



## EVERYDAY CURRENT AFFAIRS - JUNE 13&14, 2019

### TAMIL NADU

- **Five resident welfare associations from the Greater Chennai area - received the state pollution control board's annual green award for environment-conscious initiatives in 2018.**
  - ✓ They reduced garbage generation, segregated at source, recycled water and harvested rainwater, besides motivating others to follow the same
  - ✓ Residents associations of Central Park South, Sabari Terrace Apartment Owners and Ceebros Boulevard on OMR, and of Ramaniyam Eden and Tiruveedhi Amman Koil Street (TAKSRA) in Mandaveli, collected the award from chief minister Edappadi K Palaswami on June 13
  - ✓ The prize money of Rs 5 lakh will be shared equally.
- **Southern Railway - is installing 3<sup>rd</sup> water recycling plant in the city at Tambaram coaching terminal**

FACT FILE	
<b>WHAT'S IN PIPELINE</b> Water recycling plant at <b>Tambaram yard</b> Quick watering systems at <b>Chennai Egmore, Dr MGR Central, Katpadi</b> High pressure jet cleaning systems at <b>Basin bridge and Egmore yard</b>	 <b>FOR CLEANING A COACH</b> 250 litres for external 100 litres for internal
<b>WATER CONSUMPTION FOR TRAINS</b> Each coach has 4 storage tanks of <b>225 litre</b> capacity each A train with 24 coaches will need <b>21,600 litres</b>	

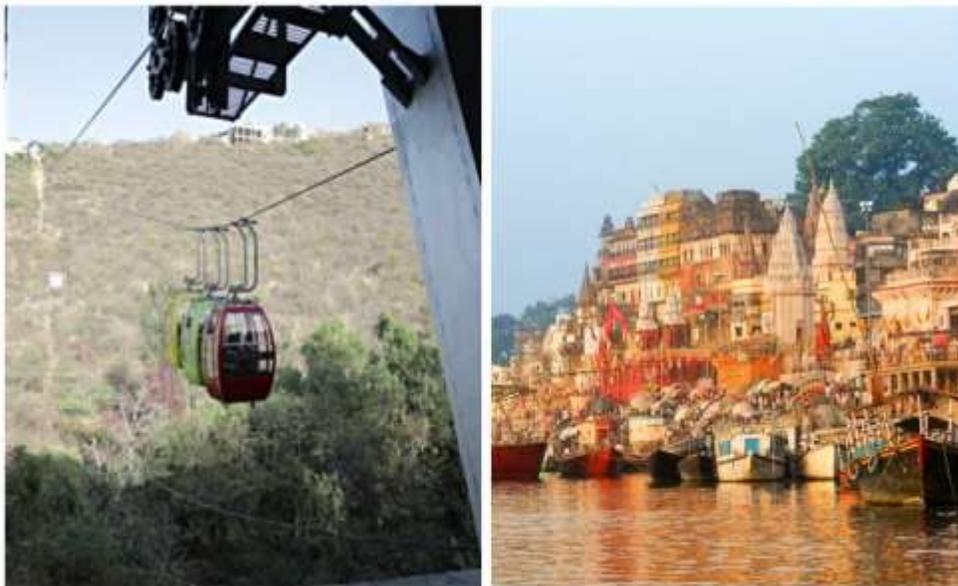
- ✓ It already has recycling plants at Basin Bridge (Puratchi Thalaivar Dr MGR Central) and Gopalaswamy yard (Chennai Egmore), which have saved close to 471 million litres since their installation in 2015.

- ✓ The recycling plants at Basin Bridge and Gopalaswamy yard have a capacity of 10 lakh litres a day and 2.5 lakh litres a day.
  - ✓ All the water that is used for cleaning the trains and also the stations is channelled into the plants where it is treated and then re-used
  - ✓ For the past year and a half, water is also being brought in wagons from Chengalpet due to lack of rain in Chennai.
  - ✓ A lot of water is needed for cleaning coaches and filling their tanks for passengers to use.
  - ✓ For example, a 24-coach train needs 21,600 litres of water to fill its tanks at 900 litres per coach.
  - ✓ And, 350 litres of water are needed to clean the inside and the outside of a coach.
  - ✓ The division has almost finalised quick watering system for coaches at Central, Egmore, Katpadi and Tambaram
  - ✓ Such systems have already been installed at Erode and Vijayawada, which are important junctions for many long distance trains.
  - ✓ A quick watering system uses high pressure pumps to re-fill water inside coaches within five minutes.
  - ✓ An automatic coach washing plant like the one in Chennai metro rail's yards is also coming up at the Tambaram terminal.
- **Cauvery water management authority, the supreme body vested with powers on storage, apportionment, regulation and control of Cauvery water - is scheduled to meet on June 25**
- ✓ This follows a request from Tamil Nadu government, as Karnataka not released the stipulated quantum of water from Cauvery reservoirs to Tamil Nadu
  - ✓ In its previous meeting, the authority had ordered Karnataka government to release 9.19tmcft (thousand million cubic feet) of Cauvery water to Tamil Nadu at Biligundulu, the inter-state border
  - ✓ This has to be done in three ten-day intervals
  - ✓ However, Karnataka has released only 1.16tmcft in the first ten days of the month.
  - ✓ Tamil Nadu government will insist on release of the remaining water owed for the month and 31tmcft due for next month
  - ✓ The poor storage, coupled with less inflow, forced the government to skip the customary date (June 12) of water release from Mettur dam
  - ✓ This is the eighth year in a row that the government is missing the June 12 schedule for water release.
  - ✓ On June 13, Mettur storage stood at 15.079tmcft as against the capacity of 93.47tmcft.
  - ✓ Karnataka reservoirs have a combined storage of 20% of their total capacity as on date.

- **Minister for Tamil language, culture and archaeology Mafoi K Pandiarajan - officially inaugurated the work for the fifth phase of archaeological excavation in Keeladi in Sivaganga district**
- ✓ A total of 13,638 artefacts had been unearthed during the first four phases that took place between 2014 and 2018.
- ✓ The fifth phase would last about four to five months.
- ✓ The foundation stone for the onsite museum, to come up on two acres of land, would be laid soon

## **STATES**

- **Varanasi (Uttar Pradesh) - could be one of the first few cities in India to get a web of cable car networks to beat the congestion.**



- ✓ The cable car network based on ropeway system in PM Modi's constituency is estimated to be 70% cheaper than Metro rail network.
- ✓ If the government gives the go ahead, cable cars would be a reality in less than two years.
- ✓ Dopplemayr, an Austrian company which has put cable cars in a few cities, has made the proposal to install the cable car system
- ✓ The frequency of cable cars will be in every few seconds and hence there will be almost no waiting time for commuters
- ✓ The company is in dialogue with city administrations in Dehradun, Vishakhapatnam and Kanpur to put this system to beat congestion.
- ✓ Till now cable cars are limited to tourist destinations in India

## NATIONAL

- **India's second mission to the moon, Chandrayaan-2 — will be launched at 2.51am on July 15, 2019**
  - ✓ The moon landing is expected on September 6 or 7, 2019
  - ✓ The ₹978-crore project will see the Indian Space Research Organisation (Isro) soft-land a lander (Vikram) near South Pole, the unexplored region of the moon.
  - ✓ The second mission costs ₹603 crore and the launch additional ₹375 crore.
  - ✓ India becomes the fourth country after the US, Russia and China to join this elite league.
  - ✓ The second lunar mission will be led by two women, a first for any Indian interplanetary mission
  - ✓ While Isro scientist Ritu Karidhal, who has played a key role in Mars Orbiter Mission, is the mission director, Vanitha M will be the project director.
  - ✓ Chandrayaan-2 will carry 14 payloads — 13 Indian and one passive payload from Nasa — with focus on mapping craters in the polar region, besides checking for water again
  - ✓ The first comprehensive lunar exploratory mission to the moon, Chandrayaan-1 was undertaken in 2008-09 with a budget of less than Rs 400 crore
  - ✓ Unlike Chandrayaan-1, the second mission involves a lander that will soft-land on the lunar surface and unload a rover to study and take measurements from the moon
- **PM Narendra Modi - asked all ministers to try to reach office by 9.30am and avoid working from home to set an example for others.**
  - ✓ He had also suggested his colleagues not to plan any outside visit during the Parliament session.
  - ✓ He has asked all ministries to come up with five-year agenda
  - ✓ The Cabinet also cleared a fresh bill to ban the practice of instant triple talaq, which will replace an ordinance issued in February
  - ✓ Other bills cleared included one to allow voluntary use of Aadhaar as identity proof for opening bank accounts and procuring mobile phone connections
- **The transport ministry - has decided to remove the minimum educational qualification required to get a driving licence for heavy vehicles (buses and trucks)**
  - ✓ The provision to end the minimum Class VIII qualification to drive such heavy vehicles had already been proposed in the Motor Vehicle Amendment Bill.
  - ✓ Recently, the Rajasthan HC had ordered the state government to withdraw licence of all illiterate drivers as they were “virtually a menace for the pedestrians”
  - ✓ Road accident data of 2016 show that drivers involved in 3.35 lakh accidents out of total 4.8 lakh had educational qualification of Class-VIII and above.

- **The centre - is planning the largest ever auction of telecom spectrum — at an estimated value of ₹6 lakh crore— that will enable introduction of affordable 5G services, including fibre-to-the-home (FTTH) internet in rural areas.**

### **REACH MORE IMPORTANT THAN REVENUE**

<ul style="list-style-type: none"> <li>➤ Affordability of 5G, not revenue maximisation, to be the key objective of auction</li> <li>➤ Non-telecom companies will be encouraged to participate in the auction</li> <li>➤ 5G usage to be pushed beyond connected cars and smart cities to affordable health and education services in rural areas</li> </ul>	<ul style="list-style-type: none"> <li>➤ Reserve price for spectrum auction, TRAI domain, may be relaxed for wider participation</li> </ul> 
--	--

- ✓ The plan was cleared by Digital Communications Commission (DCC) – the highest decision-making body on telecom matters
  - ✓ The government auction will cover nearly 8,600 MHz of mobile airwaves, most likely before the end of the year.
  - ✓ This would include spectrum for current telecom services, and also for new-age 5G services
  - ✓ The government is also in the process of taking steps to begin 5G trials in India
  - ✓ The testing phase is open to a wide spectrum of participants apart from the regular telecom operators (Reliance Jio, Bharti Airtel and Vodafone-Idea) and equipment providers such as Ericsson, Nokia, and Samsung.
  - ✓ It is unclear whether Chinese giant, Huawei can participate in the process after the recent developments against it by the US
- 
- **The Centre - announced a reduction in the contribution by employers and companies towards the health insurance under the Employees State Insurance (ESI) plan**
  - ✓ The move, effective from August 1, is expected to benefit 3.6 crore employees and nearly 13 lakh employers.
  - ✓ The government cut the rate of contribution under the ESI Act from 6.5% to 4% (employers' contribution being cut from 4.75% to 3.25% and employees' contribution from 1.75% to 0.75%).
  - ✓ This is the first reduction in contribution rates in nearly 22 years
  - ✓ The reduction in contribution rates is part of the government's strategy to widen the social security net, improve condition of workers and ease the burden on employers.
  - ✓ It is also seen as a move to improve the ease of doing business in the country.

- ✓ The Employees' State Insurance Act 1948 (the ESI Act) provides for medical, cash, maternity, disability and dependent benefits to the insured under the Act.
  - ✓ The ESI Act is administered by the Employees' State Insurance Corporation (ESIC).
  - ✓ Under the ESI Act, employers and employees both contribute their shares respectively. The Government of India through ministry of labour and employment decides the rate of contribution under the ESI Act.
  - ✓ Benefits provided under the ESI Act are funded by the contributions made by employers and the employees.
  - ✓ The rate of contribution now is fixed at 6.5% of the wages with employers' share being 4.75% and employees' share being 1.75%.
  - ✓ This rate has been in place since January 1, 1997
- **National Commission for Backward Classes - has decided to inquire into the alleged discrimination against OBCs working in PSUs over calculation of "creamy layer"**
- ✓ The Centre's has decided over last five years to use different "creamy layer" formula for OBCs employed with state and central governments, and those in PSUs and banks.
  - ✓ "Creamy layer" implies the economically better off OBC families who are ineligible for 27% Mandal quota in jobs and education
  - ✓ In March, the Centre constituted an "expert committee" under B P Sharma to "simplify" the complications in the implementation of "creamy layer"
- **Facebook - has picked up a minority stake in social-commerce company 'Meesho' in its first startup investment in the country**
- ✓ The social networking giant's investment could be part of a larger round of \$100 million that Meesho is raising
  - ✓ Started in 2015, the Bengaluru-based startup connects resellers to manufacturers to sell goods via social media platforms
  - ✓ These re-sellers, who are typically housewives and small business owners, use platforms like Facebook and WhatsApp to sell products like art & craft, fashionwear, home & kitchen products, electronics and travel packages
  - ✓ The platform is clocking annualised gross sales of about \$200 million right now, with 80% of the sales coming from non-metros.
  - ✓ Over 80% of these entrepreneurs or re-sellers on Meesho are women, who are selling online for the first time.
  - ✓ For Meesho, it typically sees an average order size of Rs 600-700.
  - ✓ In 2018, Meesho's overall sales and reseller base grew by 50 times compared to 2017.
  - ✓ The number of re-sellers currently stands at 2 million.

## INDIA AND OTHER COUNTRIES

- **India - had voted in favour of Israel in the UN Economic and Social Council (ECOSOC) to deny the Palestinian NGO 'Shahed' the observer status**
- ✓ This is probably the first time India has voted in favour of Israel at the UN.
- ✓ The NGO was declared a terrorist organization by Israel for failing to disclose its ties with Hamas
- ✓ Israel's motion against the proposal to help the Palestinian NGO become observer was approved with 28 members in favour and 14 against.
- ✓ In 2017, the Modi government had voted in favour of a resolution opposing the contentious US decision to recognize Jerusalem as the capital of Israel
- ✓ India's vote was in line with the global opinion though 128 countries had voted in favour of the resolution and only 9 against

## SCIENCE, TECHNOLOGY & ENVIRONMENT

- **India - will set up its own space station within seven years, as per Isro chief K Sivan**
- ✓ The project would be an extension of Gaganyaan, India's first manned mission slated for 2022
- ✓ India's space station will have a mass of 20 tonnes and will be used for scientific studies including microgravity tests.
- ✓ It will have provision for people to live for 15-20 days
- ✓ Isro will submit the estimates for budget approval after the Gaganyaan mission.
- ✓ For three years, Isro has been quietly working on 'space docking experiment' (Spadex), a technology that is crucial for making the space station functional.
- ✓ The department of space had allocated ₹10 crore for Spadex that allows transferring humans from one spacecraft to another
- ✓ The Aditya (solar) mission to be launched by the middle of next year would aim to study the sun's corona and its impact on climatic changes.
- ✓ It will be sent to a fixed L1 point in 109 days where it will do various scientific studies like coronal study, UV imaging and magnetic field
- ✓ Liberation point L1 lies between the Earth and Sun, which is some 1.5 million km from Earth
- ✓ A mission to Venus is planned in mid-2023 using a GSLV Mk III.
- ✓ It will study Venus's atmospheric property, surface topography and atmospheric composition.
- ✓ Isro have already shortlisted 23 payloads for the Venus mission

## DEFENCE

- **The Indian Navy - will induct Varunastra, an indigenously developed heavyweight torpedo, into its arsenal.**



- ✓ Only seven other nations have the capability to do so.
- ✓ The weapon has been indigenously developed by Naval Science and Technology Laboratory (NTSL), Visakhapatnam.
- ✓ The 1,500kg Varunastra will be manufactured for warships and submarines by Bharat Dynamics Limited and DRDO.
- ✓ Bharat Dynamics Limited (BDL) in Hyderabad, has signed a contract worth ₹1,187 crore to manufacture the torpedoes to arm both warships and submarines.
- ✓ The manufacturing would take place at the Visakhapatnam unit of BDL in collaboration with DRDO.
- ✓ The heavyweight torpedo or the Varunastra is a shiplaunched, electrically-propelled underwater weapon equipped with one of the most advanced automatic and remote-controlled guidance systems.
- ✓ The weapon system uses its own intelligence in tracing the target
- ✓ Varunastra is considered to be 95% indigenous.
- ✓ BDL, which was involved in the production of the torpedo, had earlier delivered it to the Navy in 2016 which evaluated it

## AWARDS

- **Celebrated author, Amitav Ghosh - received the prestigious Jnanpith Award in Delhi on June 12 for his contribution to the enrichment of Indian literature in English**



- ✓ The 54th edition of the award was also unique in a way that for the first time in its long history spanning over half a century, it was presented to an author writing in English. Former West Bengal governor Gopalkrishna Gandhi presented the award to Ghosh.
- ✓ The Indian literary award is presented annually by the Bharatiya Jnanpith to an author for their "outstanding contribution towards literature"
- ✓ Ghosh, a Padma Shri and Sahitya Akademi awardee, is known for a series of novels such as "Shadow Lines", "The Glass Palace", "The Hungry Tide", and Ibis Trilogy — "Sea of Poppies", "River of Smoke", "Flood of Fire"
- ✓ His recent novel "Gun Island" was officially launched on June 13
- ✓ Instituted in 1961, the recipients of Jnanpith award are given a cash prize of Rs 11 lakh, a citation plaque and a bronze replica of Goddess Saraswati.
- ✓ Major names among the 58 recipients include literary icons Krishna Sobti, Kedarnath Singh, Shrilal Shukla, Nirmal Verma, Girish Karnad, Mahasweta Devi, Amrita Pritam and U R Ananthamurthy.

# REPORT

Isro is all geared up for its second moon mission, slated for launch on July 15, which follows the Chandrayaan-1 lunar probe in 2008. **Surendra Singh** traces the path that Chandrayaan-2 will take to realise India's dream to become the fourth country ever to land on the moon

**14** Thirteen desi scientific payloads and one passive payload of Nasa

**16** No. of days lunarcraft will move around Earth's elliptical orbit

**5** No. of days spacecraft will spend transcending towards moon

**27** No. of days module will spend around moon before lander detaches from orbiter

