

## GRAP

### ❖ Context

- The **Commission for Air Quality Management (CAQM)** said that measures under 'Stage-1' of the **Graded Response Action Plan (GRAP)** will be enforced in the NCR with immediate effect.

### ❖ Key Highlights

- The order came after Delhi's AQI deteriorated to be in the 'poor' category recently.
- The **AQI in Delhi was 211.**
- The CAQM revised the Graded Response Action Plan earlier this year.

### ❖ Graded Response Action Plan (GRAP)

#### • About :

- The **GRAP was first notified in January 2017** by the **Ministry of Environment, Forest and Climate Change.**
- GRAP is a set of **emergency measures** that kick in to **prevent further deterioration of air quality** once it reaches a certain threshold.

#### • Activation of GRAP Stages :

- **Stage 1 (AQI 'Poor' – 201 to 300)**
  - Stopping all **construction and demolition activities** (with plot size of 500 square )
  - Ban on open **burning of waste** and PUC for vehicles.
- **Stage 2 (AQI 'Very poor' – 301 to 400)**
  - Not allowing **coal/firewood** in tandoors at hotels.
  - **Stopping use of diesel generator sets** except for essential and emergency services.
  - **Augment CNG/ electric bus** and metro services.

#### ▪ Stage 3 (AQI 'Severe' – 401 to 450) :

- **Ban on construction and demolition activities** except railway, metro, hospitals, sanitation projects etc.
- **Closure of industries** that have PNG supply and are not running on approved fuels.
- State governments in NCR may impose **restrictions on BS III petrol and BS IV diesel four wheelers.**

#### ▪ Stage 4 (AQI 'Severe +' – more than 450) :

- **Stop entry of truck** traffic into Delhi (except for essentials, CNG and electric trucks).
- Ban on plying of Delhi registered diesel medium and heavy goods vehicles in Delhi, except for essentials.
- Additional emergency measures like **closure of schools, plying of vehicles** on odd-even basis.

- **Side Note** : Actions under **Stages II, III and IV** will be invoked three days in advance of the AQI reaching the projected level

#### • Key Changes in GRAP this Year

- This year, **measures are pre-emptive** and will kick in based on forecasts.
- This year, **GRAP is being enforced based on the AQI**, which takes other pollutants also into account, such as ozone, sulphur dioxide and oxides of nitrogen.

#### • Implementation :

- The task of implementing the GRAP fell on the now dissolved Environment Pollution (Prevention and Control) Authority for the NCR.
- From 2021 onwards, the **GRAP is being implemented by the CAQM.**

## International Solar Alliance (ISA)

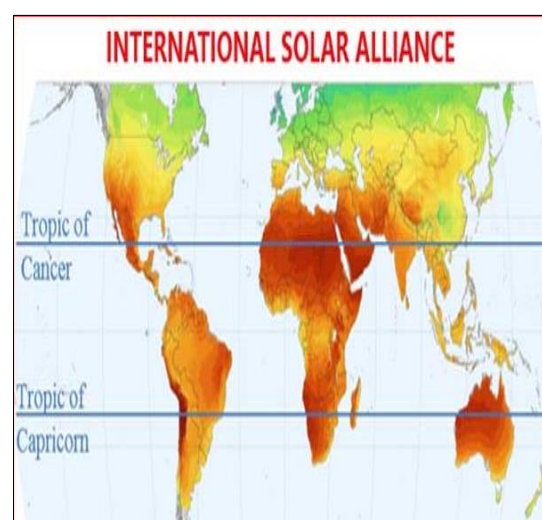
### ❖ Context

- The Fifth Assembly of the International Solar Alliance along with side events to be held in New Delhi from 17th - 20th October, 2022.



### ❖ About The International Solar Alliance:

- The International Solar Alliance is an international organisation with 109 member and signatory countries.
- The Assembly is the apex decision-making body of ISA, in which each Member Country is represented.
- It works with governments to improve energy access and security worldwide and promote solar power as a sustainable way to transition to a carbon-neutral future.
- ISA's mission is to unlock US\$ 1 trillion of investments in solar by 2030 while reducing the cost of the technology and its financing.
- It promotes the use of solar energy in the Agriculture, Health, Transport and Power Generation sectors.
- With the signing and ratification of the ISA Framework Agreement by 15 countries, on 6 December, 2017, ISA became the first international intergovernmental organization to be headquartered in India.



- India holds the office of the President of the ISA Assembly.
- This body makes decisions concerning the implementation of the ISA's Framework Agreement and coordinated actions to be taken to achieve its objective.

- Following the 5<sup>th</sup> General Assembly, three analytical reports will also be launched, namely:
  - World Solar Technology Report
  - World Solar Market Report
  - World Solar Investment Report

## Face to Face Centres

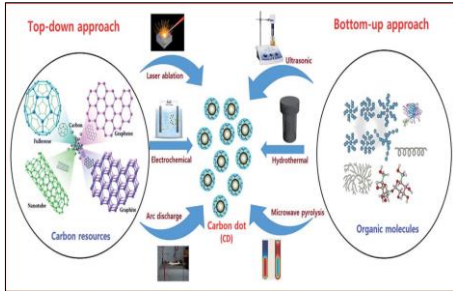


## Carbon Dots (CDs)

### ❖ Context

➤ Modern technology like nanomaterials or CD's might be the solution to environmental issues like water pollution.

### ❖ Key Highlights



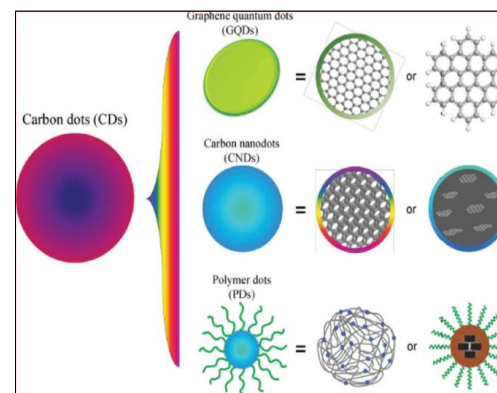
• The attractive properties of carbon nanomaterials have been an extensively studied area as they push the limits and capabilities of technology.

- CDs are one of the youngest members of the carbon nanomaterial family.
- They were discovered in 2004 and have an average diameter of less than 10 nanometres.
- The technology is produced from various raw materials leading to their wide range of beneficial physicochemical characteristics.
- CDs possess remarkable optical properties, which differ peculiarly based on the precursor used for synthesis.
- The dots show continuous and broad absorption spectra, intense fluorescent activity, excellent photostability and highly tunable photoluminescence.
- Since they are good electron donors and acceptors, they are becoming more popular as candidates in applications like sensing and bioimaging.

• Moreover, CDs are inexpensive, highly biocompatible, and environment-friendly.

### ❖ Synthesis of CDs

• Generally, the synthesis of CD's can be categorised into "top-down" & "bottom-up" methods. The top-down approach converts large carbon structures into quantum-sized carbon dots by laser ablation, arc discharge, and chemical or electrochemical oxidation.



• In the bottom-up method, CDs are produced from carbonising small molecule precursors by pyrolysis, carbonisation, hydrothermal processes or microwave-assisted synthesis.

- The fascinating properties of carbon dots have enabled them to be used in various environmental applications.
  - Pollutant sensing
  - Contaminant adsorption
  - Water treatment
  - Pollutant degradation
  - Antimicrobial

## Unlawful Activities (Prevention) Act (UAPA) Tribunal

### ❖ Context

➤ Govt appoints Justice Dinesh Kumar Sharma of Delhi High Court as Presiding officer of UAPA Tribunal.



### ❖ Key Highlights

- The presiding officer has been appointed to review the ban on the Popular Front of India (PFI) and its associates.
- The centre has recently banned PFI for 5 years, after seizing incriminating documents during the search operations at the offices of the outfit & the residences of its office bearers.

### ❖ About UAPA

- **Unlawful Activities (Prevention) Act** is an Indian law aimed at prevention of unlawful activities associations in India.
- Its main objective was to make powers available for dealing with activities directed against the integrity and sovereignty of India.
- The most recent amendment of the law, the Unlawful Activities (Prevention) Amendment Act, 2019 (UAPA 2019) has made it possible for the Union Government to designate individuals as terrorists with due process of law.
- UAPA is also known as the Anti-terror law.

## US-India Strategic Clean Energy Partnership (USISCEP)

### ❖ Context

➤ Minister of Petroleum and Natural Gas & Housing and Urban Affairs, will lead an official and business delegation to Washington DC and Houston, USA, from 6-11 October 2022.



### ❖ Key Highlights

- The revamped USISCEP was launched in accordance with U.S.-India Climate and Clean Energy Agenda 2030 Partnership.
- The US-India SCEP builds upon a longstanding bilateral energy dialogue focused on energy security and innovation.
- The revitalized SCEP will continue to advance energy security and innovation with greater emphasis on electrification and decarbonization of processes and end uses.

- The partnership continues to advance energy security and innovation; scaling up emerging clean energy technologies; and deploying technical solutions through 5 pillars.
  - Responsible Oil and Gas Pillar.
  - Power and Energy Efficiency Pillar.
  - Renewable Energy Pillar.
  - Sustainable Growth Pillar.
  - Emerging Fuels and technologies.

### Face to Face Centres





## Certification of Cotton Traceability

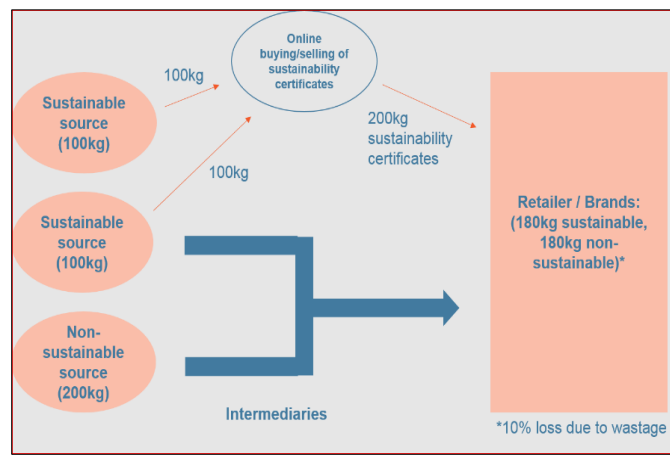
### ❖ Context

- The Cotton Textiles Export Promotion Council has launched the General Certificate of Conformity (GCC) programme along with Control Union for the traceability of Indian farm cotton to boost exports and track cotton down the value chain.



### ❖ Key Highlights

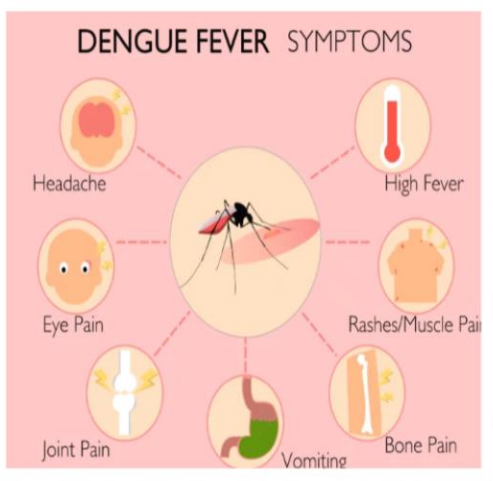
- Sustainability and traceability of cotton fibre has become one of the main criterias to tap the overseas market.
- Farmers have expanded the cotton area by 9 per cent to 128 lakh hectares Cotton prices begin to ease as new crop hits markets Environmentalists have criticised the increased use of pesticides Pesticide use must be controlled.



- Texprocil was the first export promotion council set up in independent India in 1954.
- The traceability of cotton fibre is now an essential and mandatory parameter for export of value-added cotton textile products to developed markets.

## News in Between the Lines

### Dengue



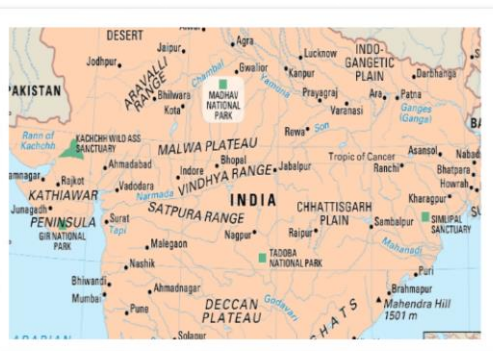
### ❖ Context

- Recently, a total of 412 Dengue cases were reported in the capital – more than twice the figure recorded last year in September with 217 cases.

### ❖ About Dengue

- Dengue is a **viral infection** transmitted to humans through the bite of infected mosquitoes.
- **Vectors :**
  - The primary vectors that transmit the disease are **Aedes aegypti mosquitoes** and, to a lesser extent, **Ae. albopictus**.
  - Aedes aegypti is a **daytime feeder**.
  - There are **4 serotypes of the virus** that causes dengue. These are known as DEN-1, DEN-2, DEN-3, DEN-4.
  - **Dengue serotype 2** is considered the **most virulent strain** and may produce serious illness.
- **Distribution :**
  - It is essentially, a **tropical disease** occurring in hot weather and intermittent rainfall conditions.
- **Symptoms :**
  - **High Fever (40°C/ 104°F)** is usually accompanied by at least two of the following symptoms: headaches, pain behind eyes, nausea, vomiting, swollen glands, joint, bone or muscle pains and rash.
- There is **no vaccine or specific medication for dengue fever**.

### Madhav National Park



### ❖ Context

- **National Green Tribunal (NGT)** recently stopped mining in ecologically sensitive **Madhav National Park** in Madhya Pradesh.

### ❖ Key Highlights

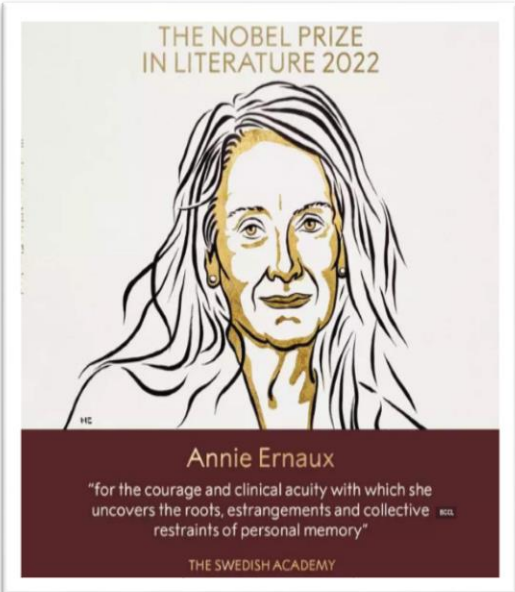
- It is situated in Shivpuri District of Gwalior division in northwest Madhya Pradesh, India.
- The Park is gifted with a diverse ecosystem comprising of lakes, forests and grasslands.
- The forest is home to antelopes like Nilgai, Chinkara and Chowsinga and Deer including Chital, Sambar and Barking Deer.
- It got the status of a National Park in 1958.

### Nobel Prize in Literature 2022

### ❖ Context

- Recently, **The 2022 Nobel Prize in Literature** was awarded to French writer **Annie Ernaux** at the Swedish Academy in Stockholm.

## Face to Face Centres



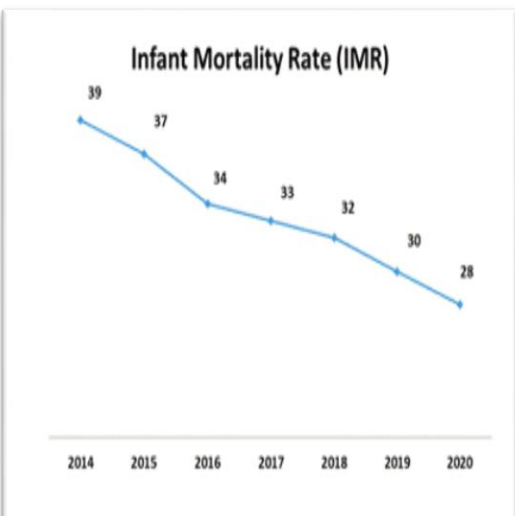
### ❖ Key Highlights

- **Work** : Annie Ernaux won the prestigious prize “for the courage and clinical acuity with which she uncovers the roots, estrangements and collective restraints of personal memory”.

### ❖ About Annie Ernaux

- Annie Ernaux was **born in 1940** and grew up in the small town of Yvetot in Normandy.
- Ernaux, 82, has seen a sharp increase in **popularity in the English-speaking world since 2019**, after her seminal work ‘The Years’, translated by Alison L Strayer, was shortlisted for the Man Booker international prize.
- Her **book on her illegal abortion in the 1960s, ‘Happening’ (first published in 2001)** has also been in the limelight after abortion rights were curtailed in the US.
- It **presents uncompromising portraits of sexual encounters, abortion, illness and the deaths of her parents.**
- Ernaux describes **her style as “flat writing” (écriture plate)**, a very objective view of the events she is describing, unshaped by florid description or overwhelming emotions.

## Decline in Female Infant Mortality Rate (IMR)



### ❖ Context

- Recently, India has registered **decline in female infant mortality rate.**

### ❖ Key Highlights

- The country's female Infant Mortality Rate (IMR) **dropped to same level as males.**
- However in **sixteen states, IMR remained higher for female babies than male but the gap had reduced since 2011.**
- **Chhattisgarh had the highest gap in 2020**, with a male infant mortality rate of 35 compared to female infant mortality rate of 41.
- In Kerala and Himachal Pradesh, IMR for boys is considerably higher.
- **Infant Mortality Rate :**
  - Infant mortality rate is the number of **infant deaths for every one thousand live births.**
  - It gives us key information about maternal, infant health and overall health of a society.
  - **IMR for India-** 28 for every 1,000 live births, girls or boys.
  - Sustainable Development Goal (SDG) target of 25 or less deaths per 1,000 live births by 2030.

## Quality Council of India (QCI)



[Daily Current Affairs](#)

[Daily Pre PARE](#) [Daily MCQ Quiz](#)

### ❖ Context

- The **QCI is completing 25 years** of its existence this year.

### ❖ Key Highlights

- The QCI has also launched a campaign, ‘**Gunvatta Se Atmanirbharta: India’s Quality Movement.**’
  - **Objectives :**
    - To celebrate India’s quality hubs.
    - To create awareness about India’s landmark achievements.
    - To inform people about initiatives to enhance the quality of life of all citizens.

### ❖ About QCI:

- The QCI was **set up in 1997 jointly by the government, Assocham, CII and FICCI**, had Ratan Tata as its first chairman.
- It is an **autonomous body.**
- **Aim:** To establish and operate national accreditation structure and promote quality through National Quality Campaign.
- **Nodal ministry :** The Department of Industrial Policy & Promotion, Ministry of Commerce & Industry,
- **Appointment:** The Chairman of QCI is appointed by the Prime Minister on recommendation of the industry to the government.

## Face to Face Centres