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Daily News Discussion (DND)

5th May 2021

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Note -

- The Newspaper clippings pasted in PDF are important from Mains point of view as it contains the fodder material for Mains Answer Writing.
- Also watch DND video lectures everyday @ 4 PM on Sleepy's YouTube channel in order to understand how to get the most out of everyday's Newspaper .

Click [here](#) to watch the following topics on YouTube

1. Environment

1.1.COVID in Asiatic Lions

- Eight **Asiatic lions** at **Hyderabad's Nehru Zoological Park** have tested positive for the deadly coronavirus, perhaps the first known case of the human infecting the felines and making them sick in India.

About

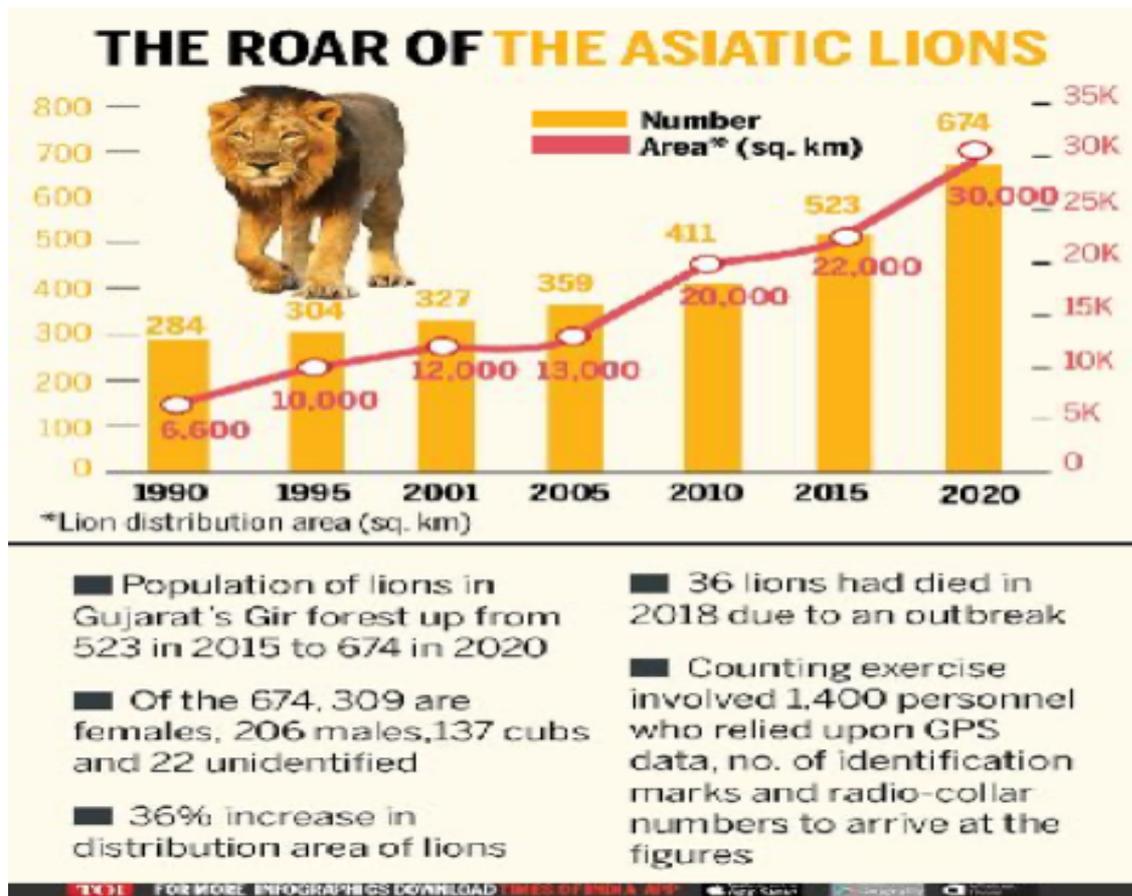
- Centre for Cellular and Molecular Biology- Laboratory for Conservation of Endangered Species (CCMB-LaCONES) informed the forest authorities that the **RT-PCR tests** of these big cats were positive.
- **Central Zoo Authority confirmed** that based on detailed diagnostic tests and report as shared by CCMB-LaCONES, it has now been confirmed that eight Asiatic lions housed in NZP have tested positive for SARS-CoV2 virus

Asiatic Lion(Smaller than African lions)					
IUCN	CITES	WLP act	Habitat	Diet	Threat
EN	I	I	Dry deciduous grassland Gir forest Guj(Only)	Carnivorous	Forest fire Human-animal conflict
Protected areas <input type="checkbox"/> Gir sanctuary <input type="checkbox"/> Gir NP <input type="checkbox"/> Pania sactuary <input type="checkbox"/> Mitiayala sanctuary <input type="checkbox"/> Girnar sactuary			Asiatic lion Census <input type="checkbox"/> 1 st 1936 <input type="checkbox"/> 13 TH 2010 <input type="checkbox"/> 14 TH 2015 <input type="checkbox"/> Census-Gujarat Forest department.	Techniques <input type="checkbox"/> Faecal DNA sample <input type="checkbox"/> Helicopter survey <input type="checkbox"/> Mark recapture method <input type="checkbox"/> Pug mark <input type="checkbox"/> 2015-Beat method(water p o i n t) - GPS, Camera ,Binoculars	

paramyxovirus, which is the same family of virus responsible for the human measles virus			Canine Distemper Virus
Transmission	Air borne	Contaminated objects	
	Infected dog	Mother to offspring	
Symptom	Watery eyes , lungs , fever, vomiting		Asiatic Lion
Treatment	No cure, only Vaccine		
Asiatic Lions	23 Asiatic lions dead in Gujarat		
Vaccine	Imported from Atlanta (US)		

Lion Census

- 2020 count was estimated not from a Census, but from a population “observation” exercise called Poonam Avlokan.

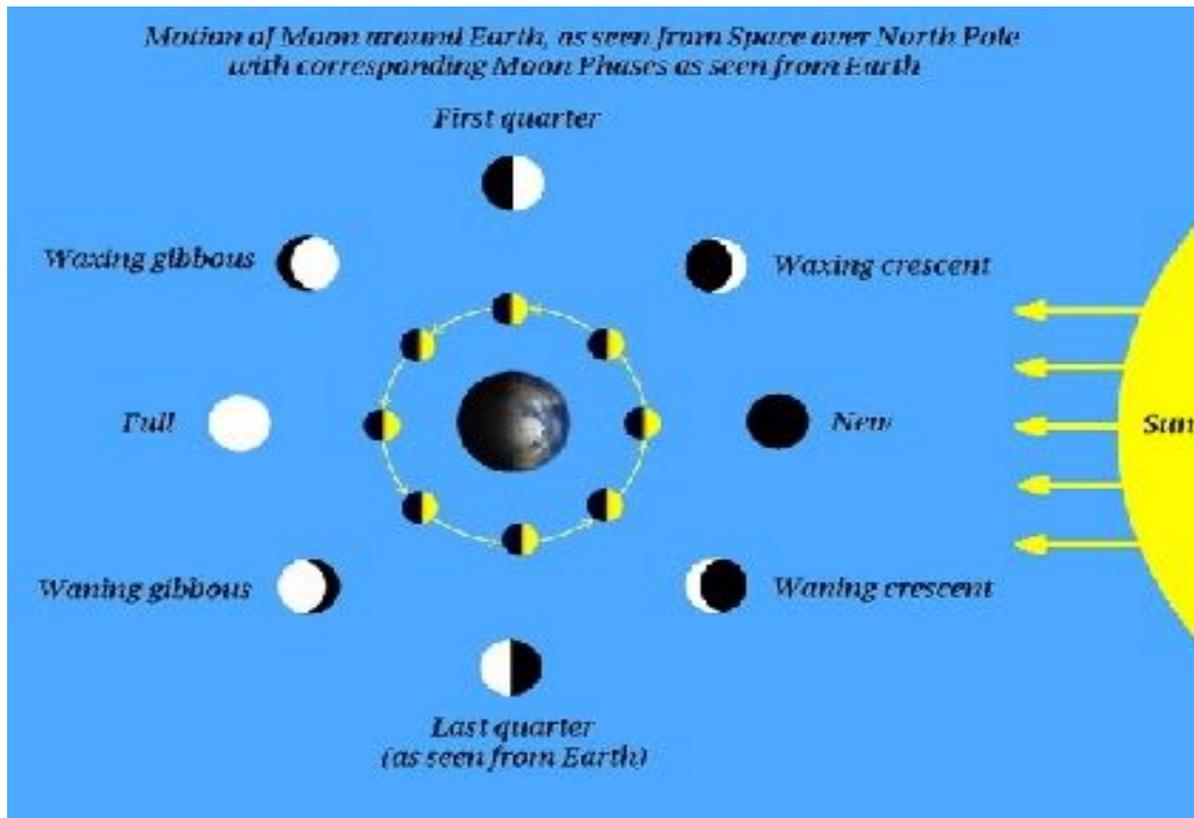


Why was the Lion Census not conducted in 2020

- Conducted once every five years, the Lion Census was due on June 5-6 this year, but was postponed after the lockdown
- Bronx Zoo in New York had reported a case of transmission of novel coronavirus from a human to a tigress.

How were the numbers estimated?

- Through Poonam Avlokan, which is a monthly in-house exercise carried out every full moon.
- Field staff and officers spend 24 hours assessing the number of lions and their locations in their respective jurisdictions.
- It was a mechanism developed by the Forest Department in 2014 as part of preparations for the 2015 Lion Census.



How is this 'observation' different from a regular census?

- The Lion Census involves larger participation. **Around 2,000 officers, experts and volunteers were involved** in the 2015 Census. That makes the Census more transparent. The lion 'observation' this month was conducted by around 1,400 forest staff and a few experts.
- The **Lion Census usually runs for more than two days**, including a preliminary census and a final census.
- It is done using the **block counting method** – in which census enumerators remain **stationed at water points** in a given block and estimate abundance of lions in that block, based on direct sighting of lions who need to drink water at least once in 24 hours during the summer.

Has the Lion Census ever been postponed before?

- The first Lion Census was conducted by the Nawab of Junagadh in 1936
- Since 1965, the Forest Department has been regularly conducting the Lion Census every five years.
- The 6th, 8th and 11th Censuses were each **delayed** by a year, for various reasons.
- The 2015 Census had counted 523 lions, up from 411 in 2010. But **12 lions were killed in a flash flood** in Amreli just a month after the 2015 census, followed by deaths of more than two dozen lions in an outbreak of **canine distemper virus (CDV) and babesiosis in 2018**.

Central zoo Authority

- The CZA is the body of the government responsible for oversight of zoos constituted under the section 38A of Wild Life (Protection) Act 1972.

Objective

- Grant of recognition and release of financial assistance.
- **Regulates the exchange of animals of endangered category Listed under Schedule-I and II of the Wildlife (Protection) Act among zoos.**
- Exchange of animals between **Indian and foreign zoos** is also approved by the Authority before the requisite clearances under EXIM Policy and the CITES permits are issued by the competent authority.

Composition

- Apart from the chairman, it consists of 10 members and a member-secretary.
- Almost all of them are officials in **the Environment Ministry and NGO experts** are those who are wildlife conservationists or retired forest officers.
- **Recently The Environment Ministry has reconstituted the Central Zoo Authority (CZA)** to include an expert from the **School of Planning and Architecture Delhi**, and a molecular biologist.

LaCONES

- **Laboratory for the Conservation of Endangered Species**, is a **Council of Scientific and Industrial Research lab** located in Hyderabad.
- It was established in 1998 with the **help of Central Zoo Authority of India and CSIR**

Census	Poonam Avlokan
Usually runs for more than two days	Carried out for 24 hours (Within jurisdiction)
Forest staff , NGOs, experts and wildlife enthusiasts	Only by Forest staff
Block counting method	lion trackers and on chance sightings.

2. Science & Technology

2.1. Oxygen Concentrator

- With the demand for medical oxygen continuing unabated and several States struggling to keep pace with demand, the **oxygen concentrator** has emerged as a sought after device
- Unlike medical oxygen sourced from industrial units, which are supplied via cylinders, **concentrators are devices that can be operated at home.**

What does a concentrator do?

- An oxygen concentrator **takes in air and separates the oxygen and delivers it into a person** via a nasal cannula.
- Air is **79% nitrogen and 21% oxygen** and a concentrator that works by plugging into a source of electricity delivers air that is **upto 95% oxygen.**
- In respiratory infections that **causes oxygen saturation levels to dip below 90%**, having an external device supply pure oxygen eases the burden on the lungs.
- However in cases of **severe respiratory distress**, it may be necessary to provide **oxygen that is almost 99% pure** and an oxygen concentrator is not up to that job



How does it work?

- A concentrator consists of a **compressor and sieve bed filter.**
- The former squeezes atmospheric air and also adjusts the pressure at which it is delivered.
- The **sieve bed is made of a material called Zeolite that separates the nitrogen.**
- There are two sieve beds that work to both **release oxygen into a tank that's connected to the cannula** as well as release the separated nitrogen and form a continuous loop that **keeps producing fresh oxygen.**

When is an oxygen concentrator needed?

- When **blood saturation levels drop below 94%**, it could be a sign of respiratory distress. Usually this merits hospitalisation, but due to the surge in COVID-19 cases and oxygen beds in short supply, the **device could help those whose saturation levels range between 88 and 92** if they can't access hospital services.

Are all concentrators the same?

- These products come with a variety of specifications. There are those with varying oxygen outputs.
- For **COVID-19 patients**, a device with a **5L-10 L** output is recommended.

2.2. Flaws in SUTRA's approach

- With close to 4,00,000 cases being added every day, **questions are being raised by some scientists on whether a government-backed model, called SUTRA**, to forecast the rise and ebb of the COVID-19 pandemic, may have had an outside role in creating the perception that a catastrophic second wave of the pandemic was unlikely in India.

Flaws in SUTRA Model

- Second wave would peak by the third week of April and stay at **around 1 lakh cases**. Clearly the model predictions in this instance were incorrect
- The predictions of the SUTRA model were **too variable to guide government policy**.
- Didn't work well on a metric of **predicting the future under different scenarios**
- SUTRA model was problematic as it relied on **too many parameters**
- If you **keep resetting those parameters, you can literally fit anything**
- The scientists from IIT-Kanpur and Hyderabad applied the **Susceptible, Undetected, Tested (positive), and Removed Approach (SUTRA)** model to predict that active cases would go up by over 10 lakh by mid-May.

SUTRA model

- **Previous papers** divided the patient population into asymptomatic and Infected, the **new model also accounts for the fact that some fraction of asymptomatic patients could also be detected due to contact tracing and other such protocols**.

Three Parameters

Beta

- The first is called **beta, or contact rate**, which measures **how many people an infected person infects per day**.
- It is related to the **R0 value**, which is the number of people an infected person spreads the virus to over the course of their infection
- The **beta value across India has gone up by 50% in March**, which indicates that a combination of factors – **people becoming more relaxed, and more infectious variants going around**

Reach

- is a measure of the **exposure level** of the population to the pandemic
- The reason to introduce 'reach' is that unlike earlier pandemics which start at a location and suddenly spread fast across a place, in **COVID, the spread of the pandemic has been slower due to the many protective measures in place**

Epsilon

- is the ratio of detected and undetected cases.
- Helps **factor in the number of asymptomatic infections** across the country.

- Since the detected cases are quarantined, we assume they no longer contribute to new infections.
- So a **growing number of daily new cases, reflect larger undetected infections.**
- By measuring the number of new cases each day, we try to **estimate the undetected and asymptomatic infections**

2.3.Ebola virus Disease (EVD)

- The **Democratic Republic of the Congo (DRC)** has officially declared the end of the 12th Ebola outbreak. The outbreak declared on February, 2021

About Ebola

- The Ebola virus (RNA) causes an acute, serious illness which is often fatal if untreated.
- ✓ EVD first appeared in 1976 in 2 **simultaneous outbreaks**, one in what is now Nzara, **South Sudan**, and the other in Yambuku, **DRC**. The latter occurred in a **village near the Ebola River**, from which the disease takes its name.



The Ebola river

- The **Ebola River** also commonly known by its indigenous name **Legbala**, is the headstream of the Mongala River, a **tributary of the Congo River**

Transmission

Natural host

- It is thought that **fruit bats of the Pteropodidae family** are natural Ebola virus hosts.

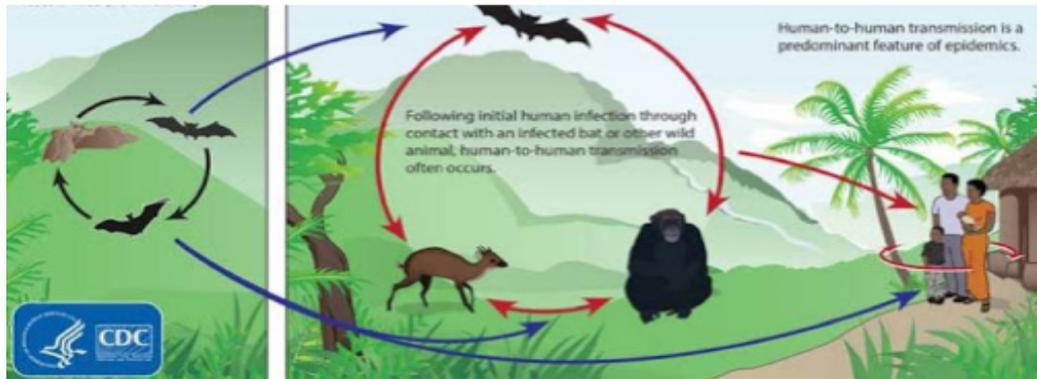
Animal to Human

- Ebola is introduced into the human population through close contact with the blood, secretions, organs or other **bodily fluids of infected animals** such as fruit bats, chimpanzees, gorillas, monkeys, forest antelope found ill or dead or in the rainforest.

Human to Human

- Ebola then spreads through human-to-human transmission **via direct contact (through broken skin or mucous membranes) with:**
 - ✓ **Blood or body fluids of a person who is sick** with or has died from Ebola
 - ✓ **Objects that have been contaminated** with body fluids (like blood, feces, vomit) from a person sick with Ebola or the body of a person who died from Ebola
- **Burial ceremonies that involve direct contact** with the body of the deceased can also contribute in the transmission of Ebola.

- **Pregnant women** who get acute Ebola and recover from the disease may still carry the **virus in breastmilk**, or in pregnancy related fluids and tissues. This poses a risk of transmission to the **baby they carry**, and to others

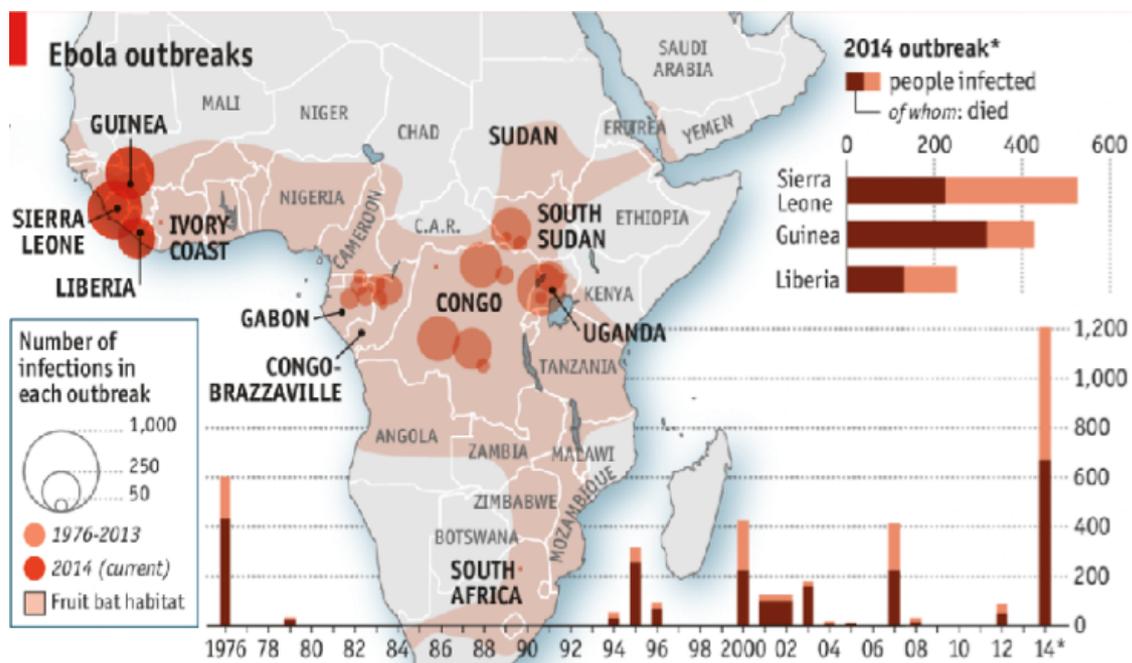


Symptoms of EVD can be sudden and include:

- Fever , Fatigue , Muscle pain , Headache , Vomiting , Diarrhoea
- In some cases, both internal and external bleeding (for example, oozing from the gums, or blood in the stools).

Vaccine

- A vaccine called **rVSV-ZEBOV** is currently being used in the DRC outbreak, as it is proven to be highly protective against the Ebolavirus



3. Economy

3.1. Network for Greening the Financial System (NGFS)

- Recently Reserve Bank of India (RBI) has joined the Central Banks and Supervisors Network for Greening the Financial System (NGFS) as a member

Network for Greening the Financial System (NGFS)

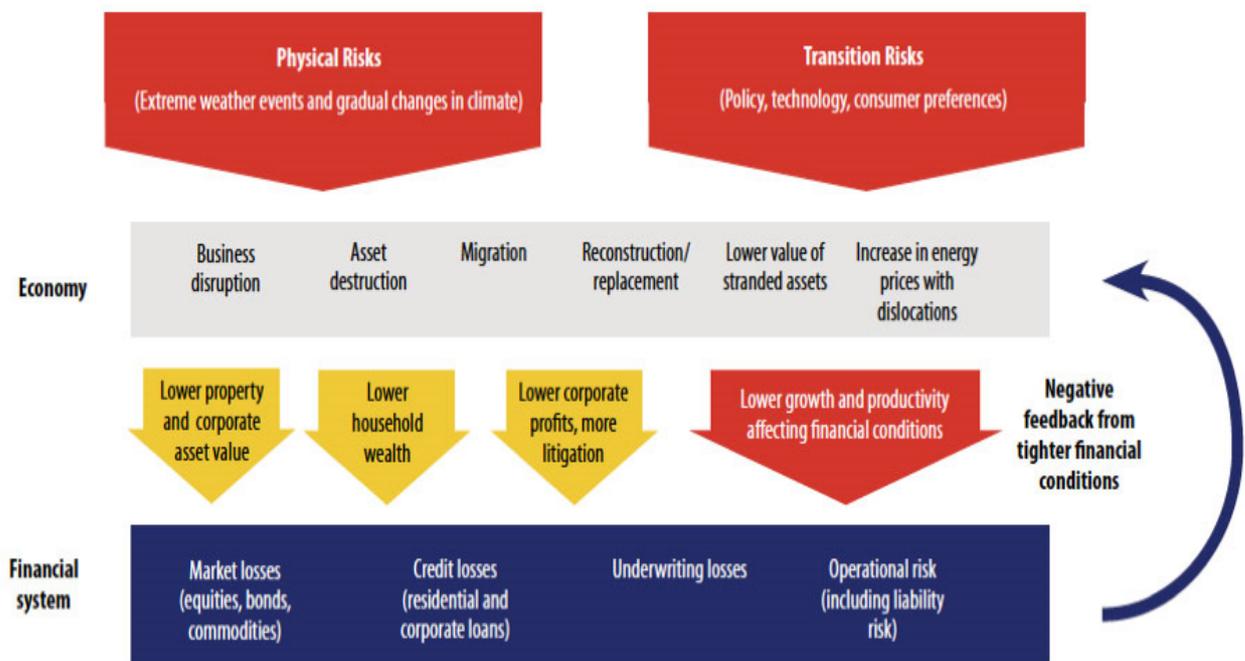
- Launched at At the Paris “One Planet Summit” in December 2017
- It is a group of Central Banks and Supervisors willing, on a voluntary basis, to exchange experiences, share best practices, contribute to the development of environment and climate risk management in the financial sector, and to mobilize mainstream finance to support the transition toward a sustainable economy.
- Its purpose is to define and promote best practices to be implemented within and outside of the Membership of the NGFS and to conduct or commission analytical work on green finance.

Purpose of the Network for Greening the Financial System

- The Network’s purpose is to help strengthening the global response required to meet the goals of the Paris agreement
- To enhance the role of the financial system to manage risks and to mobilize capital for green and low-carbon investments in the broader context of environmentally sustainable development.

Physical and transition risks

The risks from climate change to the economy have two basic channels, but many potential impacts.



3.2. Govt to provide Rs 15,000 crore to states for capital expenditure

- The Centre recently announced decision to **provide an additional amount of upto Rs 15,000 crore to states as interest- free 50-year loan for spending on capital projects.**

About

- Under the scheme, financial assistance is provided to state governments in the **form of 50-year interest free loan**

First part of scheme

- The first part of scheme is for **North-east and hill states** and an amount of Rs 2,600 crore has been earmarked. **Assam, Himachal Pradesh and Uttarakhand will get Rs 400 crore each** while remaining states in this group have been allocated Rs 200 crore each

Second part of scheme

- The second part of scheme is **for all other states** with an amount of Rs 7,400 crore. This amount has been allocated among states in **proportion to their share of central taxes as per the award of 15th Finance Commission for 2021-22**

Third part of Scheme

- The third part of scheme is for providing **incentives to states for monetisation or recycling of infrastructure assets and disinvestment of state public sector enterprises.** An amount of Rs 5,000 crore is allocated.

Significance

- Capital expenditure **creates employment**, especially for the poor and unskilled, has a high multiplier effect, enhances the **future productive capacity of the economy**, and results in a higher rate of economic growth

4. International Relations

4.1. U.S. sanctions may spur Adani to exit Myanmar

- Adani Ports and Special Economic Zone Ltd. said recently it **could abandon a Myanmar container terminal project**, if it is found to be in **violation of sanctions imposed by the U.S.**

About

- Myanmar is classified as a **sanctioned country** under the Office of Foreign Assets Control (OFAC)
- OFAC, part of the **U.S. Treasury Department**, administers and **enforces economic and trade sanctions based on the country's foreign policy.**
- A **military coup in Myanmar on February 1** and an ensuing **crackdown on mass protests** has drawn sanctions on military- controlled entities.

The Office of Foreign Assets Control (OFAC)

- The Office of Foreign Assets Control (OFAC) of the US Department of the Treasury administers and **enforces economic and trade sanctions based on US foreign policy and national security goals against foreign countries, regimes, terrorists, and similar forces that are engaged in activities related to the proliferation of weapons of mass destruction and other acts that may be considered as threats to the national security, foreign policy or economy of the United States of America (US).**

Nature of Sanctions

- The nature of sanctions imposed by the US is two pronged, i.e. Primary and Secondary.

Primary sanctions

- are in the nature of **asset freezing, trade embargos, and a prohibition on US citizens and companies** from engaging with country.

Secondary sanctions

- place an **embargo on third-party countries**, its citizens and companies with no nexus to the US, for **dealing with sanctioned countries.**
- Secondary sanctions are invariably **extra-territorial in nature and raise important questions about legitimacy, international law principles, and the concept of sovereignty.**

4.2. India-USA Military agreement

General Security of Military Information Agreement (GSOMIA)

- It was signed in 2002
- Aim to facilitate sharing military intelligence between India and the USA.

Communications Compatibility and Security Agreement (COMCASA)?

- COMCASA was signed in September 2018
- The pact allows the **US to provide India with its encrypted communications equipment and systems** so that Indian and US military commanders, and the aircraft and ships of the two countries, **can communicate through secure networks during times of both peace and war.**

- The signing of COMCASA paved the way for **the transfer of communication security equipment from the US to India** to facilitate “interoperability” between their forces – and potentially with other militaries that use US-origin systems for secure data links.

Logistics Exchange Memorandum of Agreement (LEMOA) about

- LEMOA allows the **militaries of the US and India to replenish from each other’s bases, and access supplies, spare parts and services from each other’s land facilities, air bases, and ports, which can then be reimbursed.**
- LEMOA is extremely **useful for India-US Navy-to-Navy** cooperation, since the two countries are cooperating closely in the **Indo-Pacific.**
- While India had indeed **provided ad hoc logistics support to the US in the past** – such as allowing the **refuelling of American aircraft in Bombay during the first Gulf War in 1991, and letting US warships visit Indian ports during the war on terror after 9/11**– the signing of LEMOA has **institutionalised this process and made it smoother**

Basic Exchange and Cooperation Agreement (BECA)?

- BECA will help India get **real-time access to American geospatial intelligence that will enhance the accuracy of automated systems and weapons like missiles and armed drones.**
- Through the **sharing of information on maps and satellite images,** it will help India access topographical and aeronautical data, and advanced products that will aid in navigation and targeting.
- This could be **key to Air Force-to-Air Force cooperation between India and the US.**
- BECA will **provide Indian military systems with a high-quality GPS to navigate missiles with real-time intelligence to precisely target the adversary.**
- Besides the sailing of ships, flying of aircraft, fighting of wars, and location of targets, geospatial intelligence is **also critical to the response to natural disasters.**

5. Polity

5.1. Legal Metrology (Packaged Commodities) Rules, 2011

- According to the Ministry of Consumer Affairs, **Importers of medical devices, used particularly for providing oxygen support to Covid-19 patients, are now allowed to import these devices without prior mandatory declaration for the next three months.**

About Legal Metrology Act, 2009

- **Objective:** To establish and enforce standards of weights and measures, regulate trade and commerce in weights, measures and other goods which are sold or distributed by weight, measure or number.

About rules

- The Legal Metrology (Packaged Commodities) Rules, 2011, **make it mandatory to get the approvals prior to the import.**
- **Intended to ensure that the consumers are able to make informed choices** by being informed of essential declarations on the pre-packed commodities.
- **Declaration about the manufacturer:** Goods displayed by the seller on e-commerce platform shall contain declarations required under the Rules like **name & Address of the manufacturer, packer and importer, name of the commodity, net content, retail sale price, consumer care complaint, dimension etc**
- **No person shall declare different MRPs (dual MRP) on an identical pre-packaged commodity, unless allowed under any law.**

5.2. Fires in Public buildings

- Fires occur in many **public buildings in India every year**, killing a large number of people and injuring many.

NCRB findings

- The National Crime Records Bureau (NCRB) says **330 people died in commercial building fires in 2019**, while fatalities for residential or dwelling buildings were much higher at **6,329**.

Reason

- **Electrical faults** are cited as the **leading cause** of fires
- State governments being **lax with building safety laws** and for failing to equip public buildings with modern technology.
- **Hospital ICUs** (intensive care units) are a great fire risk because they are **oxygen-suffused, and need to meet high standards.**

What fire safety compliance is expected in public buildings, including hospitals?

- At the centre of all standard-setting is the **National Building Code of India.**
- **Part 4 of the Code deals with Fire and Life Safety.**

- The document provides specifications and **guidelines for design and materials** that reduce the threat of destructive fires.
- Under the Code, **all existing and new buildings are classified by nature of use**, such as **residential, educational, institutional, assembly** (like cinemas and auditoria), business, mercantile, industrial, storage and hazardous.
- **Hospitals** come under the **institutional** category

National Building Code (NBC)

- Published by the **Bureau of Indian Standards**, is a “**recommendatory document**”, and **States** have been asked to incorporate it into their local building bylaws, making the recommendations a “**mandatory requirement**”

The National Disaster Management Authority (NDMA)

- Stipulated **requirements for fire safety in public buildings**, including hospitals, which **incorporate elements of the NBC**, besides design guidelines on maintaining minimum open safety space, protected exit mechanisms, **dedicated staircases**, and crucial drills to carry out evacuations.
- The **Health Ministry** had **circulated strict guidelines** in September 2020 stipulating **third-party accreditation** for fire safety and that a fire response plan should be in place.

Recommendation of NDC

- NBC recommends the **location of buildings by type of use** in specific zones to ensure that **industrial and hazardous structures do not coexist with residential, institutional, office and business buildings**.
- It **specifies the technical requirements for special buildings**, high rises, educational and institutional buildings **higher than 9 metres**, and those with an **area of over 300 square metres**.
- Code drills down into the specifics of **fire resistance based on the materials used** – exterior walls, interior bearing walls, floor, roof, fire check doors, fire enclosure exits, and so on.
- Technologies to **sound alerts** in case of a fire and also to fight it are expected to be incorporated into buildings.

Do State governments follow the Code?

Maharashtra

- Maharashtra, which has been hit by a series of fires, **has a Fire Prevention and Life Safety Measures Act since 2008**.
- Section 3 of the Act **makes the provisions of the NBC mandatory** and Schedule I of the State’s law is borrowed from the Code.
- However, reports in the wake of recent fire accidents indicate that the **authorities have been unable to keep up with inspection** requirements for thousands of buildings.

Kerala

- In Kerala, the **rules prescribe firefighting equipment** and installations that meet “Indian Standards”, but **do not contain a direct reference to the NBC**.

Tamil Nadu

- Tamil Nadu's **form for a fire licence**, required under the Fire Service Act read with municipal law, is even broader, and no reference is found for compliance with the Code.

What is the future course?

- Last year, the **Supreme Court directed all States to carry out fire safety audits of dedicated COVID-19 hospitals.**
- It has become evident that **State forces lack the manpower** to inspect and ensure compliance with safety codes, including the NBC, where it is mandatory.
- One option is to **make heavy fire liability insurance compulsory** for all public buildings, which would offer protection to occupants and visitors and bring about external inspection of safety.

Current affairs Worksheet (5th May 2021)

Factual sheet for Quick revision

Topic	Description	Update
Env	Asiatic Lion census	
	Poonam Avlokan	
	Canine Distemper virus	
	Central zoo Authority	
	LaCONES	
SnT	oxygen concentrator	
	SUTRA Model	
	Ebola virus Disease (EVD)	
Econom y	Network for Greening the Financial System (NGFS)	
	Loan to states for capital expenditure	
Polity	Genocide convention	
	Legal Metrology (Packaged Commodities) Rules, 2011	
	National Building Code of India.	

IR	US Sanction on Myanmar	
	GSOMIA	
	COMCASA	
	LEMOA	
	BECA	