News Analysis (31 Dec, 2019)

India State of Forest Report (ISFR) 2019

Why in News

The Ministry for Environment, Forests and Climate Change has released the India State of Forest Report (ISFR), 2019.

- ISFR is a **biennial publication** of **Forest Survey of India (FSI),** an organization under the Ministry of Environment Forest & Climate Change.
- The ISFR **assesses** the forest and tree cover, bamboo resources, carbon stock and forest fires.
- The 2019 report for the first time has assessed the qualitative nature of the forest cover, including listing its biodiversity and the type of plants and trees found.
- It also created a **national forest inventory for the first time** on produce from forests.

Key Findings

- **Increase in Forest Cover**
    - The country's forest cover includes all patches of land with a tree canopy density of more than 10% and more than 1 hectare in area, irrespective of land use, ownership and species of trees.
    - The total forest cover of the country is 7,12,249 sq km which is **21.67% of the geographical area** of the country.
    - The **top five states** to have shown an increase in forest cover include **Karnataka (1,025 sq km) > Andhra Pradesh (990 sq km) > Kerala (823 sq km) > J&K (371 sq km) > Himachal Pradesh (334 sq km).**

- **Decline of Forest Cover in North Eastern Region**
  - Total forest cover in the North Eastern region is 1,70,541 sq km, which is 65.05% of its geographical area.
  - There has been a decrease of forest cover to the extent of 765 sq km (0.45%) in the region. **Except Assam and Tripura, all the States** in the region show **decrease** in forest cover.
- **Forest Cover in Tribal Districts**
  - The total forest cover in the tribal districts is 4,22,351 sq km, which is 37.54% of the geographical area of these districts.
  - There has been a decrease of 741 sq km of forest cover within the Recorded Forest Area/ Green Wash (RFA/GW) in the tribal districts and an increase of 1,922 sq km outside.
  - There has been a decline in tree cover inside forests due to tribal populations getting **"land titles" (patta)** and there has been a rise in trees outside the forest area due to an increase in tree plantation and afforestation activities.

Note

- **Recorded Forest Area:** The area recorded as forest in the Government records.
- **Green Wash:** The extent of wooded areas generally shown in light green colour on the Survey of India toposheets.

- **Increase in the tree cover**
  - Tree cover includes all patches of trees less than 1 hectare.
  - The tree cover of the country is estimated as 95,027 sq km which is 2.89% of the geographical area.
  - **Maharashtra has had the highest increase in tree cover** and a large part of that is due to horticulture.
- **In comparison to 2017**
  - The 2019 survey has found an increase of 5,188 sq km in total forest and tree cover in the country.
  - **Tree and forest cover** together made up **24.56% (8,07,276 sq km)** of India's area. In the **last assessment** it was **24.39%.**
  - The nation's tree and forest cover has largely hovered from 21-25% and is short of the **National Forest Policy, 1988,** which envisages 33% to be under such cover.
- Mangrove cover in the country has increased by 54 sq km (1.10%) as compared to the previous assessment.

- **Carbon Stock**
    - The total carbon stock of the country was estimated at **7124 million tons,** which is an **increase of 42.6 million tons** from the last assessment.
    - It implies that India is on the right track to achieve its Paris Agreement commitment of 2.5 -3 billion carbon sinks.
- **Wetlands**
    - The total number of wetlands located within the RFA/GW is 8.13%.
    - Amongst the States, **Gujarat** has the largest area of wetlands within RFA in the country followed by **West Bengal.**
- **Forest Produce**

    Dependence of fuelwood on forests is the highest in the State of Maharashtra, whereas, for fodder, small timber and bamboo, dependence is highest in Madhya Pradesh.
- The analysis reveals that 21.40% of the forest cover of the country is highly to extremely fire prone.

National Forest Policy, 1988

- The policy aims at maintaining of environmental stability.
- It looks at conserving the natural heritage of the country by preserving the remaining natural forests.
- Increasing forest/tree cover in the country through massive afforestation and social forestry programmes.
- Creating a massive people's movement for achieving these objectives and to minimise pressure on existing forests.
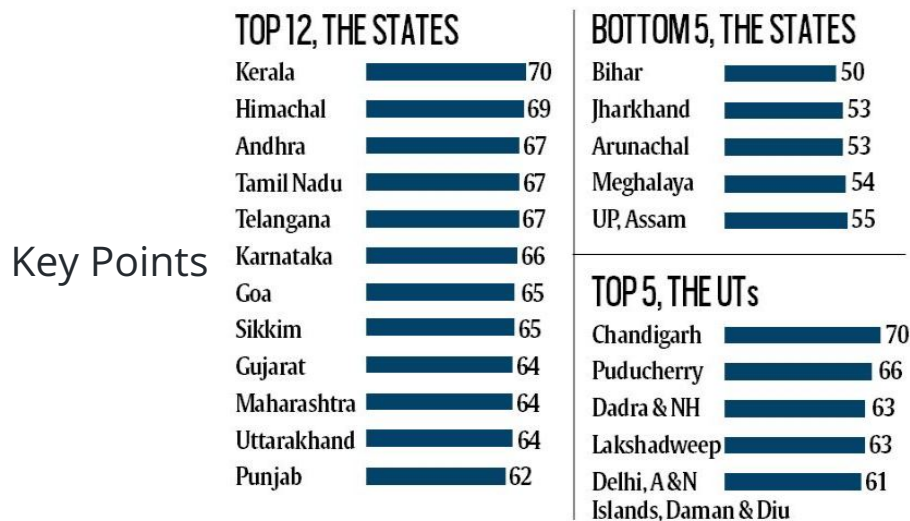
Source: TH

SDG India Index by NITI Ayog

Why in News

NITI Aayog has released the **second edition of the <u>Sustainable Development Goals</u> (SDG) India Index (SDG Index 2.0).**

- The index documents the **progress made by India's States and Union Territories** towards achieving the **2030 SDG targets.**
- The Index spans 16 out of 17 SDGs which marks an **improvement over the <u>2018 Index,</u>** which covered only 13 goals.

- The SDG India Index has been developed **in collaboration** with the Ministry of Statistics and Programme Implementation (MoSPI), the United Nations, and the Global Green Growth Institute.
- The year **2020 will be the 5th anniversary** of the adoption of SDGs by 193 countries at the UN General Assembly.

Key Points

TOP 12, THE STATES

State	Score
Kerala	70
Himachal	69
Andhra	67
Tamil Nadu	67
Telangana	67
Karnataka	66
Goa	65
Sikkim	65
Gujarat	64
Maharashtra	64
Uttarakhand	64
Punjab	62

BOTTOM 5, THE STATES

State	Score
Bihar	50
Jharkhand	53
Arunachal	53
Meghalaya	54
UP, Assam	55

TOP 5, THE UTs

UT	Score
Chandigarh	70
Puducherry	66
Dadra & NH	63
Lakshadweep	63
Delhi, A&N Islands, Daman & Diu	61

Methodology Followed

- A **composite score** for SDG Index (2019) was computed in the **range of 0–100** for each State/UT based on its aggregate performance across 16 SDGs.
    - The **higher the score** of a State/UT, the **closer** it is towards **achieving the 2030 national targets.**
- States /UTs are classified based on the SDG India Index Score as follows:
    - **Aspirant:** 0–49
    - **Performer:** 50–64
    - **Front Runner:** 65–99
    - **Achiever:** 100

National Analysis

- India's composite **score improved** from 57 in 2018 to 60 in 2019-20 with major success **in water and sanitation, power and industry.**
    - However, **nutrition and gender equality continue to be problem areas** for India, requiring a more focused approach from the government
- The ranks of **14 states have dropped** in the index **compared to 2018.**
- All states and union territories **except for Delhi** have scored **above 65.**

State/UT Wise Analysis

- **States:**
  - **Kerala** has the **top rank** with a score of **70** followed by **Himachal Pradesh with 69 points.** Further, Andhra Pradesh, Tamil Nadu and Telangana shared the third spot with each state scoring 67 on the Index.
  - **Bihar** has emerged as the **worst performer** with the **lowest** score of **50.** Jharkhand, Arunachal Pradesh, Meghalaya and Uttar Pradesh are also some of the worst-performing states on the index.
  - **Uttar Pradesh** has shown **maximum improvement** followed by Odisha and Sikkim.
- **Union Territories:**
  - **Chandigarh** has **topped** the list with the score of 70 followed by **Puducherry** with **66.**

GOAL-WISE TOP STATE/UTs

Goal 1: No Poverty
Tamil Nadu, Jammu & Kashmir, and Ladakh

Goal 2: Zero Hunger
Goa and Chandigarh

Goal 3: Good Health and Well-being
Kerala and Puducherry

Goal 4: Quality Education
Himachal Pradesh and Chandigarh

Goal 5: Gender Equality
Himachal Pradesh, Jammu & Kashmir, and Ladakh

Goal 6: Clean Water and Sanitation
Andhra Pradesh and Chandigarh

Goal 7: Affordable and Clean Energy
Sikkim and Puducherry

Goal 8: Decent Work and Economic Growth
Telangana and Chandigarh

Goal 9: Industry, Innovation and Infrastructure
Kerala, Gujarat, Daman and Diu, Delhi and Dadra and Nagar Haveli

Goal 10: Reduced Inequality
Telangana and Andaman and Nicobar Islands

Goal 11: Sustainable Cities and Communities
Himachal Pradesh, Goa and Chandigarh

Goal 12: Sustainable Consumption and Production
Nagaland and Chandigarh

Goal 13: Climate Action
Karnataka and Lakshadweep

Goal 14: Life Below Water
Karnataka

Goal 15: Life on Land
Sikkim, Manipur, Dadra and Nagar Haveli and Lakshadweep

Goal 16: Peace, Justice and Strong Institutions
Gujarat, Andhra Pradesh and Puducherry

<u>**Source: TH**</u>

AFSPA Extended in Nagaland

Why in News

The **Ministry of Home Affairs (MHA)** has declared the **entire State of Nagaland** as a **"disturbed area"** for six more months, under the **Armed Forces (Special Powers) Act, 1958 (AFSPA).**

> According to the **Ministry of Home Affairs,** the area comprising the whole of State of Nagaland is in a **disturbed and dangerous condition** and the use of armed forces in aid of civilian power is necessary.

Armed Forces (Special Powers) Act, 1958 (AFSPA)

- The Act came into force in the context of **increasing violence in the North-eastern States** decades ago, which the State governments found difficult to control.
- AFSPA gives armed forces the **power to maintain public order in "disturbed areas".** They have the authority **to prohibit a gathering of five or more persons** in an area, can use force or even open fire after giving due warning if they feel a person is in contravention of the law.
- If reasonable suspicion exists, the army can also **arrest a person without a warrant;** enter or search premises without a warrant; and ban the possession of firearms.

Disturbed Areas

- A disturbed area is the one which is declared by notification under **Section 3 of the AFSPA.** It can be invoked in places where the use of armed forces in aid of civil power is necessary.
- An area can be considered to be disturbed due to differences or disputes between members of different religious, racial, language or regional groups or castes or communities.
- The **Central Government or the Governor of the State or administrator of the Union Territory** can declare the **whole or part of the State or Union Territory** as a **disturbed area.**
- Once declared 'disturbed', the region is maintained as disturbed for a **period of three months** straight, according to **The Disturbed Areas (Special Courts) Act, 1976.** The government of the state can suggest whether the Act is required in the state or not.

States under AFSPA, Act

- It is effective in the whole of Jammu and Kashmir, Nagaland, Assam, Manipur (excluding seven assembly constituencies of Imphal) and parts of Arunachal Pradesh.
- In Arunachal Pradesh, the impact of AFSPA has been reduced to eight police stations.

Source: TH

Electro-Kinetic Streaming to Tap Energy from Water

Why in News

The **Indian Institute of Technology-Guwahati (IIT-G) researchers** have developed materials that can **produce energy from flowing or stagnant water in households.**

> The decentralised energy model involves a large number of small generation devices which can generate energy in every household and the excess energy can be transferred to energy-deficient areas nearby.

Key Points

- The generation of energy from water in various forms like river flow, ocean tides, stagnant water and even raindrops is now known as **"Blue Energy".**
    - These are the traditional form of blue energy and there have been efforts to harness the power of water in other ways. One such out-of-the-box blue source is electrokinetic energy.
- Two different methods have been employed to harvest energy from the flowing water and the stagnant waters.
- **Electro-Kinetic Streaming Potential:**
    - By this method, energy can be harvested from flowing tap water.
    - When fluids stream through tiny channels that are charged, they can generate an electrical voltage, which may be harnessed through miniaturised generators.
    - Although the exploration of such electrokinetic phenomena and their possible use for energy conversion have been known for over half a century, they have not been harnessed because of low efficiency arising from the unsuitability of channels for the fluid stream.
- **Contrasting Inter-Facial Activities:**
    - These entail different types of semiconducting materials to generate power from stagnant water.
    - Devices were fabricated with doped graphene flakes for generating power by dipping in a bucket of water in the stagnant water source to "complementary charge transfer activities".
        - Graphene is the sheet produced by oxidation followed by reduction of natural graphite flakes.
        - Graphene was modified to manipulate its electron density so that even stagnant water in contact with this form of graphene can produce energy.

Streaming Potential

It is the potential difference at zero current produced by the convective flow of charge due to a pressure gradient (flow of liquid) through a charged capillary, membrane, plug, or diaphragm.

Source: TH

Portal to Block and Trace Stolen Mobiles

Why in News

Recently, the government has launched a portal that will enable blocking and tracing of stolen or lost mobile phones.

> The initiative was launched in **Mumbai in September 2019** and has been rolled out for **Delhi-NCR now.** It will be extended to **other parts** of the country **in 2020.**

Key Points

- The project is **backed by the <u>Central Equipment Identity Register</u> (CEIR) system,** which was undertaken by the telecom department for addressing security, theft and other concerns including reprogramming of mobile handsets.
- It will facilitate requests for **blocking** of stolen or lost mobile phones by customers, allowing services to other existing customers having mobile phones with the same **International Mobile Equipment Identity (IMEI)** number, **sharing of traceability data** with police authorities, as well as **unblocking** of recovered phones.

International Mobile Equipment Identity

- Every phone or mobile broadband device has this **unique 15 digit code** that precisely identifies the device.
- Mobile phone manufacturers assign IMEI numbers to each device based on ranges allotted to them by the **Global System for Mobile Communications Association.**
- Dual-SIM phones will have two IMEI numbers.

- IMEI number is programmable and criminals can reprogramme the 15-digit unique number, which results in the cloning of IMEI. Consequently, there are multiple phone devices and hundreds of numbers with the same IMEI number.
- If such IMEI is blocked, a large number of mobile phones stand the risk of being blocked causing inconvenience to genuine customers.
  > The software that has been developed now allows an individual phone to be blocked even if it is on a cloned IMEI number.

- Moreover, because of the centralised nature of the register or database, all the operators can block the particular stolen or lost device across the country even though the phone is being serviced by one particular operator.

Source: TH

Nirmal Fort and Udasi Mutt

Why in News

Nirmal Fort and Udasi mutt in Nirmal Town in Adilabad district of Telangana are undergoing ruination.

Nirmal Fort

- Nirmal is a prominent town in Adilabad district. The town has glorious past due to patronization of arts and culture by ruling nobility.
- The region was ruled by Kakatiyas, Chalukyas, the Qutubshahis and Nizams who have contributed immensely to the growth of cultural heritage.
- Nirmal Fort, also called as the Shamgarh fort, was built by the French.
- Nirmal is about 280 km north of Hyderabad. It is renowned for wooden toy industry and Nirmal Plates that depict miniature paintings and floral design.

Udasi Mutt

- The Udasi mutt in Nirmal town was built around 1822 in the Deccan by Dewan Chandulal, who was the Prime Minister for Nizam, Asaf Jah III, a follower of the Udasi sect of ascetics which was based on the teachings of Guru Nanak's elder son Sri Chand.
- Followers of Sri Chand established mutts at all the places visited by Guru Nanak.
- The mutt in Nirmal Town was built during Guru Nanak's second Udasi between 1511 CE and 1513 CE.
    - To spread the "real message of God" Sri Guru Nanak Dev ji travelled in all four direction – North, East, West and South, these long travels are known as the "Four Udasis".
    - Udasis were the missionary travels of Guru Nanak, the second one covering Sri Lanka and the Deccan, including Vijayawada and Guntur in Andhra Pradesh, and Hyderabad and Nirmal in Telangana.

Source: TH

80th Session of Indian History Congress

Why in News

Recently, the **80th session** of the **Indian History Congress (IHC)** was held at **Kannur, Kerala,** between **28th and 30th December 2019.**

> It called upon political and administrative authorities to pursue the constitutional duty of promoting composite culture, which is vital to promoting the territorial unity of India.

Indian History Congress

- In **1935,** an **All India Congress** was organised by the **Bharata Itihasa Samshodhaka Mandala (BISM)** to celebrate its silver jubilee. The event resulted in the inception of the **IHC.**
- **Role of IHC:**
    - To regulate the standard of works of history produced in India.
    - To promote impartial and substantive history.
    - To commit to a fair and scientific history, devoid of bias and politics.
- It passed significant resolutions regarding the protection of monuments of historical importance and the role the government and **Archaeological Survey of India** should play in their preservation.
- In **1946,** it **petitioned the government to allow researchers access to archives.**
- It also began to engage with the history taught in schools and colleges and in **1948,** it **resolved to contribute to the syllabi in universities and colleges** across the country.

Archaeological Survey of India

- It is the premier organization for the archaeological research, scientific analysis, excavation of archaeological sites, conservation and preservation of protected monuments.
- It is an attached office under the **Department of Culture, Ministry of Culture.**
- It was founded in **1861 by Alexander Cunningham, who became its first Director-General.**

Source: TH

Merchant Discount Rate

Why in News

From 1st January, 2020, businesses with an annual turnover of more than ₹50 crore will have to offer low cost digital payment options to customers and Merchant Discount Rate (MDR) will not be levied on either customers or merchants.

- Low cost digital payment modes will include options such as BHIM UPI, UPI QR Code, Aadhaar Pay, Debit Cards, NEFT, RTGS, among others.
- The move is expected to boost payments via home-grown real-time payments system Unified Payments interface (UPI) at merchant locations, along with RuPay debit cards.
- MDR is the cost paid by a merchant to a bank for accepting payment from their customers via digital means. The merchant discount rate is expressed in percentage of the transaction amount.
    - Presently, it is applicable for online transactions and QR-based transactions.
    - The amount that the merchant pays for every transaction gets distributed among three stakeholders--the bank that enables the transaction, vendor that installs the point of sale (PoS) machine and the card network provider such as Visa, MasterCard, RuPay.

Source: TH