

EVERYDAY CURRENT AFFAIRS – JAN 2, 2020

TAMIL NADU

- **The Tamil Nadu government – plans to commence a ₹3,000 crore flood mitigation and water conservation project.**
- ✓ The project will aim to conserve 4.76tmcft (thousand million cubic feet) of rainwater and minimise the impact of severe floods in Chennai and coastal districts.

IN THE PIPELINE

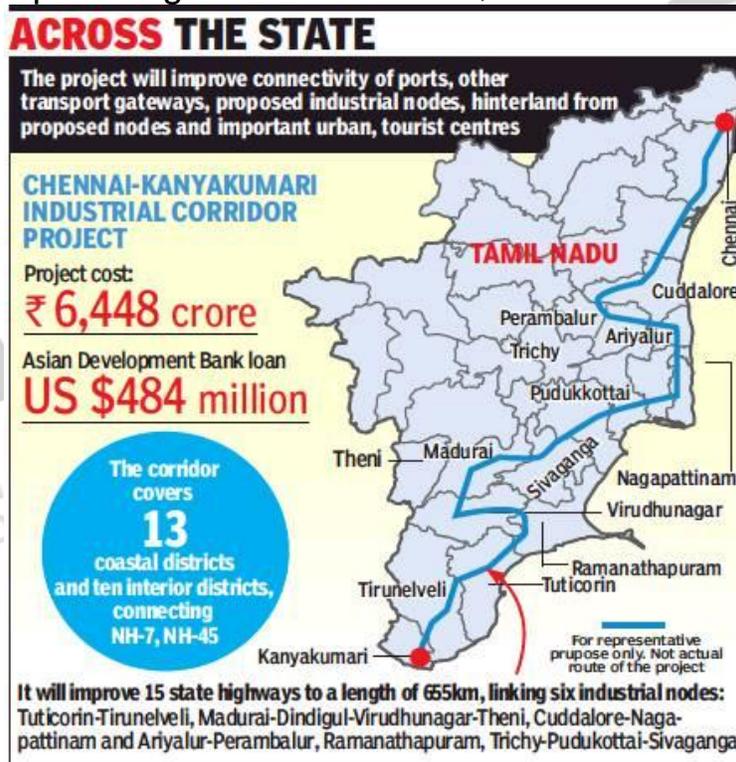
The flood mitigation and management works to be adopted have been categorized into three different approaches

Conservation of floodwater 41 works at ₹1,157cr	
Climate change and adaptive rehabilitation 25 works at ₹931cr	
Flood protection and river training work 27 works at ₹ 911cr	

The project aims to store **4.7tmcft** of rainwater, minimize damages during flood

- ✓ The comprehensive Flood mitigation and management project will focus on Chennai and its neighbouring urban areas in Chengalpet, Kancheepuram and Tiruvallur districts, besides targeting other vulnerable areas in the state’s coastal districts.
- ✓ The state government had already obtained the Centre’s approval to utilize financial aid from the World Bank for the project, which has been also approved by the Central Water Commission.
- ✓ The Commissionerate of revenue administration and state disaster management agency would be the nodal agencies of the project

- ✓ The water resources wing of the public works department (PWD) would be responsible for implement the project.
 - ✓ The project consists of more than 620 works that are grouped into 93 packages
 - ✓ These include construction of 14 check dams, barrages with shutters and reservoirs across Palar, Adyar, Kovalam and Kosasthalaiyar rivers at a cost of ₹396 crore.
 - ✓ As part of the project, more than 400 water bodies in Chengalpet and Kancheepuram districts would be desilted to restore water storage capacity to the optimum level at a budget of ₹750 crore.
- **The Tamil Nadu government – to release tenders for improving 6 of the 15 State highways which form part of the long-pending Chennai-Kanyakumari Industrial Corridor project.**
- ✓ The Asian Development Bank will be the external funding agency for the project
 - ✓ The ADB will be providing an assistance of \$484 million towards the project.



- ✓ The objective of the project is to improve ease of doing business and make the corridor more competitive in attracting potential investments.
- ✓ Initially, the department will start working on State Highways 69 (Virudhachalam to Ulundurpet), SH142 (Thuraiyur to Perambalur), SH115 (Cheyyur to Polur and ECR link), SH191(Melur to Karaikudi via Tirupattur, Kundrakudi), SH63 (Thanjavur to Mannargudi) and SH23 (Mayiladuthurai to Tiruvarur) for improvements
- ✓ The corridor has also identified Tuticorin, Tirunelveli, Madurai, Trichy, Cuddalore, Thanjavur, Pudukottai Manapparai, Perambalur, Karaikudi as anchor cities

NATIONAL

- **Prime Minister Narendra Modi – to disburse ₹12,000 crore to 6 crore farmers through e-transfer at an event in Tumkur, Karnataka on January 2**
- ✓ During the event, the Prime Minister will also hand over keys of 'Deep Sea Fishing' vessels and 'Fishing Vessel Transponders' to select farmers of Tamil Nadu and distribute 'Kisan Credit Cards' (KCC) to select farmers of Karnataka.
- ✓ The payment will be the third instalment of the current financial year as part of the 'PM-Kisan' (Pradhan Mantri Kisan Samman Nidhi) scheme



- ✓ The move will help landholder farmers get ₹2,000 each directly into the beneficiaries' bank accounts
- ✓ Earlier, over ₹2,000 crore had been transferred to bank accounts of over 1.01 crore farmers at the launch event of the PM-Kisan scheme in Gorakhpur, Uttar Pradesh on February 24, 2019
- ✓ The Agriculture ministry had earlier transferred the first instalment (of ₹2,000 each) of current financial year to 7.46 crore farmers and the second instalment to 5.96 crore farmers as on December 31, 2019.
- ✓ Under the scheme, nearly 14.5 crore landholder farmers are eligible to receive ₹6,000 per annum in 3 equal instalments of ₹2,000 each in a financial year
- ✓ In 2019 budget, annual expenditure of Rs 75,000 crores was allocated to the scheme.
- ✓ The scheme was earlier meant for only marginal and small farmers (having landholding up to maximum five acres), but it was later expanded under Modi 2.0 covering all farmers irrespective of the size of their landholdings.
- ✓ The scheme is not meant for landless farmers or tenant farmers.

- ✓ Punjab, Haryana, Andhra Pradesh, Uttar Pradesh, Gujarat, Telangana, Himachal Pradesh, Chhattisgarh, Kerala and Odisha figured among top 10 performers in the project
- ✓ West Bengal figured at the bottom as it has decided not to cover around 72 lakh of its farmers with the benefits of the scheme.
- **Reserve Bank of India - launched a mobile application, MANI (Mobile Aided Note Identifier) on January 1**

2 easy steps for the visually impaired to identify the denomination of a currency note.

- 1 Download and install the MANI app
- 2 Open the app and point the camera of the mobile phone to the currency note

RBI launches the MANI App (Mobile Aided Note Identifier)
Empowering the visually impaired.

- Identifies denomination of Mahatma Gandhi Series and Mahatma Gandhi (New) series banknotes.
- Identification by audio notification in Hindi and English and vibration mode
- After downloading, internet is not required and works in offline mode
- Available on both Google and Apple Store without any charges/payment

The mobile application does not authenticate the note as genuine or counterfeited

For more details, give a missed call to 14440 or visit www RBI.org.in/MANI
For feedback on this advertisement, write to rtikehlahai@rbi.org.in

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- ✓ It will assist visually impaired persons in identifying the denomination of currency notes.
- ✓ The app was launched by RBI governor Shaktikanta Das
- ✓ It can be downloaded from Android Play Store and iOS App Store
- ✓ Once installed, the app can be used to scan all currency notes of Mahatma Gandhi series (new and old).
- ✓ Upon the completion of scanning, the user will get an audio notification in Hindi as well as English
- ✓ The app can be used in offline mode without internet connectivity.

- ✓ Indian banknotes contain several features which enable the visually impaired to identify them, such as intaglio printing and tactile mark, variable banknote size, large numerals, variable colour, monochromatic hues and patterns
- ✓ Intaglio is a raised shape that are present in all notes except in Rs 10
- ✓ The app is designed to help those with only visual or visual and hearing disability using the vibration mode.
- ✓ For those who are hearing impaired, the user can detect the note by counting the number of vibrations which increases with the increasing value of denomination.
- ✓ For instance, for a ten-rupee note the phone will buzz twice, which will increase progressively up to 8 times for a ₹2,000 note.
- ✓ The MANI mobile app will not authenticate a rupee note as 'genuine' or 'fake'.
- ✓ The Reserve Bank of India released a batch of new currency notes under the latest 'Mahatma Gandhi Series' after demonetization in November 2016.
- ✓ The new currency notes were launched in different denominations ranging from Rs 2000, Rs 500, Rs 200, Rs 100, Rs 50, Rs 20 and Rs 10
- ✓ The Mahatma Gandhi Notes were first introduced in 1996, replacing the Lion Capital Series.
- ✓ They contain a security thread that can be seen as a straight line against a light source
- ✓ It also contains a hidden image of Mahatma, which is visible when held against light source at an angle of 45 degrees.
- ✓ It also holds a water mark and fluorescence apart from containing the word "Bharat" written in Devanagari script

INTERNATIONAL

- **Palau – becomes the first nation in the entire world to ban “reef-toxic” sunscreens from January 1, 2020**

Palau sunscreen ban

Oxybenzone and octinoxate are chemicals found to be harmful to corals



Source: AFP/National Geographic

© AFP



- ✓ The Western Pacific island nation introduced strict environmental measures to protect one of the world's largest marine sanctuaries located in the island

- ✓ Palau is famous for its marine life and is regarded as one of the world's best diving destinations
- ✓ The chemicals found in most sunscreens were toxic to corals, even when exposed to minute doses
- ✓ From January 1, any reef-toxic sunscreen imported or sold in Palau will be confiscated and the owner will be fined US\$1,000.
- ✓ As per the report published by The Ocean Foundation, about 14,000 tons of sunscreen is absorbed into the oceans every year.
- ✓ Based on a 2015 study, the oxybenzone present in sunscreen inhibits coral growth and also affects fish reproduction by interfering with their hormonal system
- ✓ It was also found to be toxic to the algae living within the coral reefs.

SCIENCE, TECHNOLOGY & ENVIRONMENT

- **The final four astronauts selected for Gaganyaan - to begin their training in Russia from the third week of this month.**
- ✓ The shortlisted astronauts will be trained at the Yuri Gagarin Cosmonaut Centre in Moscow, as per an agreement signed between the space agencies of the two countries last year.
- ✓ This was announced by the Isro chairman K Sivan on January 1, 2020

FINAL FRONTIER

- PM Modi, in his 2018 Independence Day speech, announced the first manned space mission
- Gaganyaan, which is set to take off in 2022, will cost less than ₹10,000cr, the Centre said in 2018
- If successful, India will be the fourth nation to send humans into space after Russia, US and China



- ✓ Seven Indian Air Force test pilots chosen for Ganganyaan had completed the screening process in India and Russia during November and another 5 completed this process in December.
- ✓ Out of these 12, the final 4 have been shortlisted for training now after a series of fitness and endurance tests
- ✓ The Institute of Aerospace Medicine (IAM) under the IAF in Bengaluru had selected 12 astronauts out of 60 applicants

- ✓ Glavkosmos — a subsidiary of Roscosmos State Corporation (Russia's space agency) — which will train them, has completed its screening process to select the final four.
 - ✓ Gaganyaan astronauts will use space suits from Russia for their first mission
 - ✓ In India, the Defence Bioengineering and Electromedical Laboratory (DEBEL), a lab under DRDO, has been working on a space suit
 - ✓ The Rs 10,000 crore Gaganyaan project will be India's first human spaceflight programme scheduled for 2022
 - ✓ It was announced by the Prime Minister Narendra Modi in August 2018
 - ✓ It is designed to have 3-7 crew members to spend 3-7 days in space in a 400-km orbit.
 - ✓ The first of the two pre-Gaganyaan flights along with a humanoid will be launched this year-end
 - ✓ It will also carry some of the six shortlisted micro-gravity experiments
- **The Indian Space Research Organisation - is set to launch Chandrayaan-3 by this year end**
- ✓ The agency has set an internal target of November 2020 for the project, but it may further move into early next year
 - ✓ The third Moon mission is estimated to cost more than ₹600 crore
 - ✓ The lander, rover and propulsion module will cost ₹250 crore, while GSLV Mark III vehicle launch service will cost another ₹365 crore
 - ✓ Chandrayaan-3 will have a lander, rover and a propulsion module
 - ✓ It will be utilizing the Chandrayaan-2 orbiter, which is fully functional.
 - ✓ In the second mission that cost nearly ₹1,000 crore, an orbiter carried the lander and the rover to a lunar orbit.
 - ✓ Isro failed to land a probe on Moon in its first attempt in September 2019, as part of Chandrayaan-2 mission
 - ✓ M Vanitha, the project director of Chandrayaan-2 has been replaced in Chandrayaan-3 by **P Veeramuthuvel** of the U.R. Rao Satellite Centre, who was also the associate project director of Chandrayaan-2
 - ✓ Isro is targeting 25 missions this year
 - ✓ It had managed to accomplish 13 missions in 2019, even though the target set in January 2019 was 30 missions
 - ✓ Isro has already requested for ₹120 crore for a new launchpad for SSLV (small satellite launch vehicle), which will be part of the proposed spaceport in Tamil Nadu's Kulasekarapattinam in Tuticorin
 - ✓ The Tamil Nadu government has began the process of acquiring 2,300 acres of land in Thoothukudi district for ISRO's second launch port.
 - ✓ Currently satellites are launched from the Sriharikota launch centre in Andhra Pradesh.
 - ✓ The first experimental flight of SSLV will happen this year at Sriharikota, while Aditya mission is scheduled for mid-2020

- ✓ SSLVs are meant to launch a payload of up to 500 kg in space.
- **Isro - is in talks with Chinese phone-maker Xiaomi to include NavIC chipsets in its products within India**
- ✓ The chipsets will be made by US chipmaker Qualcomm Technologies in collaboration with Isro
- ✓ Xiaomi is expected to launch handsets with NavIC in about seven months

DEFENCE

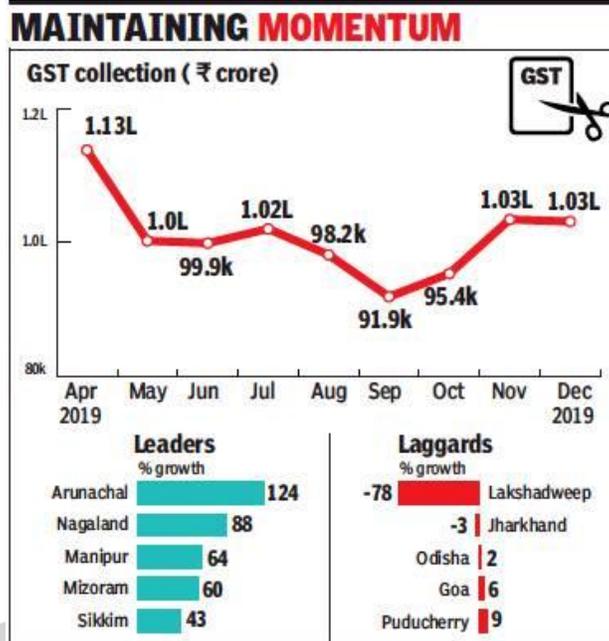
- **The Chief of Defence staff (CDS) General Bipin Rawat – to prepare a roadmap for the first new theatre command to be set up in four to five years**

INTEGRATED MILITARY PUNCH	
Indian Military Manpower	
ARMY	
Officers 42,913	Soldiers 11.9 lakh
IAF	
Officers 12,142	Airmen 1.3 lakh
NAVY	
Officers 10,012	Sailors 57,240
	
WHAT ARE THEATRE COMMANDS?	WHY INDIA NEEDS INTEGRATED COMMANDS?
<ul style="list-style-type: none"> ➤ All Army, Navy, Air Force & other military assets/manpower under one operational commander in a geographical region ➤ US has 11 unified combatant commands: 6 'geographic' to handle different part of the globe (Indo-Pacific Command covers entire Asia-Pacific, including India); 5 'functional' to handle nuclear arsenal, special operations, space, cyberspace and transport/mobility ➤ China re-organised 2.3-million PLA into 5 theatre commands in early-2016. The Western Theatre Command handles entire Line of Actual Control with India, from eastern Ladakh to Arunachal Pradesh 	<ul style="list-style-type: none"> ➤ Such commands are cost-effective, save resources and prepare forces for integrated land-air-sea operations ➤ Will help in right-sizing the almost 1.5-million strong armed forces, who are starved of funds for modernisation due to defence budget being hit by ballooning pay and pension bills ➤ India has 17 single-Service commands (Army 7, IAF 7 & Navy 3) and only 2 unified commands ➤ Andaman & Nicobar Command, set up in Oct 2001, is the only theatre command ➤ Strategic Forces Command, set up in Jan 2003, to handle nuclear arsenal

- ✓ The proposed theatre command aims to build an integrated land-air-sea war-fighting machinery for a greater combat punch
- ✓ India's only theatre or geographical command is currently located in the strategically-located Andaman and Nicobar archipelago
- ✓ It places all the assets and manpower of the three services under one operational commander
- ✓ It was commenced in 2001.
- ✓ There was another proposal to establish theatre commands in the shape of one or two (one each for west and east of Nepal) for the "northern borders" with China, a western command for Pakistan, a counterinsurgency operations command and one southern or two peninsular commands for the maritime borders.

ECONOMY

- The Goods and services tax (GST) collections by the Government - crossed ₹1 lakh crore for the second straight month in December 2019 (for November sales)



- ✓ This is almost 9% higher than the December 2018 GST collection of ₹94,726 crore
- ✓ However, the collected amount still falls short of the ambitious ₹1.1 lakh crore monthly target set by the Centre last month for the remainder of this fiscal year.
- ✓ As per the finance ministry estimates, GST collections at over ₹1.03 lakh crore during December (for sales in November) has increased the Centre's revenue by 21.4%, while states saw a 19.3% expansion in their share
- ✓ But an almost 10% drop in integrated GST on imports, indicating that shipments into the country declined during November, resulted in the overall GST receipts being 8.9% higher.

SPORTS

- Spain's Fernando Alonso - is set to become the first Formula One champion to compete in the Dakar Rally, which starts in Saudi Arabia on January 5
- ✓ Alonso, who won the F1 title in 2005 and 2006, decided to compete in the world's most grueling race this year to become a more complete and versatile driver.
- ✓ About 20 F1 drivers have so far competed in the Dakar Rally over the years, but Alonso will be the first World champion to compete in the event.

- ✓ Belgium's Jacky Ickx became the first former F1 driver to win the Dakar Rally, finishing first in 1983 and second in 1986 and 1989.



- ✓ French driver Sebastien Loeb, a nine-time World rally champion, competed in the Dakar Rally from 2016 to 2019, winning 13 stages but never finishing first overall.
 - ✓ The 45-year-old Loeb was unable to take home the bronze 'Touareg Trophy' even though he is the best driver in rally history
 - ✓ Dakar rally, whose inaugural edition was held in 1979, will start in Jeddah and finish in Qiddiyah
 - ✓ It will cover nearly 8,000km distance, with more than 5,000km in a 'timed' manner
 - ✓ The rally will be completed on January 17 this year
- **World Anti Doping Agency (WADA) - released a list of substances and methods that are prohibited in 2020**



- ✓ The list consists of Anabolic agents like androgenic steroids, peptide hormones, growth factors, and mimetics like Erythropoietin (EPO), beta-2 agonists including all optical isomers like Fenoterol and Formoterol.
- ✓ The presence in urine of salbutamol in excess of 1000 ng/ mL or formoterol in excess of 40 ng/mL will also be considered as an Adverse Analytical Finding unless the athlete proves it was due to a therapeutic dose (by inhalation) up to the maximum dose as mentioned.
- ✓ The list also stipulates a ban on hormone and metabolic modulators, diuretics and masking agents.
- ✓ All-natural and synthetic cannabinoids are also prohibited along with glucocorticoids, when administered by oral, intravenous, intramuscular or rectal routes

SECTOR WISE ALLOCATION BY THE FM TO ACHIEVE \$5 TRILLION ECONOMY - REPORT

FM Sitharaman has unveiled ₹1021 cr investment push for infrastructure projects over next 5yrs

ENERGY	(In ₹cr)
Power	11.8L
Renewable	9.3L
Atomic	1.5L
Petroleum, Natural Gas	1.9L

TARGETS FOR 2025

- **619 GW:** Total capacity planned in 2025, up 74% from 356 GW now
- Renewable and nuclear to account for 50% from about a third of the total power mix now
- **36% Jump** in per capita electricity use, from 1,181 kWh to 1,616 kWh

AGRICULTURE	(In ₹cr)
Irrigation	7.7L
Agriculture infrastructure	54.3k
Food processing industries	1.3k
Food & public distribution	5k

TARGETS FOR 2025

- Increase irrigated land to 85 million hectares (about 61% of total) from 68 million hectares (about 49% of total) at present
- Increase use of micro-irrigation to 28% of all irrigated area from 15% today
- Double farmers' incomes
- Build modern silos for storage with capacity of 100 lakh MT. Existing silos have a capacity of 7.25 lakh MT

TRANSPORT	(In ₹cr)
Roads	19.6L
Railways	13.7L
Ports	1.0L
Airports	1.4L

TARGETS FOR 2025

- **1.99 lakh km:** Total proposed National Highway length by 2025. Total NH length set to rise 50% over current length
- Expressways to account for 10%, or 20,000 km, of total NH road length by 2025
- **500 Passenger trains & 30% of 750 stations** to be privatised. 100% of existing railway network to be electrified from 46% now
- **30-35 airports** owned by AAI to be privatised. Target is to be in Top 2 of global aviation market from No. 3 rank at present

SOCIAL INFRA	(In ₹cr)
Higher education	1.2L
School education	37.8k
Health and family welfare	1.7L
Sports	7.6k
Tourism	24.3k

TARGETS FOR 2025

- Raise gross enrolment ratio in higher education to 40% from 25.8%
- Increase spending on health to 2.5% of GDP from 1.28%
- Add 73 new medical colleges

URBAN+RURAL	(In ₹cr)
Urban infra*	16.3L
Rural water & sanitation	3.6L
Rural infra	4.1L

*AMRUT, SMART Cities, MRTS, housing, Jal Jeevan Mission

TARGETS FOR 2025

- Provide piped water supply to 100% of urban and rural households. Currently, less than 25% of urban households have access to drinking water in their premises and 70% of the water in India is contaminated
- Treat 100% of municipal solid waste, up from less than 25% treated currently
- Make metro rail transit available in more than 25 cities. Metro rail systems are active in 11 cities today
- Pucca houses with basic civic amenities for 100% of rural population. In 2019, a majority of rural houses are not pucca

INDUSTRIAL+DIGITAL (₹cr)	
Digital infrastructure	3.2L
Industries & internal trade	3.0L
Steel	8.2k

TARGETS FOR 2025

- Increase internet penetration to 80%. Today, 40% of the population has internet access
- Implement 5G technologies

Source: Ministry of Finance

