

1. Smart Cities

Topic: Governance



In News: Bhopal, Surat, Bhubaneswar, Udaipur, Ahmedabad, Varanasi and Indore are set to be declared India's 'first set of smart cities'.

More on the Topic:

- The Smart Cities Mission, launched on June 25, 2015, to 'smarten up' cities with eco-friendly hi-tech solutions to urban problems, is in its last year of implementation. The mission period ends in June 2023. Of the 100 cities, the seven have taken a lead with most projects completed.

More on Smart City Mission:

- The National Smart Cities Mission is **an urban renewal mission** launched on June 25, 2015, to promote cities to provide core infrastructure, a clean and sustainable environment, and a decent quality of life to their citizens through the application of 'smart solutions'.
- The purpose of the Smart Cities Mission is to drive economic growth and improve the quality of life of people by enabling local area development and harnessing technology, **especially technology that leads to Smart outcomes.**
- **The Ministry of Housing and Urban Affairs (MoHUA) is the implementing ministry** in collaboration with the respective state governments. It is a centrally sponsored scheme that initially included 100 cities to be covered between 2019 and 2023.

Challenges ahead:

- Creating energy-efficient and green buildings needs to be addressed effectively. It has not achieved optimally.
- Self-reliant Urban Bodies are one of the important aims of Smart city mission. This has not been achieved in most of the cities.
- There is need to increase citizens use of public transport. Innovative solutions to attract and retain public transport consumers are the need of the hour.
- Increased pace in urbanization has led to increased pollution, congestion, etc. Innovative technologies are needed to address the same.

Source: Indian Express

2. State of the World's Forest Report

Topic: Environment and Ecology

In News: The he State of the World's Forests 2022 (SOFO 2022) was released by the United Nations Food and Agriculture Organization (FAO).

More on the Topic:

- The world has lost approximately 10.34 per cent of its total forest area in the last 30 years.
- Although the rate of deforestation was declining, 10 mha of forests were lost every year between 2015 and 2020.
- More than 700 mha of forest (18 per cent of total forest area) is in legally established protected areas. **Nevertheless, forest biodiversity remains under threat from deforestation and forest degradation.**
- Unless additional action is taken, an estimated 289 mha of forests would be deforested between 2016 and 2050 in the tropics alone, **resulting in the emission of 169 GtCO₂e.**
- Globally, ecosystems at risk of deforestation or degradation **contain at least 260 Gt of irrecoverable or difficult-to-recover carbon**, particularly in peatlands, mangroves, old-growth forests and marshes.



- Restoration of degraded land through afforestation and reforestation could cost-effectively take 0.9 to 1.5 GtCO₂e per year out of the atmosphere between 2020 and 2050.
- More than 140 countries have pledged, through **the Glasgow Leaders' Declaration on Forests and Land Use**, to eliminate forest loss by 2030 and to support restoration and sustainable forestry.

Significance of Protecting Forests:

- Forest are important to keep the global temperature below 1.5°C
- Improved forest protection would reduce the risk of future pandemics
- It will also ensure food security and nutrition for all
- Forests plays an important role in eliminating poverty and conserving the planet's biodiversity.

Way Forward Suggested by the report:

- **Halting deforestation** and maintaining forests
- Restoring degraded lands and expanding agroforestry
- **Sustainably using forests** and building green value chains

Source: Indian Express

3.Stratospheric Observatory for Infrared Astronomy (SOFIA) mission

Topic: Science and Technology

In News: NASA would shut down the operations of Stratospheric Observatory for Infrared Astronomy (SOFIA) mission by end of 2022.

More on the Topic:

- SOFIA is a 2.7-meter infrared telescope sitting inside a Boeing 747SP airplane, flying at an altitude of 38,000-45,000 feet above the surface.
- It's the second-most expensive astrophysics mission.
- **SOFIA was designed to observe cosmic objects in far-infrared wavelengths.** This allows researchers to watch star formation by looking through huge, cold clouds of gas.
- **SOFIA is a collaboration between NASA and the German Space Agency (DLR).**
- Since its inception in 2014, SOFIA has been collecting data to understand star birth and death and the formation of new solar systems.





- It has also been keeping a close eye on planets, comets and asteroids in our solar system, nebulas and galaxies, celestial magnetic fields and black holes at the centre of galaxies.

Source: Indian Express

4. World Press Freedom Index

Topic: Reports and Indices

WORLD PRESS FREEDOM INDEX

INDIA SLIPS TWO PLACES

Source: Civildaily

India made its debut on this index in 2013 at 140 out of 180 nations. The rankings gradually improved, reaching 136 in

2017. However, it has since slipped back to 140 this time. South Asia, in general, features poorly on the index, with Pakistan dropping three places to 142, and Bangladesh dropping four places to 150



Rank	Countries	Score	Rank	Countries	Score
1	Norway	7.82	10	Costa Rica	12.24
2	Finland	7.90	33	UK	22.23
3	Sweden	8.31	48	USA	25.69
4	Netherlands	8.63	106	Nepal	33.40
5	Denmark	9.87	140	India	45.67
6	Switzerland	10.52	142	Pakistan	45.83
7	New Zealand	10.75	149	Russia	50.31
8	Jamaica	11.13	150	Bangladesh	50.74
9	Belgium	12.07	177	China	78.92

In News: India has slipped 8 places on the World Press Freedom Index 2022. With a global score of 41, India has gone down to the 150th position from 142 last year.

More on the Topic:

- The index is being released by **Reporters Without Borders(RSF)** on May 3, which is observed as the World Press Freedom Day, assesses the state of journalism in 180 countries and territories.

- Norway with a global score of 92.65 is at the top of the list followed by Denmark and Sweden.
- **The parameters for Ranking** include pluralism, media independence, media environment and self-censorship, legislative framework, transparency, and the quality of the infrastructure that supports the production of news and information.

Source: Indian Express

5. The frilled shark

Topic: Environment and Ecology

In News: Frilled Shark was caught by fishermen.

More on the Topic:

- The frilled shark is a pre-historic creature with 300 teeth that has been roaming the seas since the time of the dinosaurs.
- Dubbed the “living fossil”, the creatures have hardly even changed over the last 80 million years.
- Its intimidating teeth and knowledge of the creature suggests they pose the biggest threat to other fish - having a hinged jaw to catch larger prey.
- **It has been found in waters across the Atlantic and in waters off the coasts of Japan and Australia.**
- But because **the shark lives in extreme depths and is actually rarely caught**, scientists are unsure of how many there are in population.
- Conservation Status: International Union for the Conservation of Nature list - species of least concern.
- But it was noted that increasing deep water commercial fishing could in fact increase the likelihood of the frilled shark becoming an unwanted catch.



Source: Down to Earth

6. Shigella

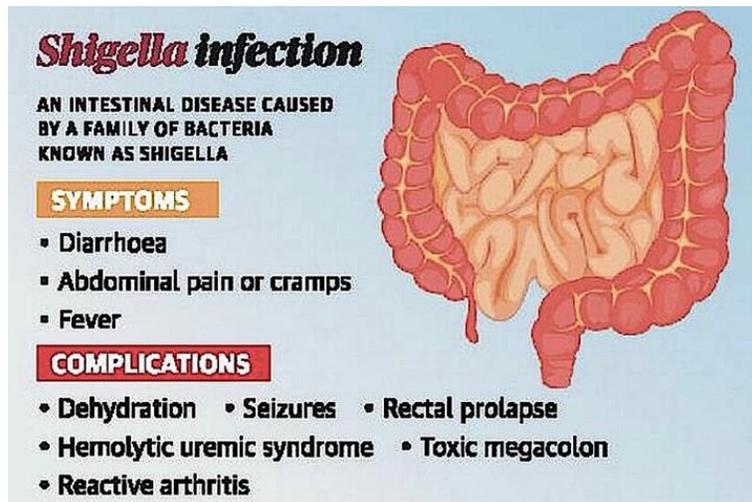
Topic: Environment and Ecology

In News: The Kerala health department has identified Shigella bacteria as the cause for the food poisoning incident in Kerala, which claimed the life of a 16-year-old girl and led to 30-odd others being admitted to hospital.

More on the Topic:

- Shigella is a bacterium that belongs to the enterobacter family — a group of bacteria that reside in the intestine, not all of which cause disease in humans.
- It mainly affects the intestine and results in diarrhoea, sometimes bloody, stomach pain, and fever.
- The infection spreads easily as it takes only “a small number of bacteria to make someone ill”.
- It is easily spread by direct or indirect contact with the excrement of the patient.
- Shigellosis is not a very common infection like the typhoid and cholera.
- **The infection does not generally kill, unless the patient has a weak immune system or the pathogen is resistant to the antibiotics that are prescribed.**
- Products such as milk, chicken, and fish can get infected easily and must be kept at a proper temperature. **They must also be properly cooked to avoid infections.**
- **Washing hands and keeping hygiene also will help to avoid Shigella contamination.**

Source: Hindu



7. Sin Goods

Topic: Economy

In News: The Govt may subsume sin goods cess into GST to pacify states.

More on the Topic:

- Subsuming the cess into GST will mean that the states will get half of the proceeds as state GST (SGST) in addition to getting 41% of the Centre's GST collections.
- **Sin Tax:** A sin tax is an excise tax specifically levied on certain goods deemed harmful to society and individuals, such as alcohol, tobacco, drugs, candies, soft drinks, fast foods, coffee, sugar, gambling etc.
- **Cess:** Different from the usual taxes and duties like excise and personal income tax, a Cess is imposed as an additional tax besides the existing tax (tax on tax) with a purpose of raising funds for a specific task.
- For example, the Swachh Bharat cess is levied by the government for cleanliness activities that it is undertaking across India.



Source: Hindu