

## EVERYDAY CURRENT AFFAIRS – SEP 9, 2019

### TAMIL NADU

- Anna University – developed a model to manage Chembarambakkam reservoir better during extreme rainfall and prevent a situation similar to that of the 2015 flood.

#### STEMMING THE FLOW

What the Anna University study suggests to prevent flood along the Adyar river during extreme rain

##### THE STUDY

- Scientists simulated three extreme rainfall events in 2005, 2008 and 2015 to assess the performance of Chembarambakkam reservoir
- They have applied box simulation to the reservoir



##### HOW IT WORKS?

- Computer model gives inputs on inflow to be expected from catchment area and storage level to be maintained at reservoir
- It will predict quantity of water that needs to be released into Adyar river based on inputs



##### WHAT'S THE SOLUTION?

- Reduce storage to 50% and release water just before heavy rain is forecast
- Reduce outflow by 9% to 37% and delay the time taken to reach maximum outflow from one hour to six hours
- It will not prevent inundation but will reduce the extent of flooding

##### WHAT'S BOX SIMULATION?

A model that tells how much water is to be released and how much is to be stored when there is heavy rain in catchment area

- ✓ The 'box' model developed by researchers from the University will help to control the flooding and at the same time prevent the excess release of water.
- ✓ Based on input and output parameters, the model simulates the operation of Chembarambakkam reservoir and hydraulic behaviour.
- ✓ During 2015, the city received 474mm rain in just two days.
- ✓ The city recorded 450 mm of rain in just two or three hours on December 1
- ✓ Due to full storage and heavy inflow, gates of Chembarambakkam reservoir were opened on December 2 submerging parts of the city.

## STATES

- **The Asian Development Bank (ADB) - signed a \$200 million loan agreement with the Centre - to upgrade rural roads to all-weather standards in 34 districts of Maharashtra.**
  - ✓ The pact will improve the condition of about 2,100 kilometres (km) of rural roads to all-weather standards
  - ✓ It will also provide climate resilience and safety features, connecting rural communities with productive agricultural areas and socio-economic centres.
- **Jammu and Kashmir and Ladakh - will have a common high court, Jammu and Kashmir High Court**
  - ✓ The two Union Territories will come into existence from October 31, 2019.
  - ✓ Earlier, President Ram Nath Kovind gave his assent to the Jammu and Kashmir Reorganisation Act, 2019 on August 9 dividing the state into two UTs
  - ✓ The Union Government on August 5, 2019 abrogated Article 370 of the Indian constitution, revoking the special status of the state of Jammu and Kashmir

## NATIONAL

- **Cannabis, commonly known as ganja - will be grown, henceforth, at Central institute of medicinal and aromatic plants (CIMAP) in Lucknow (UP) and Pantnagar (Uttarakhand)**
  - ✓ The narcotics department within the revenue wing of the Union finance ministry has approved a research and development (R&D) project on cannabidiol (CBD) and tetrahydrocannabinol (THC) — two unique natural compounds found in cannabis
  - ✓ CBD is extracted from cannabis hemp and it's used in gels, oils and food supplements.
  - ✓ It also has medicinal use to treat difficult symptoms of insomnia, aches and pains.
  - ✓ THC is a psychoactive compound present in cannabis, responsible for giving high sensation.
  - ✓ At present, CBD use is legal in the US and Canada according to the provisions of cannabis act.
- **The newly-established Rashtriya Kamdhenu Aayog – announces that the startups focussing on “commercializing” cow by-products like dung and urine, in addition to dairy, could receive up to 60% of their initial investment as government funding**
  - ✓ The kamdhenu aayog, set up by the government in February with an initial corpus of ₹500 crore, aims to chalk out strategies to attract youth for cow-based entrepreneurship

- ✓ The Aayog will provide a platform to scholars and researchers to project their research on these by-products
- ✓ It will also hold training programmes and skill development camps for people running gaushalas
- ✓ The Aayog had earlier announced plans to promote a cow tourism circuit.

## PERSONALITIES

- **Anupriya Lakra – becomes the first tribal woman from Odisha to fly a commercial plane**



- ✓ Anupriya, a 27-year-old tribal woman from Odisha's Maoist-hit Malkangiri district, joined IndiGo as a co-pilot earlier this month and will soon be flying commercial planes
- ✓ Anupriya, who belongs to the Santal community, joined a flying institute in Bhubaneswar in 2012 after giving up her engineering studies midway

## SCIENCE, TECHNOLOGY & ENVIRONMENT

- **Indian Space Research Organisation (Isro) – confirms that the cameras on board Chandrayaan-2's orbiter have spotted the image of Vikram lander on the lunar surface**
- ✓ It believes the lander might have 'hard-landed' on the lunar surface
- ✓ The lander has been found in a tilted position without suffering any major damage to its massive structure
- ✓ The orbiter camera is the highest resolution camera (0.3m) in any lunar mission so far.
- ✓ The orbiter continues to orbit the moon from pole to pole from a 100-km distance.
- ✓ The "hard-landing" means the lander, which was supposed to make a soft-landing on the lunar surface, has effectively crashed
- ✓ The agency has not been able to get a communication signal from the lander, just minutes before its scheduled landing in the early hours of September 7
- ✓ The lander was spotted at a distance of possibly half a kilometre from its intended touchdown point

- ✓ The originally chosen region of landing was about 70° south of the lunar equator and about 600 km from the lunar South Pole
- ✓ Chandrayaan-2 mission was launched on July 22, 2019, from the Satish Dhawan Space Centre in Sriharikota
- ✓ USA, Russia and China are the only three countries in the world to have landed a spacecraft on the lunar surface

## BOOKS & AUTHORS

- **Loktantra Ke Swar and The Republican Ethic**



- ✓ These two books are a compilation of 95 selected speeches delivered by President Ram Nath Kovind during his second year in office
- ✓ Vice President M. Venkaiah Naidu released the book at Pravasi Bharatiya Kendra, New Delhi.
- ✓ Since India is celebrating 150<sup>th</sup> Birth Anniversary of Mahatma Gandhi this year, a separate section has been given to the speeches related to Gandhi.

## OBITUARY

- **Ram Jethmalani, former Union Minister and Senior criminal law practitioner (95 years)**



- ✓ Born on September 14, 1923, in Sikarpur, Sindh Province , Ram Bulchand Jethmalani completed his law degree in Karachi, before arriving in India in 1962
- ✓ As the chairman of the Bar Association of India, he became famous in 1975, opposing the Emergency imposed by the then prime minister Indira Gandhi
- ✓ In 1977, Jethmalani contested and won the Bombay north-west Lok Sabha seat, backed by the Bharatiya Jana Sangh
- ✓ Jethmalani became a member of Rajya Sabha for the first time in 1988
- ✓ He became Union law minister in 1996 under former Prime Minister Atal Bihari Vajpayee.
- ✓ He served as the Union law minister and the minister of urban development in Atal Bihari Vajpayee-led NDA government in 1998 and 1999
- ✓ Jethmalani later took on Vajpayee in the 2004 Lok Sabha elections from Lucknow, but lost.
- ✓ On May 7, 2010, Jethmalani was elected as the president of Supreme Court Bar Association

**TOP CASES**

- Defended the assassins of former PM **Indira Gandhi**
- Defended the assassins of former PM and Congress leader **Rajiv Gandhi**
- Defended underworld don and smuggler **Haji Mastan**
- Defended the accused in the **Jessica Lall** murder case
- Defended **Amit Shah** in the Sohrabuddin murder case
- Defended **Lalu Yadav** in the Bihar Fodder Scam case
- It was Jethmalani's appearance in the **Nanavati** case that brought him into the spotlight

- ✓ After more than seven decades as a lawyer, Jethmalani announced his retirement from the legal profession in September 2017
- ✓ In 1977, he received the Human Rights Award instituted by World Peace Through Law for his fight against authoritarianism at the Philippines

## SPORTS

- **The Canadian teen Bianca Andreescu – defeats Serena Williams (US) to lift the US Open Women's title in New York**
- ✓ The 15th seed Bianca clinched a 6-3, 7-5 victory to pocket \$3.85 million winner's cheque.
- ✓ Williams was dealt a fourth consecutive defeat in the final of a Major to again deny her a record-equalling 24th Slam title

## TEEN TOPPLES TITAN, MAKES HISTORY AT US OPEN



► 19-year-old Bianca Andreescu became the first Canadian to win a singles Grand Slam title, beating Serena Williams 6-3, 7-5

► She is the first teen to win a major since Maria Sharapova won the US Open 13 years ago. Bianca had never played in the main round of the US Open before winning this one

► Bianca, the first player born this millennium to win a Grand Slam title, wasn't born when Serena won her first US Open in 1999. Serena was the last player to win a Slam as a teenager in the previous millennium (US Open, 1999)

► It was Serena's 4th Grand Slam final defeat since returning to court after giving birth in Sept 2017. She is one win away from equalling Margaret Court's record 24 Slams | P 16

- ✓ The 19-year-old Andreescu became the youngest Grand Slam winner since Svetlana Kuznetsova at the 2004 US Open
- ✓ Andreescu tied Monica Seles, who lifted the 1990 Roland Garros trophy in her fourth Major, for the record as the fastest player to win her first Slam title in the Open era.
- ✓ Interestingly, at 18 years and 263 days, this is the largest gap in age between Grand Slam finalists in the Open Era — Andreescu is 19 and Williams is just short of her 38th birthday
- ✓ Serena has 72 career titles and her opponent has just two.
- ✓ Andreescu previously had never gone past the second round of a Grand Slam and was making her main draw debut here, while the American is a 23-time major winner, including six US Open titles.
- ✓ Williams' US Open win-loss record is a staggering 101-12, the teenager's count was 6-0 coming into the final.

