as anti-theft applications that can be used to track stolen or lost devices. While viruses and malware can be detected by anti-virus software, spyware and stalkerware apps disguise themselves as useful and send out stolen data to central servers without the knowledge of the users

#QUIXPLAINED



- Hackers who use Pegasus, install the malware in the users' phones – mainly iPhones and Android devices – using software loopholes and security bugs.
- The spyware is so secretive that it gets installed with the help of just a missed call. Once infiltrated, it even deletes the call log entry, so that there is no trace on the gadget.
- Apart from data theft, Pegasus can also clear all information from the host device including caller logs, calendar events etc – making sure that the particular data is snatched away from the target person without their notice.

Akash Missile

(Source: [The Hindu](#))

Context: *A new generation of Akash surface-to-air missile was successfully flight-tested on Wednesday by the DRDO from an integrated test range off the Odisha coast in a boost to air defence capabilities. Separately, the DRDO also successfully flight-tested an indigenously developed low weight man-portable anti-tank guided missile, paving the way for its production for the Army.*

Details:

- This is **surface to air anti-aircraft missile** with a strike range of 25 km and capability to carry warhead of 60 kilogram.
- It can reach an altitude of 18 km and can be fired from both tracked and wheeled platforms.
- The missile is guided by a phased array fire control radar called 'Rajendra' which is termed as Battery Level Radar (BLR) with a tracking range of about 60 km.
- The Akash-MK-1S is capable of striking down enemy fighter jets and drones very effectively and accurately.
- The Akash surface-to-air missile was designed to intercept enemy aircraft and missiles from a distance of 18 to 30 km.

UNESCO

(Source: [The Hindu](#))

Context: *The English city of Liverpool has been removed from UNESCO's list of world heritage sites after the United Nations' cultural agency found new buildings, including a football stadium, undermined the attractiveness of its Victorian docks.*

Details:

- Liverpool was named a World Heritage Site in 2004, joining cultural landmarks such as the Great Wall of China and the Taj Mahal.
- After a vote in China by members of its World Heritage Committee, UNESCO said on Twitter that Liverpool should be removed from the international cultural organisation's list. Joanne Anderson, the Liverpool Mayor, said the decision was "incomprehensible".
- The only other sites stripped previously of the title are a wildlife sanctuary in Oman in 2007 after poaching and habitat loss, and the Dresden Elbe Valley in Germany in 2009 when a four-lane motorway bridge was built over the river.

UNESCO

- UNESCO is a specialised agency of the United Nations that works for world peace through global cooperation in the fields of education, culture and the sciences.
- Through its programmes, it strives to achieve the Sustainable Development Goals (SDGs).
- UNESCO develops educational tools so as to help humanity live in a world free of intolerance and hate.
- It works in preserving the cultural heritage of the world's many cultures and also promotes the equal dignity of all cultures.
- It also engages in advancing scientific programmes and policies as platforms for cooperation and development.
- UNESCO is also known for advocating the freedom of expression and stands up against the killing of journalists.
- Although officially founded as UNESCO in 1945, the organisation had its origins in the League of Nations itself. The Constitution of UNESCO came into force in 1946.
- Headquartered in Paris, UNESCO is also a member of the United Nations Development Programme (UNDP).
- Currently, UNESCO has 193 members.
 - The US, Israel and Liechtenstein are members of the UN, but not members UNESCO.
 - The US and Israel pulled out in 2019 citing bias in the organisation in the Palestine issue.
 - The US had pulled out of UNESCO once earlier in 1984 and then rejoined in 2003.
 - Three countries, namely, Palestine, Niue and the Cook Islands are members of UNESCO, but not of the UN.
- UNESCO sponsors many programmes such as in the fields of teacher training, science, promotion of media and press freedom, regional and cultural history, cultural diversity, natural and cultural heritage, translating world literature, human rights, etc.
- UNESCO is headed by its Director-General.
- **Culture Conventions of UNESCO:** These conventions have helped in the protection and preservation of the natural and cultural heritage of the world.
 - Convention on the Means of Prohibiting and Preventing the Illicit Traffic of Cultural Property (1970)
 - Convention for the Protection of the World Cultural and Natural Heritage (1972)
 - Convention on the Protection of the Underwater Cultural Heritage (2001)
 - Universal Declaration on Cultural Diversity (2001)
 - Convention for the Safeguarding of the Intangible Cultural Heritage (2003)
 - Convention on the Protection and Promotion of the Diversity of Cultural Expressions (2005)
- UNESCO is the only UN Agency to have a global network of national cooperating bodies known as National Commissions for UNESCO.

UNESCO World Heritage Sites

- UNESCO World Heritage Site is a site recognized by UNESCO as having a distinctive cultural or physical significance, and which is considered of outstanding value to humanity.
- There are more than 1000 heritage sites across 167 nations.

Chief Labour Commissioner of India

(Source: [PIB](#))

Context: *Chief Labour Commissioner of India reviews implementation of Labour Laws and new Labour Codes with Project officials in Srinagar.*

About Chief Labour Commissioner (CLC) of India:

- The organization of the Chief Labour Commissioner (Central) also known as Central Industrial Relations Machinery is an apex organization in the country responsible for maintaining harmonious industrial relations mainly in the sphere of Central Government.
- The office was set up in 1945.
- **Functions of CLC (Central):**
 - Prevention and settlement of industrial disputes through conciliation/mediation
 - Enforcement of Labour Laws and Rules made under the Central Sphere (such as Industrial Disputes Act, 1947; Minimum Wages Act, 1948; Contract Labour (Regulation & Abolition) Act, 1970; Child Labour (P&R) Act, 1986; etc.)
 - Quasi-Judicial functions
 - Verification of Trade Union membership
 - Miscellaneous Functions such as conducting periodic meetings of Minimum Wages Advisory Board; advising the Labour Ministry in conflict situations like strikes, etc.
- The jurisdiction of the Chief Labour Commissioner (Central) extends to all the establishments in the central sphere for enforcement of provisions of Labour Laws and Rules made thereunder.

Great Indian Bustards of Kutch –

(Source: [Indian Express](http://www.indianexpress.com))

Context: *The Central government informed the Rajya Sabha that there were no Great Indian Bustards (GIB) in Kutch Bustard Sanctuary (KBS) in Gujarat's Kutch district as on January 1 this year. The reply, which came in response to a question asked by Congress MP Shaktisinh Gohil, raised many eyebrows among conservationists and wildlife enthusiasts as it had come just three months after the Supreme Court order to power companies to place their overhead powerlines underground in GIB habitat in Rajasthan and and Kutch to save the species from going extinct.*

GIBs and their habitats

- GIBs are the largest among the four bustard species found in India, the other three being MacQueen's bustard, lesser florican and the Bengal florican.
- GIBs' historic range included much of the Indian sub-continent but it has now shrunk to just 10 per cent of it.
- Among the heaviest birds with flight, GIBs prefer grasslands as their habitats. Being terrestrial birds, they spend most of their time on the ground with occasional flights to go from one part of their habitat to the other. They feed on insects, lizards, grass seeds etc.
- GIBs are considered the flagship bird species of grassland and hence barometers of the health of grassland ecosystems.
- Critically endangered bird Great Indian Bustard bird spotted at Naliya, Kutch, last January.



On the brink of extinction

- In February last year, the Central government had told the 13th Conference of Parties to the United Nations Convention on Migratory Species of Wild Animals (CMS) held in Gandhinagar, that the GIB population in India had fallen to just 150.

- Of them 128 birds were in Rajasthan, 10 in Kutch district of Gujarat and a few in Maharashtra, Karnataka and Andhra Pradesh. Pakistan is also believed to host a few GIBs.
- The historical range of these majestic birds included much of Indian sub-continent but it has now shrunk by 90 per cent, experts say.
- Due to the species' smaller population size, the International Union for Conservation of Nature (IUCN) has categorised GIBs as critically endangered, thus on the brink of extinction from the wild.

Threats

- Scientists of Wildlife Institute of India (WII) have been pointing out overhead power transmission lines as the biggest threat to the GIBs.
- WII research has concluded that in Rajasthan, 18 GIBs die every year after colliding with overhead powerlines as the birds, due to their poor frontal vision, can't detect powerlines in time and their weight make in-flight quick manoeuvres difficult.
- Coincidentally, Kutch and Thar desert are the places which have witnessed creation of huge renewable energy infrastructure over the past two decades, leading to installation of windmills and construction of power lines even in core GIB areas.
- For example, windmills whirr on the north, south and western border of the 202-hectare KBS while two power transmission lines run on its eastern border. KBS has also recorded deaths of two GIBs after hitting powerlines.
- Change in landscape by way of farmers cultivating their land, which otherwise used to remain fallow due to frequent droughts in Kutch, and cultivation of cotton and wheat instead of pulses and fodder are also cited as reasons for falling GIB numbers.

Why no bustard in KBS

- KBS near Naliya in Kutch district's Abdasa block is a tiny sanctuary notified in 1992 and spread over just two square kilometres (sqkm).
- But its eco-sensitive zone spread over 220 sqkm covers most of present-day core GIB habitat. The creation of safe-haven for the birds led to an increase in the GIB population in KBS—from 30 in 1999 to 45 in 2007.
- But windmills and powerlines started coming up right on the borders of the sanctuary from 2008 onward and GIB numbers started dwindling hence.
- The population fell to just 25 individuals by 2016 and field staff of KBS say, now there are only seven, all of them female.
- No male has been sighted for the past two years. Besides the KBS, Prajau, Bhanada and Kunathia-Bhachunda are important grasslands which have been declared unclassified forests recently.
- Due to the barrier created by the power infrastructure on all its sides, sightings of GIB inside the KBS' notified two sqkm area is becoming increasingly rare.

Conservation measures

- In 2015, the Central government launched the GIB species recovery programme.
- Under the programme, the WII and Rajasthan forest department have jointly set up conservation breeding centres where GIB eggs harvested from the wild are incubated artificially and hatchlings raised in controlled environment.
- Till last year, nine eggs had hatched successfully and the plan is to create a population which can act as insurance against the threat of extinction and release the third generation of these captive-bred birds into the wild.

E-100 Pilot Project

(Source: [PIB](#))

Context: *Recently E-100 Pilot Project launched.*

About the E-100 Pilot Project:

- The E-100 Pilot Project was launched in Pune on the occasion of World Environment Day (5 June).
- The project aims to set up a network for production and distribution of ethanol across the nation.
- The government is also releasing the E-20 notification that will allow oil companies to sell 20 per cent ethanol blended petrol from 1st April, 2023 and the Bureau of Indian Standards (BIS) specifications for ethanol blends E12 and E15.

Ethanol Sector in India:

- India is targeting to have **20 per cent ethanol-blended fuel by 2025**, in a push towards a robust **biofuel policy**.
- The focus on ethanol is having a **better impact on the environment** as well as on the **lives of farmers** as it helps them earn more profits.
 - A large part of this eightfold increase in ethanol procurement has **benefitted the sugarcane farmers** of the country,
- Most of the **ethanol manufacturing units** are mostly **concentrated in 4-5 states** where **sugar production is high** but now **food grain-based distilleries** are being established to expand this to the whole country.
- **Modern technology-based plants** are also being set up in the country to make **ethanol from agricultural waste**.

WHO-GMP/COPP

(Source: [PIB](#))

Context: *The Indian Medicines Pharmaceutical Corporation Ltd. (IMPCL) (Central Public Sector Enterprise) Mohan, Dist. Almora, Uttarakhand under the administrative control of Ministry of AYUSH, Government of India has applied for “WHO-GMP/COPP certification for 18 Ayurvedic products.*

What is WHO-GMP/COPP?

- The certificate of pharmaceutical product (CPP or COPP) is a certificate issued in the format recommended by the World Health Organization (WHO).
- The application for grant of WHO-GMP Certificate of Pharmaceutical Product shall be made to respective zonal/sub zonal officers as per the requirement. The COPP will be issued by zonal/sub zonal officers on behalf of the Drugs Controller General (India) after inspection and satisfactory clearance by CDSCO officers as per WHO – GMP guidelines.
- It is valid for 3 years from the date of issue and companies can apply for renewal after that.
- The WHO-GMP certificate is mandatory in most global markets for pharmaceutical companies to be able to sell medicines. The manufacturer of an exporting country must be licensed by the regulatory authority of that country and comply with the WHO-GMP guidelines.
 - The COPP is issued under WHO-GMP based on guidelines laid down by the health agency and is aimed at diminishing the risks inherent in pharmaceutical production.
 - The certificate helps the regulator ensure that drugs are consistently produced and are quality controlled before they leave the country.

- The Central Drugs Standard Control Organization (CDSCO), which is the national drugs regulatory authority, regulates the import and export of the drugs in the country, through the port offices located in different parts of the country.

Gatekeeper Model

(Source: [The Hindu](#))

Context: *In a bid to prevent suicides triggered by mental health issues in prisons across the country, the National Institute of Mental Health and Neuro Sciences (NIMHANS), Bengaluru, has recommended the “Gatekeeper Model” where selected inmates, trained to identify prisoners at risk of suicide, would refer them to treatment or supportive services.*

Details:

- Acting on the request of the Ministry of Home Affairs, NIMHANS, an Institute of National Importance, issued a set of guidelines on the management of mental health issues of the prisoners and prison staff.
- Referring to the Bangalore Prison Mental Health Study, the advisory pointed to the prevalence of mental illness and substance use disorder in about 80% of the prison population.
- NIMHANS experts said prisoners with mental disorders had to be regularly assessed for severity of suicidal risk and also put on regular and supervised medication.
- To address the prisoner’s mental health needs, the correctional facility should have links to community-based initiatives like the District Mental Health Programme.

“Buddy system”

- The advisory said the concept of a ‘Buddy System’ — social support through trained prisoners called “buddies” or “listeners” — was found to have a good impact on the well-being of suicidal prisoners.
- Periodic telephone conversations with friends and family would also foster support, it said.
- These initiatives were part of several other recommendations made by NIMHANS to effectively manage mental health issues among prisoners and staff.
- Communicating the guidelines to all States, the MHA said the COVID-19 virus had posed unique challenges to the world and prisons and correctional facilities were also affected by the pandemic.
- Though appropriate measures were taken by the authorities to check the spread of the virus in prisons, there was a need to continue monitoring the situation rigorously without letting the guard down and provide care to inmates and prison staff.
- Emphasising on the mental health of prisoners, the Ministry said incarcerated people could face many vulnerabilities during the pandemic, which might impact their mental wellbeing.
- The prison staff was also working under tremendous pressure and faced challenges in performing their duty while safeguarding themselves from contracting the infection.
- In Tamil Nadu, Director-General of Police, Prison & Correctional Services, Sunil Kumar Singh said 58 mobile phones were purchased for prisoners to make video calls to their family members in lieu of the physical interviews that were temporarily suspended in view of the pandemic.

The Gaon Bura

(Source: [Indian Express](#))

Context: *Earlier this month, the Assam Cabinet announced that Gaon Buras (village headman), village-level functionaries of the district administration, will henceforth be called ‘Gaon Pradhans’. While it is yet*

to be notified, the move has been criticised by several in Assam as an imposition on the culture and language of the state.

A colonial term

- The institution of Gaon Bura in Assam dates back to the colonial era, when the British appointed the oldest person in the village as the head, who would oversee matters relating to land and revenue in a particular area.
- The position would usually go to the oldest, most knowledgeable man who had good personal ties with everyone in a village, or a cluster of small villages.
- In Arunachal Pradesh, too, the Gaon Buras (and Buris) are the most important village-level functionaries.
- Post-independence, the government continued with the institution and made the Gaon Bura a formal part of the Assam Revenue and Disaster Management department, increasing his responsibilities, and eventually introducing a small honorarium for the role.
- The role commands respect, and the responsibilities initially included recording births, deaths, revenue collection, settling disputes, among others.
- While the *buranjis*, (Ahom-era chronicles) do not have the word Gaon Bura, the concept existed in some form even in the pre-colonial period too.
- Over the years, the Gaon Bura became central to rural, village life and inevitably featured in a number of writings—including novels and plays—of the 19th century. Among them is Assamese litterateur Padmanath Gohain Baruah's popular social play called 'Gaon Bura'.

Adarsh Smarak Scheme

(Source: [PIB](#))

Context: 3 monuments of Andhra Pradesh Identified as “Adarsh Smarak” for providing additional facilities.

About the Monuments:

- **Monuments at Nagarjunakonda:** Nagarjunakonda in Guntur District is named after the renowned Buddhist monk Nagarjuna. It once an important settlement during the 1st and 2nd centuries BCE. It was an important Buddhist learning centre and houses the remains of many Buddhist Stupas, statues, pillars, Chaityas, monasteries, etc. The first archaeological ruins of Nagarjunakonda were discovered in 1926 by A.R. Saraswati.
- **Buddhist Remains at Salihundam:** Salihundam in Srikakulam District contains several votive stupas, a mahastupa, chaityas and viharas. Several inscriptions that were unearthed at the site indicate that it dates back to the 2nd century CE. The mahavihara sali-pethaka here, interestingly, has an entrance in the shape of a swastika, indicating that this is probably from where Buddhism spread to Sumatra and the rest of Southeast Asia.
- **Veerabhadra Temple at Lepakshi:** Veerabhadra Temple at Lepakshi, District Anantapuram is a temple dedicated to Virabhadra (Lord Shiva). Built in the 16th century, the architectural features of the temple are in the Vijayanagara style with a profusion of carvings and paintings at almost every exposed surface of the temple.

About the Scheme:

- The scheme was launched in 2014 by the Ministry of Culture for providing improved visitor amenities in historical and archaeological monuments/sites.
- It also aims at the better preservation of the monuments.



- The monuments included in the list would have all the tourist facilities as per international standards including wi-fi, signages, security, encroachment free area, interpretation centres, etc.

H5N1 avian influenza

(Source: [Indian Express](#))

Context: *Recently an 11-year-old boy died of H5N1 avian influenza in Delhi. This is the first recorded death due to the bird flu in India this year. In January, bird flu was confirmed in several states with thousands of birds, including migratory species, being found dead.*

What is bird flu?

- Bird flu or avian influenza is a disease caused by avian influenza Type A viruses found naturally in wild birds worldwide.
- The virus can infect domestic poultry including chickens, ducks, turkeys and there have been reports of H5N1 infection among pigs, cats, and even tigers in Thailand zoos.
- Avian Influenza type A viruses are classified based on two proteins on their surfaces – Hemagglutinin(HA) and Neuraminidase(NA). There are about 18 HA subtypes and 11 NA subtypes. Several combinations of these two proteins are possible e.g., H5N1, H7N2, H9N6, H17N10, etc.

Bird flu: Infection in humans

- There have been reports of avian and swine influenza infections in humans including A(H1N1), A(H1N2), A(H5N1), A(H7N9), etc.
- The first report of human H5N1 infection was in 1997 and currently, over 700 human cases of Asian Highly Pathogenic Avian Influenza A (HPAI) H5N1 virus have been reported to the World Health Organisation from 16 countries. The infection is deadly as it has a high mortality rate of about 60%.
- The most common route of virus transmission is direct contact — when a person comes in close contact with infected birds, either dead or alive.
- Humans can also be affected if they come in contact with contaminated surfaces or air near the infected poultry. There is no sufficient evidence suggesting the spread of the virus through properly cooked meat.

Bird flu: Human-to-human transmission

- Human-to-human transmission of the H5N1 virus was very rare and there was no need to panic.
- A paper published in 2005 in The New England Journal of Medicine, investigated possible person-to-person transmission in a family cluster in Thailand and wrote that the “disease in the mother and aunt probably resulted from person-to-person transmission of this lethal avian influenza virus during unprotected exposure to the critically ill index patient.”
- Avian influenza or bird flu is predominantly a zoonosis, and there is no evidence of sustained human-to-human transmission so far.

SMILE – Support for Marginalized Individuals for Livelihood and Enterprise

(Source: [PIB](#))

Context: *Government has formulated a scheme covering comprehensive measures for welfare of beggars.*

About SMILE:



- The Ministry of Social Justice and Empowerment has formulated a scheme “SMILE – Support for Marginalized Individuals for Livelihood and Enterprise”, which includes the sub-scheme – ‘Central Sector Scheme for Comprehensive Rehabilitation of persons engaged in the act of Begging’.
- The focus of the scheme is extensively on rehabilitation, provision of medical facilities, counselling, basic documentation, education, skill development, economic linkages and so on.
- The scheme would be implemented with the support of State/UT Governments/Local Urban Bodies, Voluntary Organizations, Community Based Organizations (CBOs), institutions and others.
- The Scheme provides for the use of existing shelter homes available with the State/UT Governments and urban local bodies for rehabilitation of persons engaged in the act of begging.
- In case of non-availability of existing shelter homes, new dedicated shelter homes are to be set up by the implementing agencies.
- The Ministry has also initiated pilot projects on Comprehensive Rehabilitation of Persons engaged in the act of Begging in ten cities namely Delhi, Bangalore, Chennai, Hyderabad, Indore, Lucknow, Mumbai, Nagpur, Patna and Ahmedabad.

Defence Services Bill

(Source: [Indian Express](#))

Context: Minister of State for Defence *Ajay Bhatt* introduced the *Essential Defence Services Bill* in the Lok Sabha.

What is the Essential Defence Services Bill?

- Essentially, the Essential Defence Services Bill is aimed at preventing the staff of the government-owned ordnance factories from going on a strike. Around 70,000 people work with the 41 ordnance factories around the country.
- The Bill introduced on Thursday mentioned that it is meant to “provide for the maintenance of essential defence services so as to secure the security of nation and the life and property of public at large and for matters connected therewith or incidental thereto”.
- But in its objectives, the government has stated: “Indian Ordnance Factories is the oldest and largest industrial setup which functions under the Department of Defence Production of the Ministry of Defence.
- The ordnance factories form an integrated base for indigenous production of defence hardware and equipment, with the primary objective of self reliance in equipping the armed forces with state of the art battlefield equipment.”
- Further, it noted that since it is “essential that an uninterrupted supply of ordnance items to the armed forces be maintained for the defence preparedness of the country and the ordnance factories continue to function without any disruptions, especially in view of the prevailing situation on the northern front of the country, it was felt necessary that the Government should have power to meet the emergency created by such attempts and ensure the maintenance of essential defence services in all establishments connected with defence, in public interest or interest of the sovereignty and integrity of India or security of any State or decency or morality”.

What does it allow the government to do?

- The Bill empowers the government to declare services mentioned in it as essential defence services “the cessation of work of which would prejudicially affect the production of defence equipment or goods; or the operation or maintenance of any industrial establishment or unit engaged in production of goods or equipment required for any purpose connected with defence; or repair or maintenance of products connected with defence”.

- It also prohibits strike and lockouts in “any industrial establishment or unit engaged in essential defence services”.

Who will it affect?

It has a direct bearing on around 70,000 employees of the 41 ordnance factories around the country, who are unhappy with the corporatisation of OFB, fearing that it will impact their service and retirement conditions. Singh had said that even the Cabinet note, through which the decision got the nod, also mentioned that there should be no change in the service condition of the around 70,000 employees of the OFB the defence minister had mentioned earlier.

The employee unions and associations had threatened to go on strike last year as well, when the government had declared that it will start the process towards OFB corporatisation.

Laws for surveillance in India

(Source: [Indian Express](#))

Context: *Communication surveillance in India takes place primarily under two laws — the Telegraph Act, 1885 and the Information Technology Act, 2000. While the Telegraph Act deals with interception of calls, the IT Act was enacted to deal with surveillance of all electronic communication, following the Supreme Court’s intervention in 1996. A comprehensive data protection law to address the gaps in existing frameworks for surveillance is yet to be enacted.*

Telegraph Act, 1885

- Section 5(2) of the Telegraph Act reads: “On the occurrence of any public emergency, or in the interest of the public safety, the Central Government or a State Government or any officer specially authorised in this behalf by the Central Government or a State Government may, if satisfied that it is necessary or expedient so to do in the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign states or public order or for preventing incitement to the commission of an offence, for reasons to be recorded in writing, by order, direct that any message or class of messages to or from any person or class of persons, or relating to any particular subject, brought for transmission by or transmitted or received by any telegraph, shall not be transmitted, or shall be intercepted or detained, or shall be disclosed to the Government making the order or an officer thereof mentioned in the order...”
- Under this law, the government can intercept calls only in certain situations — the interests of the sovereignty and integrity of India, the security of the state, friendly relations with foreign states or public order, or for preventing incitement to the commission of an offence.
- These are the same restrictions imposed on free speech under Article 19(2) of the Constitution.
- Significantly, even these restrictions can be imposed only when there is a condition precedent — the occurrence of any public emergency, or in the interest of public safety.
- Additionally, a proviso in Section 5(2) states that even this lawful interception cannot take place against journalists.
- Provided that press messages intended to be published in India of correspondents accredited to the Central Government or a State Government shall not be intercepted or detained, unless their transmission has been prohibited under this sub-section.

Supreme Court intervention

- In *Public Union for Civil Liberties v Union of India* (1996), the Supreme Court pointed out lack of procedural safeguards in the provisions of the Telegraph Act and laid down certain guidelines for interceptions.

- A public interest litigation was filed in the wake of the report on “Tapping of politicians phones” by the CBI.
- The court noted that authorities engaging in interception were not even maintaining adequate records and logs on interception.
- Among the guidelines issued by the court were setting up a review committee that can look into authorisations made under Section 5(2) of the Telegraph Act.
- The Supreme Court’s guidelines formed the basis of introducing Rule 419A in the Telegraph Rules in 2007 and later in the rules prescribed under the IT Act in 2009.
- Rule 419A states that a Secretary to the Government of India in the Ministry of Home Affairs can pass orders of interception in the case of Centre, and a secretary-level officer who is in-charge of the Home Department can issue such directives in the case of a state government. In unavoidable circumstances, Rule 419A adds, such orders may be made by an officer, not below the rank of a Joint Secretary to the Government of India, who has been duly authorised by the Union Home Secretary or the state Home Secretary.

IT Act, 2000

- Section 69 of the Information Technology Act and the Information Technology (Procedure for Safeguards for Interception, Monitoring and Decryption of Information) Rules, 2009 were enacted to further the legal framework for electronic surveillance. Under the IT Act, all electronic transmission of data can be intercepted.
- So, for a Pegasus-like spyware to be used lawfully, the government would have to invoke both the IT Act and the Telegraph Act.
- Apart from the restrictions provided in Section 5(2) of the Telegraph Act and Article 19(2) of the Constitution, Section 69 the IT Act adds another aspect that makes it broader — interception, monitoring and decryption of digital information “for the investigation of an offence”.
- Significantly, it dispenses with the condition precedent set under the Telegraph Act that requires “the occurrence of public emergency of the interest of public safety” which widens the ambit of powers under the law.

PLI Scheme for Specialty Steel

(Source: [PIB](#))

Context: *Union Cabinet approves Production-linked Incentive (PLI) Scheme for Specialty Steel.*

Details:

- Speciality steel has been chosen as the target segment because out of the production of 102 million tonnes of steel in India in 2020-21, only 18 million tonnes of value added steel/speciality steel was produced in the country.
- Apart from this, out of 6.7 million tonnes of imports in the same year, approximately 4 million tonnes was of specialty steel alone resulting in a foreign exchange outgo of nearly Rs. 30,000 crores.
- The idea is to become ‘atmanirbhar’ in specialty steel in order to come on par with advanced steel making nations like Japan and Korea.
- The benefit of this scheme will accrue to both big players i.e. integrated steel plants and to the smaller players (secondary steel players)

Specialty Steel:

- Specialty steel is value added steel wherein normal finished steel is worked upon by way of coating, plating, heat treatment, etc. to convert it into high value added steel which can be used in various



strategic applications like Defence, Space, Power, apart from automobile sector, specialized capital goods, etc.



The five categories of specialty steel which have been chosen in the PLI Scheme are:

- Coated/Plated Steel Products
- High Strength/Wear resistant Steel
- Specialty Rails
- Alloy Steel Products and Steel wires
- Electrical Steel

Benefits:-

- Enhanced exports and minimising dependence on imports for high end steel
- Bring in investment of approximately **₹40,000 crores**
- Employment generation potential of about **5.25 lakh**
- Capacity addition of **25 MT**
- Will incentivize steel sector to invest in technological capability building to contribute to global steel value chain



PASSEX

(Source: [PIB](#))

Context: Indian Navy participated in a two-day bilateral Passage Exercise (PASSEX) with the UK's Royal Navy Carrier Strike Group (CSG)-21 led by HMS Queen Elizabeth in the Bay of Bengal.

About the Exercise:

- The bilateral Maritime Exercise was designed to hone the ability of the two navies to operate together in the maritime domain.
- The maiden exercise between Indian Navy and the Royal Navy's latest Aircraft Carrier, HMS Queen Elizabeth included participation of CSG-21 comprising Type 23 Frigates and an Astute-class submarine in addition to the other surface combatants.
- Indian Navy was represented by IN Ships Satpura, Ranvir, Jyoti, Kavaratti, Kulish and a submarine. Anti-Submarine Warfare capable Long Range Maritime Reconnaissance Aircraft P8I also participated in the exercise.

Schemes for the Welfare of the Minorities

(Source: [PIB](#))

Context: Ministry of Minority Affairs implements programmes/schemes for socio-economic and educational empowerment of the six (06) centrally notified minority communities namely Muslims, Christians, Sikhs, Buddhists, Parsis and Jains

These schemes/programmes implemented by the Ministry of Minority Affairs are:

- Pre-Matric Scholarship Scheme, Post-Matric Scholarship Scheme, Merit-cum-Means based Scholarship Scheme – For educational empowerment of students through Direct Benefit Transfer (DBT) mode.
- Maulana Azad National Fellowship Scheme – Provides fellowships in the form of financial assistance.



- Naya Savera – Free Coaching and Allied Scheme – The Scheme aims to provide free coaching to students/candidates belonging to minority communities for qualifying in entrance examinations of technical/medical professional courses and various competitive examinations.
- Padho Pardesh – Scheme of interest subsidy to students of minority communities on educational loans for overseas higher studies.
- Nai Udaan – Support for students clearing Prelims conducted by Union Public Service Commission (UPSC), State Public Service Commission (PSC), Staff Selection Commission (SSC), etc.
- Nai Roshni – Leadership development of women belonging to minority communities.
- Seekho Aur Kamao – Skill development scheme for youth of 14 – 35 years age group and aiming at providing employment and employment opportunities, improving the employability of existing workers, school dropouts, etc.
- Pradhan Mantri Jan Vikas Karyakram (PMJVK) – Being Implemented to provide basic infrastructure such as Schools, Colleges, ITIs, Polytechnics, Hostels, Sadbhav Mandap, Skill Development Centres, Drinking water and Sanitation facilities, Primary Health Centres etc. in deprived areas of the country.
- Jiyo Parsi – Scheme for containing population decline of Parsis in India.
- USTTAD (Upgrading the Skills and Training in Traditional Arts/Crafts for Development). Hunar Haat are being organised across the Country to provide employment opportunities and markets to artisans/craftsmen.
- Nai Manzil – A scheme for formal school education & skilling of school dropouts.
- Hamari Dharohar- A scheme to preserve rich heritage of minority communities of India under the overall concept of Indian culture.
- Maulana Azad Education Foundation (MAEF) implements education and skill related schemes as follows:- (a) Begum Hazrat Mahal National Scholarship for Meritorious Girls belonging to the economically weaker sections of Minorities (b) Gharib Nawaz Self Employment Scheme started in 2017-18 for providing short term job oriented skill development training to youth (c) Bridge Course for madrasa students & school dropouts.
- Equity to National Minorities Development and Finance Corporation (NMDFC) for providing concessional loans to minorities for self-employment and income generating ventures.

Reverse merger

(Source: [The Hindu Businessline](http://TheHinduBusinessline))

Context: Earlier this month, the stocks of Equitas Small Finance Bank, Ujjivan Small Finance Bank and their holding companies skyrocketed following a new development. The market's positive reaction was based on the RBI's permission to these small finance banks to apply for a reverse merger with their holding companies.

What is it?

- A merger is a corporate action where two companies decide to bring together their assets and liabilities to create a single entity that is bigger and better than either of them.
- While a merger is usually proposed between equals, a reverse merger is a combination where a smaller company merges into a larger one, or a loss-making company merges into a profitable one.
- In the case of small finance banks, the holding company is expected to be merged into the subsidiary bank. This type of a reverse merger is also referred to as a downstream merger.

Why is it important?

- When NBFCs were originally allowed by the RBI to bag small finance bank licences to offer credit to unbanked segments of the population, the RBI required them to set up their banks under the non-operating financial holding company (NOFHCs) structure.
- This was so that the NBFC would separate its new banking operations from its other businesses. Later when small finance banks were mandated to be listed, Equitas and Ujjivan opted to list their holding companies first, instead of the bank. This did not satisfy RBI.
- They subsequently listed their respective SFBs as well. As there is no point in both the parent company and the bank trading on the bourses essentially playing on the same business, the RBI has now cleared the decks for a reverse merger of these banks with their holding companies.
- The other requirement of the RBI with respect to SFBs was that their promoter holding be brought down to 40 per cent within five years of commencement, and to 30 per cent and 26 per cent within 10 and 15 years, respectively.
- Currently, the holding companies hold slightly more than a 80 per cent stake in the SFBs. This impending stake sale has been a negative overhang on small finance bank stocks. For Equitas the initial five-year period ends by September 2021, for Ujjivan SFB it ends in January 2022. The downstream mergers could help dilute promoter stakes in these banks.
- The reverse merger proposal has made small finance banks a better bet for investors.

Alexander Dalrymple Award

(Source: [PIB](#))

Context: *Chief Hydrographer to the Govt. of India received the Alexander Dalrymple award from the British High Commissioner.*

Details:

- The Alexander Dalrymple Award has been named after the first hydrographer of the Admiralty and was instituted in 2006.
- India's chief hydrographer, Vice Admiral Vinay Badhwar, was honoured with the award in recognition of his leadership in the disciplines of hydrography and nautical cartography.

About the Chief Hydrographer to the Govt. of India:

- The Chief Hydrographer heads the Indian Naval Hydrographic Department (INHD) which is an Indian government agency responsible for hydrographic surveys and nautical charting in India.
- INHD's headquarters National Hydrographic Office is located in Dehradun.
 - The department is also responsible for making electronic navigational charts officially on behalf of the government of India.
 - It was formed in 1954 although its origins date back to 1874 when the Indian Marine Survey Department was established in Calcutta.



WHAT IS HYDROGRAPHY



Hydrography is the science of measuring and depicting those parameters that are necessary to describe

- ☞ **the precise nature and configuration of the sea-bed**
- ☞ **its geographical relationship to the landmass**
- ☞ **the characteristics and dynamics of the sea.**

◆ *The parameters encompass **bathymetry, geology, geophysics, tides, currents, waves**, and certain other physical properties of sea water*

◆ **Hydrographic surveying** is the art of collecting hydrographic data utilizing a skillful blend of systems and field methodologies. Not something which can be learned in a classroom!





INTERNATIONAL

Nord Stream 2 pipeline

(Source: [Indian Express](#))

Context: Recently, the US and Germany reached a deal on the Nord Stream 2 pipeline– which significantly increases Europe’s energy dependence on Russia– under which Berlin will respond to stop Moscow should the latter use the strategically critical gas system as political leverage.

What is the Nord Stream 2 pipeline?

- In 2015, the Russian energy major Gazprom and five other European firms decided to build Nord Stream 2, valued at around \$11 billion.
- The 1,200-km pipeline will run from Ust-Luga in Russia to Greifswald in Germany through the Baltic Sea, and will carry 55 billion cubic metres of gas per year.
- The under-construction pipeline will run along with the already completed Nord Stream 1 system, and the two together will supply an aggregate of 110 billion cubic metres of gas to Germany per year. The pipeline falls in the territory of EU members Germany and Denmark, and is about 98% complete.

Why is the pipeline controversial?

- Since it was first planned, Nord Stream 2 has drawn criticism from the US, where both the Democratic and Republican parties believe that the project would increase Europe’s dependence on Russia for natural gas, thus emboldening its leader Vladimir Putin. Currently, EU countries already rely on Russia for 40 per cent of their gas needs.
- The project also has opponents in eastern Europe, especially Ukraine, whose ties with Russia have seriously deteriorated in the aftermath of the Crimean conflict in 2014.
- There is an existing land pipeline between Russia and Europe that runs through Ukraine. The country feels that once Nord Storm 2 is completed, Russia could bypass the Ukrainian pipeline, and deprive it of lucrative transit fees of around \$3 billion per year. Ukraine also fears another invasion by Russia once the new pipeline is operational.
- Russia, on its part, has dismissed these fears. Germany, too, has solidly stood behind the Nord Stream 2, despite opposition from allies, with Chancellor Angela Merkel’s government insisting that it is a commercially beneficial project.

Monkey B virus

(Source: [Indian Express](#))

Context: China has reported the first human infection case with Monkey B virus (BV) after a Beijing-based veterinarian was confirmed with the same a month after he dissected two dead monkeys in early March.

What is Monkey B virus?

- The virus, initially isolated in 1932, is an alphaherpesvirus enzootic in macaques of the genus Macaca. B virus is the only identified old-world-monkey herpesvirus that displays severe pathogenicity in humans.
- The infection can be transmitted via direct contact and exchange of bodily secretions of monkeys and has a fatality rate of 70 per cent to 80 per cent.
- According to the Centre for Disease Control and Prevention, Macaque monkeys commonly have this virus, and it can be found in their saliva, feces (poop), urine (pee), or brain or spinal cord tissue. The

virus may also be found in cells coming from an infected monkey in a lab. B virus can survive for hours on surfaces, particularly when moist.

When can a human get infected with B virus?

- Humans can get infected if they are bitten or scratched by an infected monkey; get an infected monkey's tissue or fluid on broken skin or in eyes, nose, or mouth; scratch or cut oneself on a contaminated cage or other sharp-edged surface or get exposed to the brain (especially), spinal cord, or skull of an infected monkey.
- Currently, there are no vaccines that can protect against B virus infection.
- Till date, only one case has been documented of an infected person spreading B virus to another person.

NEA Scout

(Source: [Indian Express](#))

Context: Recently, NASA announced that its new spacecraft, named NEA Scout, has completed all required tests and has been safely tucked inside the Space Launch System (SLS) rocket. NEA Scout is one of several payloads that will hitch a ride on Artemis I, which is expected to be launched in November.

What is NEA Scout?

- Near-Earth Asteroid Scout, or NEA Scout, is a small spacecraft, about the size of a big shoebox. Its main mission is to fly by and collect data from a near-Earth asteroid.
- It will also be America's first interplanetary mission using a special solar sail propulsion.
- NEA Scout will use stainless steel alloy booms and deploy an aluminum-coated sail measuring 925 square feet.
- The spacecraft will take about two years to cruise to the asteroid and will be about 93 million miles away from Earth during the asteroid encounter.
- NEA Scout is equipped with special cameras and can take pictures ranging from 50 cm/pixels to 10 cm/pixels. It can also process the image and reduce the file sizes before sending them to the earth-based Deep Space Network via its medium-gain antenna.
- Scientists will use this data to determine what is required to reduce risk, increase effectiveness, and improve the design and operations of robotic and human space exploration, added Castillo-Rogez.

Zero-click attacks

(Source: [Indian Express](#))

Context: One of the worrying aspects of the **Pegasus spyware** is how it has evolved from its earlier spear-phishing methods using text links or messages to 'zero-click' attacks which do not require any action from the phone's user. This had made what was without a doubt the most powerful spyware out there, more potent and almost impossible to detect or stop.

How do zero-click attacks work?

- A zero-click attack helps spyware like **Pegasus gain control over a device** without human interaction or human error. So all awareness about how to avoid a phishing attack or which links not to click are

pointless if the target is the system itself. Most of these attacks exploit software which receive data even before it can determine whether what is coming in is trustworthy or not, like an email client.

- Earlier this year, cybersecurity firm ZecOps claimed iPhones and iPads have had a traditional vulnerability to unassisted attacks, especially with its mail app.
- Zero-click attacks are hard to detect given their nature and hence even harder to prevent. Detection becomes even harder in encrypted environments where there is no visibility on the data packets being sent or received.
- One of the things users can do is to ensure all operating systems and software are up to date so that they would have the patches for at least vulnerabilities that have been spotted.
- Also, it would make sense to not sideload any app and to download only via Google Play or Apple's App Store.

Moon 'wobble' affect

(Source: [Indian Express](#))

Context: *Sometimes, the moon seems to move in mysterious ways. It is mostly circles and ovals, depending on your perspective. But there is also something else — a so-called wobble — animating those rotations and revolutions. According to a study published last week, the phenomenon is expected to lead to more flooding here on Earth in the middle of the next decade.*

What is moon wobble?

- The wobble is nothing new. It is a regular oscillation that humans have known about for centuries, and it is one of many factors that can either exacerbate rising sea levels or counteract them, alongside other variables like weather and geography.
- The authors of the study, published in the peer-reviewed scientific journal Nature Climate Change, aimed to untangle all of those variables in an effort to improve predictions about the future of floods.
- Their results underscored a basic fact separate from the movement of the moon: Our oceans are rising because of climate change.
- Rising temperatures caused by greenhouse gas emissions are not the only cause of higher flood risks, and the report explored the interplay of many variables that push and pull at ocean levels.
- But in news media reports about the study, one particular variable seemed to capture outside attention: the moon wobble.
- The study warned that we should expect this wobble to heighten high tides in the middle of the 2030s, but it also showed that this prediction does not apply uniformly to every coastline everywhere.
- As NASA put it in a news release last week, "There's nothing new or dangerous about the wobble; it was first reported in 1728. What's new is how one of the wobble's effects on the moon's gravitational pull — the main cause of Earth's tides — will combine with rising sea levels resulting from the planet's warming."

What is the effect of wobble?

- Other variables aside — and speaking very generally, since every region is different — the effect of the wobble could cause high tide levels at a beach to oscillate by 1 or 2 inches over the course of its long cycle.
- That may sound small. But in certain situations, it can matter quite a bit.
- Understanding that baseline is important even when we are in the phases of the nodal cycle that would seem to counteract rising sea levels, which is what is happening now.



Mains

GS II

A 'tolerant' India can be majoritarian

(Source: [The Hindu](#))

Context: In a recent comprehensive face-to-face survey (of nearly 30,000 people) on religious identity, nationalism and tolerance in Indian society, and conducted in 17 languages between late 2019 and early 2020 by the reputed United States-based Pew Research Center 85% of Hindus affirmed that “respecting all religions is very important to being truly Indian.” But, paradoxically, 64% of Hindus think “it is very important to be Hindu to be ‘truly’ Indian”. And 80% among them say, “it is very important to speak Hindi to be truly Indian”, giving credence to the slogan of Hindutva.

Details:

- Rather than celebrating toleration, or seeing the paradoxes as a peculiarity of the Indic mind, it is crucial to recognise that a virulent majoritarianism can coexist with the professions of tolerance.
- It is misreading to treat the latter as a paradox because mere toleration or an empirical plurality of cultures is not the same as a conscious democratic project of multiculturalism or composite culture.
- Thus, in the last two Lok Sabha elections, not a single Muslim has been elected on a Bharatiya Janata Party ticket.
- This obliteration of political representation of a significant minority (numbering 200 million) — which arguably has no parallel in any established democracy in the world — has become completely normalised in India, and is not a matter of discussion at all.

Other findings and paradoxes

- The Survey abounds in other paradoxes: 80% (across all religions, in almost same proportion) think that respecting other religions is a very important part of their own religious identity, 91% assert that they are free to practise their religion, 77% of Muslims believe in the Hindu notion of karma, but when it comes to inter-religious marriages, friendships and neighbours, there is a marked tendency to keep communities separate.
- Thus, 67% of Hindus and 80% of Muslims believe it is important to stop women of their communities from marrying outside; 86% of Hindus have their close friends come mainly or entirely from their religion.
- Plural cultures have always existed in the past, but what marks out contemporary multi-cultural societies is the premise of equality of cultures, and not just self-contained co-existence.
- The key features of multi-culturalism/composite culture are, as Prof. Lord Parekh asserts, cultures beyond compartments, constant dialogue and mutual change, and a strong streak of interrogation of “settled beliefs” across all cultures, especially the dominant culture.
- It is a mistake to see the electoral success of religious majoritarianism in recent years as constructed in a vacuum.
- Instead, it is precisely the decades-long compartmentalisation of different religious communities, and the absence of solid state and civil society arrangements in educational pedagogy, personal relationships, workplace, to facilitate inter-cultural interaction, and based on equality and respect, even under supposedly secular regimes, that has made the soil politically fertile for the demonisation of the minority, especially the Muslim (and occasionally the Sikh, as in the recent farmer protests).
- **This is despite the Survey breaking the Hindutva appellation of the anti-national Muslim. In fact, 95% of Muslims (and Sikhs) declare that they “are very proud to be Indian”.**

India's 'skyboxification'

- The American philosopher Michael J. Sandel argued that under rising extreme inequalities of capitalism, there is a "skyboxification of American life", in which the affluent classes and people of poor means have no connection at all, and they "live and work and shop and play in different places" and their "children go to different schools".
- In India, this plays out differently not just in economic terms, but also in religion, and more starkly, caste, the fundamental divide.
- Every religion is riven by caste. Like with religion, 64% say that it is "very important" to prevent women from crossing caste boundaries in marriage, and 70% affirm that "most or all of their close friends share their caste".
- Again, the Survey brings to the fore the central contradiction of a democratic nation that is divided by compartmentalised hierarchies.
- Thus, it is vital to note that amidst the gathering clouds of majoritarianism, it is a minority of upper castes that holds the reins of power, across religions, and it is the lower castes among the religious minority that face the brunt of majoritarian attacks.
- Glossing over this reality, ironically, reinforces religious majoritarianism, and reduces conflicts to merely religion.
- This can only be overcome by the unison of social groups, especially the oppressed, across, religious and caste boundaries.
- As B.R. Ambedkar recognised a long time ago, the central barrier to the making of a nation is "separation in social life".
- It cannot be eliminated simply by elements like, as the Survey shows, a quarter of Muslims and a third of Christians believing in the purifying power of the Ganga, or the same kind of numbers believing in reincarnation, etc.
- The antidote to the fear of other social groups, especially minorities, often is increased interaction among them in a variety of public and private settings.
- This is demonstrated in earlier Pew surveys in India, and those elsewhere. In the United States and West Europe, there is a big difference in positive attitudes towards other social/religious groups when members of those groups are personally known. Despite anti-Muslim sentiments, much higher numbers than India are willing to accept Muslims as neighbours.
- In the Pew Survey on 11 Emerging Economies including India (<https://pewrsr.ch/2VVyEBV>), a higher percentage of the majority community in countries such as Lebanon, Venezuela, and South Africa interact with the minorities than India.

Attitudes in South India

- But contrary voices to the majoritarian and segregated vision can be seen within the present Survey too. In several aspects such as the superiority of one's own religion, having friends and neighbours from other religions, preventing inter-religious marriages, the importance of being a Hindu and speaking Hindi to be a true Indian, prohibition of beef, the attitudes in South India differ, not by a small, but a substantial margin to the rest of India, especially the North and the Central parts.
- This enhanced willingness to break differences permeates both Hindus and Muslims in the South, showing the wider reinforcing effects of increased mutual interaction. Since culture affects politics, Hindu nationalism has had much less electoral success in the South, at least so far.
- Social reality and complexity cannot be reduced to numbers. After all, one cannot compare attitudes of different social groups blandly without understanding power differences. But quantitative surveys are still necessary tools.
- Majoritarianism, accompanied by mere tolerant acceptance of minority communities as non-interacting enclaves, is the death knell of democracy. To the extent that the Pew Survey hints at majoritarian attitudes and compartmentalisation, it can only be ignored at our own peril.

Conjugal rights before the Supreme Court

(Source: [Indian Express](#))

Context: *The Supreme Court is expected to begin hearing a fresh challenge to the provision allowing restitution of conjugal rights under Hindu personal laws. In 2019, a three-judge Bench of the Supreme Court had agreed to hear the pleas.*

What is the provision under challenge?

- Section 9 of the Hindu Marriage Act, 1955, which deals with restitution of conjugal rights, reads: “When either the husband or the wife has, without reasonable excuse, withdrawn from the society of the other, the aggrieved party may apply, by petition to the district court, for restitution of conjugal rights and the court, on being satisfied of the truth of the statements made in such petition and that there is no legal ground why the application should not be granted, may decree restitution of conjugal rights accordingly.”

What are conjugal rights?

- Conjugal rights are rights created by marriage, i.e. right of the husband or the wife to the society of the other spouse. The law recognises these rights— both in personal laws dealing with marriage, divorce etc, and in criminal law requiring payment of maintenance and alimony to a spouse.
- Section 9 of the Hindu Marriage Act recognises one aspect of conjugal rights — the right to consortium and protects it by allowing a spouse to move court to enforce the right. The concept of restitution of conjugal rights is codified in Hindu personal law now, but has colonial origins and has genesis in ecclesiastical law.
- Similar provisions exist in Muslim personal law as well as the Divorce Act, 1869, which governs Christian family law.
- Incidentally, in 1970, the United Kingdom repealed the law on restitution of conjugal rights.

How can a case under Section 9 be filed?

- If a spouse refuses cohabitation, the other spouse can move the family court seeking a decree for cohabitation. If the order of the court is not complied with, the court can attach property. However, the decision can be appealed before a High Court and the Supreme Court.
- Normally, when a spouse files for divorce unilaterally, the other spouse files for restitution of conjugal rights if he or she is not in agreement with the divorce. The provision is seen to be an intervention through legislation to strike a conciliatory note between sparring spouses.

Why has the law being challenged?

- The law is being challenged now on the main grounds that it violative of the fundamental right to privacy.
- The plea by two law students argues that a court-mandated restitution of conjugal rights amounted to a “coercive act” on the part of the state, which violates one’s sexual and decisional autonomy, and right to privacy and dignity.
- In 2019, a nine-judge Bench of the Supreme Court recognised the right to privacy as a fundamental right.
- Although the provision of restitution of conjugal rights has been upheld by the Supreme Court earlier, legal experts have pointed out that the nine-judge Bench’s landmark verdict in the privacy case set the stage for potential challenges to several laws such as criminalisation of homosexuality, marital rape, restitution of conjugal rights, the two-finger test in rape investigations.



- Although the law is ex-facie ('on the face if it') gender-neutral since it allows both wife and husband to seek restitution of conjugal rights, the provision disproportionately affects women. Women are often called back to marital homes under the provision, and given that marital rape is not a crime, leaves them susceptible to such coerced cohabitation.
- It will also be argued whether the state can have such a compelling interest in protecting the institution of marriage that it allows a legislation to enforce cohabitation of spouses.

What has the court said on the law earlier?

- In 1984, the Supreme Court had upheld Section 9 of the Hindu Marriage Act in the case of Saroj Rani v Sudarshan Kumar Chadha, holding that the provision "serves a social purpose as an aid to the prevention of break-up of marriage".
- Leading up to the Supreme Court intervention, two High Courts — those of Andhra Pradesh and Delhi — had ruled differently on the issue. A single-judge Supreme Court Bench of Justice Sabyasachi Mukherjee settled the law.
- In 1983, a single-judge bench of the Andhra Pradesh High Court had for the first time struck down the provision in the case of T Sareetha v T Venkatasubbaiah and declared it null and void. Justice P Choudhary cited the right to privacy among other reasons.
- The court also held that in "a matter so intimately concerned the wife or the husband the parties are better left alone without state interference". The court had, most importantly, also recognised that compelling "sexual cohabitation" would be of "grave consequences for women".
- However, in the same year, a single-judge Bench of the Delhi High Court took a diametrically opposite view of the law. In the case of Harvinder Kaur v Harmander Singh Chaudhry, the Delhi High Court upheld the provision.
- "From the definitions of cohabitation and consortium, it appears that sexual intercourse is one of the elements that goes to make up the marriage. But it is not the summum bonum. Sex is the refrain of T Sareetha's case. As if marriage consists of nothing else except sex. Chaudhary, J's over-emphasis on sex is the fundamental fallacy in his reasoning. He seems to suggest that restitution decree has only one purpose, that is, to compel the unwilling wife to 'have sex with the husband'."
- Justice Avadh Behari Rohatgi of the Delhi High Court, while critiquing the Andhra Pradesh High Court judgment, added that "it is in the interests of the State that family life should be maintained, and that homes should not be broken up by the dissolution of the marriage of parents. Even in the absence of children, it is in the interest of the State that if possible the marriage tie should remain stable and be maintained".
- The Supreme Court upheld the Delhi High Court view and overruled the Andhra Pradesh High Court verdict.

Prosecutor, not persecutor

(Source: [The Hindu](#))

Context: *Father Stan Swamy's recent death while waiting for bail has prompted an outcry among lawyers, activists and concerned citizens. While those who admired him were processing their grief, the same National Investigation Agency (NIA) Court rejected bail for one of his co-accused, Anand Teltumbde. Father Swamy's arrest under the Unlawful Activities (Prevention) Act (UAPA) and the denial of bail to him and others accused in the Bhima-Koregaon case have highlighted issues related to police power, pretrial detention, and draconian anti-terror legislation. However, the role of prosecutors in perpetuating the dominant attitude towards undertrial detention has been largely ignored.*

Role of public prosecutors



- The NIA Court order rejecting Father Swamy's request for bail stated that the prosecutor submitted various pieces of evidence to prove a prima facie case against the accused.
- The prosecutor argued that the court must give precedence to the interest of the community/society over the right to liberty even though by this stage, Father Swamy's need for medical attention was apparent. He had Parkinson's disease, his hearing was impaired and he had contracted COVID-19. Was an 84-year-old man in such a precarious state of health a threat to the community's interests? Was there any risk of him absconding or tampering with evidence if released?
- The prosecutor's stand in the case as mechanically presenting the investigating agency's case while zealously demanding prolonged detention of the undertrial throws up vexing questions about the role of public prosecutors in the criminal justice system.
- Public prosecutors are influential at every stage of a trial. They decide what offences the accused person should be charged with, whether to seek pretrial custody, and what sentence to ask for. However, public prosecutors, unlike defence counsel, have an ethical obligation to seek justice balancing the interests of the victims of crime, society, and those accused of crimes.
- They represent the public and are not mere mouthpieces for law enforcement agencies. The Supreme Court in *Sheo Nandan Paswan v. State of Bihar* (1986) cautioned that even though prosecutors have a duty to represent the executive for trying the offender, and it is broadly their responsibility to see that the trial results in conviction, they need not be extremely concerned about the outcome of the case.
- They act as officers of the court and are obliged to ensure that the accused person is not unfairly treated.
- The High Court of Delhi, in *Jitendra Kumar v. State* (1999), warned that, "In performance of his duty he can prosecute the accused, but he cannot assume the role of a persecutor. It is no part of his duty to secure conviction at all costs... The Public Prosecutor should act fairly and impartially and must be conscious of the rights of the accused. He is not only required to conduct prosecution case... but [also] respect and protect the rights of the accused."
- The duty of a public prosecutor to not assume the role of persecutor is vital in trials under special statutes like the UAPA, which water down fair trial guarantees. Undertrial detention becomes a convenient means to punish those accused under the UAPA without convicting them.
- Such trials are long-drawn-out, and the conviction rate is low. In 2019, in 11% of UAPA cases (pending from previous years and filed in 2019), the police closed the case because of insufficient evidence or because the accused was untraceable.
- Charge sheets were filed in only 9% of the UAPA cases. The conviction rate for UAPA cases was 29.2% compared to an average conviction rate of 50.4% for crimes committed under the Indian Penal Code.

Narrative building

- Public prosecutors also have a role in narrative building. Since they present the state's case in criminal trials, they build narratives of criminality and criminalisation. Daniel Richman describes them as "adjudicative gatekeepers" who play a key role in translating criminal "law on the books" to criminal "law in action."
- Such narratives are especially pernicious in cases involving alleged terrorist activities and "anti-nationals", where anxieties about the security of the state already haunt the imagination of those in the criminal justice system and ordinary citizens.
- Thus, public prosecutors who support criminal justice reform can be a powerful force for altering the culture of undertrial detention.
- The responses of the prosecutors and law enforcement agencies reflect the carceral logic that buttresses undertrial detention.
- Two-thirds of India's prison population comprises undertrial prisoners. This reflects the embedding of this carceral logic in the architecture of law enforcement and manifests in prosecutors demanding prolonged custody of the accused.
- Reversing course will require a re-imagination of the objectives of the criminal justice system and cultural change.



The politics of snooping

(Source: [Indian Express](#))

Context: *The Pegasus storm is only the latest — though perhaps the most widespread and sophisticated — among many snooping scandals in Indian politics. In past scandals, governments have fallen, Chief Ministers have resigned, CBI inquiries have been ordered, and the Supreme Court has been moved. But in many of these earlier cases, the alleged infringement of privacy and misuse of the powers of interception were far less flagrant — and in some cases, minuscule — compared to the en masse apparent misuse that is being revealed in the global media investigation called the Pegasus Project.*

A spyware like no other

- The change in surveillance technology over the decades has been frightening. The trepidation of those who may fear their conversations are being listened to, has increased manifold with, for instance, the development of the revolutionary spying software with ‘zero-click’ technology that the Israeli company NSO offers.
- Intelligence agencies the world over have always relied heavily on “listening in” technology as against human intelligence. Before the advent of mobile telephony, it was conversations on telephone fixed lines that were being snooped upon — and those who feared they might be intercepted would strain their ears for the faint whirring sound of tape recorders or the call drops that ensued.
- There was a joke that if you wanted to beat the old-fashioned snoops, you made your confidential telephone calls very early in the morning. Reason: the headphone-wearing listeners, who mostly belonged to the Intelligence Bureau, would not have reported for duty!
- Later, with the use of off-air or “passive” interception equipment, people would look out for the strange car or van parked close to their homes or workplaces. Again, those who feared their conversations might be picked up, found simple solutions (many important people still do!) such as creating enough sound disturbance for the off-air equipment to receive only garbled conversations.
- The illegal use of off-air equipment was in the news towards the end of the tenure of former Army Chief General V K Singh in 2012, when he and his detractors traded charges of mounting surveillance equipment to spy on each other.
- But what do you do if a spyware like Pegasus is implanted in your mobile phone seemingly without leaving a trace, and it continuously streams out all of the phone’s audio, video, and text content?

Snooping over the years

- Over the years, snooping scandals in India have emerged through the outing of a variety of material. It could be the leak of interception orders (leading to the resignation of then Karnataka Chief Minister Ramakrishna Hegde in 1988); the physical sighting of intelligence operatives (which led to the fall of the Chandra Shekhar government in 1991); the leak of audio tapes.
- There have been other scandals such as the leak of the secret letter written by then Finance Minister Pranab Mukherjee to then Prime Minister Manmohan Singh, informing him that he suspected his office was being bugged; and the “snoopgate” in Gujarat (2013), when audio tapes, recorded allegedly at the behest of then Chief Minister Narendra Modi’s aide Amit Shah, of purported conversations of a woman architect were leaked.
- There was also the leak of Blackberry Messenger (BBM) messages recovered by Income Tax officials from the laptop of meat exporter Moin Qureshi.
- At that time, BBM services were considered impenetrable to surveillance — just as messaging services like WhatsApp, Telegram and Signal, which promise end-to-end encryption, were, until recently,

considered safe. From 2019, however, when the first Pegasus surveillance lists were published, the Internet-based messaging platforms are no longer seen as being entirely safe.

- In the present case involving Pegasus, metadata comprising thousands of telephone numbers, belonging to targets of the government clients of NSO, has been leaked.

The fallout of leaks

- A review of some of these past scandals provides lessons in the manner in which agencies that purchase spyware have been upgrading their arsenal with increasingly expensive equipment and software.
- It also shows the manner in which the politicians of the day have reacted when confronted with evidence of violations — while many stepped down taking moral responsibility in the past, more recently, they have tended to mostly brazen it out.
 - **RAMAKRISHNA HEGDE:** The then Chief Minister of Karnataka stepped down on “moral grounds” in 1988 after details emerged of wire-taps on 50 individuals, including journalists and dissidents within the Janata Party. Subsequently, the authorisation given to the state police for the tapping too was made public, completing the ignominy of the Chief Minister.
 - **CHANDRA SHEKHAR:** While Rajiv Gandhi, who was Prime Minister at the time, was exultant at the exit of Hegde, three years later he had his own surveillance moment. The Congress had propped up Chandra Shekhar’s Samajwadi Janata Party government. The tenuous relationship between the two leaders dived sharply after two policemen belonging to the Haryana CID were apprehended allegedly keeping vigil outside Rajiv’s house.

Tata and Radia Tapes

- The Tata Tapes were the first instance of the leak of a large volume of intercepted conversations. The tapes dealt with conversations of industrialists Nusli Wadia, Ratan Tata, and Keshub Mahindra, and the attempts to get the Centre to intercede in the manner in which the United Liberation Front of Asom (ULFA) was extorting money from tea estates, including those owned by the Tatas.
- Then Prime Minister I K Gujral ordered a CBI inquiry into the audio tape leaks but shortly thereafter, the inquiry was closed “for want of evidence”. The question of who or which agency ordered the telephone taps on the industrialists was never conclusively answered.
- More than a decade after the Tata Tapes, hundreds of conversations of corporate lobbyist Niira Radia were leaked in 2008. The difference was that the route of the interception and the secret written communications between the Income Tax Department and the CBI that preceded the phone tapping were in circulation before the contents of the conversations were made public.
- The other difference was that this was the leak of an authorised interception (renewed three times as per procedure) in connection with the 2G telecom scam, but it triggered a huge brouhaha.
- The result: for years, monitored by the apex court, the CBI attempted to find “criminality” in the contents of the Radia Tapes, but failed. Radia herself quit public relations, but the message from that episode remains starkly true: that no conversations are safe, and anything can leak.

GS III

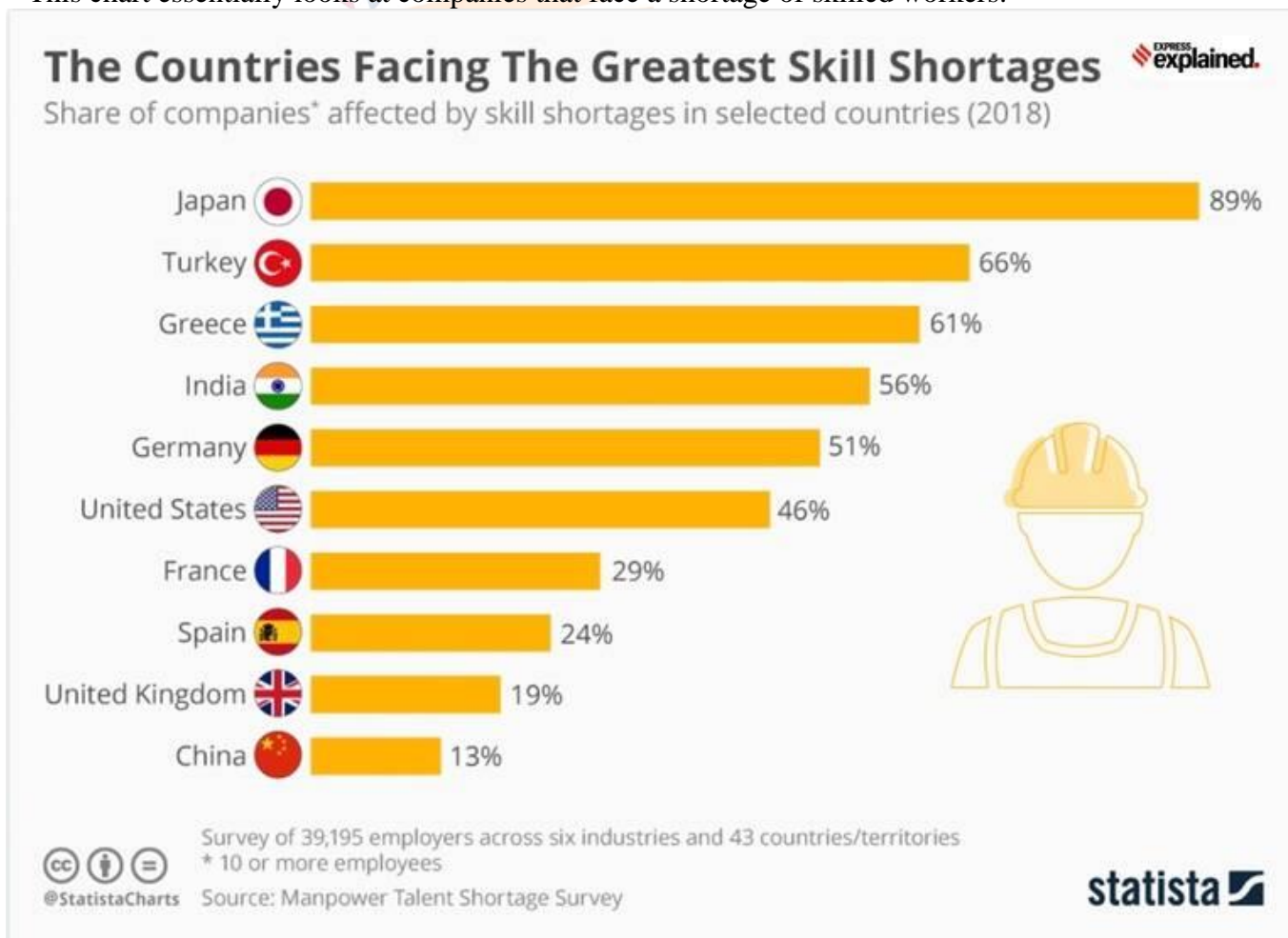
The challenge of skilling India

(Source: [Indian Express](#))

Context: Speaking on the occasion of the World Youth Skills Day last week, Prime Minister Narendra Modi yet again **underscored the importance of a skilled workforce** for achieving the goal of becoming Atmanirbhar Bharat. He said that in today's world, only those individuals and countries would grow which are skilled. He referred to the schemes and programmes run by his administration — such as the Skill India Mission and the 'Going Online As Leaders' (or Goal) etc — to argue that India had laid the foundation for improving the level of skill among the youth.

Details:

- However, according to most estimates (see the chart below; Source: Statista), India continues to be a country that faces one of the highest shortages of skilled workforce.
- This chart essentially looks at companies that face a shortage of skilled workers.



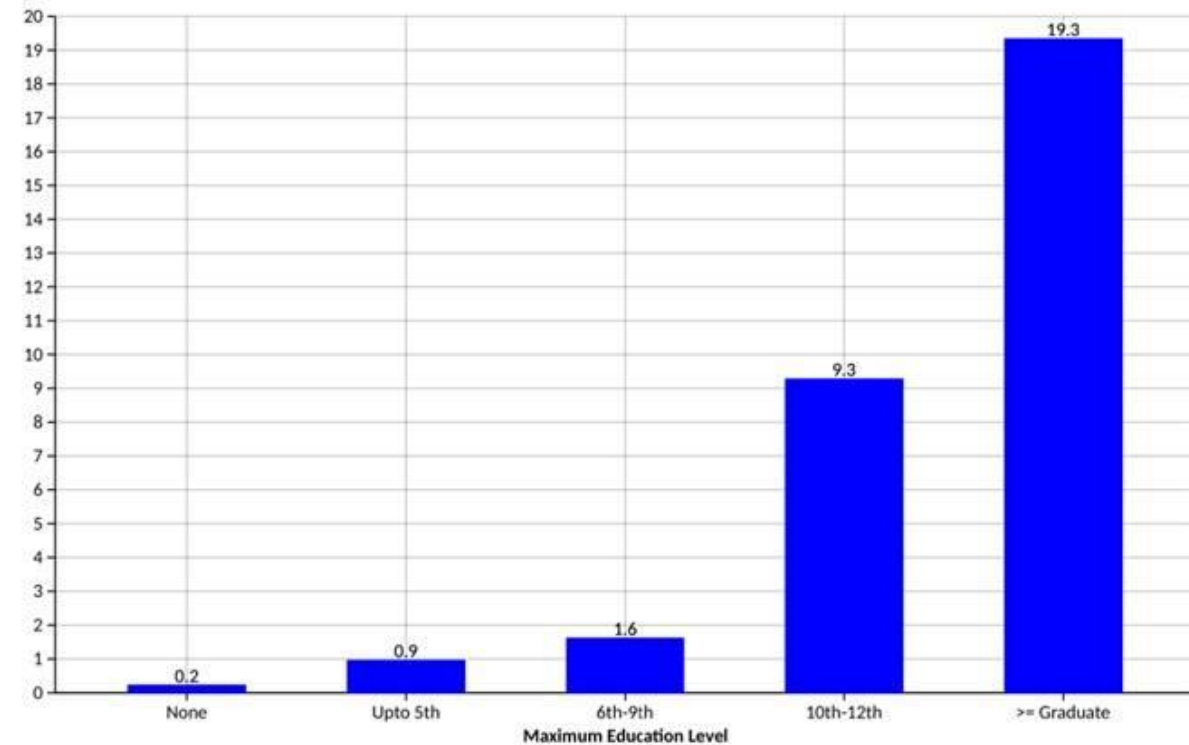
- But this is just one side of the problem.
- The other side is the massive unemployment in India — one that worsens with educational attainment (see the chart below; source: CMIE). The data for this chart is for the January to April 2021 period, when the overall unemployment rate in the country was 6.83%. In comparison, those with graduation (or even higher degrees) face almost three-times the unemployment level.



- At over 19% unemployment rate, one in every five Indian who graduate (or even better) is unemployed. It is almost as if the economy penalises you for getting educated.
- The upshot of these two charts: On the one hand, companies in India face an acute shortage of skilled manpower and, on the other, India has millions of educated unemployed.

The Skilling Challenge: UER(%)

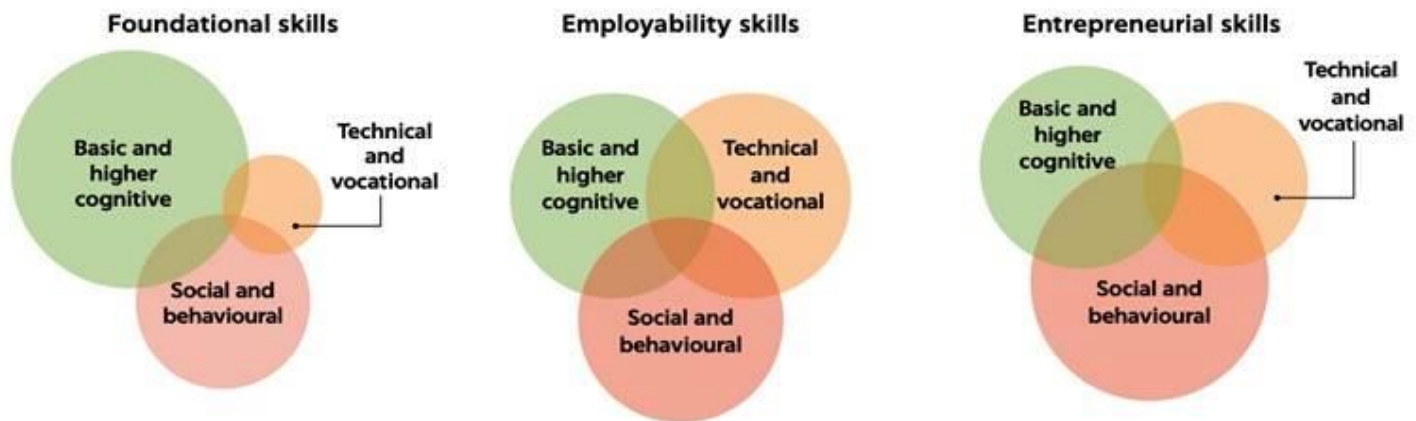
EXPRESS
explained.



Centre for Monitoring Indian Economy Pvt. Ltd.

What explains this oddity? The lack of skill.

- Before understanding the size of the skilling challenge that India faces, it is important to understand what do we mean by “skilling”.
- A good resource in this regard is the 2018 report by the National Council of Applied Economic Research — aptly titled “No time to lose”.
- This report explains that there are three types of skills. First, the cognitive skills, which are the basic skills of literacy and numeracy, applied knowledge and problem-solving aptitudes and higher cognitive skills such as experimentation, reasoning and creativity.
- Then there are the technical and vocational skills, which refer to the physical and mental ability to perform specific tasks using tools and methods in any occupation. Lastly, there are social and behavioural skills, which include working, communicating, and listening to others.
- Different levels of these three types of skills can be combined to further classify skills into foundational, employability, and entrepreneurial skills (see the chart below).



Note: See appendix A2.1 for a glossary of skills and examples of cognitive, technical and vocational, and social and behavioural skills.

Source: NCAER.

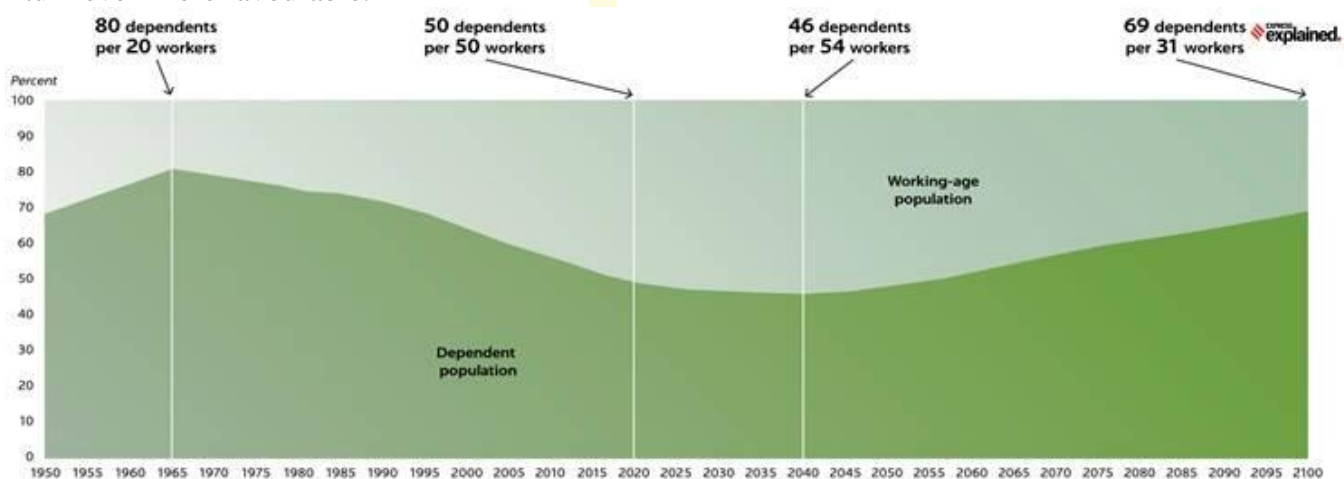
EXPRESS explained.

What is the scale of the skilling challenge facing India?

- According to the 2018 report by NCAER, India had about 468 million people in its workforce. Around 92% of them were in the informal sector. Around 31% were illiterate, only 13% had a primary education, and only 6% were college graduates. Further, only about 2% of the workforce had formal vocational training, and only 9% had non-formal, vocational training.
- That report had also estimated that almost 1.25 million new workers (aged 15–29) were projected to join India's workforce "every month" through 2022.
- Another noteworthy observation in that report was that out of the more than 5 lakh final year bachelors students aged 18–29 who were surveyed, around 54% were found to be "unemployable".

What is at stake?

- If the skilling issue is not resolved, India risks forfeiting its so-called "demographic dividend".
- Look at the chart below to understand it more clearly. The chart shows that, thanks to the fact that India's working-age population (light green area) is growing faster than its population of young and old dependents (dark green area), there is great opportunity for India to improve both its social and economic outcomes if the higher number of workers are productively employed.
- At precisely the year 2020, the proportion of those Indians who belong to the working age (15 to 64 years of age) and those who are dependent will be 50-50. Between 2020 and 2040, this proportion will turn even more favourable.



Source: United Nations, Department of Economic and Social Affairs, Population Division, 2017 Revision of World Population Prospects, data acquired at website.



- There is great opportunity for India to improve both its social and economic outcomes if the higher number of workers are productively employed.
- But whether this will turn into a demographic dividend or not will depend entirely on how many of those in the working age bracket are working and becoming prosperous. If they are not in well-paying jobs, the economy would not have the resources to take care of itself since with each passing year, the proportion of dependents will continue to rise after 2040.
- “To put it simply, to attain its rightful place and realise its aspirations, India must become rich before it gets old,” states the report succinctly.
- But why is India stuck with low levels of skilling? Indians have excelled in technical expertise at the global level — be it medicine or engineering. Then what explains India’s domestic skilling paradox?
- A big part of the trouble is the starting condition. Over 90% of India’s workforce is in the informal sector.
- According to researchers at the NCAER, India is trapped in a vicious cycle: Greater workforce informality leads to lower incentives to acquire new skills. Faced with inadequately skilled workers, businesses often choose replacing labour with machinery. That’s because “skilled labour and technology are complementary, but unskilled labour and technology are substitutes”. This, in turn, leads to still fewer formal jobs.
- Millions of Indians who work in agriculture continue to subsist because they do not have the skills to take up industrial or services sector jobs even as these sectors themselves have failed to create adequate job opportunities.

What can be done to break this cycle?

- A distinct disadvantage with India’s approach towards skilling has been to ignore the demands of the market.
- For the most part, skills have been provided in a top down fashion. Thus, most skilling efforts focus almost solely on providing certain skills but fail to “match” them with the needs of the market.
- Experts argue that for skilling schemes to yield lasting results, even matching is not enough. Given the way market demands fluctuate — for instance, look at how Covid pandemic has upended supply chains — skilling efforts must try to anticipate the needs of the market.

Surveillance reform is the need of the hour

(Source: [The Hindu](https://www.thehindu.com/news/national/article-surveillance-reform-is-the-need-of-the-hour/1))

Context: *It is worth asking why the government would need to hack phones and install spyware when existing laws already offer impunity for surveillance. This unsettling query arises on the basis of reports emerging from a collaborative investigation by journalists from around the world, including from India’s The Wire, titled the ‘Pegasus Project’. Reports say that over “300 verified Indian mobile telephone numbers, including those used by ministers, opposition leaders, journalists, the legal community, businessmen, government officials, scientists, rights activists and others”, were targeted using spyware made by the Israeli firm, NSO Group.*

Threat to press freedom

- Subsequent reporting showed that the Pegasus spyware had been used to target 37 phones, of which 10 belonged to Indians.
- Amnesty International’s Security Lab was then able to confirm that Pegasus was used to compromise the phones of former journalist of The Indian Express Sushant Singh, former editor of the Economic and

Political Weekly Paranjay Guha Thakurta, former Outlook journalist S.N.M. Abdi, and The Wire's two founding editors Siddharth Varadarajan and M.K. Venu.

- These revelations highlight a disturbing trend with regard to the use of hacking software against dissidents and adversaries. In 2019, similar allegations were made about the use of Pegasus against journalists and human rights activists.
- Most of them were situated in Maharashtra and Chhattisgarh as the hack targeted lawyers related to the Bhima Koregaon case and Dalit activists, respectively. However, despite repeated calls for investigations, the relevant State governments failed to do so.
- A significant number of Indians reportedly affected by Pegasus this time are again journalists. This is not surprising since the World Press Freedom Index produced by Reporters Without Borders has ranked India 142 out of 180 countries in 2021.
- What is shocking, however, is that the press requires (and in democracies is afforded) greater protections on speech and privacy. Privacy and free speech are what enable good reporting. They protect journalists against threats of private and governmental reprisals against legitimate reporting. This has been recognised in Supreme Court decisions.
- In the absence of privacy, the safety of journalists, especially those whose work criticises the government, and the personal safety of their sources is jeopardised. Such a lack of privacy, therefore, creates an aura of distrust around these journalists and effectively buries their credibility.

Problematic provisions

- The government, in its purported undated and unsigned response, relied on existing provisions of law under the Indian Telegraph Act of 1885 and the Information Technology (IT) Act of 2000. Even without the use of Pegasus or any other hacking software and surveillance, these provisions are problematic and offer the government total opacity in respect of its interception and monitoring activities.
- While the provisions of the Telegraph Act relate to telephone conversations, the IT Act relates to all communications undertaken using a computer resource. Section 69 of the IT Act and the Interception Rules of 2009 are even more opaque than the Telegraph Act, and offer even weaker protections to the surveilled.
- No provision, however, allows the government to hack the phones of any individual since hacking of computer resources, including mobile phones and apps, is a criminal offence under the IT Act. Nonetheless, surveillance itself, whether under a provision of law or without it, is a gross violation of the fundamental rights of citizens.
- The very existence of a surveillance system impacts the right to privacy and the exercise of freedom of speech and personal liberty under Articles 19 and 21 of the Constitution, respectively. It prevents people from reading and exchanging unorthodox, controversial or provocative ideas.
- Regardless of whether a citizen knows that their email is being read by the government, the perceived danger, founded on reasonable suspicion that this may happen, itself impacts their ability to express, receive and discuss such ideas.
- There is also no scope for an individual subjected to surveillance to approach a court of law prior to or during or subsequent to acts of surveillance since the system itself is covert.
- In the absence of parliamentary or judicial oversight, electronic surveillance gives the executive the power to influence both the subject of surveillance and all classes of individuals, resulting in a chilling effect on free speech.
- Constitutional functionaries such as a sitting judge of the Supreme Court have reportedly been surveilled under Pegasus without any checks outside the executive wing of government.
- Vesting such disproportionate power with one wing of the government threatens the separation of powers of the government. In response to a Right to Information (RTI) request in 2013, the Central government had revealed that 7,500 to 9,000 orders for interception of telephones are issued by it every month.
- However, RTI requests for such information are now denied citing threats to national security and to the physical safety of persons.



- The government, in its purported response, stated that any surveillance which takes place happens through a “due process of law”. However, the existing provisions are insufficient to protect against the spread of authoritarianism since they allow the executive to exercise a disproportionate amount of power.
- Such surveillance, when carried out entirely by the executive, curtails Articles 32 and 226 of the Constitution (empowering the Supreme Court and High Courts, respectively, to issue certain writs) as it happens in secret.
- Thus, the affected person is unable to show a breach of their rights. This violates not only the ideals of due process and the separation of powers but also goes against the requirement of procedural safeguards as mandated in *K.S. Puttaswamy (Retd) v. Union of India* (2017).

Role of judiciary

- Thus, in order to satisfy the ideal of “due process of law”, to maintain an effective separation of powers and to fulfill the requirements of procedural safeguards and natural justice, there needs to be oversight from another branch of the government.
- Only the judiciary can be competent to decide whether specific instances of surveillance are proportionate, whether less onerous alternatives are available, and to balance the necessity of the government’s objectives with the rights of the impacted individuals.
- The need for judicial oversight over surveillance systems in general, and judicial investigation into the Pegasus hacking in particular, is also essential because the leaked database of targeted numbers contained the phone number of a sitting Supreme Court judge, which further calls into question the independence of the judiciary in India.
- Surveillance reform is the need of the hour in India. Not only are existing protections weak but the proposed legislation related to the personal data protection of Indian citizens fails to consider surveillance while also providing wide exemptions to government authorities.
- When spyware is expensive and interception is inefficient, the individuals surveilled will be shortlisted by priority and perceived threat level to the existing regime.
- But as spyware becomes more affordable and interception becomes more efficient, there will no longer be a need to shortlist individuals. Everyone will be potentially subject to state-sponsored mass surveillance. The only solution is immediate and far-reaching surveillance reform.

Curbs on Mastercard

(Source: [The Hindu](#))

Context: *The Reserve Bank of India (RBI) on Wednesday banned Mastercard from issuing new debit and credit cards to customers in India with effect from July 22. According to the RBI, the U.S. card-issuer has failed to comply with the local data storage rules announced by the central bank in 2018. The ban has unsettled banks operating in India that use Mastercard’s services to issue a variety of cards to their customers.*

What is the RBI’s data localisation policy?

- In 2018, the Indian central bank had issued a circular ordering card companies such as Visa, Mastercard, and American Express to store all Indian customer data locally so that the regulator could have “unfettered supervisory access”.
- This meant that foreign card companies had to store complete information about transactions made by Indian customers in servers located within India. Companies were initially required to comply with these rules within six months.



- The reason offered by the RBI to back up its data localisation rule was that local storage of consumer data is necessary to protect the privacy of Indian users and also to address national security concerns. Since the order, Mastercard, Visa and other foreign card companies have lobbied to dilute the rules. But the RBI has remained strict that companies must comply with its data localisation rules.
- Consequently, Mastercard deleted Indian customer data from its foreign servers and promised to invest in building local servers in India to store local customer data. The RBI, however, has not been impressed.
- It has banned Mastercard from issuing new cards to customers from July 22. Reuters reported Mastercard as having said it was “disappointed” with the RBI’s decision and it had provided regular updates on its compliance with the rules since 2018.
- The company was quoted as saying it would continue to work with the Indian central bank to provide any additional details required to resolve its concerns.
- Existing Mastercard customers, however, can continue to use their cards. Earlier this year, American Express and Diners Club International were also banned by the RBI from issuing new cards after they failed to comply with the 2018 circular.

What is the need for local data storage?

- Experts believe that customer privacy and national security are genuine concerns that need to be taken seriously. However, many also believe that data localisation rules are too stringent and they could simply be used by governments as tools of economic protectionism.
- For instance, they argue, it may not be strictly necessary for data to be stored locally to remain protected. Broadly speaking, formal international laws to govern the storage of digital information across borders may be sufficient to deal with these concerns. Governments, however, may still mandate data localisation in order to favour local companies to foreign ones.
- China, for example, has used its cyber-security laws to discriminate against foreign companies. A similar trend may be playing out in India with the Centre’s emphasis on economic self-sufficiency.
- In 2018, Mastercard had launched a complaint with the U.S. government that Prime Minister Narendra Modi was actively promoting Indian cards like RuPay and that it was affecting the business of foreign card companies.
- Governments may also believe that mandating foreign companies to set up local infrastructure can boost their local economies.

What lies ahead?

- Indian banks that are currently enrolled in the Mastercard network are expected to make alternative arrangements with other card companies. The process is expected to take a few months, and their card business is expected to take a significant hit meanwhile.
- The RBI’s data localisation policy, as it burdens foreign card companies, may end up favouring domestic card issuers like RuPay. Mastercard owns about one-third of the market share in India, and the RBI’s ban is likely to significantly benefit its competitors. RBL Bank, for instance, has decided to enter into an agreement with Visa after the RBI’s ban on Mastercard.
- Similarly, the ban on American Express and Diners Club earlier this year benefited the Indian card network RuPay. Some believe that even Visa, a foreign company which dominates card payments in India, may come under regulatory pressure in the near future.
- Thus, the card payments sector may end up being restricted to a few domestic companies, which in turn can lead to reduced competition. This could mean higher costs and lower quality services for customers.
- It is also worth noting that in today’s digital economy data have turned out to be a valuable commodity, which companies as well as governments have tried to gain control over. Information about spending patterns and other customer data can be monetised by companies in a variety of ways.
- With no clear rules on who owns customer data and to what extent, conflicts over data ownership are likely to continue for some time.

Pegasus is India's Watergate moment

(Source: [The hindu](#))

Context: *“If this government ever became a tyranny, if a dictator ever took charge in this country, the technological capacity that the intelligence community has given the government could enable it to impose total tyranny, and there would be no way to fight back because the most careful effort to combine together in resistance to the government, no matter how privately it was done, is within the reach of the government to know. Such is the capability of this technology.” Those words of Sen. Frank Church, who led one of two committees on intelligence and surveillance reform established in the aftermath of the Watergate scandal, are just as relevant in India today given the revelations of extensive surveillance — it is unclear by whom, but signs point to the Indian government — by the use of spyware on people’s phones. While there is much to be said about the international regulation of the unaccountable sale of spyware by shadowy entities such as the NSO Group, it is equally, if not more important to ensure that surveillance in India is made accountable.*

Go easy on the salt

- My former colleague, Sunil Abraham, often likens surveillance to salt. A small amount of surveillance is necessary for the health of the body politic, just as salt is for the body; in excess, both are dangerous.
- While one cannot enjoy the liberties provided under the Constitution without national security, we must equally remember that national security is not meaningful if it comes at the cost of the very liberties such security is supposed to allow us to enjoy.
- Excessive and unaccountable surveillance imperils privacy, freedom of thought, of speech, and has a chilling effect on people’s behaviour, while shattering the bedrock of the rule of law upon which a constitutional liberal democracy is built.
- The government claims all its surveillance is authorised and justified. But then, the question arises: where are the prosecutions for terrorism, organised crime, espionage, etc., based on evidence from such surveillance?
- Who is ensuring that the surveillance is necessary and proportionate? Indeed, on the contrary, there are numerous examples of surveillance powers being misused for personal and political gain, and to harass opponents.

Earlier examples

- In 2012 in Himachal Pradesh, the new government raided police agencies and recovered over a lakh phone conversations of over a thousand people, mainly political members, and many senior police officials, including the Director General of Police (DGP), who is legally responsible for conducting phone taps in the State.
- In 2013, India’s current Home Minister was embroiled in a controversy dubbed “Snoopgate”, with phone recordings alleged to be of him speaking to the head of an anti-terrorism unit to conduct covert surveillance on a young architect and her family members without any legal basis.
- The Gujarat government admitted the surveillance, including phone tapping, but claimed it was done on the basis of a request made to the Chief Minister by the woman’s father. Yet, no order signed by the State’s Home Secretary — a legal necessity for a phone tap — was ever produced, and the Gujarat High Court shut down an inquiry into “Snoopgate” upon the request of the architect and her father, on the shocking basis that it “did not involve public interest”.
- In 2009, the United Progressive Alliance government swore in an affidavit in the Supreme Court that the CBDT had placed Niira Radia, a well-connected PR professional, under surveillance due to fears of her being a foreign spy. Yet, while they kept her under surveillance for 300 days, they did not prosecute her for espionage.



- Non-state actors such as the Essar group, have also been shown to engage in illegal surveillance. K.K. Paul, then the Governor of Meghalaya, noted complaints by telecom operators that private individuals were misusing police contacts to tap phone calls of “opponents in trade or estranged spouses”.
- There are dozens of such examples of unlawful surveillance which seem to be for political and personal gain, and have nothing to do with national security or organised crime. Yet, there are few examples of people being held legally accountable for unlawful surveillance.

The laws

- Currently, the laws authorising interception and monitoring of communications are Section 92 of the CrPC (for call records, etc), Rule 419A of the Telegraph Rules, and the rules under Sections 69 and 69B of the IT Act. Indeed, it is unclear when the Telegraph Act applies and when the IT Act applies. A limited number of agencies are provided powers to intercept and monitor.
- In 2014, the Ministry of Home Affairs told Parliament that nine central agencies and the DGPs of all States and Delhi were empowered to conduct interception under the Indian Telegraph Act. In 2018, nine central agencies and one State agency were authorised to conduct intercepts under Section 69 of the IT Act.
- Yet, the Intelligence Organisations Act, which restricts the civil liberties of intelligence agency employees, only lists four agencies, while the RTI Act lists 22 agencies as “intelligence and security organisations established by the central government” that are exempt from the RTI Act. Thus, it is unclear which entities count as intelligence and security agencies.
- Further, a surveillance alphabet soup exists, with programmes such as CMS, TCIS, NETRA, CCTNS, and so on, none of which has been authorised by any statute, and thus fall short of the 2017 K.S. Puttaswamy judgment, which made it clear that any invasion of privacy could only be justified if it satisfied three tests: first, the restriction must be by law; second, it must be necessary (only if other means are not available) and proportionate (only as much as needed); and third, it must promote a legitimate state interest (e.g., national security).
- In 2010, then Vice-President Hamid Ansari called for a legislative basis for India’s agencies, and the creation of a standing committee of Parliament on intelligence to ensure that they remain accountable and respectful of civil liberties.
- In 2011, the Cabinet Secretary in a note on surveillance held that the Central Board of Direct Taxes having interception powers was a continuing violation of a 1975 Supreme Court judgment on the Telegraph Act. That same year, parliamentarian Manish Tewari introduced a private member’s Bill to bring intelligence agencies under a legislative framework.
- That Bill soon lapsed. In 2013, the Ministry of Defence-funded think-tank, the Institute for Defence and Strategic Analysis, published a report, “A Case for Intelligence Reforms in India”, a core recommendation of which was: “the intelligence agencies in India must be provided a legal framework for their existence and functioning; their functioning must be under Parliamentary oversight and scrutiny”.
- In 2018, the Srikrishna Committee on data protection noted that post the K.S. Puttaswamy judgment, most of India’s intelligence agencies are “potentially unconstitutional”, since they are not constituted under a statute passed by Parliament — the National Intelligence Agency being an exception.
- In its 2019 election manifesto, the Indian National Congress — in what to my knowledge was a first for a national political party — called for parliamentary oversight of intelligence agencies.

Post-Watergate reforms

- The legacy of the Church Committee can be seen in the fact that the Snowden revelations in 2013 did not uncover any spying on Opposition politicians, journalists, judges, and human rights defenders for partisan political ends.
- What was shocking about the Snowden revelations was the extent of NSA’s surveillance, the overreach of the powers provided under the PATRIOT Act, as well as the lack of sufficient checks and balances provided by the Foreign Intelligence Surveillance Court.

- The Snowden revelations led to meaningful reform of that court, and controversial domestic surveillance provisions of the PATRIOT Act expired in 2020.
- We need such reforms in India, which are aimed at professionalising intelligence gathering, bringing intelligence agencies under parliamentary oversight, making them non-partisan, and ensuring that civil liberties and rule of law are protected.
- This is India's Watergate moment, and the Supreme Court and Parliament should seize it.

Microplastics concentration in Ganga more than any other major world river, finds new study

(Source: [Down to Earth](#))

Context: *The Ganga is heavily polluted with microplastics at Varanasi, Haridwar and Kanpur, Delhi-based non-profit Toxic Link claimed.*

What are Microplastics?

- Microplastics are plastics that are less than 5 millimetres in size but are a major source of marine pollution.
- They are non-degradable plastics that often entered the Ganga through industrial waste or packaging of religious offerings, its research found.
- The density of population in the three cities also added to the problem because a large chunk of pollutants got directly discharged into the river by people living on the banks.

What the study says?

- Among the three cities, the Toxic Link's study found that sites at Varanasi showed the maximum load of microplastics in the water of the Ganga, as compared to the other two cities.
- This might be due to cumulative downstream pollution as well as industrial and human activities. Assi Ghat in Varanasi had the maximum abundance of microplastics.
- The Dohri ghat in Kanpur ranked topmost among all 15 sites (five each from all three cities) from where the river water sample was collected. This was thanks to the sewage and / or industrial effluents coming from the city of Kanpur.
- Pollution of all kinds increased as one travelled downstream from Haridwar to Varanasi. This was not only been pointed out in the Toxics Link report but many others.
- "It indicates that municipal and industrial discharges are responsible for microplastics pollution in the river water. The pollution becomes more prominent in Kanpur and Varanasi, which may be due to discharge from tanneries and other industries like textiles, etc," the study found.
- The researchers tried to compare the microplastics concentration in Ganga water with similar studies on other rivers across the globe, like the Rhine in Europe, the Patapsco, Magothy, Rhode in North America and the Elqui, Maipo, Biobio, and Maule in South America.
- They found the Ganga microplastics pollution was much higher. This was in spite of a higher per capita consumption of plastic in the European countries, North and South America, as compared to India.
- The study not only measured the amount of microplastics but also did an analysis of its types present in the Ganga. Ethylenevinyl is particularly suited for food, drugs and cosmetic packaging.
- Polyacetylene is used as a doping agent in the electronics industry. Polypropylene is also used in packaging, plastic sheets, fibre, fabrics, rope, etc. PIP is mainly used in footwear and baby bottle nipples.
- Polyamide, commonly known as nylon, is used as a natural fibre and as metal wires in clothing and industry. All these and 36 other types were found in the samples. Their concentration varied from site to site.

How does it impact people?

- The results of this study are a matter of grave concern not just for academic and scientific interests but also from the public health perspective. The Ganga is a source of water for not just drinking and bathing purposes but also for irrigation to a large extent.
- Microplastics in river water, if ingested in humans or other organisms, can cause toxicity through various means. Not only are these microplastics toxic themselves, they also have a tendency to absorb various toxins present in water, including harmful chemicals.
- The study also shows that the river is acting as a carrier of plastics and microplastics and transporting significantly large quantities into the ocean.
- Although some of the effects of microplastics on public health are understood, a lot still needs to be done.
- “Microplastics and their impact on marine bodies and the environment is documented through various research studies. But there is hardly any work for assessing their impact on human health,” the study noted.
- Microplastics could have a serious impact on human health considering their property to absorb toxic pollutants. Studies needed to be taken up to understand this in depth, the study added.
- The study also recommended the strengthening of implementation of Extended Producer Responsibility (EPR) in Plastic Waste Management Rules since a lot of pollution in the Ganga was due to industrial waste.
- EPR put the onus of plastic waste management on the producers or the companies manufacturing the products. It also pushes the argument that rivers should be declared as ‘no plastic zones’.

Clean energy: How AI can help spot the copper we need

(Source: [Down to Earth](#))

Context: Climate crisis is worsening, and there is a growing urgency to head towards net-zero emissions. The world is going to need massive quantities of copper — an essential and highly efficient mineral used in renewable energy systems to generate power from solar, hydroelectric, thermal and wind energy. But where do we scour the copper? The world may be bound for a supply crunch: Market analysts have estimated that the supply shortfall of copper a year could be as high as 10 million tonnes by 2030 the world does not build any new mines. A new report shows the way: Using artificial intelligence to discover copper deposits formed along the ancient mountain ranges over the past 80 million years. The research from the Earthbyte research group, University of Sydney, pointed to a developing software called GPlates that can model Earth in four dimensions to discover these ancient copper deposits.

Why is copper needed

- Wind and solar energy as well as batteries offer renewable and clean alternatives. But these clean energy technologies need new material demands.
- Copper is an excellent conductor of thermal and electrical energy; the power systems that utilise this metal generate and transmit energy with high efficiency and with minimum environmental impacts.
- Use of copper in energy systems, therefore, helps reduce carbon dioxide emissions. It can also be recycled completely many times over without any loss in performance.
- The global need for copper, however, could increase by 350 per cent by 2050.

- The study underlined that the current reserves could deplete between 2035 and 2045, as wind and solar energy gains more traction and more people shift to electric vehicles.
- The International Energy Agency in its report published May 2021 also flagged global supply of copper for accelerated deployment of solar panels, wind turbines and electric vehicles.

What is GPlate technology?

- Cooper deposits are locked up in remote locations, including the volcanic mountain chains such as the Andes and the Rocky Mountains.
- When tectonic plates converge, one plate slides beneath the other and descends into the Earth's mantle at rates of 2-8 centimeters a year. The process creates a variety of magmatic rocks (formed through the cooling and solidification of magma or lava) and copper deposits along the edge of the continent. The process is called subduction.
- The region of the Earth's crust where the tectonic plates meet is called the subduction zone. Porphyry copper systems, the most viable source of economic copper, occur along magmatic belts derived in subduction zones.
- The hot magmatic fluid inside the mantle has copper, which, after millions of years of further plate movement, moves closer to the surface and can be extracted.
- GPlates software — desktop software that primarily helps understand where copper deposits have formed along the mountain belts — uses machine learning to understand the link between copper deposits and the evolution of the subduction zone.
- The branch of artificial intelligence measures how fast the tectonic plates are moving towards each other, how far the plate is from the subduction zone, how much copper there is in the crust, etc.
- The study has narrowed down on several candidate regions in the United States, which include central Alaska, southern Nevada, southern California and Arizona, and regions in Mexico, Chile, Peru and Ecuador.

Climate change and lightening strikes

(Source: [Down to Earth](#))

Context: West Bengal received the highest number of lightning strikes per square kilometer in 2020, followed by Jharkhand, according to South Asia lightning Report ,2020 by Earth Networks, a global weather intelligence agency. West Bengal, along with Bangladesh, received two million lightning bolts on ground — above 8 lightning strikes per square kilometer on average during last year. Overall, 57 million lightning strikes were recorded in India, Bangladesh and Sri Lanka together. Around one-fourth of them were cloud-to-ground strikes and the rest were intra-cloud.

India received most strikes

- India received about 39.6 million intra-cloud and cloud-to-ground lightning strikes in 2020, a whopping 70 per cent of the total number in the region.
- The country received nearly 89 per cent of all the lethal cloud-to-ground strikes in the world.
- India suffered 1,697 deaths due to lightning in 2020, according to a report prepared jointly by the Union Ministry of Earth Sciences, Indian Meteorological Department and Indian Institute of Tropical Meteorology, among others. During the last decade (2011-20), India recorded a total of 2,600 deaths a year on an average.
- In Bangladesh, about a third of the three million lightning bolts were ground strikes. Rajshahi, Khulna, Dhaka and Rangpur districts received the most (over 0.1 million each) cloud-to-ground strikes in the country.

- Only 4 per cent of Sri Lanka's 14.5 million lightning pulses were ground strikes, a very unusual data according to experts.
- The proportion of ground lightning incidents vary from around 25 to 40 per cent in general due to several factors but less than 10 per cent is unusual.
- Though lightning is a major problem, the number of incidents seems to have reduced in recent years.

West Bengal worst-hit

- West Bengal received 940,958 lightning strikes on ground, about 11 lightning strikes per square kilometer on average last year.
- It's a fact that the number of lightning has increased in our state and 108 people died between April 2019 to March 2021. However we are trying hard to reduce the mortality from lightning through various actions and campaigns.
- Jharkhand was the second-highest on the list with around 10 strikes; Orissa, Chhattisgarh, Tamil Nadu and Andhra Pradesh are other states which received lightning strikes 4-8 strikes every square kilometer.
- Tamil Nadu topped the list of overall lightning strikes (including both intra-cloud fireworks and cloud-to-ground bolts), with close to six million strikes, followed by Andhra Pradesh, Orissa, Karnataka and West Bengal.
- The report added:
 - For all of 2020, Earth Networks detected 39,549,444 lightning pulses in India, of which 12,022,402 were dangerous cloud-to-ground strikes. The top five states with the most lightning last year were Tamil Nadu, Andhra Pradesh, Karnataka, West Bengal and Odisha. Lightning increased by 22.6 per cent compared to 2019.
- The rise is even more phenomenal between April 2020 and March 2021.
- Around 18.5 million lightning strikes were recorded in India, which was a 34 per cent increase from the 13.8 million strikes between April 2019 and March 2020, according to a report prepared by IMD and others.
- There are states with very sharp increases in lightning strikes during the period. Punjab saw upto 331 per cent rise, Bihar 168 per cent, Haryana 164 per cent, Puducherry 117 per cent, Himachal Pradesh 105 per cent and West Bengal 100 per cent.

Link with climate change

- Climate change, particularly warming, is contributing considerably to the rise of lightning strikes, as it enhances both heat and moisture, the key components required for lightning.
- All these heat waves cater to more thunderstorms, which, in turn trigger more lightning strikes. Bengal delta has been traditionally affected by the lightning strikes mainly during *kalbaishakhi* winds (norwesters). But the number has increased in recent years.
- The Bengal delta, encompassing the Indian state of West Bengal and Bangladesh, is one of the most vulnerable regions for climatic impacts, with high sea-surface water temperatures and cyclones, said a local climate expert. "Lightning is just a corollary."
- A 2015 California University study had projected that an increase in average global temperatures by 1°C would increase the frequency of lightning by 12 per cent,

Current Affairs Quiz

- 1) Which of the following statements is/are correct with respect to Hubble Space Telescope?
1. It is a large telescope in space, built by NASA & European Space Agency.
 2. It uses cameras that can see across the entire optical spectrum from infrared to ultraviolet.

Select the correct answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

- 2) Which of the following statements is/are incorrect with respect to NISHTHA Programme?
1. It is a capacity building programme that aims to build competencies among all the teachers and school principals at the elementary stage.
 2. The programme is being organized by constituting Resource Groups at both National and State level.

Select the correct answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : d

Both statements are correct

- 3) Consider the following statements with respect to Pegasus:
1. It is a spyware that infects devices and spies on the victim by transferring data to a master server in an unauthorised manner.
 2. It was built and marketed by the Israel based NSO Group.

Select the CORRECT answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

- 4) Which of the following statements is/are correct with respect to Data localization?
1. It is the storing of data on a device physically present within the borders of the country where the data was generated.
 2. As per the RBI rules, foreign debit & credit card companies had to store complete information about transactions made by all Indian customers in servers located within India.

Codes:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

- 5) Which of the following statements is/are correct with respect to Conjugal Rights?
1. It recognizes the rights in criminal law requiring payment of maintenance and alimony to a spouse.

2. Rakhmabai case of 1884 revolved around restitution of conjugal rights.

Codes:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

6) Consider the following statements with respect to Monkey B virus:

- 1. It is a type of neuro invasive viruses that establish lifelong infections in the peripheral nervous system of humans.
- 2. It can be transmitted via direct contact and exchange of bodily secretions of monkeys and has a fatality rate of 70% to 80%.

Which of the statements given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

7) Consider the following statements with respect to Adjournment Motion:

- 1. It can be introduced either in Lok Sabha or in Rajya Sabha to draw the attention on urgent public importance.
- 2. The discussion on this motion should last for not less than two hours and thirty minutes.
- 3. It should not revive discussion on a matter that has been discussed in the same session of the house.

Select the CORRECT answer code:

- a. 1 & 2 only
- b. 2 only
- c. 1 & 3 only
- d. 2 & 3 only

Answer : d

It can be introduced only in Lok Sabha to draw the attention of the House to a definite matter of urgent public importance.

8) Which of the following agency has announced the Near-Earth Asteroid Scout mission?

- a. National Aeronautics and Space Administration (NASA)
- b. European Space Agency (ESA)
- c. Indian Space Research Organisation (ISRO)
- d. Japan Aerospace Exploration Agency (JAXA)

Answer : a

9) Which of the following statements is/are correct with respect to Support for Marginalized Individuals for Livelihood and Enterprise (SMILE)?

- 1. This scheme covers several comprehensive measures including welfare measures for rehabilitation of persons who are engaged in the act of begging.
- 2. It is an initiative of Ministry of Social Justice & Empowerment.

Codes:

- a. 1 only
- b. 2 only
- c. Both 1 and 2

d. Neither 1 nor 2

Answer : c

10) The Inequality report 2021 was published by-

- a. Food and Agriculture organization
- b. Amnesty International
- c. World Economic Forum
- d. Oxfam International

Answer : d

11) Which of the following statements is/are correct with respect to New Generation Akash Missile (Akash-NG)?

1. It is an air-to-air Missile developed by the Defence Research & Development Laboratory (DRDL), Hyderabad in collaboration with other DRDO laboratories.
2. It is a hypersonic missile that can strike targets at a distance of around 60 km and fly at speeds higher than Mach 5.

Codes:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : d

The Defence Research and Development Organisation (DRDO) have successfully flight-tested the latest Akash **surface-to-air** missile system recently.

The ministry claims that the new version of the Akash missile (Akash-NG) can strike targets at a distance of around 60 km and fly at a speed of up to **Mach 2.5**.

12) Dairy Investment Accelerator has been set up by-

- a. Ministry of Fisheries, Animal Husbandry and Dairying
- b. Ministry of Agriculture and Farmers' Welfare
- c. Ministry of Commerce and Industry
- d. Ministry of Rural Development

Answer : a

13) Consider the following statements with respect to Gondi Language:

1. It is one of the 22 languages listed in the Eighth Schedule of Indian Constitution.
2. It is in the 'vulnerable' category on UNESCO's Atlas of the World's Languages in Danger.

Select the CORRECT answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

14) Which of the following statements is/are incorrect with respect to Sessions of Parliament?

1. Prorogation means the dissolution of the house in case of Lok Sabha, which can be done only by President of India.
2. Quorum refers to the minimum number of the members required to be present for conducting a meeting of the house.

Codes:

- a. 1 only

- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

It is the end of session and not the dissolution of the house, it is done by the President of India.

15) Harela Festival is celebrated in -

- a. Himachal Pradesh
- b. Uttarakhand
- c. Arunachal Pradesh
- d. Sikkim

Answer : b

16) Who proposed the Fit for 55 Package?

- a. World Health Organization (WHO)
- b. UN-Developmental Program (UNDP)
- c. World Trade Organization (WTO)
- d. European Union (EU)

Answer : d

17) Consider the following statements with respect to Policy on Vintage Vehicles:

- 1. The Central Motor Vehicle Rules (CMVR), 1989 does not define what vintage vehicles are.
- 2. Under the policy, vintage motor vehicles shall not be driven on roads for regular/commercial purposes.

Select the CORRECT answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : c

18) Consider the following statements with respect to One District One Focus Product (ODOFP) Programme:

- 1. The programme covers products of agriculture and allied sectors which will be promoted in a cluster approach to increase the farmers' income and value of the products.
- 2. The Ministry of Agriculture & Farmer's Welfare provides financial support under the National Agriculture Infra Financing Facility.

Select the CORRECT answer code:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

The Ministry of Food Processing Industries (MoFPI) provides financial support under Centrally Sponsored Pradhan Mantri Formalisation of Micro Food Processing Enterprises Scheme (PM FME Scheme) for One District One Focus Product.

19) Which of the following statements is/are correct with respect to Floating Constituency?

- 1. It is reserved for particular cultural groups, since no reservation is allowed on religious grounds in India.

2. Srinagar is the only floating constituency reserved for Kashmiri Pandits, in India which is backed by Articles 371.

Codes:

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : a

The only floating constituency of India sangha model for Lama sanghas in Sikkim is backed in the constitution of India under Articles 371(F)

- 20) Start-up India Showcase Platform is launched by -
- a. Ministry of Skill Development and Entrepreneurship
 - b. Ministry of Commerce and Industries
 - c. Ministry of Corporate Affairs
 - d. Ministry of Micro, Small and Medium Enterprises

Answer : b