

TIGER POPULATION

There is an increase in the number of incidents of Human- Tiger conflicts.



About:

- Every four years, India carries out a census of the tiger population across India.
- The latest estimate put the tiger population at 2,967.
- Tigers were reportedly increasing at a rate of about 6% per annum and the area that they occupied was roughly stable, at about 89,000 square km since 2014.
- These numbers are estimated using a sophisticated system that involves photographing animals via camera traps as well as mathematical analysis.
- In 2006, India had 1,411 tigers. This rose to 1,706 in 2010 and 2,226 in 2014 on the back of improved conservation measures and new estimation methods.

How did the numbers increase?

- The consistent implementation of Project Tiger since 1973, whereby dedicated tiger reserves were established in India, as well as anti-poaching measures have played a significant role in tiger conservation.
- **India has 53 tiger reserves.**
 - Uttar Pradesh's Ranipur Tiger Reserve has become the 53rd tiger reserve of India.
- However, rising tiger numbers have meant that nearly half the tigers are now outside designated protected zones that lead to increasing instances of human-animal conflict.

HOMO ERECTUS

A rare, well-preserved ancient human skull found in central China could be a million-year-old Homo erectus.



About:

- **Homo erectus** or '**upright man**' is an extinct species of the human genus.
 - They most likely originated in Africa or Eurasia.
 - Fossils connected with this species have been found ranging from Africa all the way to Southeast Asia.
 - H. erectus had a similar range of body sizes to modern humans, and it is the first human ancestor to have similar limb and torso proportions to those seen in modern humans.
 - Homo erectus' ability to make complex tools was possible because of the strength and dexterity in its hands, which it owes to a certain hand-bone projection called a "**styloid process**".
 - H. erectus appears to have been the first human species to control fire, some 1,000,000 years ago.
 - The species seems to have flourished until some 200,000 years ago (200 kya) or perhaps later before giving way to other humans including Homo sapiens.
-

SALT INTAKE

A recent study published in the **Journal of American College of Cardiology** showed a **higher incidence of heart attacks, heart failure and strokes with higher frequency of adding salt to one's food. This did not include the salt used for cooking.**



About:

- It was found that adding less salt with food was associated with fewer heart attacks and strokes.
- This was found to be true even in participants who were following the DASH diet (Dietary Approaches to Stop Hypertension).
- **DASH** is the best recommended diet to prevent cardiovascular events.
- DASH diet involves eating fruits, vegetables, lean meat, poultry, nuts, whole grains, and reducing the intake of saturated fats, cholesterol, and sugar.
- The WHO recommends only 5gm of salt per day. The recent study points to the immense benefit of avoiding salt on the table.

India:

- A consumption of more than 10 gm per day, far exceeding the recommended allowance.
- It could be worse in children since the recommendation is almost half.
- A study conducted by Sapiens health foundation amongst school and college students in Chennai showed a 10% prevalence of hypertension.
- Intake of salt may be worse in Indians since pickles are often introduced early in life.
- It contains hidden salt in preserved and packaged foods.
- The consumer is not given a choice to choose food items based on salt content.

Salt substitutes:

- Salt substitutes are good since majority of them contain upto 25% potassium chloride.
- A 2001 study found salt substitutes reduced the incidence of stroke and heart attack by almost 10%, and deaths too.

INDIA GETS BEST-EVER AVIATION SAFETY RANK

In News:

- Recently, the United Nations aviation arm - International Civil Aviation Organisation (ICAO), has ranked Indian aviation safety oversight mechanism at the 48th spot - a quantum leap from its 102nd rank four years ago.

About the ranking:

- **Background:**
 - The ICAO had earlier audited the Indian **Directorate General of Civil Aviation (DGCA)** to check its effective implementation of critical safety elements under the **Universal Safety Oversight Audit Programme (USOAP)**.
 - Following that, the UN aviation arm has given the DGCA its highest ever EI score, putting India on the 48th spot, above that of countries like China (49), Israel (50), Turkey (54), Denmark (55) and Poland (60).

- Top five score countries: Singapore, UAE, South Korea, France and Iceland. US is at 22nd place and Qatar is at 25th place.
- **Effective Implementation scores are given for eight areas:**
 - These are legislation, organisation, personal licensing, operations, airworthiness, aerodromes, aircraft accident and investigation.
 - ICAO audited the first six critical areas in India during the audit.
- **Significance of India getting its best ranking:**
 - It will make it easier for **Indian carriers to expand their wings abroad**, because countries with poor aviation safety records find their aircraft being subjected to more surprise checks at airports abroad.

About the International Civil Aviation Organization (ICAO):

- It is a **specialised agency** (headquarters - Montreal, Canada) of the UN that coordinates the principles and techniques of international air navigation.
- It was established in **1947** under the **Chicago Convention (1944)** and is funded and directed by 193 national governments (signatories of the convention).
- It fosters the planning and development of international air transport to ensure **safe and orderly growth** and to support **diplomacy and cooperation** among signatories in air transport
- Its core function is -
 - To maintain an administrative and expert bureaucracy (the ICAO Secretariat) supporting these diplomatic interactions,
 - To research new air transport policy and standardisation innovations as directed and endorsed by governments through the ICAO Assembly or the ICAO Council which the assembly elects.
- ICAO is distinct from other international air transport organisations (like IATA, CANSO), particularly because it alone is vested with international authority (among signatory states).

About the Directorate General of Civil Aviation (DGCA):

- The DGCA is the regulatory body of the Government of India in the field of Civil Aviation, primarily dealing with safety issues.

- It became a statutory body under the Aircraft (Amendment) Act, 2020 and is responsible for regulation of air transport services to/from/within India and for enforcement of civil air regulations, air safety and airworthiness standards.
- The DGCA also co-ordinates all regulatory functions with the ICAO. The Government of India is planning to replace the organisation with a Civil Aviation Authority (CAA), modelled on the lines of the American Federal Aviation Administration (FAA).

INDIA'S FIRST DARK NIGHT SKY RESERVE

Ladakh is all set to have India's first Dark Night Sky Reserve at Hanle village in Changthang region. In about eighteen locations in Hanley, powerful telescopes will be installed for stargazing.



About:

What is a Dark Sky Reserve?

- **The International Dark Sky Association (IDSA) defines an international dark sky reserve (IDSR) as “a public or private land of substantial size (at least 700 km², or about 173,000 acres) possessing an exceptional or distinguished quality of starry nights and nocturnal environment, and that is specifically protected for its scientific, natural, educational, cultural heritage, and/or public enjoyment”.**
- A dark sky reserve requires a **“core” area** that has clear sky without any light pollution, which can enable telescopes to see the sky in its natural darkness.
- To support the core, it should be surrounded by a “peripheral” or “buffer” area that supports dark sky values in the core while receiving the same benefits.

How are dark sky reserves identified?

- According to IDSA, it considers land suitable for dark sky sites **only if it is on public or private land, is publicly accessible all or part of the year, protected for scientific, natural, educational, cultural, cultural and/or public purposes.**



CROSS & CLIMB ROHTAK



- The central part of the core offers exceptional dark sky resources compared to the communities and cities that surround it, and the core limits the brightness of the night sky to either reserves, parks, or sanctuaries.
- The IDSR also needs to have a comprehensive **lighting management plan (LMP)** “which should be adopted by a sufficient number of communities within the entire IDSR (core and periphery) corresponding to at least 80 percent of population and 80 percent of designated area of protection”.
- It also needs a description of current and suspected future threats to dark skies over the core zone, and a plan to address these threats.
- This is particularly important as Hanle is particularly close to Chinese territories, which makes it highly sensitive.
- The reserve must also submit a detailed annual report to IDA by October 1 each year.

Why Ladakh?

- The **Hanle Dark Sky Reserve (HDSR) will come up within the Changthang Wildlife Sanctuary**, situated 4,500 metres above sea level, which makes it a perfect host for telescopes.
- Ladakh is also ideal for long-term observatories and dark-sky sites because of its large arid area, high elevation, and sparse population.
- The **Milky Way Galaxy is visible through the night in the Hanle region** due to its cloudless skies and lower atmospheric disturbance.
- **Hanley is home for the second-highest optical telescope in the world, established in 2001 by Indian Institute of Astrophysics.**
- The Department of Science and Technology and Indian Institute of Astrophysics (IIA) in Bengaluru are providing support for the facility.

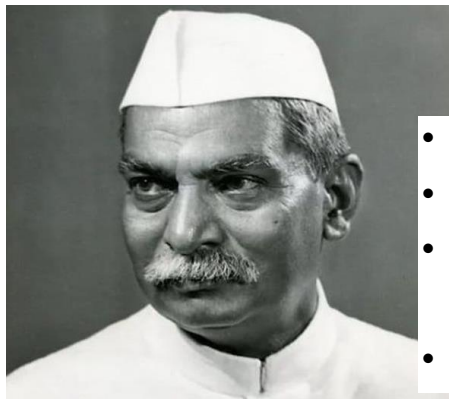
How many such reserves exist in the world?

- A dark sky reserve is only one of the designations given by the IDSA, others being international dark sky parks, communities, reserves, sanctuaries, and urban night sky places.

- At present, there are 20 dark sky reserves around the world, seven in the United Kingdom; four in France; two each in the USA and Germany; and one each in New Zealand, Canada, Namibia, and Australia.

DR RAJENDRA PRASAD

The President of India, Smt Droupadi Murmu, paid floral tributes to Dr Rajendra Prasad, the first President of India, on his birth anniversary (December 3, 2022) at Rashtrapati Bhavan.



About:

- Rajendra Prasad was born in Bihar in 1884.
- His father was a scholar of Persian and Sanskrit language.
- A brilliant student, Rajendra Prasad stood first in the entrance examination to study at the University of Calcutta.
- He passed away in 1963.

Career:

- After his post-graduation, he joined as a Professor of English at the Langat Singh College of Muzaffarpur, Bihar and later became its Principal.
- He started his law practice at the Calcutta High Court in 1911.
- He joined Patna High Court in 1916, after its establishment.
- He eventually emerged as a popular and eminent figure of the entire region.

Role in Nationalist Movement:

- He attended as a volunteer in the 1906 Calcutta session of the Indian National Congress and formally joined the party in 1911.
- In 1917, Mahatma Gandhi undertook the 'Champan Satyagraha' and Dr. Prasad offered his whole-hearted support to the cause.
- During the Non-Cooperation Movement in 1920, Dr Rajendra Prasad gave up his lucrative law practice and dedicated himself to the cause of freedom.

- He started the **National College in Patna in 1921**.
- He was elected as the President of the Bombay session of the Indian National Congress in October 1934.
- He was elected to the post again in 1939 and 1947.
- He became very much involved in the **Quit India Movement** launched by Gandhi in 1942.
- Rajendra Prasad was selected as the **Food and Agriculture Minister** in the interim Government headed by Jawaharlal Nehru in 1946.
- Soon he was elected **President of the Constituent Assembly** on December 11, the same year.

Work in Independent India:

- On January 26, 1950, the Republic of India came into existence and **Rajendra Prasad was elected to be the first ever President of the country**.
- He travelled the world extensively as an ambassador of India, building diplomatic rapport with foreign nations.
- **He was re-elected for 2 consecutive terms in 1952 and 1957**, and remains only President of India to achieve this feat.
- **In 1962, he was awarded the “Bharat Ratna”, India’s highest civilian award.**

NAVY DAY

India observes Navy Day on December 4 every year.



About:

- It aims to acknowledge the role of the Indian Navy and commemorate its achievements in ‘Operation Trident’ during the 1971 Indo-Pak War.
- This year, for the first time, Navy Day Celebrations are being conducted outside the National Capital.



CROSS & CLIMB ROHTAK



- This year, as India celebrates 75 years of her independence, the Indian Navy is all set to demonstrate India’s combat prowess and capability through an ‘Operational Demonstration’ at Visakhapatnam.
 - The Op Demo will showcase the capability and versatility of Indian Naval ships, submarines, aircraft, and Special Forces.
 - The Navy Day celebrations are aimed at fostering greater outreach, renewing maritime consciousness amongst our citizens and highlights the Navy’s contributions towards national security.
-

