

22nd December, 2021 Current Affairs

1. ADB will provide USD 350 million to improve access to urban services in India:

The Asian Development Bank (ADB) has decided to provide USD 350 million loan for improving access to urban services across India.

Key Highlights:

Access to urban services will be improved:



- By accelerating policy actions and reforms of enhancing service delivery and
- By promoting performance-based central fiscal transfers to urban local bodies (ULBs).
- ADB will also <u>dispense knowledge and advisory support</u> to the Ministry of Housing & <u>Urban Affairs for programme implementation</u>, monitoring and evaluation.
- ADB will also <u>extend support to ULBs</u>, <u>particularly in select</u> low-income states for implementing policy reforms, preparing investment plans, as well <u>as providing recommendations on cross-cutting issues</u> such as gender equality, climate change, social inclusion and environmental & social safeguards assessment.

<u>Sub-programme under Sustainable Urban Development and Service Delivery Programme:</u>

Loan agreement for <u>first sub-programme worth USD 350 million</u> has also been signed by ministry of finance, under Sustainable Urban Development & Service Delivery Programme. The <u>sub-programme is intended to establish essential policies and guidelines</u> for urban reforms at national level. This programme is in line with the government national flagship programmes, <u>which promote cities</u> as engines of economic growth.

ADB's loan for Skill University in Assam:



ADB will also provide a USD 112-million loan to establish a skill university in Assam. For this, Government of India and ADB has signed a deal on December 17. This university will be key to strengthen industry-aligned & flexible skills education and training system in Assam. Skill University project will support the design and construction of ASU campus. The Project will also develop ASU's management & operating systems and promote professional development of faculty members.

2. <u>Kerala University of Fisheries and Ocean Studies (KUFOS) became partner in NASA-ISRO research programme:</u>

The Kerala University of Fisheries & Ocean Studies (KUFOS) has been selected to join a research project under a NASA-ISRO collaborative programme.

Key Facts:

- KUFOS will join the research programme by Space Application Centre of ISRO.
- NASA and ISRO together have been developing a space-borne synthetic aperture radar (NISAR). It will be launched in January 2023.
- NISAR will provide a high-resolution data for large areas with capability for systematic observation of earth resources. It will also <u>provide time-series</u> <u>data for eco-systems applications.</u>

NASA-ISRO Synthetic Aperture Radar (NISAR) mission:

NISAR is a joint project between NASA and ISRO. Both the organisations are working on it to co-develop and launch a dual-frequency synthetic aperture radar on the Earth observation satellite. NISAR will be launched in 2023 and it will be the first radar imaging satellite which will use dual frequencies. The Satellite will be used for remote sensing as well as to observe & understand natural processes on Earth.

Advanced Radar Imaging:



NASA-ISRO Synthetic Aperture Radar <u>will use advanced radar imaging for mapping the elevation</u> of Earth's land and ice masses. Mapping will be done for <u>4 to 6 times in a month at resolutions of 5 to 10 meters</u>. Satellite has been designed to observe and measure <u>Earth's most complex natural processes</u>, like <u>ice-sheet collapse</u>, ecosystem disturbances, and natural hazards like tsunamis, earthquakes, volcanoes and landslides.

About NASA-ISRO agreement:

Under the agreement between NASA and ISRO, NASA will provide <u>L-band</u> <u>synthetic aperture radar (SAR)</u>, a solid-state recorder, a high-rate telecommunication subsystem for scientific data GPS receivers, and a payload data subsystem. On the other hand, <u>ISRO will provide an S-band synthetic</u> aperture radar, satellite bus, launch vehicle, and associated launch services.

Launching of Mission:

NISAR satellite will be launched <u>from India on January 29, 2023, aboard a GSLV</u>
Mk II.

Life of the mission:

Planned mission life is three years.



3. Linking voter rolls to Aadhar-Merits and Demerits:

Recently, Rajya Sabha has passed The Election Laws (Amendment)

Bill, 2021, by voice vote. The bill enables for linking electoral roll data with the Aadhaar ecosystem.

Background of this bill:

 A Parliamentary Standing Committee had <u>presented a report on demands of grants of Law Ministry</u>, in Rajya Sabha on March 6, 2021.





- The Committee <u>had advocated for linking unique Aadhaar ID Card number</u> with voter I-card, for streamlining alterations in EPIC during change of ordinary residence by the electors.
- In March 2015, Election Commission <u>had also implemented a National</u>
 <u>Electoral Roll Purification & Authentication Programme</u>, which sought to link
 Aadhaar to voter IDs, in order to delete duplicated names.

What are the benefits of this bill?

- According to government, <u>linking Aadhaar with electoral rolls will curb the</u>
 <u>issue</u> of multiple enrolments of same person at different places.
- Once the Aadhaar <u>is linked</u>, <u>electoral roll data system will issue alert</u> on the existence of previous registration(s) whenever a person will apply for new registration.
- This move will help in cleaning the electoral roll and facilitate elector registration in the location at which persons are 'ordinarily resident'.

Will linking Aadhaar with Voter IDs be mandatory?

According to Law Minister Kiren Rijiju, linking Aadhaar with the voter ID card is voluntary. It will not be compulsory or mandatory.

What are the limitations of the bill?

- The linking of Aadhaar with voter IDs violates the fundamental right to privacy as provided by the Supreme Court of India in Puttaswamy case.
- Linking Aadhaar and IDs might enable non-citizens also to vote.
- Though, linking will <u>not lead to identification of voting choices</u>, but there is a concern that it will lead to profiling.



4. <u>66-million-year-old dinosaur embryo has been found:</u>

Recently, a <u>66-million-year-old</u> <u>dinosaur embryo</u> has been discovered in Ganzhou in southern China.

Key Facts:

- The embryo is believed to be a <u>toothless theropod</u> <u>dinosaur, or</u> oviraptorosaur.
- It has been named Baby Yingliang.
- The <u>discovery of embryo has also provided researchers</u> a greater understanding of the link between dinosaurs and modern birds.

The fossil provides that, embryo was in a curled position called as "tucking".

This behaviour is seen among birds, shortly before they hatch. It also indicates that tucking behaviour in modern birds has been evolved and originated from their dinosaur ancestors.

About Oviraptorosaurs:

Oviraptorosaurs means <u>"egg thief lizards"</u>. They were feathered dinosaurs, which <u>lived-in present-day Asia and North America during</u> Late Cretaceous period, some 100 million to 66 million years ago. They are distinct for their short, beaked, parrot-like skulls.

About Baby Yingliang:

Baby <u>Yingliang measures 27cm</u>. long from <u>head to tail</u>. It is resting inside a 6.7-inch-long egg at Yingliang <u>Stone Nature History Museum in China</u>. This egg was first uncovered in 2000 and put into storage for 10 years.

About Theropoda Clade:

Members of Theropoda clade <u>are known as theropods</u>. Teropoda is a dinosaur clade, which is characterized by hollow bones as well as three-toed limbs. Theropods are usually classed as a group <u>of saurischian dinosaurs</u>. They were <u>ancestrally carnivorous</u>. However, a number of theropod groups evolved to





become omnivores, herbivores, piscivores, and insectivores. They <u>first</u> appeared during Carnian age in late <u>Triassic period</u>, around <u>231.4 million years</u> ago. They included all the large terrestrial carnivores, from Early Jurassic to Cretaceous period.

5. <u>Delhi will set up the first Teachers University:</u>

Recently, Delhi Cabinet has approved to set up Delhi Teachers' University.

Key Highlights:

The university will offer <u>a four-year integrated teacher</u>
 <u>education programme</u> after <u>Class</u>
 <u>12.</u>



- In the programme, BA & B.Ed, BSc & B.Ed, and B.Com & B.Ed courses will be incorporated.
- While pursuing these courses, the enrolled students in the university will also be linked to Delhi government schools for training purposes.
- Government will introduce "Delhi Teachers University Bill 2021" for the same in the next session of Delhi Assembly.

About the Delhi Teachers University:

Delhi Teachers' University <u>will be a public university</u>. It will be intended to prepare excellent <u>quality teachers</u> for Delhi <u>across different school stages</u>. Students from university will also be attached with Delhi government schools for entire duration of the course, to get <u>hands-on experience</u>. It will help students in receiving excellent practical knowledge in addition <u>to theoretical</u> knowledge.

Importance of the University:

• The University will <u>act as a centre for excellence</u> in preparing teachers at <u>pre-service as well as in-service</u> in the areas of education studies, leadership and policy.



The University will work for <u>filling the gap between practice</u>, research and <u>policy in teacher preparation</u>. It will also engage constantly with the dynamic concept and realities of quality education Delhi.

Admission to university:

Admission to the new <u>University will start for academic</u> session 2022-23.

Set up of university:

Delhi Teacher's University will be set up at Bakkarwala in west Delhi.

Integrated Teacher education programme (ITEP):

The Integrated Teacher Education Programme (ITEP) was notified by Ministry of Education (MoE), in accordance with National Education Policy (NEP) 2020. This course will be available for all students who choose to become teacher after their 12th exam. Four-year ITEP will start from the academic session 2022-23. The course will be offered in pilot mode across 50 selected multidisciplinary institutions in India, initially. Admission for the courses will be carried out by National Testing Agency (NTA) through a National Common Entrance Test (NCET).

6. Karnataka has announced Reservation for Transgenders in Police:

Karnataka Government has recently announced to give 1 % reservation to transgenders in Police.

Key Highlights:

- The Reservation will be given to them across <u>all the ranks in</u> <u>police department.</u>
- This innovative step will help in <u>changing the perception</u> towards transgenders. It will connect them into mainstream and <u>remove all the</u> prejudices against them in society.





- Karnataka <u>police department has also started recruitment</u> of both men and women by giving them equal opportunities.
- There was reservation for women in police department, <u>three-four decades</u>
 <u>back.</u> But now the department aims to reach <u>25 per cent of women</u> in the
 police force.

About Karnataka State Police:

- Police in Karnataka <u>were called by various names</u> in different regions such as Thoti, Talwar, Kattubidi, Umbalidhar, Neeraganti etc.
- The foundation for <u>current police set up was laid after</u> the appointment of first Inspector General of Police in the state.

History of the state police:

Mysore State was the predecessor to Karnataka State, <u>created on November 1</u>, <u>1965.</u> Sri. L. Rickets was appointed as first Inspector General of Police. Before that, the State Police had <u>no status</u>, <u>structure and powers</u>. During 1883, Talwars, Thotis, Kavalugararu, Neeragantis, Patela, Amaragararu, Ankamaale, Shyanubhogas etc. used to do policing. Police existed in different variants during the rule of Maharajas of Mysore.

Policing after establishment of Judicial System:

In 1856 the judicial system became functional in the state. With the establishment of Judicial System, Judicial Commissioners were appointed. Later in 1873, a Deputy Inspector General of Police was appointed to assist the Commissioner. In the same period, posts of first-class Inspector, second class Inspectors, Daphedhars (Head Constables), Jamadhars, Constables were also created.

First Transgender Police in India:

<u>K. Prithika Yashini</u> has become the <u>first transgender women</u> police officer in India. She has been appointed as sub-inspector in Tamil Nadu.



7. Indigenous Armoured Engineer Reconnaissance Vehicle inducted into Army:

Recently, first batch of <u>Indigenous</u>
<u>Armoured Engineer Reconnaissance</u>
<u>vehicles</u> has been inducted into the Indian Army.

Key Highlights:

- These next-generation vehicles
 have been inducted into the Corps of Engineers in the Army at an event in Pune.
- Indigenous Armoured Engineer Reconnaissance vehicle are designed by Defence Research and Development Organisation (DRDO).
- It was manufactured by Ordnance Factory Medak in association with Bharat Electronics Limited, Pune.
- The Indian Army has ordered 53 units of the AERV.
- These vehicles will be deployed with individual engineering formations, mainly on the Western front.

Importance of the vehicle:

The vehicle is capable to carry out reconnaissance of water obstacles and boggy patches to execute engineering tasks with capabilities of carrying out reconnaissance & provide updates in real time to force commanders. It will help in enhancing existing "engineer reconnaissance capabilities" of Indian Army. Vehicles would be a biggest game-changer in support of mechanised operations in any of the future conflicts.

<u>Armoured Engineer Reconnaissance vehicles (AERV):</u>

- The AERV has been developed by <u>modifying the amphibious infantry</u>
 fighting vehicle called <u>BMP-II</u>. The vehicle has been designed to meet
 tactical and combat requirements of military engineers who are carrying out
 terrestrial and under-water surveys in difficult terrains.
- It will primarily be used for the construction work of assault <u>bridges in</u> <u>desert, flat and riverine areas for</u> offensive as well as defensive operations.
- The revolving town, turret, has been replaced with a laser range finder and other electronic equipment. It also comprises of 'equipment measuring



water currents & soil densities' which are required for engineering columns for constructing bridges.

8. Apretude: FDA has approved injection to prevent HIV

Recently, the Food and Drug Administration (FDA) has approved world's <u>first injectable medication</u> <u>for reducing the risk of acquiring</u> HIV.

About Apretude:

Apretude is an injectable drug. Its generic name is "cabotegravir extended-release injectable suspension".



- The drug works as an alternative to daily pills for HIV prevention, like Truvada and Descovy. According to Centers for Disease Control and Prevention (CDS), these pills are effective up to 99% at preventing the sexual transmission of HIV. However, it must be taken every day to be effective.
- But to start Apretude, people initially receive two shots, one month apart.
 Following this, they receive an injection every two months thereafter.
 - This injection will be critical in addressing the HIV epidemic in the U.S. It will also <u>help high-risk individuals and certain groups</u> where daily medication is a major challenge or not a realistic option.

Oral formulation 'Vocabria':

HIV patients will be given to take an oral formulation of cabotegravir, known as Vocabria, daily for four weeks before starting the injections, in order to see how well they tolerate this drug. Patients are required to be tested for HIV and confirmed negative before starting Apretude. They are also required to be confirmed negative before each injection in order to avoid the risk of developing drug-resistant HIV.



Price of the Apretude:

Apretude has a <u>list price of \$3,700 per dose</u>. It is expected to ship to <u>wholesalers and specialty distributors</u> in the U.S. in 2022.

