

EVERYDAY CURRENT AFFAIRS – JAN 6, 2020

TAMIL NADU

- **The sixth phase of Keeladi excavations – to begin in the second fortnight of January**
- ✓ It will be done alongwith the excavations in Keeladi cluster, at Konthagai burial site, Agaram and Manalur habitation sites.



- ✓ The Tamil Nadu Archaeology Department (TNAD) has associated with Madurai Kamaraj University for assistance during and after the exercise.
- ✓ Madras Institute of Technology, Chromepet will assist in carrying out a preliminary survey of all the sites alongwith an aerial survey of the site using unmanned aerial vehicles (UAVs)
- ✓ The TNAD has also tied up with the National Institute of Advanced Studies, Bengaluru, for metallurgy studies of artefacts, the French Institute of Pondicherry for doing pollen studies, and the Deccan College, Pune, for performing animal bone analysis.
- ✓ The TNAD will also simultaneously commence excavations at Kodumanal in Erode district and Sivagalai and Adichanallur in Thoothukudi district.

NATIONAL

- **India - has adopted a 'National framework' to overcome gender barriers and ensure 'equitable' access to TB care and services to all.**
 - ✓ The framework aims to eradicate tuberculosis in the country by 2025
 - ✓ Based on a data available with the Government, a higher proportion of the 27.4 lakh diagnosed with TB in India are men and the ratio is approximately 2:1 between men and women
 - ✓ The framework deals with interventions under the subjects of 'Detect, Treat, Prevent and Build'.
 - ✓ Under 'Detect', the primary focus will be on removing gender differences during the diagnosis
 - ✓ 'Treat' will include training health workers on adopting a respectful attitude especially in maintaining confidentiality, improving treatment literacy and providing counselling.
 - ✓ The 'Prevent' section will deal with various steps to strengthen periodic screening of women and other care givers who are 'vulnerable'.
 - ✓ 'Build' will focus on capacity development of the programme and tie-up with the private sector to provide patient-centric care
 - ✓ In case of women, under-nutrition, role as caregivers and the use of solid fuel for cooking are considered key causes for the propagation of disease.
 - ✓ In case of men, smoking and alcohol are specific barriers to TB diagnosis and treatment.

- **The Road transport ministry – announced new 'provision' to allow only the security vehicles "accompanying" the specific dignitaries a 'free' ride across all toll plazas without paying the user fee on NH networks.**
 - ✓ As per the new provisions, a "security vehicle" is one which carries security personnel from central armed forces or central para-military forces or state police.
 - ✓ According to the old NHAI rules, vehicles transporting and "officially accompanying" 25 dignitaries including President, Prime Minister, chief justices of the Supreme Court and high courts, Union ministers, chief ministers, judges of SC and HCs, defence chiefs and MPs are exempted from paying toll.

- **Tamil Nadu - to get 256 EV charging stations, which have been approved by the Government under FAME II scheme.**
 - ✓ Overall, the government has approved installation of 2,600 EV charging stations in 62 cities under FAME II project.
 - ✓ Maharashtra tops the number of charging stations with 317 followed by Andhra Pradesh with 266.

- ✓ Gujarat, Rajasthan, and Uttar Pradesh will be provided with 228, 205, and 207 EV charging stations respectively.
- ✓ The union territories of Delhi and Chandigarh are expected to get 72 and 70 charging stations
- ✓ The union territory of Puducherry will get 10, while the newly created union territory of Jammu and Kashmir will get 25 charging points.
- ✓ Uttarakhand and Himachal Pradesh will get 10 each
- ✓ The Government intends to create “atleast one charging station” in a grid of 4 square km area

➤ **The Government - to confer the first ever ‘Antarrashtriya Yoga Diwas Media Samman’ for 30 media houses on January 7**

- ✓ This award will be conferred by Information and Broadcasting Minister Prakash Javadekar
- ✓ The award was instituted in June 2019 to mark the role of media in spreading the art of Yoga to the World
- ✓ A six-member jury, headed by Justice C. K. Prasad (Chairman, Press Council of India), has analysed the nominees for the award
- ✓ The awards will be conferred in the categories of Best Media Coverage of Yoga in Television (8 awards), Best Media Coverage of yoga in Radio (11 awards) and Best Media Coverage of Yoga in Newspapers (11 awards).
- ✓ It has to be recalled that International Yoga Day is celebrated on 21 June because it is the longest day of the year (Summer Solastice)
- ✓ On this day, the exposure of sun rays on the earth is also the longest, thereby creating high positive energy on the body.
- ✓ Also, north pole gets tilted towards the sun during the day and hence sun begins to move from north to south
- ✓ The International Yoga Day was recognized by the United Nations on December 11, 2014, when a proposal was approved by 177 member countries.
- ✓ The first ever International Yoga Day was celebrated on June 21, 2015.
- ✓ It was initiated by Prime Minister of India Narendra Modi.
- ✓ The fifth International Yoga Day was observed on June 21, 2019, with the theme "Yoga for Climate Action"
- ✓ On this day, Prime Minister Narendra Modi participated in a ‘mass’ yoga program in Ranchi, Jharkhand.

➤ **The Bureau of Energy Efficiency (BEE) - has notified new Energy standards for the performance of Air conditioners**

- ✓ It notifies that 24-degree Celsius default setting will be mandatory for all room air conditioners.
- ✓ These energy standards will be applicable from January 01, 2021, onwards.

- ✓ As per the new energy standards, the Indian Seasonal Energy Efficiency Ratio (ISEER) will be - 3.30 to 5.00 for split air conditioners and - 2.70 to 3.50 for window air conditioners
- ✓ ISEER is the ratio between total amount of heat an AC can remove when operated in 'active' mode to the amount of energy required during the same period
- ✓ In 2006, the BEE commenced the voluntary 'star labelling' programme, which was applicable only to fixed speed Room Air Conditioners
- ✓ The concept of default setting was introduced in 2018.
- ✓ Countries like Japan has regulation to keep temperature set default at 28 degree Celsius.
- ✓ According to BEE, the total air conditioner capacity of India is 80 million tonnes of refrigeration.
- ✓ It is estimated that this capacity will increase to 250 million by the year 2030.

INTERNATIONAL

- **The linguists at the American Dialect Society in New Orleans, Louisiana – have chosen 'They' as the 'Word of the Decade' on January 4**
- ✓ The singular pronoun 'They' is used as third-person plural pronoun to refer to those who do not identify with either male or female gender. (non-binary gender)
- ✓ 'They' was also adjudged as the word of the year in 2015
- ✓ The other 'Word of the Decade' nominees include BlackLivesMatter, Climate and #MeToo
- ✓ The American Dialect Society has picked only two 'Word of the decade' winners till now- 'web' for the 1990s decade and 'Google' for 2000s.
- ✓ It has to be recalled that Merriam-Webster dictionary had chosen the word 'They' as the 'Word of the Year' earlier

CONFERENCES & SUMMITS

- **The 5th Asia Pacific Drosophila Research Conference - was held at Pune on January 6, 2020**

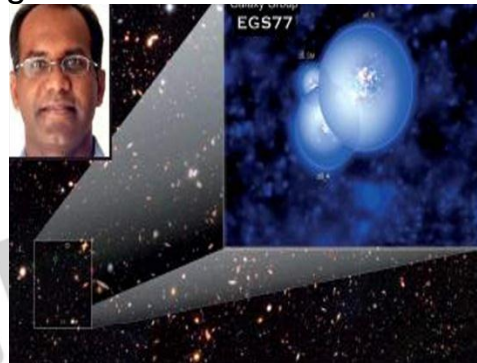


- ✓ It will be organized by the Indian Institute of Science Education and Research between January 6, 2020 and January 10, 2020
- ✓ The event will witness the largest meeting of Drosophila researchers on a global level.

- ✓ *Drosophila* is the small fruit fly, which is being used by researchers as a model organism in researches.
- ✓ The main reason for using the fruit fly as model in genome researches is that the behavior of fruit fly and humans are strikingly similar and both the genres pass on the traits to successive generations in similar way
- ✓ The flies have 15,500 genes on four chromosomes, whereas humans have 22,000 genes in 23 chromosomes.

SCIENCE, TECHNOLOGY & ENVIRONMENT

- **Indian-origin Goa-born scientist, Vithal Tilvi - has discovered a never before-seen group of galaxies, now labelled EGS77**
- ✓ Nasa's international team of astronomers led by Tilvi has sighted EGS77, which is the farthest group of galaxies to have ever been identified.



- ✓ Tilvi was also part of a team that discovered the farthest single galaxy ever sighted by astronomers in 2013
- ✓ Currently, Tilvi is the project leader for a Nasa-funded project to study the black hole using observations taken by the Hubble Space Telescope.
- ✓ Tilvi is also part of the NASA's Wide Field Infrared Survey Telescope (WFIRST) team, which is going to be launched in 2025.
- ✓ The new group of galaxies, EGS77, is estimated to be at a distance of more than 13 billion light years away from the Earth.
- ✓ It took Tilvi and team more than 4 years to come out with their findings.
- ✓ Usually, it is difficult to see galaxies at a distance as far as EGS77 because of the presence of neutral hydrogen fog in the universe, which blocks some of the galaxy light
- ✓ Fortunately, intense heat from these same galaxies clears the surrounding hydrogen fog, thereby allowing galaxy light to travel freely to the Earth
- ✓ The details of the discovery of EGS77 are being presented for the first time on January 5, at the American Astronomical Society conference in Hawaii.
- ✓ By mid of next year, Nasa will be launching James Webb Telescope
- ✓ It is much bigger than Hubble Space Telescope, using which new groups like EGS77 will be further identified.
- ✓ Tilvi is currently a visiting Researcher at the School of Earth & Space Exploration, at the Arizona State University, US

✓ He also contributes to State Higher Education Council of the government of Goa as a Professor of Research, development, and innovation.

➤ **Researchers at Monash University - have developed a new lithium-sulphur batteries that can replace lithium-ion batteries in the nearby future**



- ✓ Lithium ion batteries are used currently in wide applications ranging from iPhones to pacemakers
- ✓ The newly developed lithium-sulphur batteries can power a phone for five continuous days or allow an electric vehicle to travel more than 1,000km without needing to recharge
- ✓ Theoretically, lithium-sulfur batteries are capable of holding up to five-times more energy than lithium-ion ones
- ✓ But, the biggest challenge until now with lithium-sulphur batteries has been the instability of the cathode, which undergoes a 78% change in size each time it goes through a charge cycle.
- ✓ This means the batteries degrade faster and do not last long enough for them to be recharged over and over again
- ✓ Now, researchers at Monash University have developed a very 'flexible' cathode allowing it to handle the 'expansion and contraction' without significant degradation and size change.
- ✓ The commercialisation of the batteries may be between two to four years away, and a patent for the manufacturing process has already been approved.

➤ **India's new world-class facility for training astronauts – to come up at Challakere on the Bengaluru-Pune NH4 in Chitradurga district of Karnataka in the next 3 years.**

- ✓ The Indian Space Research Organisation (ISRO) has proposed a ₹ 2,700-crore master plan to create a world class infrastructure that will house its 'Human Space Flight Centre' (HSFC).
- ✓ When ready, the 400-acre ISRO land at Challakere will be the single-stop infrastructure comprising of all activities related to space travellers.
- ✓ Challakere will also accommodate the work related to crew and service modules of the spacecraft that carries the astronauts.
- ✓ Currently, the country pays a hefty, unnamed sum to use such facilities abroad.

- ✓ The first set of four astronaut candidates for the first Gaganyaan mission of 2022 are supposed to train in Russia.
- ✓ The Institute of Aerospace Medicine of the Air Force has been chosen for their selection and also for the basic and final training in Bengaluru.
- ✓ The amount sought for the HSFC for the purpose is over and above the ₹10,000-crore approved budget of Gaganyaan
- ✓ The HSFC, formally announced in January 2019, has been functioning from a temporary place at the ISRO headquarters, Antariksh Bhavan.
- ✓ It was set up to perform human space missions, complete mission planning, developing engineering systems for survival and safe return of the crew and in selecting and training astronauts.
- ✓ S. Unnikrishnan Nair has been named its Founder-Director and R. Hutton the project director of Gaganyaan.

DEFENCE

- **The Army – is on the process of creation of agile and self-contained integrated battle groups (IBGs) for better theatre commands**
- ✓ The move is part of the ongoing restructuring of the 13-lakh strong Army's entire war fighting machinery to ensure a better offensive operations.

COLD START: MOBILIZE FAST & HIT HARD

THE PAST

- 13-lakh strong Army's strike formations took a month to mobilize under **Operation Parakram** in border launch pads against Pakistan after Dec 2001 terrorist attack on Parliament
- This gave enough time to Pak to shore up defences as well as the international community to intervene
- Led to the "Pro-Active War Strategy" or "Cold Start" aimed at mobilizing fast & striking hard
- A series of major combat exercises conducted over the years to practice swift multiple offensives into enemy territory

THE PRESENT

- Army has designed new integrated battle groups (IBGs) as agile, self-contained fighting formations that can mobilize



fast & hit hard

- Each IBG has around **5,000 soldiers**, with a mix of infantry, armoured, artillery, air defence, signals, engineers, logistics etc
- IBGs exercised on the western & eastern fronts in 2019

THE FUTURE

- The composite IBGs will be commanded by **Major-Generals**. They will be larger than brigades (which have 3,000

- soldiers each) but smaller than divisions (12,000 soldiers)
- Each IBG will be configured as per the nature of threat, the type of terrain involved & the task to be achieved
- **8 IBGs** will first come up under the 9 Corps (headquarters at Yol), 17 Corps (Panagarh) & 33 Corps (Sukna)
- The efficacy of these IBGs will first be validated over 3 to 4 years before more are set up

- ✓ Each of these groups will have around 5,000 soldiers and a varying mix of support units
- ✓ These IBGs have been tested on the western and eastern fronts for their capability to act fast and hit hard
- ✓ The Army first tested the IBGs meant for Pakistan under the 9 Corps in the Chandimandir-based Western Command, in April-May.

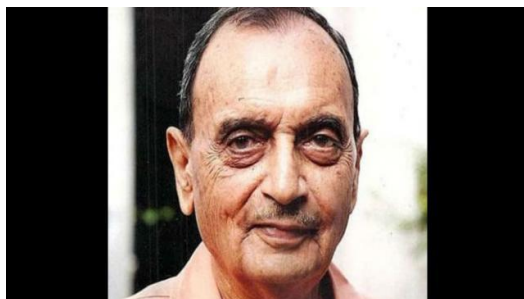
- ✓ Then, the “Him Vijay” exercise was held in October to test the IBGs for mountain warfare in Arunachal Pradesh under the 17 Corps in the Kolkata-based Eastern Command.
- ✓ The Army plans to carve out 8 to 10 IBGs from the 9 Corps (headquarters at Yol, Himachal Pradesh), 17 Corps (Panagarh, West Bengal) and 33 Corps (Sukna, West Bengal)
- **The Army - is likely to sign a Memorandum of Understanding (MoU) with Russia soon for the procurement of over 7.5 lakh AK-203 assault rifles**
- ✓ These rifles will be manufactured locally by an India-Russia joint venture (JV)
- ✓ About 1 lakh rifles will come directly from Russia and the remaining will be manufactured by the JV in India



- ✓ The rifles will be manufactured by the Indo-Russian Rifles Private Limited (IRRPL) at Korwa in Uttar Pradesh.
- ✓ The JV facility is being set up by the Ordnance Factories Board from the Indian side (50.5%), and Rosoboron Exports and Kalashnikov on the Russian side. (49.5%)
- ✓ The Army has appointed Major General Sanjeev Senger as the Chief Executive Officer of IRRPL.
- ✓ In addition to the AK-203, the Army recently began inducting the first batch of 10,000 SIG-716 assault rifles.
- ✓ The contract for these rifles was signed in February 2019
- ✓ The Army has been seeking to replace the indigenous INSAS (Indian National Small Arms System) rifles, which are currently in use, with modern rifles.
- ✓ INSAS is a light machine gun that is currently being manufactured at Ordnance Factory, Trichy, Ishapore Arsenal and Kanpur.
- ✓ It was adopted in 1990 and was widely used during Kargil war

OBITUARY

- **Kamal Singh, the last Maharaja of Dumraon and the last surviving member of the first Lok Sabha (94 years)**



- ✓ Singh was the country's youngest MP, having been elected to the first Lok Sabha in 1952 at the age of 25
- ✓ He represented Buxar parliamentary constituency (Bihar) in the Lok Sabha as an Independent till 1962.
- ✓ He contested parliamentary elections again in 1989 and 1991 from Buxar constituency unsuccessfully
- ✓ He has opened a number of educational institutions and health facilities for the poor in the old Shahabad region

SPORTS

- **New Zealand batsman Leo Carter - entered the record books by becoming the seventh cricketer in the world to hit six sixes in an over**

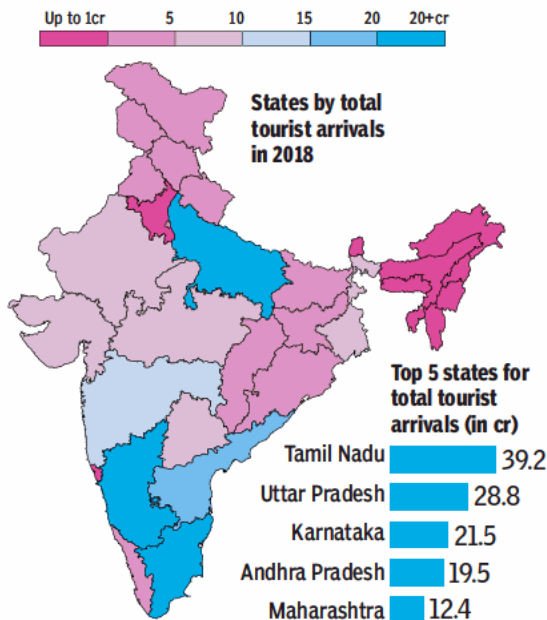


- ✓ Carter achieved the feat during his side Canterbury Kings' win over Northern Knights in New Zealand's domestic T20 tournament Super Smash game.
- ✓ The 25-year-old left-hander hit left-arm spinner Anton Devcich six times over the Hagley Oval boundary during his unbeaten knock of 70 runs off 29 balls
- ✓ Overall, Carter is the seventh player in world cricket to achieve the record across all formats in both domestic and international level.
- ✓ He entered the elite list that includes Gary Sobers (West Indies), Ravi Shastri (India), Herschelle Gibbs (South Africa), Yuvraj Singh (India), Worcestershire's Ross Whiteley (England) and Afghanistan's Hazratullah Zazai.
- ✓ Carter also became only the fourth batsman to achieve the feat in T20 cricket.
- ✓ The others are Yuvraj Singh (2007), Ross Whiteley (2017) and Hazratullah Zazai (2018).
- ✓ Yuvraj Singh hit 6 sixes against England's fast bowler Stuart Broad in the 2007 T20 World Cup.
- ✓ In that T20 World Cup match, Yuvraj Singh also set a new world record by completing a half-century off 12 balls.
- ✓ Ravi Shastri hit the record in a Ranji trophy match between Bombay and Baroda.
- ✓ He also scored the fastest double century in Ranji history in the second innings of that match, scoring 200 from 123 balls
- ✓ Garry Sobers was the first batsman to score 6 sixes in an over in first-class cricket
- ✓ Carter was also a part of New Zealand's 2014 ICC Under-19 team.

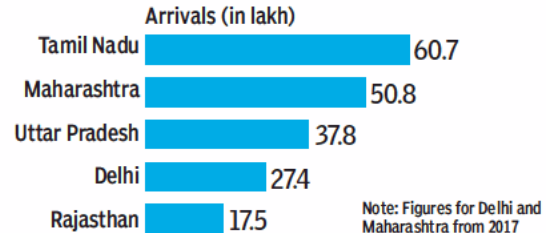
TOURISM IN INDIA – A REPORT

For a second straight year, Tamil Nadu saw the most tourist arrivals despite having one of the lowest expenditures on tourism, finds a study by World Travel and Tourism Council – India Initiative. In 2018, India had nearly 2 billion tourists, both domestic and foreign. A look at how states performed

Agra, Varanasi make UP second-most visited state



Top 5 states for international tourist arrivals in 2018



185cr
Total tourist visits in 2018, a 12% increase from 2017

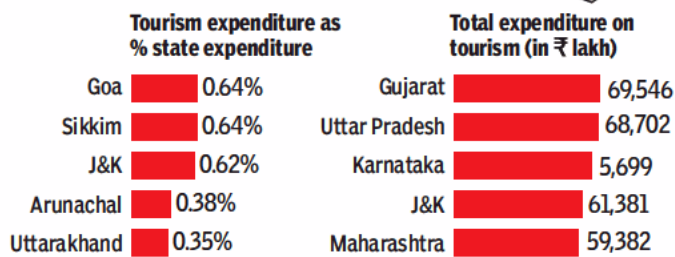
2.89cr
International tourist visits in 2018, up 7% from 2017
Tamil Nadu accounted for 21% of all tourist visits in 2018, followed by UP at 15%

India at present ranks 34 out of 140 economies in terms of travel and tourism competitiveness

Though the government has introduced the e-visa scheme and made efforts to increase India's rank in the 'Ease of Doing Business' index, it is still a long road to becoming a major destination for international tourism

Goa, Sikkim spend biggest chunk of budget on tourism

Top 5 states for expenditure on tourism in 2018-19



\$247 billion
India's tourism GDP in 2018, up by 6.7% from 2017. Tourism contributed about 9% to the country's total GDP

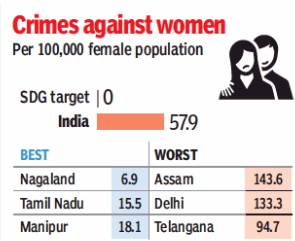
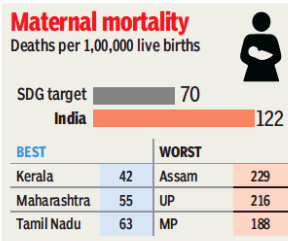
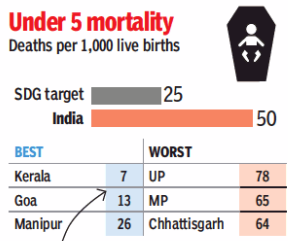
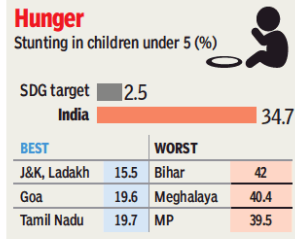
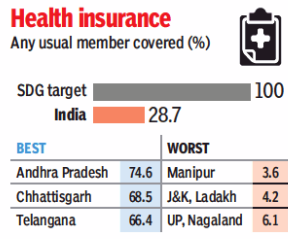
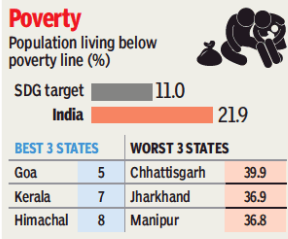
4.3cr
Jobs generated, directly and indirectly, by the tourism and travel industry in 2018

► The growth was largely driven by domestic tourism

₹1,518cr
Combined states' spending on marketing and publicity for tourism

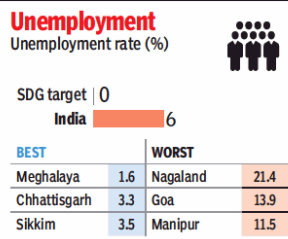
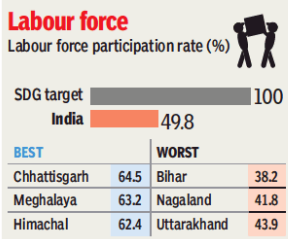
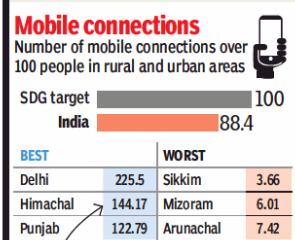
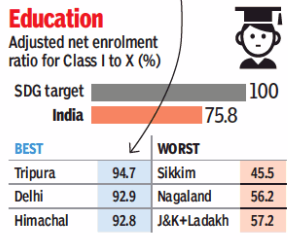
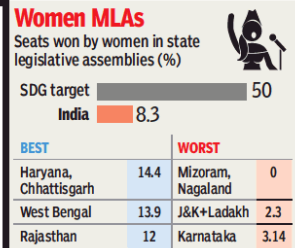
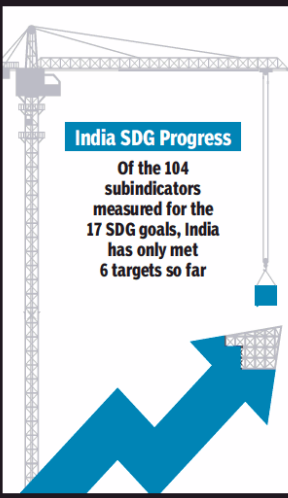
SDG INDIA INDEX – A REPORT

Sustainable Development Goals (SDGs), set at the United Nations, are a set of targets across 17 sectors ranging from poverty to environment to be met by all member states by 2030. Since the objectives were set in 2015, India has taken promising steps on meeting some of those goals, but remains a long way off its target on many others, shows the 2019 SDG India Index compiled by Niti Aayog. A look at India's progress so far on 14 selected socioeconomic subindicators



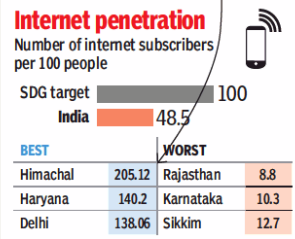
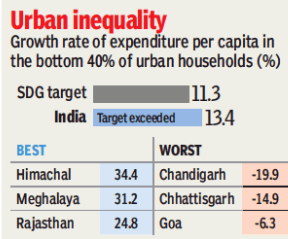
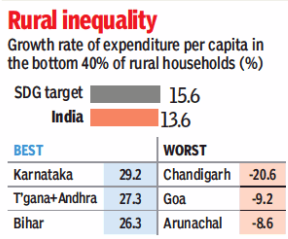
Kerala and Goa have substantially lower infant mortality rates than the SDG target of 25/1,000 live births. On maternal mortality ratio, however, only 3 states have met the target

5 states and Delhi have more than 90% school enrolment. Tamil Nadu, Kerala and Goa are the remaining ones



Delhi, Himachal, Punjab, Kerala, Tamil Nadu, Karnataka and Gujarat have met and exceeded the target of 100 mobile connections per 100 persons

Himachal, Haryana, Delhi, Odisha and Kerala have met and exceeded the target of 100 internet subscribers per 100 population



Note: All UTs except Chandigarh, Delhi, J&K and Ladakh excluded

Source: Niti Aayog