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Daily News Discussion (DND)

4th June 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. Black carbon

- As per study by world bank Black carbon (BC) deposits produced by human activity which accelerate the pace of glacier and snow melt in the Himalayan region can be sharply reduced through new, currently feasible policies by an additional 50% from current levels

Highlights

- The research covers the **Himalaya, Karakoram and Hindu Kush (HKHK) mountain ranges**, where, the report says, glaciers are melting faster than the global average ice mass
- The rate of retreat of HKHK glaciers is estimated to be **0.3 metres per year in the west to 1.0 metre per year in the east.**

Policy implementation

- Full implementation of current policies to mitigate BC can achieve a 23% reduction but enacting new policies and incorporating them through regional cooperation among countries can achieve enhanced benefits

Black carbon

- BC is a short-lived pollutant that is the second-largest contributor to warming the planet behind carbon dioxide (CO₂).
- Unlike other greenhouse gas emissions, BC is quickly washed out and can be eliminated from the atmosphere if emissions stop," the publication says.
- Unlike historical carbon emissions, it is also a localised source with greater local impact.
- Deposits of BC act in two ways hastening the pace of glacier melt: by decreasing surface reflectance of sunlight and by raising air temperature, the researchers point out.

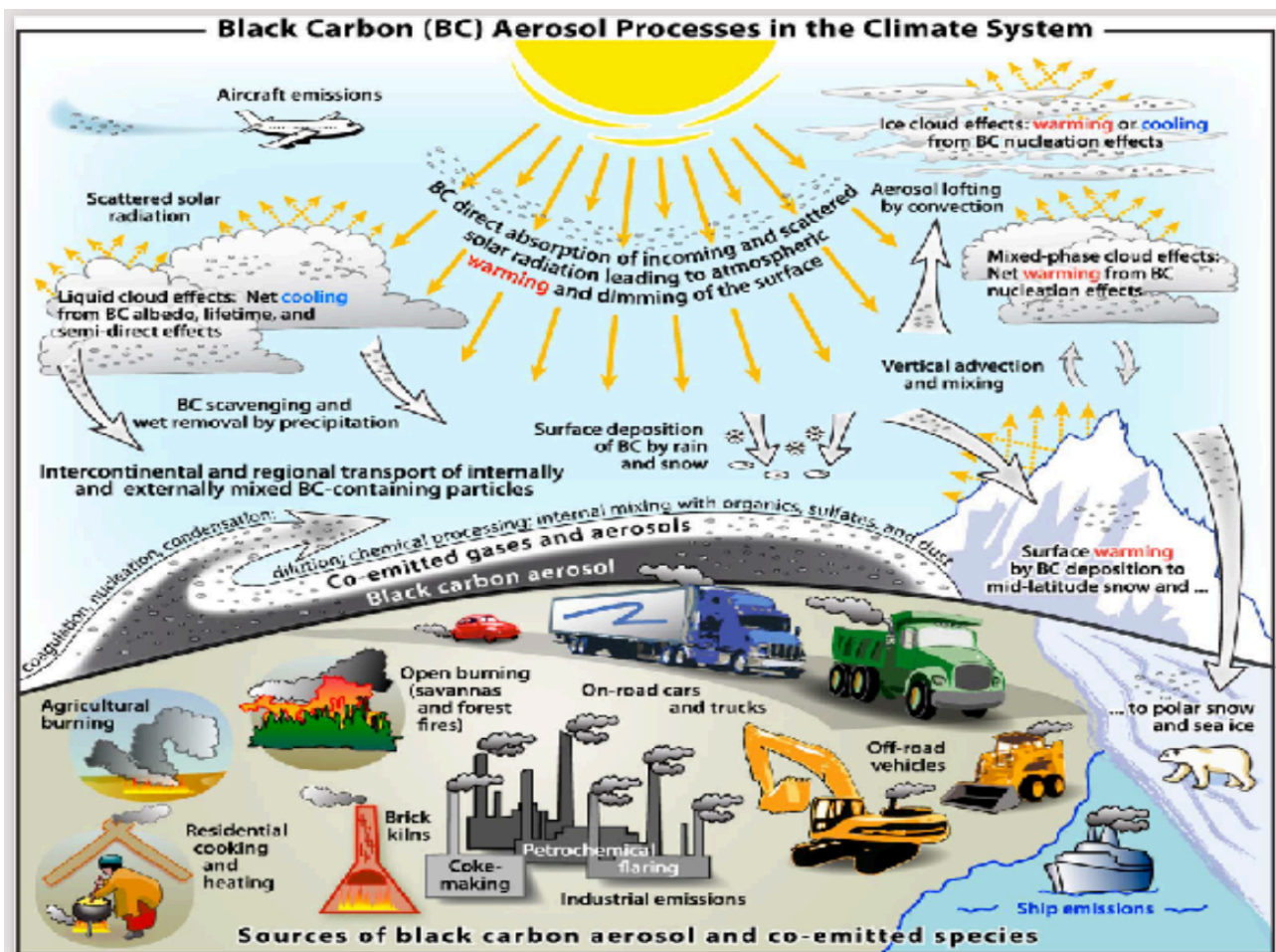
Himalayan region

- Industry [primarily brick kilns] and residential burning of solid fuel together account for **45–66%** of regional anthropogenic [man-made] BC deposition, followed by on-road diesel fuels (**7–18%**) and open burning (**less than 3%** in all seasons)" in the region.
- Reducing black carbon emissions from **cookstoves, diesel engines, and open burning** would have the greatest impact and could significantly reduce radiative forcing and help to maintain a greater portion of Himalayan glacier systems

Need

- Some of the **ongoing policy measures** to cut BC emissions are enhancing fuel efficiency standards for vehicles, phasing out diesel vehicles and promoting electric vehicles, accelerating the use of liquefied petroleum gas for cooking and through clean cookstove programmes, as well as upgrading brick kiln technologies etc
- However, with all existing measures, **water from glacier melt is still projected to increase** in absolute volume by 2040, with impacts on downstream activities and communities

- Regional governments to **review policies on water management**, with an emphasis on basin-based regulation and use of price signals for efficiency, careful planning and use of hydropower to reflect changes in water flows and availability, and increasing the efficiency of brick kilns through proven technologies.
- There must also be greater knowledge sharing in the region.
- Regional **integration and collaboration** was one way to address the question of melting glaciers. Glacier melt produces flash floods, landslips, soil erosion, and glacial lake outburst floods.



Hindu Kush Himalayan (HKH) Region

- It extends 3,500 km over all or part of eight countries from Afghanistan in the west to Myanmar in the east.
- The HKH mainly spans over **Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, Pakistan**
- It is the source of ten large Asian river systems -the **Amu Darya, Indus, Ganges, Brahmaputra, Irrawaddy, Salween (Nu), Mekong, Yangtze, Yellow River and Tarim**.



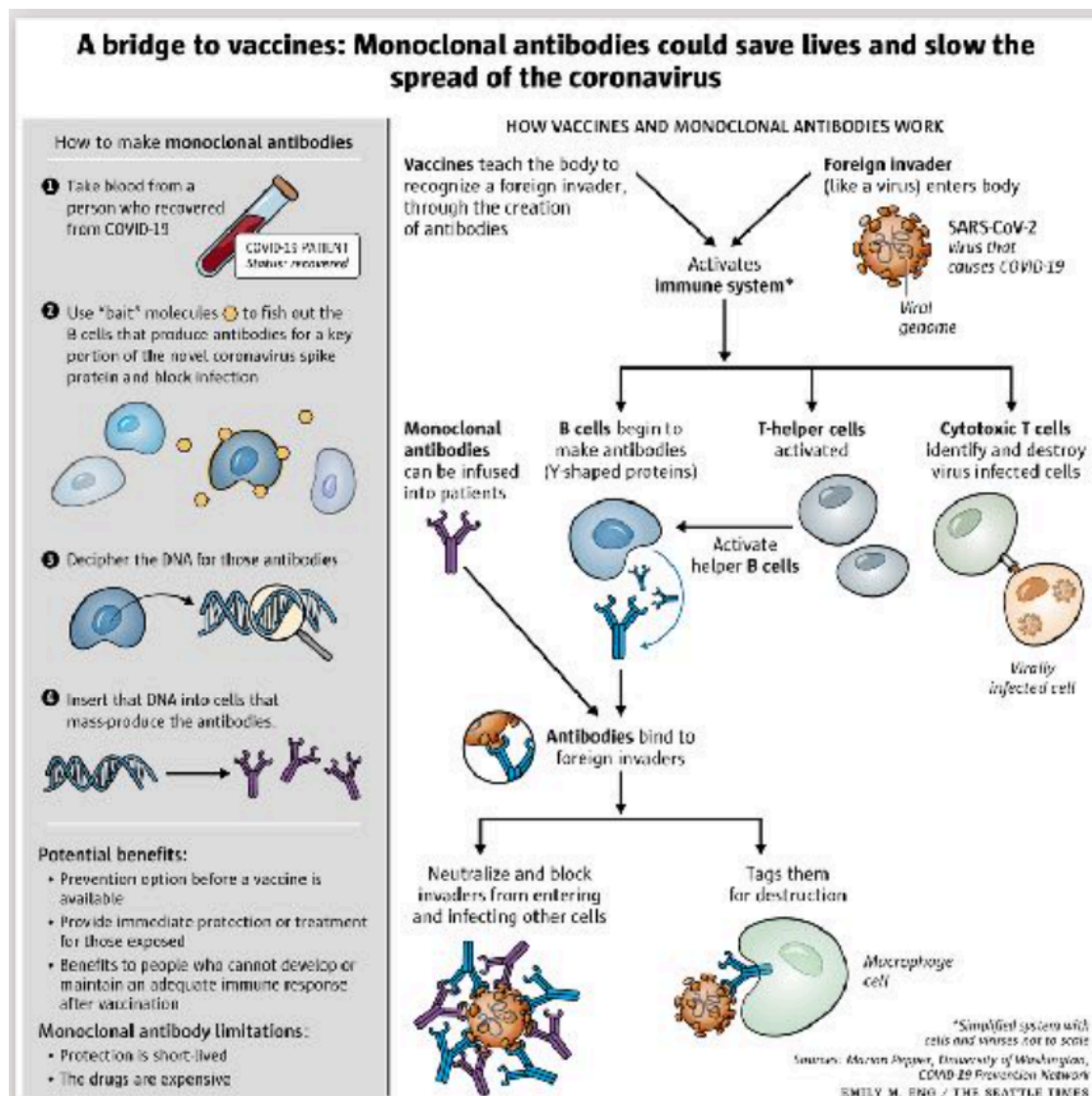
2. Science & Technology

2.1. Monoclonal antibodies

- As per recent reports use of monoclonal antibodies at right time will halt Covid progression
- Since the emergence of Covid-19, multiple treatment strategies and protocols are being used to curb the prevalence of the virus, including neutralizing monoclonal antibodies cocktail drug, casirivimab and imdevimab.

Antibody cocktail drug

- **Casirivimab and Imdevimab** bind simultaneously to different, non- overlapping epitopes on the SARS-CoV-2 spike (S) glycoprotein and prevent its attachment to the ACE-2 receptors, thereby, blocking viral entry into the cells
- A single IV infusion of the combined regimen (1.2 g of Casirivimab and Imdevimab) **reduced the risk of hospitalisation or death by 70 per cent**
- Use of these monoclonal antibodies in right patients at the right time may benefit individuals by **halting progression to severe disease.**

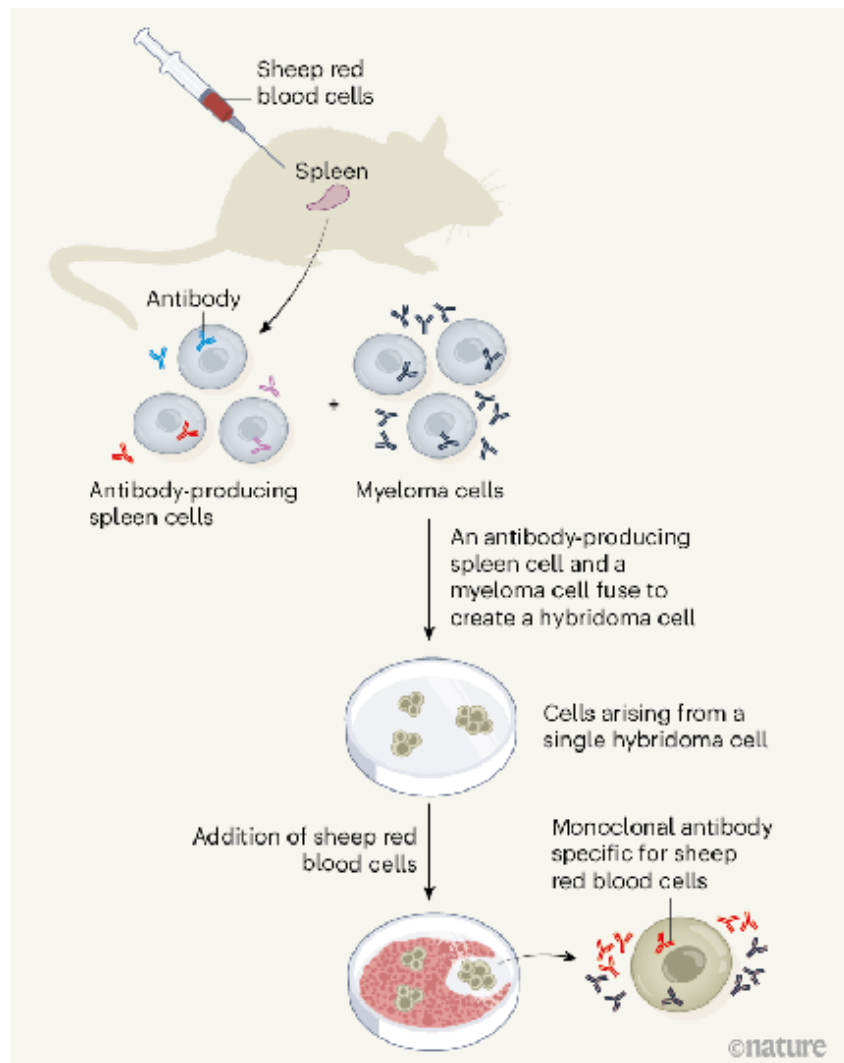


Who will benefit from Covid-19 antibody drug cocktail?

- Casirivimab and Imdevimab should not be used in patients who:
- Are hospitalized due to Covid-19, Obesity, Cardiovascular disease, including hypertension, Chronic lung disease, including asthma, diabetes mellitus etc

When should the antibody drug cocktail treatment be used?

- Those who are at risk of progression to severe disease, as it reduces the risk of hospitalisation and mortality.
- It is important that it should be given in early symptomatic phase within 10 days of the onset of symptoms



Full year Current Affairs Revision through MCQs

Science & Technology - Day 5

1. Which among the following best describe iPS stem cells

- A. Stem cells derived from embryonic stage
- B. Stem cells created through the introduction of embryonic genes
- C. Stem cells specifically used to treat neurological diseases
- D. Unipotent stem cell for arthritis treatment

2. Consider the following statements

- 1. In cloudy weather RADAR operate better than LIDAR.
- 2. RADAR provide better and precise image of an object as compare to LIDAR.

Select the correct answer code:

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

3. Consider the following matches:

- 1. Param Shivay IIT-BHU
- 2. Paramshakti IIT Kharagpur
- 3. Param Brahma IIT Delhi

Select the correct answer code:

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 only
- D. All of the above

4. Which among the following consume least time to perform calculations

- A. Fugaku
- B. Summit
- C. Sycamore
- D. PARAM Siddhi

5. 'Opposition event' often seen in news, more specifically related to:

- A. Quantum uncertainty
- B. Alignment of celestial bodies
- C. Entanglement and superposition
- D. Lagrange points

3. Economy

3.1. Model Tenancy Act (MTA)

- Recently centre formally approved the Model Tenancy Act (MTA) to streamline the process of renting property in India.

Need

- As per Census 2011, more than **1 crore houses** were lying vacant in urban areas across the country
- The existing rent control laws are restricting the growth of rental housing as they **discourage the owners** from renting out their vacant houses due to fear of not getting them back.
- **Informal agreements** with arbitrary clauses and often litigation arising out of disputes

Coverage (MT Act)

- It will apply to premises let out for residential, commercial or educational use, but not for industrial use.

Not cover

- Hotels, lodging houses, inns, etc.
- will not affect existing tenancies

Model Tenancy Act		
Agreement	written agreement is mandatory between the property owner and the tenant. Must submit to concerned Dist Rent Authority	
Advance security deposit by tenant	Residential	Max 2 month rent
	Non residential	Max 6 month rent
Rights and Obligations	Landlord	Responsible for activities like structural repairs (except damage caused by the tenant) whitewashing of walls and painting of doors Internal and external electrical wiring etc
	Tenant	Replacement of glass panels in windows, doors ,switches and socket repairs, kitchen fixtures repairs, maintenance of gardens etc
Conflict over repair	Application-Rent court 24-hour prior notice before entering the rented premises to carry out repairs or replacement.	
Compensation in case of non vacancy	On the expiry of extended period of six months of agreed tenancy period, tenant liable to pay compensation of double of the monthly rent for two months and four times of monthly rent thereafter	

Analysis		
Transparency	Currently	rent agreements are registered at the sub-registrar's office
	Rent authority	bring transparency, fix accountability and promote fairness in the rental housing segment,
Dispute settlement	Current	move to civil courts in case of contention
	Act	First Rent Authority Rent court/rent tribunal within 30 days Court-pass order within 60 days
	Impact	generate Confidence in landlords Dec burden on lower courts
Cap on entering premises:	Resolve privacy issues	
Others	fillip to private participation in rental housing institutionalisation of rental housing rental housing is a preferred option for different segments of society such as migrant labour, working professionals and especially students.	

4. Polity

4.1. Chemical disasters in India

- A gas leakage from a chemical factory in Badlapur was reported recently

chemical disasters in India

Bhopal Gas Tragedy (1984)


- UCIL was a pesticide plant which manufactured the pesticide carbaryl (chemical name: 1-naphthyl methylcarbamate) under the brand name Sevin.
- Manufactured carbaryl using methyl isocyanate (MIC) as an intermediate
- MIC is a highly toxic chemical and extremely dangerous to human health
- Deaths of about 4000 people

Vizag Gas Leak (2020)-AnP

- Source of the leak was a styrene plant owned by South Korean electronics giant LG.
- Styrene gas
- flammable liquid that is used in the manufacturing of polystyrene plastics, fibre glass, rubber, and latex found in vehicle exhaust, cigarette smoke, and in natural foods like fruits and vegetables.
- The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, styrene is classified as a toxic and hazardous chemical.
- Few people dies & many affected

Baadlapur (2021)-Maha

- gas leakage caused due to overheating by a chemical reaction between sulfuric acid and benzyl acid in the company

<p>WHAT IS STYRENE? Styrene is a benzene derivative. It is an oily liquid and usually odourless. It evaporates and mixes with air. It is used in the manufacture of plastics and resins</p>	 <p>The LG Polymers factory after the gas leak on Thursday</p>
<p>Is styrene harmful? According to International Agency for Research on Cancer (IARC), a body affiliated with the World Health Organisation, styrene is a 'possible' cancer-causing agent. Before 2018, IARC had classified as 'probable' carcinogen and upgraded the threat level to 'possible carcinogen' ➤ Exposure to styrene may cause irritation of eyes and mucous membrane in mouth, nose and digestive tract, including the intestines. Long-term or heavy exposure may</p>	<p>impact functioning of the central nervous system. Reproductive system may also be affected. It has low acute toxicity, says WHO Is styrene present in water and air? Traces are found in water and air and even in food. WHO warns that smoking may raise daily exposure by up to 10 times, while those living near plastics and resins units inhale a few hundred micrograms per day. The impact on health may not be visible immediately. The permissible level of styrene in drinking water is 0.02 mg/litre</p>
<p>What are the symptoms of exposure? The symptoms of styrene exposure include headaches, weakness, tiredness, loss of hearing and depression</p>	<p>Where do we find styrene in our daily use? Right from the plastic bottle containing drinking water to styrofoam cups, we find styrene in common things of daily use</p>

Efforts to tackle chemical disasters

Bhopal Gas Leak (Processing of Claims) Act, 1985,	Central govt to secure claims connected with Bhopal gas tragedy
Environment Protection Act, 1986,	Central govt to set standards and inspect industrial units.
The Public Liability Insurance Act, 1991	<ul style="list-style-type: none"> • all enterprises that own or have control over handling of any hazardous substance, to subscribe to a "public liability insurance policy cover" whereby they are insured against the claims from third parties for death or injury or property damage caused by hazardous substances handled in their enterprise • Compensation-irrespective of the company's neglect • Claim-File within 5 years of the accident • Criticism- Low compensation (Death-25000 rs)
National Green Tribunal, 2010	tribunal for effective and expeditious disposal of cases

Analysis

Case of Bhopal gas tragedy	The judicial processing of the Bhopal Gas Tragedy took approximately 26 years government's failure in protecting the legal rights of the gas victims
Judiciary failed to relieve	owners were not held accountable for the damage to life and were let out on bail.
Fixation of Acoountability	Normally suit is usually against a company involved but not person responsible for negligent behaviour
Poor regulation	governments tighten safety rules during time of crisis Large number of clearances to industrial proposals
Multiple laws	No comprehensive regulatory oversight.

4.2. Norms for employing retired officials defined

- The Central Vigilance Commission (CVC) has laid down a defined procedure to be followed by government organisations for getting vigilance clearance before employing a retired official on a contractual or consultancy basis.

Norms

- Before offering employment to **retired All India Services and Group A officers of the Central government** or their equivalent in other organisations owned or controlled by the Centre, vigilance clearance from the employer organisation, from which the officer has retired, should be obtained.
- In case a **retired officer served in more than one organisation**, clearance has to be obtained from all of them where the person was posted in the 10 years prior to retirement.
- Simultaneously, a **communication seeking clearance** should also be sent to the CVC.
- **If no reply** is received from the erstwhile employer (s) within 15 days of sending the communication by speed post, a **reminder can be sent**.
- If there is no response within 21 days, vigilance clearance should be deemed to have been given.
- Later, if the **employee is found involved** in any vigilance-related matter or not cleared from the vigilance point of view, the **erstwhile employer organisation would be responsible** for all consequential actions

Cooling-off period

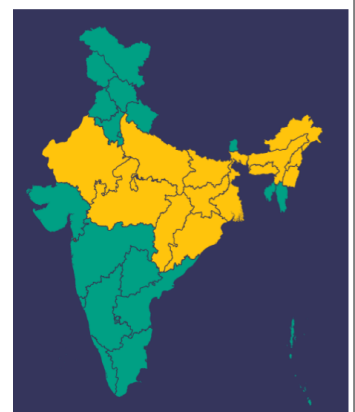
- In the case of retired officials taking up full-time or contractual assignments in the private sector, the Commission said often, the “cooling off” period was not observed and the act constituted serious misconduct.
- It directed all government organisations to **formulate rules to ensure the cooling-off** period was observed.

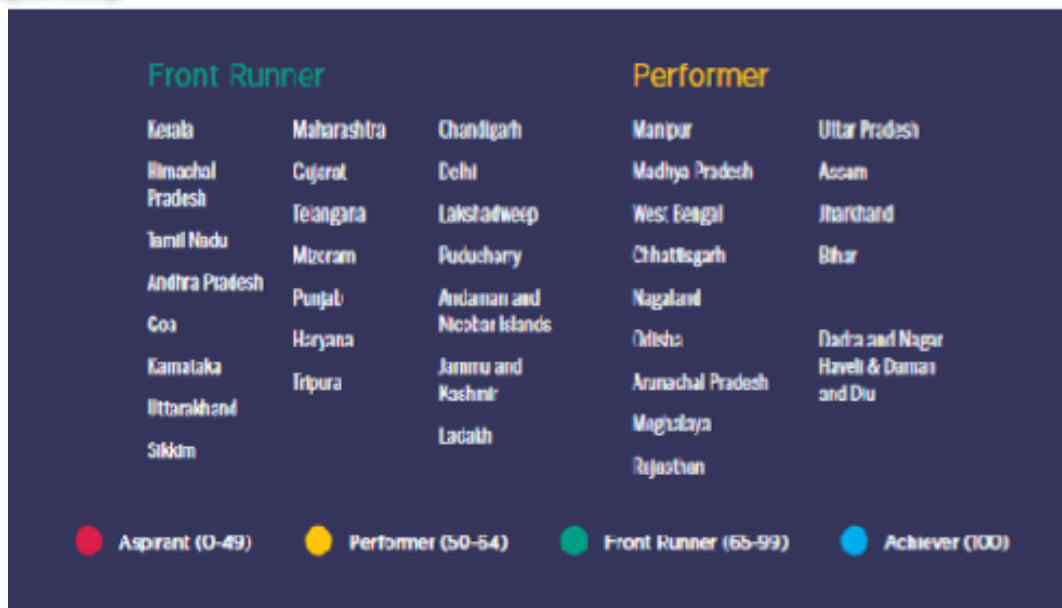
4.3. SDG India Index

- Niti Aayog recently released SDG India Index 2020-21
- The index documents the **progress made by India's States and Union Territories** towards achieving the **2030 SDG targets**

Methodology

- A composite score for SDG Index was computed in the range of 0– 100 for each State/UT based on its aggregate performance across SDGs.
- The higher the score of a State/UT, the closer it is towards achieving the 2030 national targets.
- From covering 13 goals, 39 targets, and 62 indicators in the first edition in 2018-19 to 17 goals, 54 targets and 100 indicators in the second; t
- The SDGs, constituted through an unprecedented consultative process, have 17 goals and 169 related targets to be achieved by 2030





Performance -India overall score 66 point (6 point up from last year)

Top performers	States at the bottom of table	Top performing Union Territories	Top gainers
Kerala: 75 points	Bihar: 52 points	Chandigarh: 79	Mizoram: 12 points gained
Himachal Pradesh: 74 points	Jharkhand: 56 points	Delhi: 68	Haryana: 10 points gained
Tamil Nadu: 74 points	Assam: 57 points	Lakshadweep: 68	Uttarakhand: 8 points gained

Analysis

- India saw significant improvement in the Sustainable Development Goals (SDGs) related to **clean energy, urban development and health** in 2020
- However, there has been a major decline in the areas of **industry, innovation and infrastructure** as well as decent work and economic growth
- Although the index shows **improvement on the inequality SDGs**, the NITI Aayog has **omitted key economic indicators** used to measure inequality in income and expenditure last year and given greater weightage to social indicators instead

Thrust on social equality

- In 2019, the indicators for inequality included the **growth rates for household expenditure per capita** among the bottom 40% of rural and urban populations, as well as **the Gini coefficient** — a measure of the distribution of income — in rural and urban India.
- **The 2018 indicators** included the **Palma ratio**, another metric for income inequality.

2020 edition

- Such economic measures have been **omitted from the indicators** used for this SDG in the 2020 edition of the Index.



- Instead, it gives **greater weightage to social equality indicators**, such as the percentage of women and **Scheduled Caste/ Scheduled Tribe representatives** in State Legislatures and the panchayati raj institutions and the levels of crime against the SC/ ST communities.
- The only economic indicator this year is the percentage of population in the lowest two wealth quintiles

Current affairs Worksheet (4th June 2021)

Factual sheet for Quick revision

Topic	Description	Update
Env	Black carbon and impact	
Geog	Hindu Kush Himalayan (HKH) Region	
SnT	Monoclonal antibodies Antibody cocktail drug	
Eco	Model Tenancy Act (MTA)	
Polity	chemical disasters in India (List) The Public Liability Insurance Act, 1991 SDG India Index 2020-21	