



# PIB, THE HINDU Newspaper and Editorial

## Current Affairs

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### **Karnataka law on SC/ST promotion quota upheld**

#### **Why in news?**

The Supreme Court upheld a Karnataka law which grants **reservation in promotion and consequential seniority** to the Scheduled Castes and the Scheduled Tribes in government services in the State.

#### **SC verdict:**

- A Bench of Justices U.U. Lalit and D.Y. Chandrachud declared that the multiple petitions challenging the Karnataka Extension of Consequential Seniority to Government Servants Promoted on the Basis of Reservation (to the Posts in the Civil Services of the State) Act, 2018, “lack in substance.”
- The law protects consequential seniority from April 24, 1978.
- Countering arguments that reservation in promotion **would affect administrative efficiency and erode merit**, Justice Chandrachud, who wrote the judgment, observed that establishing the position of the SCs and STs as worthy participants in the affairs of governance **is intrinsic to an equal citizenship**.

#### **Administrative efficiency vsCenturies of discrimination:**

- The judge said “administrative efficiency is an outcome of the actions taken by officials after they are appointed or promoted. It is not tied to the selection method itself.
- The argument that one selection method produced officials capable of taking better actions than a second method must be empirically proven, he said.

- The court said **special measures need** to be adopted for considering the claims of SCs and STs in order to bring them to a level playing field.
- **Centuries of discrimination and prejudice** suffered by the SCs and STs in a feudal, caste-oriented societal structure poses real barriers of access to opportunity, it pointed out.

### Quantifiable data:

- The 135-page judgment is significant as it is the first verdict after a Constitution Bench of the Supreme Court, last year, in **the Jarnail Singh case**, declared that a **State does not really have to collect quantifiable data on SC/ST backwardness** before implementing reservation.
- To this extent the Jarnail Singh judgment had modified a **2006 judgment in the Nagaraj case**.
- The latter case had called for collection of quantifiable data on backwardness.
- But Justice Chandrachud found that the State of Karnataka had carried out the exercise of collating, analysing data through the **Ratna Prabha Committee**.
- The 2018 law was based on the committee's extensive 'Report on Backwardness, Inadequacy of Representation and Administrative Efficiency in Karnataka' submitted in 2017.
- The Ratna Prabha Committee was correctly appointed to carry out the required exercise. Even if there were to be some errors in data collection, that will not justify the invalidation of a law which the competent legislature was within its power to enact," the apex court observed.
- It held the Reservation Act of 2018 did not amount to a usurpation of judicial power by the State legislature.
- In fact, the court observed that the 2018 law was a valid exercise of the enabling power conferred by Article 16 (4A) of the Constitution.
- The court said providing of reservation for SCs and the STs is not at odds with the principle of meritocracy.
- Merit must not be limited to narrow and inflexible criteria such as one's rank in a standardised exam, but rather must flow from the actions a society seeks to reward, including the promotion of equality in society. It ensures a diverse and representative administration,"

Justice Chandrachud wrote.

### **Level playing field:**

- The court said special measures need to be adopted for considering the claims of SCs and STs in order to bring them to a level playing field.
  - Centuries of discrimination and prejudice suffered by the SCs and STs in a feudal, caste-oriented societal structure poses real barriers of access to opportunity, it pointed out.
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### **Why no FIR on Rafale deal complaint?**

#### **Why in news?**

Justice K.M. Joseph asked the government why there was still no FIR registered on a corruption complaint made to the CBI in October last year in connection with the 36 Rafale jets deal.

#### **Duty-bound:**

- Question here is whether you are obliged under the law to register an FIR when a complaint is made," Justice Joseph asked Attorney General K.K. Venugopal.
- The queries came during a two-hour hearing at the end of which the Bench, led by Chief Justice of India Ranjan Gogoi, reserved the Rafale review petitions for judgment.
- The complaint was made in October under various provisions of the Prevention of Corruption Act.
- Justice Joseph referred to a Constitution Bench judgment in the **Lalithakumari case**, which held that the police or a **statutory authority like the CBI was duty-bound to file an FIR and investigate a complaint**.
- If later no prima facie case was made out, the probe could be closed and a copy of the report given to the complainant.
- However, the complaint filed by review petitioner's union ministers

Yashwant Sinha, Arun Shourie and advocate Prashant Bhushan, with 70-odd pages of documents is yet to be acted upon.

- In fact, the trio union ministers Yashwant Sinha, Arun Shourie and advocate Prashant Bhushan had moved the Supreme Court primarily seeking a direction for a fair investigation into their complaint.

### **Government stand:**

- Mr. Venugopal replied that a complaint would be investigated if it prima facie showed ingredients of an offence. he said the Rafale deal was not just another contract for a highway or a dam.
- A combative government also took offence when Justice Joseph asked it to provide records of the deliberations made by **the Indian Negotiating Team** (INT) after three of its domain experts wrote a **stinging eight-page dissent note** concluding that the present government's Rafale deal for 36 jets was not on "better terms" than the offer made by Dassault Aviation during the procurement process for 126 aircraft under the United Progressive Alliance government.

### **Concerns settled:**

- The judge's question came after Mr. Venugopal told the Bench that though these members had dissented initially, it was later settled in a collegiate manner.
- The government's affidavit said, "The concerns raised by members of the INT were deliberated, recorded and addressed, while ensuring utmost integrity and transparency in the process, allowing opinions to be freely expressed, recorded, discussed and, if necessary, modified.
- But Justice Joseph persisted in his request for the records.
- I will produce the records if Your Lordships ask me, but I have to say you have no jurisdiction to ask. Your Lordships are taken in by these selective media leaks based on documents obtained through theft. You are listening to them and saying 'we will certainly ask for this and this document'," Mr. Venugopal retorted.
- Finally, the CJI intervened to bring peace and told the lawyer that "we would tell you if we want these documents.
- Mr. Venugopal said the government was under no obligation to produce the gamut of documents simply for the reason that the court did not ask it to do so.
- A "mistake" in interpretation found in the December 14 judgment

upholding the Rafale deal cannot be the basis of review, he said

- Advocate Prashant Bhushan countered by asking how the government “anticipated in the Supreme Court in November 2018 that the CAG report, which was presented in February 2019, would redact the Rafale pricing details?”

### **Clauses dropped:**

- He questioned the dropping of eight standard clauses, including all anti-corruption clauses, from the Inter-Governmental Agreement with France.
  - This was not communicated to the apex court and amounted to fraud, Mr. Bhushan said. He said a letter of comfort from the French, without a sovereign or bank guarantee, is “no comfort at all”.
  - In his turn, Mr. Shourie questioned the government’s version that the Rafale plea and request for outing more documents is part of a “fishing and roving enquiry”.
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## **Electoral bonds worth Rs. 3,622 cr. Sold**

### **Why in news?**

The State Bank of India has sold electoral bonds worth over Rs. 3,622 crores in March and April this year, according to an RTI response.

### **Rise in sale:**

- In a reply provided to Pune-based Vihar Durve, the SBI said electoral bonds of Rs. 1365.69 crore were sold in March, which shot up by 65.21% in April to Rs. 2256.37 crore.
- In April, most electoral bonds were sold in Mumbai at Rs. 694 crore, followed by Rs. 417.31 crore in Kolkata, Rs. 408.62 crore in New Delhi and Rs. 338.07 crore in Hyderabad among other cities.

### **Challenged in court:**

- The scheme of electoral bonds notified by the Centre in 2018 has

been challenged in the Supreme Court.

- Only the political parties registered under Section 29A of the Representation of the People Act, 1951, and which secured not less than 1% of the votes polled in the last general election to the House of the People or the Legislative Assembly of the State, shall be eligible to receive the bonds.
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## **Supreme Court extends Ayodhya mediation till Aug. 15**

### **Why in news?**

A five-judge Bench, led by Chief Justice of India Ranjan Gogoi, gave the Supreme Court-appointed mediation committee time till August 15 to continue with its efforts to resolve the prolonged and strife-ridden Ayodhya title dispute.

### **Sufficient time:**

- We do not want to short-circuit the mediation process. We will extend the time in order to enable the committee to complete the task assigned to it," Chief Justice Gogoi addressed the parties in the courtroom.
- The committee filed an interim report, dated May 7, with the Constitution Bench.
- Sources said the panel conveyed that "progress" was being made in the talks, and it was meeting with the parties. The next meeting is in June.
- The panel of mediators comprises former Supreme Court judge Justice F.M.I. Kalifulla, as Chairman; and spiritual leader Sri Sri Ravi Shankar; and senior advocate Sriram Panchu, a pioneer in alternative dispute resolution, as members.
- The court sent the dispute for mediation on March 8 in a bid to heal minds and hearts. It gave the panel an initial deadline of eight weeks.
- The eight weeks was the time given to the Muslim parties to examine the accuracy and relevance of the Uttar Pradesh government's official translation of thousands of pages of oral depositions and exhibits in



the title suit appeals pending since 2010 in the court.

- In fact, the court had invoked Section 89 of the Civil Procedure Code to propose mediation as an “effective utilisation of time” during the interregnum.
- The committee had held several rounds of mediation with the stakeholders in Faizabad district and the mediation proceedings were held in camera.
- The court had stressed the need for “utmost confidentiality” in the mediation to ensure its success.

### **No reporting by media:**

- It had gone to the extent of opining that the media should refrain from reporting the mediation proceedings.
- We are of the further opinion that while the mediation proceedings are being carried out, there ought not to be any reporting of the said proceedings either in the print or in the electronic media, it said.
- The CJI had expressed the hope that mediation might spell a peaceful end to the volatile dispute between the members of the two religious’ faiths.
- The court took the step despite objections raised by some Hindu parties that their faith in Lord Ram’s birthplace is “non-negotiable”.
- The Bench had explained that the Ramjanmabhoomi-Babri Masjid case “is not about the 1,500 sq.ft. of disputed land, but about religious sentiments.
- We know its impact on public sentiment, on body politic. We are looking at minds, hearts and healing if possible.
- The court allowed the appellants to file objections in the translation of over 13,900 pages of documents that are part of the case as evidence.

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## **A-G says he wrote to SC seeking a ‘different’ panel in CJI case**

### **Why in news?**

Attorney-General (A-G) K.K. Venugopal, the Union government’s highest

law officer, told The Hindu that he had written to Supreme Court judges about the constitution of a committee quite “different” from the one which was eventually formed under Justice S.A. Bobde to examine the sexual harassment allegation against Chief Justice of India (CJI) Ranjan Gogoi.

### **AG’s Advice:**

- I had written a letter for a committee different from the one that was constituted,” he said over the telephone.
- Mr. Venugopal said he had written in his personal capacity on April 22 saying the committee should be composed of retired judges.
- He described reports that “serious differences” arose between the government and him after the letter, as “untrue and baseless”.
- The Justice Bobde panel was formed on April 23.
- The Justice Bobde committee, which eventually gave a clean chit to the CJI, had Justices Indu Malhotra and Indira Banerjee as its members.
- Justice Malhotra was inducted into the panel after Justice N.V. Ramana, the third in seniority in the court, recused himself from the panel, following a complaint by the woman that he was close to the CJI.

### **Twist in the case:**

- The panel had proceeded ex parte after the complainant, a former employee of the court, withdrew from its proceedings on April 30.
- The panel refused her a lawyer or a support person. Its report is confidential and has not been shared with her. It found that there was “no substance” in her allegation
- Mr. Venugopal’s letter follows a communication reportedly by Justice D.Y. Chandrachud that the woman ought to be represented by a lawyer, or the committee should appoint an amicus curiae

**Missing firms: govt. says not much impact on GDP working**

**Why in news?**



The Finance Ministry clarified that the '**missing**' enterprises in the **MCA-21 database** did not have a significant impact on the calculation of growth rates of Gross Domestic Product (GDP) and Gross Value Added (GVA) as these companies still added to the total output of the economy.

### **Missing Firms:**

- The National Sample Survey Organisation (NSSO) in a recent survey report on the service sector found that, of a sample of 35,456 companies taken from the MCA-21 database, 38.7% were out-of-survey unit.
- Some sections of the media have misinterpreted these out-of-survey enterprises (as classified for the purposes of surveying the services sector) to be enterprises that do not exist in the economy, the clarification said.
- On the basis of this interpretation, the suggestion has emerged that by not removing out-of-survey enterprises from the MCA database, Central Statistics Office (CSO) over-estimates the gross domestic product of the country.
- The Finance Ministry explained that of the 38.7% out-of-survey enterprises in the NSSO report, out-of-coverage enterprises comprised 21.4%. These out-of-coverage enterprises were those that were not engaged in activities intended for inclusion in the service sector survey.

### **Economic activity:**

- However, these enterprises are engaged in some economic activity, possibly in the manufacturing sector for instance," the Ministry said.
- As a result, they cannot be classified as out-of-coverage enterprises for the purposes of estimating the GDP of the country.
- In other words, the GDP estimates based on the aforesaid out-of-coverage enterprises are very much a part of overall GDP of the country.
- The Ministry did acknowledge that the bulk of the remaining 17.3% out-of-survey enterprises were either closed or untraceable, but justified this by saying that this proportion was falling over the years and that their impact on the overestimation of GDP "in all likelihood" is marginal.

- Crucially, we must note that the share of total paid up capital of the private corporate sector that is accounted by non-responsive enterprises affects GDP estimates using the MCA database, not the number of non-responsive enterprises in the private corporate sector," it added.
- In simpler terms, GDP estimates are affected by the share in the paid-up capital of the missing companies and not by their absolute number.
- The Ministry provided data to show that from 2012-13 to 2016-17, the number of enterprises whose annual returns were not available for GDP estimation accounted for just 12-15% of the paid-up capital of all the enterprises in the MCA-21 database.
- As such, the GVA (gross value added) estimated for the responsive enterprises was increased by a blow-up factor of only 1.13-1.17 to estimate the GVA of the entire private corporate sector," the Ministry said.
- Most of the non-responsive enterprises did not provide data because they exercised their discretion of filing returns in subsequent years while continuing to engage in activities reflected in their previously filed return.
- Accordingly, their inclusion in the overall GVA estimation was legitimate.
- Lastly, the Ministry explained that while the blowing up affects the level of GDP, it does not affect the year-on-year annual growth rates in any material way.
- The proportion of firms in the MCA database that have ceased their operations varies minimally from year to year from 2012-13 to 2016-17," the Ministry said.
- This feature ensures that although GVA levels could be slightly more or less than what they actually are, the growth rate of GVA from year-to-year will not be affected," it added.

## **IIP at a 21-month low as manufacturing slows down**

### **Why in news?**

Growth in industrial activity dipped to a 21-month low in March,

contracting 0.1% due in large part to a continuing slowdown in the manufacturing sector, according to official data released.

### **Declining trend:**

- The Index of Industrial Production (IIP) contracted in March for the first time since June 2013. To further put this contraction in perspective, the IIP grew a robust 5.33% in the same month of last year, and 4.39% in March 2017.
- Within this, the manufacturing sector contracted by 0.43% in March, the second consecutive month of contraction (it contracted 0.39% in February) and the third consecutive month of slowing growth.
- The broad signals for the economy is a continuing slowdown and this is confirmed both from the output side and signals from the demand side.
- The **IIP numbers are giving the output profile of contraction** and on the demand side, the sales of different sectors have been slowing.

### **Rate cut:**

- One of the primary reasons for the slowdown in the overall economy is that the **government has very little room to manoeuvre on the fiscal side**, even though the Reserve Bank of India has done what it can on the monetary policy side with two successive interest rate cuts.
- As per the use-based classification, contraction in capital and intermediate goods (indicative of subdued investment activity) further resulted in slowdown in the industrial output," Care Ratings said in a report.
- **Uncertainties over general elections** could be cited as one of the major reasons of lower activity in these segments.
- The capital goods sector contracted for a third consecutive months, by 8.66% in March compared with a contraction of 8.92% in February.
- Intermediary goods sector contracted for the fifth consecutive month, by 2.55% in March, compared with a contraction of 5.05% in the previous month.

### **Fiscal targets:**

- The **fiscal deficit has exceeded the limits** and even the revised estimates numbers might not prove to be true.
- Because of this, there would be considerable constraints in stimulating the economy.
- There is not likely to be any big push as far as Central government budget expenditure is concerned. Even when new government comes in, they will find it difficult.

### **Demand side contraction:**

- On the demand side, the consumer durables sector also contracted in March by 5.07% after being positive for three consecutive months, which is symptomatic of weak demand conditions in the country, Care Ratings added.
- Infrastructure sector, however, saw a strong turnaround in growth in March, coming in at 6.4%, up from 2.1% in February. The mining and quarrying sector saw growth slowing to 0.78% from 2.18%.
- The electricity sector witnessed a slight acceleration in growth to 2.17% in March from 1.32% in February.
- The general outlook for the upcoming months is subdued, according to economists and ratings agencies alike, who say that there is still no certainty about the RBI cutting rates in its monetary policy review in June.
- The RBI will wait for the inflation numbers to come out and see in what way it is trending because of the pressure on oil prices," Mr. Srivastava said.

### **CCI probes Google for unfair practices**

#### **Why in news?**

The Competition Commission of India (CCI) has started a probe against Google for alleged anti-competitive practices with respect to its popular Android platform for mobile phones.

#### **Abuse of platform:**

- The fair-trade watchdog has been looking into the matter for some

time, especially after a European Commission ruling last year.

- The official said the regulator had started investigation into alleged abuse of Android platform and the issues are similar to those dealt with by the European Commission.
- A majority of smartphones in India are powered by the Android platform. Other mobile platforms include iOS (Apple), among others.

### 1. **Trump raises tariffs on Chinese goods:**

#### **Why in news?**

The trade war between the U.S. and China took a turn for the worse as the Trump administration **increased tariffs on \$200 billion worth of Chinese goods**. Tariffs on 5,700 categories of goods increased from 10% to 25%.

#### **Further worsening:**

- The tariffs went into effect just hours before U.S. Trade Representative Robert Lighthizer, Treasury Secretary Steven Mnuchin and Chinese Vice-Premier Liu He held a second day of talks in Washington. The session ended after about 90 minutes.
- They were constructive discussions," Mr. Mnuchin told reporters as he left Mr. Lighthizer's offices near midday. Mr. Mnuchin said the negotiations were done for the day.
- Mr. Liu, the lead Chinese negotiator, told reporters at his hotel in Washington that the talks had gone "fairly well".
- Things have moved quickly over the past few days with tariffs kicking in days after Mr. Trump said they would, and five days after the administration notified the new rates in the Federal Register.
- This, despite Mr. Trump saying on Thursday that Chinese President Xi Jinping had sent him a "very beautiful letter" offering to "work together" and "get something done".

#### **Category of goods:**

- The tariff rate on machinery and technology imports from China, whose value is about \$50 billion, was already hiked to 25% last year in tit-for-tat tariff rounds between the two countries.
- Friday's tariffs for the \$200 worth of Chinese imports, "as part of the



U.S.'s continuing response to China's theft of American intellectual property and forced transfer of American technology," was set to kick in January 1 as per a September 2018 announcement from the USTR, but it was held in abeyance as negotiations continued.

- In the past, Mr. Trump had threatened to increase tariffs on the remainder of Chinese imports as well, a threat he reiterated on Friday.
- The U.S. imported \$558 billion of goods from China as per the USTR, with \$250 billion attracting 25% tariffs as of Friday.

### **New round:**

- The process has begun to place additional tariffs at 25% on the remaining \$325 billion," Mr. Trump wrote on Twitter.
  - Last week, U.S. officials familiar with the discussions had said China had backtracked on commitments, prompting Mr. Trump's decision to impose the new round of tariffs.
  - China has said, via a Ministry of Commerce statement, that it "deeply regretted" the latest tariff development and has said it will take countermeasures.
  - American agriculture has felt much of the heat of the tit-for-tat trade war with China.
  - Mr. Trump sought to assuage concerns.
  - With an election looming in 2020, the President cannot afford to alienate farmers most of the top 10 agricultural States were won by Mr. Trump in 2016.
  - Your all time favourite President got tired of waiting for China to help out and start buying from our FARMERS, the greatest anywhere in the World!" he wrote on Twitter.
  - Tariff increases will also mean U.S. firms paying more for Chinese inputs and those costs will be, at least in partially, passed on to American consumers.
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## **Chandrayaan-2 will carry 14 payloads from India**

### **Why in news?**



Chandrayaan-2, the **lunar lander mission** planned to be launched during July 9-16, will have 14 Indian payloads or study devices, a mission update of the Indian Space Research Organisation (ISRO) has said.

About the Mission:

- The 3,800-kg spacecraft **includes an orbiter** which will circle the moon at 100 km; a **five-legged lander called Vikram** that will descend on the moon on or around September 6; and a **robotic rover, Pragyan**, that will probe the lunar terrain around it.
- ISRO said all three modules will carry payloads but did not specify them or their objective.
- The orbiter alone will have eight payloads or instruments.
- The lander will carry four while the rover will be equipped with two instruments. "All the modules are getting ready for the Chandrayaan-2 launch," a recent update had said, mentioning only 13 payloads.
- ISRO has chosen a landing area at the hitherto unexplored lunar south pole, making it the first agency to touch down at the south pole if it succeeds in its first landing attempt. Chandrayaan-2 will be India's second outing to the moon.
- ISRO will send the mission on its heavy lift booster, the MkIII, from Sriharikota.
- In October 2008, the space organisation had launched its orbiter mission **Chandrayaan-1 on its PSLV booster**.
- The spacecraft had 11 payloads. One of the U.S. payloads shares credit with Chandrayaan-1 for confirming the presence of water ice on the moon.
- Before that, the **Moon Impacter Probe** carrying the Indian tricolour image was made to hard-land on the lunar south pole.

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## **Fani's fury creates four new mouths in Odisha's Chilika Lake**

**Why in news?**

The extremely severe cyclone Fani has created four new mouths in **Chilika Lake, Asia's largest brackish water lake**, connecting to the Bay of Bengal, officials said.

### **New Mouths:**

- Chilika Development Authority (CDA) officials have started studying the impact of saline ingress into the lake.
- Chilika lagoon had only two active mouths, the point where it meets the sea before Fani hit the Odisha coast on May 3.
- Four new mouths have opened due to wave energy with high tidal prism.

### **Salinity surge:**

- While three new mouths have come up between the two functional mouths near Sanpatna and Arakhakuda, a smaller mouth has been noticed on the northern side.
- In the meantime, a lot of sea water is entering Chilika Lake. We are now monitoring its salinity level at different stations. If sea water ingress goes up, fish migration will increase and the biodiversity will get richer. But its long term impact is something we will have to keep a watch on," officials said.
- When asked if the rise in salinity would alter Chilika's ecosystem, he said: Three of the four sectors are more or less marine ecosystems.
- The rise in salinity will lead to increase in productivity. **Chilika Lake is a mixture of saline and fresh water**. We will keep observing and consulting with experts." The three new mouths may ultimately merge with the two functional mouths, Mr. Nanda added.

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## **Amazon unveils space vision, moon lander**

### **Why in news?**

Jeff Bezos, who heads both Amazon and space company Blue Origin, unveiled a lunar lander that he said would be used to transport

equipment, and possibly human beings, to the south pole of the moon by 2024.

### **Blue Moon:**

- This is Blue Moon, the world's richest man said at a presentation in Washington, as curtains lifted to show a mock-up of a huge vessel weighing many tons and able to carry four self-driving rovers.
- It's an incredible vehicle, and it will go to the moon," he declared.
- Mr. Bezos didn't announce a specific date for the project's first launch, but said the lander would be ready in time to make **President Donald Trump's announced timeline to return people to the moon by 2024.**
- We can help meet that timeline, but only because we started three years ago," he said. "It's time to go back to the moon, this time to stay."

### **Generating water:**

- The vehicle has been under development for the past three years, Mr. Bezos said.
- It will be capable of carrying scientific instruments, the four small rovers, and also a future pressurised vehicle for humans.
- The goal is to land on the moon's south pole, where ice deposits were confirmed in 2018. Water can be exploited to produce hydrogen, which in turn could fuel future exploration of the solar system.
- Fully loaded with fuel, Blue Origin will weigh about 33,000 pounds (15,000 kilograms), which will decrease to around 7,000 pounds when it is about to land, he said.
- The White House's intention to return to the moon in 2024 has sent NASA into a frenzy of activity since the end of March, because that particular mission was originally anticipated for 2028.
- Nothing is ready: not the powerful rocket necessary to transport vehicles and astronauts. Not the components of the future mini-station in lunar orbit, which will act as a rest-stop between the earth and moon. And not the lander or rovers needed by astronauts, among whom will be the first woman to set foot on Earth's natural satellite.

### **Lunar colonies:**

- The lander's unveiling came as Mr. Bezos outlined his broader vision to build an infrastructure that would sustain the colonisation of space by future generations of humans and shift polluting industries off the Earth.
  - As space agencies prepare to return humans to the moon, top engineers are racing to design a tunnel boring machine capable of digging underground colonies for the first lunar inhabitants.
  - Space is becoming a passion for a lot of people again. There are discussions about going back to the moon, this time to stay.
  - But the harsh conditions on the surface of the moon mean that, once up there, humans need to be shielded from radiation and freezing temperatures in structures which maintain atmospheric pressure in a vacuum.
  - They also need protection from meteorite strikes. "Imagine something the size of my fist as a piece of rock coming at 10-12 km per second, it can hit anything and would immediately destroy it," Mr. Rostami said at the meeting in southern Italy.
  - Our idea is to start underground, using a mechanism we already use on the earth, a tunnel boring machine, to make a continuous opening to create habitats or connect colonies," he added.
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## **India facing critical shortage of healthcare providers**

### **Why in news?**

Despite the health sector employing five million workers in India, it continues to have low density of health professionals with figures for the country being lower than those of Sri Lanka, China, Thailand, United Kingdom and Brazil, according to a World Health Organisation database.

### **Critical shortage:**

- This workforce statistic has put the country into the "critical shortage of healthcare providers" category.
- Bihar, Jharkhand, Uttar Pradesh and Rajasthan are the worst hit while Delhi, Kerala, Punjab and Gujarat compare favourably.

- Southeast Asia needs a 50% increase in healthcare manpower to achieve universal health coverage by 2030.
- India faces the problem of acute shortages and inequitable distributions of skilled health workers as have many other low- and middle-income countries,” said K. Srinath Reddy, president, Public Health Foundation of India.

### **New courses needed:**

- He said that the need of the hour is to design courses for different categories of non-physician care providers.
  - Competencies (and not qualification alone) should be valued and reform must be brought in regulatory structures to provide flexibility for innovations, he added.
  - Data on the prevalence of occupational vacancies in the health care system in India overall is scarce.
  - Government statistics for 2008, based on vacancies in sanctioned posts showed 18% of primary health centres were without a doctor, about 38% were without a laboratory technician and 16% were without a pharmacist,” says a paper titled ‘Forecasting the future need and gaps in requirements for public health professionals in India upto 2026’ published in the WHO South-East Asia Journal of Public Health .
  - The **health workforce in India comprises broadly eight categories**, namely: doctors (allopathic, alternative medicine); nursing and midwifery professionals; public health professionals (medical, non-medical); pharmacists; dentists; paramedical workers (allied health professionals); grass-root workers (frontline workers); and support staff.
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