

NATIONAL**Mekedatu dam project**

Tamil Nadu Chief Minister E K Palaniswami recently wrote to the Prime Minister urging him to stop the process of a feasibility study for the Mekedatu dam project in Karnataka. The study has been cleared by the Central Water Commission (CWC), which has also asked for a detailed project report.

Mekedatu dam project: Being set up by the Karnataka government, the project is near Mekedatu, in Ramanagaram district, across the river Cauvery from Tamil Nadu. Its primary objective is to supply drinking water to Bengaluru and recharge the groundwater table in the region.

The Dispute: Tamil Nadu has moved the Supreme Court. Its main argument is that the project violates the final award of the Cauvery River Water Tribunal, and that the "construction of the two reservoirs would result in impounding of the flows in the intermediate catchment below the Krishnaraja Sagar and Kabini reservoirs, and Billigundulu in the common border of Karnataka and Tamil Nadu". Karnataka says, the project will not come in the way of releasing the stipulated quantum of water to Tamil Nadu, nor will it be used for irrigation purposes.

CWC:

- It is a premier Technical Organization of India in the field of Water Resources and is presently functioning as an attached office of the Ministry of Water Resources, River Development and Ganga Rejuvenation, Government of India.
- The Commission is entrusted with the general responsibilities of initiating, coordinating and furthering in consultation of the State Governments concerned, schemes for control, conservation and utilization of water resources throughout the country, for purpose of Flood Control, Irrigation, Navigation, Drinking Water Supply and Water Power Development.
- Central Water Commission CWC is headed by a Chairman, with the status of Ex-Officio Secretary to the Government of India.

Digital Sky Platform launched

In August 2018, India had announced the release of its Civil Aviation Regulations (CAR) to enable safe flying of RPAS (Remotely Piloted Aerial Systems) in India. RPAS, also known as drones, are a technology platform with wide-ranging applications.

Digital Sky Platform:

- New features will be developed to ease the process of flying for users.
- To provide oversight to security agencies.
- It is envisioned that in the future Digital Sky Service Providers (DSPs) will be extending the functionality of the platform through Application Program Interfaces (APIs).
- Permissions to fly in different zones:

To get permissions, RPAS operators or remote pilots will have to file a flight plan.

- Green zones – Flying in the green zones, requires only intimation of the time and location via the portal or the app.
- Yellow zones – Permission will be required for flying in yellow zones.
- Red zones – Flights will not be allowed to fly.

If an RPAS does not have permission to fly, it will not be allowed to take-off under the policy of No-Permission-No-Takeoff (NPNT).

Hornbill Festival in Nagaland Inaugurated:

Hornbill Festival offers unique opportunity for states to interact and exhibit their cultural heritage in the true spirit of "Ek Bharat, Shrestha Bharat".

- Nagas celebrate this festival to revive, protect, sustain and promote the richness of the Naga heritage and traditions.
- It occurs during 1 – 10 December on an annual basis.
- It is also called the "Festival of Festivals".
- The festival pays tribute to Hornbill, the most admired and revered bird for the Nagas for its qualities of alertness and grandeur.
- It is organized by State Tourism and Art & Culture Departments and also supported by Union Government.
- Hornbill Festival was established on 1st December 1963 and was inaugurated by the then President Dr. S Radhakrishnan.

NITI Aayog forum for north east to be held in Guwahati

The second meeting of the newly constituted 'NITI Forum for North East' will be held in Guwahati on 4th December, 2018. Vice Chairman NITI AAYOG, Dr Rajiv Kumar will chair and Minister of State (IC) for DoNER, Dr Jitendra Singh will co-chair the meeting.

NITI-Forum for North-East: In February 2018, the 'NITI-Forum for North East' was constituted to periodically review the development status in North Eastern Region. The NITI Forum for Northeast is tasked to identify various constraints on the way of accelerated, inclusive and sustainable economic growth in the North East Region of the country and to recommend suitable interventions for addressing identified constraints. Members of the Forum include Secretaries of various Ministries of the Government of India, Chief Secretaries of all the eight North-eastern states and also senior government officials and experts from various fields. The Secretary, North East Council (NEC) is the Member Secretary of the Forum.

INTERNATIONAL AND BILATERAL

Australia Becomes First Country to Move Against 'Orphanage Trafficking'

Australia is the first country in the world to recognize orphanage trafficking as a form of modern slavery. The Modern Slavery Bill was passed by both houses of parliament and under it, the new law, so-called "orphanage trafficking" will be treated as a slavery and trafficking offence.

According to US Government Trafficking in Persons (TIP) Report, it is estimated that around 80 percent of the eight million children in orphanages worldwide have parents or family who could take care of them.

According to Save the Children, more than 50 percent of Australian universities advertised orphanage placements as a volunteering opportunity overseas.

Children Trafficking: Trafficking of children is a form of human trafficking and is defined as the "recruitment, transportation, transfer, harboring, and/or receipt of a child for the purpose of slavery, forced labour and exploitation.

This definition is substantially wider than the same document's definition of "trafficking in persons"

Children may also be trafficked for the purpose of adoption.

ECONOMY

Slowing inflation might lead to holding of key policy rates by MPC

- Slowing inflation is likely to prompt the monetary policy committee (MPC) of the Reserve Bank of India (RBI) to hold the key policy rate or the repo rate in the fifth bimonthly monetary policy review of 2018-19
- The retail inflation rate the yardstick used by the RBI for monetary policy purposes slowed in October to 3.3%, the slowest pace in 13 months. Consumer price index-based inflation or retail inflation remained below the 4% target of the RBI for the third straight month. Inflation is likely to decline further as crude oil prices dropped below \$60 a barrel in November.
- While the central bank estimated retail inflation to be in the 3.9-4.5% range for the second half of the current financial year and 4.8% for the first quarter of 2019-20, Kotak Securities expects inflation to undershoot the RBI estimate.
- The market will be looking for liquidity-boosting measures from the central bank, including reduction in the cash reserve ratio (CRR), even if the RBI has changed its monetary policy stance in the last review meeting to calibrated tightening, from neutral. The change in stance indicates that interest rate can only go upward.
- The recent decision of the RBI to infuse Rs. 40,000 crore liquidity in December through open market operations has been seen as inadequate by market participants. A report from Bank of America Merrill Lynch estimated the current liquidity deficit at Rs.1 lakh crore, which could go up to Rs.1.4 lakh crore after corporate advance tax outflows start by the middle of this month.

MPC: The Monetary Policy Committee (MPC) determines the policy interest rate required to achieve the inflation target. The Central Government in September 2016 constituted the present MPC as under:

- Governor of the Reserve Bank of India – Chairperson, ex officio;
- Deputy Governor of the Reserve Bank of India, in charge of Monetary Policy – Member, ex officio;
- One officer of the Reserve Bank of India to be nominated by the Central Board – Member, ex officio;
- Shri Chetan Ghate, Professor, Indian Statistical Institute (ISI) – Member;
- Professor Pami Dua, Director, Delhi School of Economics – Member;
- Dr. Ravindra H. Dholakia, Professor, Indian Institute of Management, Ahmedabad – Member. (Members referred to at 4 to 6 above, will hold office for a period of four years or until further orders, whichever is earlier.

SCIENCE AND TECHNOLOGY

Nasa's Osiris-Rex

OSIRIS-Rex stands for Origins, Spectral Interpretation, Resource Identification, Security-Regolith Explorer. This mission is all set to reach the Bennu asteroid – a rock that may predate the solar system – where its primary mission is to hover just above it, grab a sample of rock and dust and bring it back to Earth. The launch of the NASA OSIRIS-REx mission took place on September 8, 2016. Since then, the spacecraft has been two years travelling through space to reach its target, primitive asteroid Bennu, in October, 2018.

Mission Goals:

- OSIRIS-REx will be conducting a range of scientific experiments in order to better understand the asteroid.
- The aim of the mission is to collect a sample of regolith- the loose, soil-like material which covers the surface of the asteroid.
- In July 2020, the probe will move to within a few metres of Bennu, extending its robotic arm to touch the asteroid's surface. The arm will make contact with the surface for just 5 seconds, during which a blast of nitrogen gas will be used to stir up the regolith, allowing it to be sucked into the sample collector.
- OSIRIS-REx has enough nitrogen on board for 3 sample collection attempts, and NASA are hoping to collect between 60 and 2000g of regolith material to bring back to Earth.

Mother's milk influences rotavirus infection in children

- By studying the complex interplay between the sugars and microbes in mother's milk and the baby's gut microbes, an international team of researchers has tried to understand neonatal rotavirus infection.
- Rotavirus infection is one of the leading causes of gastroenteritis in children under five years worldwide. Babies in 10 Indian states are immunised against rotavirus.
- The researchers first investigated whether human milk oligosaccharides (specific sugars in milk) can inhibit infection by a particular strain (G10P11) of rotavirus. In vitro studies were carried out on monkey kidney epithelial cells (MA104 cells).
- Though mother's milk sugars should be ideally killing the virus, the researchers found that the oligosaccharides enhanced the infection of cells with this strain of rotavirus.
- The researchers then repeated the study in a neonatal nursery to validate their lab results. A study group of 181 mother-infant pairs were selected from the Christian Medical College (CMC), Vellore. The sugars and microbiome of breast milk, and baby's gut microbiome were characterised.
- They found that oligosaccharides responsible for increased infectivity were "significantly higher" in breast milk where the babies had symptomatic infection. There were also specific differences in the milk microbiome.

MISCELLANEOUS

Train 18: India's first indigenously designed locomotiveless (engine less) train known as Train 18, breached the 180 kmph speed limit during test run in Kota-Sawai Madhopur section. When this train is made operational, it will become the country's fastest train. It is touted as next generation Shatabdi Express and will connect metros with other important cities.

G20 Summit in 2022: India will host G20 Summit in 2022, when it celebrates its 75th year of Independence. It was announced by Prime Minister Narendra Modi during ongoing G20 meet of international grouping in Buenos Aires, capital of Argentina. This comes after Italy accepted

India's formal request to host this summit in 2021 as earlier it was going to host it in 2022. During the Buenos Aires G20 meet, India presented a nine-point agenda to the G20 countries calling for strong and active cooperation among them to comprehensively deal with fugitive economic offender.

New Chief Election Commissioner: Sunil Arora assumed charge as 23rd Chief Election Commissioner (CEC) of India. He succeeded OP Rawat who retired on 1 December 2018. He will have nearly two-and-a-half-year tenure as CEC and General Election 2019 to 17th Lok Sabha will be conducted under his stewardship. Prior to assuming this, charge he was serving as Election Commissioner in Election Commission of India (ECI) from September 2017