

Global Report on Assistive Technology (GReAT)

❖ Context

- The World Health Organization (WHO) and United Nations Children's Fund (UNICEF) have recently launched the first **Global Report on Assistive Technology (GReAT)**.



❖ What is Assistive technology?

- Assistive technology is an umbrella term covering the systems and services related to the delivery of **assistive products and services**.
- Assistive technology is products, equipment, and systems that enhance learning, working, and daily living for persons with disabilities.
- Assistive technology (AT) is any item, piece of equipment, software program, or product system that is used to increase, maintain, or improve the functional capabilities of persons with disabilities.
 - These include a very wide range of technologies and devices such as prosthetics, braces, walkers, special switches, special-purpose computers, screen readers and specialised curricular software.

❖ About Global Report on Assistive Technology

- This report is the culmination of the **71st World Health Assembly resolution** in 2018 to prepare a global report on effective access to **assistive technology**.
- GReAT presents evidence for the first time on the global need for and access to **assistive products**.
 - It provides a series of recommendations to expand availability and access, raise awareness of the need, and implement inclusion policies to improve the lives of millions of people.
- The current report supports the implementation of the **UN Convention on the Rights of Persons with Disabilities and making universal health coverage (UHC) inclusive** and achieving the **Sustainable Development Goals (SDGs)**.

❖ Key-Highlights of the Report (Magnitude of the Problem)

- The number of people in need of one or more assistive products is likely to rise to 3.5 billion by 2050, due to population aging and the prevalence of non-communicable diseases rising across the world. Also, affordability is a major barrier to access.
- There is the vast gap in access between low- and high-income countries. An analysis of 35 countries reveals that access varies from 3% in poorer nations to 90% in wealthy countries.
- A billion of them are denied access, particularly in low- and middle-income countries, where access can be as low as 3% of the need for these life-changing products.
- Affordability is a major barrier to access. More than 2.5 billion people need one or more assistive products, such as wheelchairs, hearing aids, or apps that support communication and cognition.
- A survey of 70 countries featured in the report found large gaps in service provision and trained workforce for assistive technology, especially in the domains of cognition, communication, and self-care.

❖ Other Initiatives

- The WHO launched the **Priority Assistive Products List** in 2018.
- These include hearing aids, wheelchairs, communication aids, spectacles, artificial limbs, pill organisers, memory aids and other essential items for the elderly and person with disabilities.

The Lancet Planetary Health Report

❖ Context

- The Lancet Planetary Health published a report on air pollution.



❖ Key Highlights On Air Pollution

- Air pollution was responsible for **16.7 lakhs deaths in India in 2019** or **17.8% of all deaths in the country**.
- This is the **largest number of air pollution related deaths of any country**.
- **9.8 lakhs deaths were caused by PM 2.5**. 6.1 lakh were caused by household air pollution.
- Air pollution is **most severe in the Indo-Gangetic Plain**.
- **Burning of biomass in households was the single largest source** of deaths, followed by coal combustion and crop burning.
- **Globally**, air pollution alone contributes to **66.7 lakhs deaths**. Overall, pollution was responsible for 90 lakhs deaths (1 in 6).

- **WHO has lowered the guideline value for PM 2.5 from 10 microgram per cubic metre to 5 microgram per cubic metre** which may make hardly any place in India to follow the WHO norm.

❖ Key Highlights On Lead Pollution

- Globally, more than **80 crore children (27.5 crore in India)**, are estimated to have blood lead concentrations that exceed 5µg/dL.
- The level of concentration that has been established by the US Centres for Disease Control and Prevention for intervention is 3.5µg/dL.
- Earlier, the source of lead pollution was leaded petrol which has been replaced. Other sources are unsound recycling of **lead acid-batteries**, **e-waste** without pollution controls, **spices contaminated with lead**, **pottery glazed with lead salts** and lead in **paint and other consumer products**.

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Urban Heat Island

❖ Context

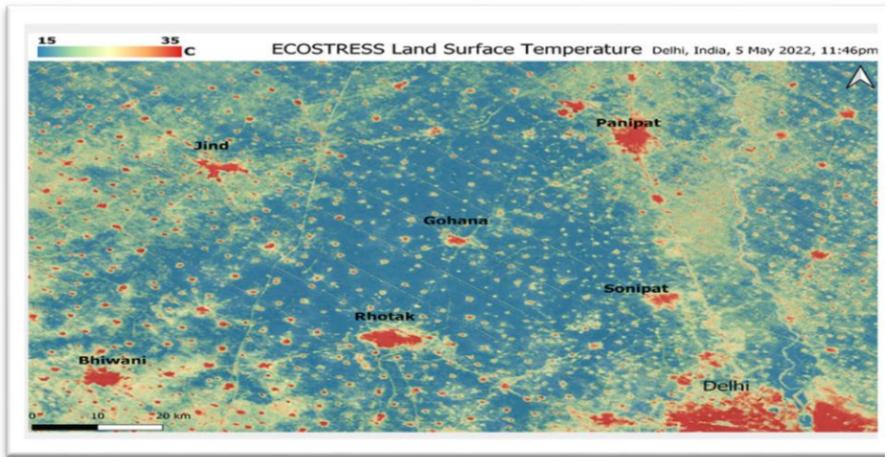
- Around midnight on May 5, **NASA's ECOSTRESS** captured an image covering 12,350 sq. km of north west Delhi.

❖ Key Highlights

- The image shows a **stark temperature difference of around 20 degree celsius** between urban and rural pockets during night time.
- Red patches delineate urban heat islands amid significantly cooler rural patches.

❖ What is Urban Heat Island

- This is a localised and temporary phenomenon.
- Certain pockets experience higher temperatures than surrounding areas.
- This is due to:
 - Heat getting trapped in localities that resemble concrete jungles.



- **Absence of green cover** leads to absence of **heat regulation** through **transpiration**.

- Use of glass, concrete or dark coloured materials which absorb more heat.

❖ About ECOSRTESS

- ECOSTRESS stands for **Ecosystem Spaceborne Thermal Radiometer Experiment on Space Station instrument**.
- It measures the **temperature of the ground**, which is very similar to air temperature at night (though the ground may be warmer than the air in daylight hours).
- The instrument **launched to the space station in 2018**.
- Its **primary mission is to identify plants' thresholds for water use and water stress**, giving insight into their ability to adapt to a warming climate.
- However, ECOSTRESS also records other heat-related phenomena, like this heat wave.
- With a pixel size of about 225 feet (70 metres) by 125 feet (38 metres), its high-resolution images serve as a powerful tool for understanding aspects of the weather event that might be overlooked by traditional observation networks.

Scheme on Enhancement of Competitiveness in The Indian Capital Goods Sector (Phase - II)

❖ Context

- The **Ministry of Heavy Industries (MHI)** has signed an MoU with **National Research Development Corporation (NRDC)** for undertaking various activities for smooth implementation of the scheme.

❖ Background

- The **phase I** of the scheme was launched in **2014**. Phase II was launched on Jan-22.
- The aim of the scheme is: To enhance the **competitiveness** of the capital goods sector to increase exports and withstand imports.
 - **Capital goods sector contributes at least 25% to the manufacturing sector.**

Overview Capital Goods

- Machines that make machines
- Have a multiplier effect on manufacturing
- Contributes about 1.8 % to GDP
- 12% of manufacturing output
- Technology development and investment key drivers

Major Sub-Sectors

- | | |
|-------------------------------------|--------------------------------|
| • Heavy electrical equipment | • Dies, moulds and press tools |
| • Process plant equipment | • Textile machinery |
| • Earth-moving and mining machinery | • Machine tools |
| • Printing machinery | • Plastic machinery |
| • Food processing machinery | • Metallurgical machinery |

❖ Components Of The Scheme

- Identification of Technologies through **Technology Innovation Portals**.
- Setting up of four new **Advanced Centres of Excellence** and augmentation of Existing Centres of Excellence.
- Promotion of skilling in Capital Goods Sector—creation of Qualification packages for skill levels 6 and above.
- Setting up of four **Common Engineering Facility Centres (CEFCs)** and augmentation of existing CEFCs.
- Augmentation of existing **Testing and Certification Centres**. Setting up of ten **Industry Accelerators for Technology Development**.

❖ About NRDC

- Established in **1953** by the Government of India.
- To promote, develop and commercialise the technologies / know-how / inventions / patents / processes emanating from various national R&D institutions / Universities.
- Presently working **under the administrative control of the Dept. of Scientific & Industrial Research, Ministry of Science & Technology**.

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News in Between the Lines

Air Launched Anti-ship Missile



❖ Context

- Defence Research and Development Organisation (DRDO) and Indian Navy successfully conducted maiden flight-test of indigenously-developed Naval Anti-Ship Missile launched from a Naval Helicopter.

❖ Key Highlights

- It is the **first indigenous air launched anti-ship missile system** for the Indian Navy.
- The missile followed the desired sea skimming trajectory and reached the designated target with high degree of accuracy.
- The missile employed many new technologies, including an indigenously developed launcher for the helicopter.

HANSA-NG



❖ Context

- HANSA-NG, the **two seater flying trainer aircraft** successfully completed **in-flight engine relight test** at DRDO's Aeronautical Test Range (ATR) facility, Challakere.

❖ Key Highlights

- It is **designed & developed by CSIR-NAL (National Aerospace Laboratories)**. Flight test was carried out at an altitude of **7000-8000 feet with a speed range of 60 to 70 knots**.
- CSIR-NAL mentioned that the in-flight engine relight test is the most critical and important milestone towards certification of the aircraft by DGCA.

National Startup Advisory Council



❖ Context

- The Minister of Commerce and Industry chaired the 4th meeting of **National Startup Advisory Council (NSAC)** in New Delhi.

❖ Key Highlights

- The Minister also launched **NavIC Grand Challenge** which aims at promoting adoption of NavIC as a geo-positioning solution.
- It aims to identify and handhold solutions of startups which are engaged in developing NavIC enabled drones.
- The **Department for Promotion of Industry and Internal Trade (DPIIT)** had **constituted the National Startup Advisory Council, in January 2020**, to advise the government on measures needed to build a strong ecosystem for nurturing innovation and startups in the country to drive sustainable economic growth and generate large scale employment opportunities.
- Besides the **ex-officio members**, the council has **non-official members**, representing various stakeholders such as founders of successful startups, veterans who have grown and scaled companies in India, persons capable of representing interests of investors, incubators and accelerators into startups, representatives of associations of stakeholders of startups and representatives of industry associations.

Prehistoric rock paintings found in Telangana



❖ Context:

- History enthusiasts in Telangana have discovered a **Prehistoric Rock Paintings Site**, dating back at least **10,000 to 30,000 years**, at **Kasipeta in Yadadri Bhuvanagiri district**.

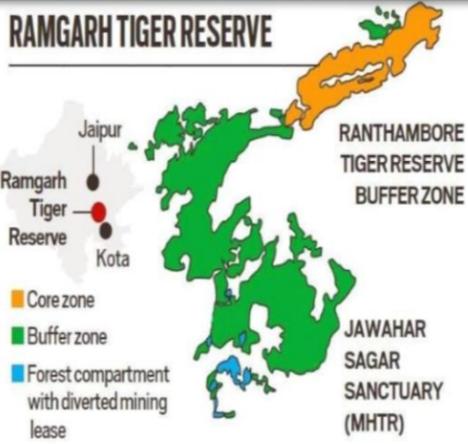
❖ Key Highlights:

- The group identified **four bisons, two men**, and an animal **resembling a horse**. The human figure standing behind the four bisons was drawn using the **X pattern**.
- The painting of the other man standing near the bison is similar to the **petroglyph of a man with a weapon at the Regonda site**.
- The group believes that many rock paintings were lost due to the **lime coating applied by local villagers**.

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Ramgarh Vishdhari Sanctuary



❖ Context:

➤ India's tiger conservation efforts received a boost after the environment ministry notified the **Ramgarh Vishdhari Sanctuary** in Rajasthan as India's **52nd tiger reserve** recently.

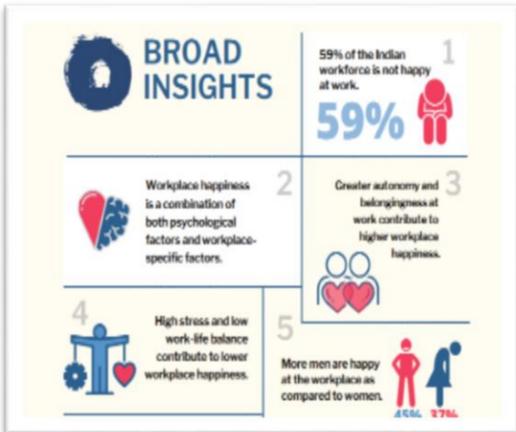
❖ Key Highlights:

- The Ramgarh Vishdhari Wildlife Sanctuary, covering an area of about **252 square kilometres**, acts as a buffer for the **Ranthambore National Park on the Bundi-Nainwa Road in Rajasthan**.
- The area had been declared a **sanctuary on 20 May 1982**, Section 5 of the Rajasthan Wildlife and Bird Protection Act, 1951.
- It is home to a large number of wild animals such as the **Indian Wolf, leopard, striped hyena, sloth bear, golden jackal, chinkara, nilgai and fox**.
- Rajasthan now has four tiger reserves - **Ranthambore Tiger Reserve** in Sawai Madhopur district, **Mukundra Hills Tiger Reserve** in Kota district and **Sariska Tiger Reserve** in Alwar district.
- India currently has **2,967 tigers in 20 states**.

❖ Importance of Tiger Corridors:

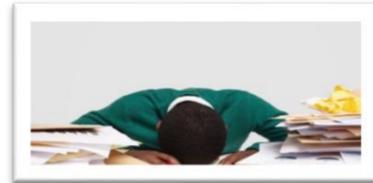
- A tiger corridor is a stretch of land **linking tiger habitats, allowing movement of tigers, prey and other wildlife**. As of date, there are around **33-35 major tiger corridors** and several smaller ones in the country.
- Corridors help **reduce man-tiger attacks**; as more space is given to tigers, the killing of human beings will come down and **reduce resentment among locals against tigers**. Tiger corridors also serve as habitat for several other species such as wolves, hyenas, ratel, pangolins, birds, reptiles, etc.

More Than Half Of India's Workforce Is Unhappy



❖ Context:

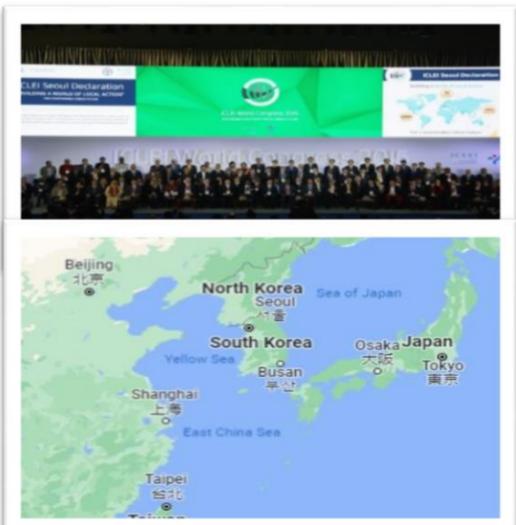
➤ A large majority of India's workforce is not happy, finds a new survey - '**Happiness at Work**'.



❖ Key Findings:

- **High stress and low work-life balance** have taken a toll on workplace happiness in the post-pandemic world, finds the survey undertaken by **House of Cheer**. The key insights were that **59% of the workforce was unhappy**.
- The report found that **full time staff were happier** than part time employees as the sense of belonging with the organisation was **higher for the former**.
- The preferred mode of work in respect to **happiness at work was flexible (remote and hybrid) working**.
- While **45 per cent of men were happy at work, only 37 per cent of women were happy**. Lower workplace happiness can prompt employees to consider leaving their jobs.

Seoul Declaration



Daily Current Affairs

❖ Context:

➤ Recently, the Seoul Declaration was adopted at the **XV World Forestry Congress**, held in **Seoul, South Korea**.

❖ Key Highlights of Declaration:

- The investment in forest and landscape restoration globally must be **tripled by 2030** to implement global commitments and meet **internationally agreed goals and targets**.
- The Declaration pointed out that the health of forests and humans was closely related and forest degradation can have serious negative impacts on human health and well-being.
- **Forests must be maintained in a healthy and productive state** to reduce the risk of future pandemics and to provide other essential benefits for the physical and mental health of mankind.
- The Declaration also stressed on **international cooperation**.
- The responsibility over forests should be **shared and integrated across institutions**, sectors and stakeholders in order to achieve a sustainable future.
- **Signatories:** The Declaration was signed by 141 participant countries.

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