



DAILY CURRENT AFFAIRS 18-06-2024

GS-1

1. National Centre for Seismology
2. Kavli Prize

GS-2

3. Central Information Commission
4. Digi Yatra

GS-3

5. New Collective Quantified Goal

National Centre for Seismology

Syllabus: GS-1; Earthquake

Context

- *An earthquake of magnitude 3.4 on the **Richter Scale** struck Manipur's Kamjong, according to the National Centre for Seismology (NCS).*

About

- *The National Centre for Seismology (NCS) is an office of India's **Ministry of Earth Sciences**.*
- *The office monitors earthquakes and conducts seismological research.*
- *Specifically, it provides earthquake surveillance and hazard reports to governmental agencies.*
- *It consists of various divisions:*
 - *Earthquake Monitoring & Services*
 - *Earthquake Hazard & Risk Assessments*
 - *Geophysical Observation Systems*
- *The Seismology Division and Earthquake Risk Evaluation Centre of the **India Meteorological Department** merged with NCS in August 2014 to more effectively monitor and research seismological activity.*
- *The Centre's objective is to improve understanding of earthquake processes and their effects through seismological research and monitoring.*
- *In July 2017, NCS released a mobile app, "**IndiaQuake**", that disseminates realtime earthquake information.*

Seismic Microzonation

- *A priority of NCS is to provide seismic microzonation of major urban areas in India lying in seismic hazard zones.*
- *This exercise has been initiated for 30 cities in India, including Delhi.*

Seismological Research

- *NCS is actively involved in seismological research related to estimating shallow and deep crustal structures in various tectonic domains of the India land mass.*
- *This research provides insight into earthquake occurrence processes in the **Himalayas, the Burma plate, and the Sumatra trench**, as well as crustal deformation measurements in the plate-boundary and plate-interior regions.*

Kavli Prize

Syllabus: GS-1; Awards and Recognition

Context

- *The winners of the 2024 Kavli Prize (not to be confused with the Kavli Medal) were announced.*
- *Eight winners were awarded for their contributions to astrophysics, neuroscience, and nanoscience.*



Fred Kavli

- *The Kavli Prize is awarded in honour of **Norwegian-American businessman and philanthropist Fred Kavli (1927-2013)**.*
- *Born in Erejsford, Norway, Kavli moved to California in 1956 after getting an engineering degree. In the US, he began working for a company which built high-tech sensors for missiles, becoming its chief engineer within a year.*
- *In 1958, he started his own enterprise, founding Kavlico.*
- *Today, the company is a leading manufacturer of pressure sensors and related systems, which are used in all kinds of industries, from aviation to home appliances. Kavlico's pressure transducers (devices which convert pressure into an electric signal) are known for their high accuracy, stability, and reliability.*
- *In 2000, Kavli sold his company for \$ 340 million, and established the Kavli Foundation, with the aim to support wide-ranging basic research to improve the quality of life for people worldwide.*

- *The foundation runs 20 institutes which specialise in astrophysics, neuroscience, nanoscience, and theoretical physics.*

Winners in 2024

All eight scientists awarded the Kavli Prize this year are professors at leading American universities.

- **ASTROPHYSICS:** *This year's prize for astrophysics has been awarded to David Charbonneau of Harvard University, and Sara Seager, of the Massachusetts Institute of Technology.
The duo have been recognised for discoveries of exoplanets, and the characterisation of their atmosphere.*
- **NANOSCIENCE:** *Robert Langer of MIT, Armand Paul Alivisatos of the University of Chicago, and Chad Mirkin of Northwestern University were given the prize for nanoscience.
Langer was recognised for his breakthrough idea of nano-engineering a material for the controlled release of therapeutic bio-molecules, which could help the development of controlled drug delivery systems to treat diseases like aggressive brain cancer, prostate cancer and schizophrenia.
Alivisatos devised semiconductor crystals or "quantum dots" which could be used as multi-colour fluorescent probes in bio-imaging.
Mirkin introduced the concept of spherical nucleic acid (SNA), a new class of nucleic acids that are densely functionalised and oriented spherically around a nanoparticle core.
SNAs have wide-ranging use in areas like intracellular detection, gene regulation and immunotherapy.*
- **NEUROSCIENCE:** *The prize in neuroscience has been awarded to Nancy Kanwisher of MIT, Winrich Freiwald of Rockefeller University, and Doris Tsao of the University of California at Berkeley.
The trio have been awarded for their collective effort over decades to map the linkage between facial recognition and the brain.
While Kinwisher identified the exact brain's centre for face processing, Tsao and Freiwald took this knowledge forward using functional imaging and recording from individual brain cells to map out the neural architecture of the human brain.*

Central Information Commission

Syllabus: GS-2; Non Constitutional Bodies

Context

*The Delhi High Court recently observed that the Central Information Commission (CIC) has no jurisdiction to comment on the utilisation of funds by the members of Parliament under the **Members of Parliament Local Area Development Scheme**.*



About

- *The Central Information Commission is a **statutory body**, set up under **the Right to Information Act in 2005** under the Government of India.*
- *This acts upon complaints from those individuals who have not been able to submit information requests to a **Central Public Information Officer or State Public Information Officer** due to either the officer not have been appointed, or because the respective Central Assistant Public Information Officer or State Assistant Public Information Officer refused to receive the application for information under the **Right to Information Act**.*
- *The commission includes one chief information commissioner and not more than ten information commissioners who are appointed by the **President of India** on the recommendation of a committee consisting of the Prime Minister as chairperson, the Leader of Opposition in the Lok Sabha and a Union Cabinet Minister to be nominated by the Prime Minister.*
- *Two women have been chief information commissioners: Deepak Sandhu (fourth chief information commissioner overall) and Sushma Singh (fifth overall).The oath to CIC is administered by President of India.*

Digi Yatra

Syllabus: GS-2; Government polices and Interventions

Context

- *Digi Yatra could be expanded to hotels, rail travel and public places: CEO*

Significance

- *This would **enhance the travel experience for a tourist** who has to produce a passport for check-in at a hotel and at police stations for verification.*

About

- *The Digi Yatra initiative is digital processing of air travellers which uses their **biometrics such as a facial scan instead of a boarding pass to enable paperless movement through various checkpoints at an airport.***
- *The initiative was rolled out at airports in December 2022, and today covers 14 airports while 15 more airports will be included by the end of 2024.*
- *The primary aim of the initiative at the time its policy document was launched in 2017 was **to improve passenger throughput** (or number of passengers passing through various checkpoints) at airports.*
- *This would achieve the objective of enhancing airport infrastructure needed to cater to increasing passenger volumes by ensuring more efficient airport operations, alongside physical expansion of airports in the country.*
- *But the proposed use-case for hotels and other public places implies that the role for Digi Yatra could extend beyond air travel.*
- *The Digi Yatra Foundation itself is a not-profit private company which is a consortium of five private airports that have a combined shareholding of 74%, and Airports Authority of India which holding the remainder 26% share.*

New Collective Quantified Goal

Syllabus: GS-3; Climate Change

Context

- *The New Collective Quantified Goal (NCQG) on **climate finance** is the headline issue of the year, but the outcomes have not inspired much hope.*

About

- *In 2009, developed countries agreed to collectively mobilize \$100 billion per year by 2020 for climate action in developing countries.*
- *A successor **climate finance goal** is set to be formalized at **COP29 in Baku**.*
- ***The New Collective Quantified Goal (NCQG)** is to be set from a floor of \$100 billion, taking into account the needs and priorities of developing countries.*
- *The process of developing the new goal has been profoundly different from its predecessor, with a series of technical dialogues and deliberations over three years.*
- *This process and focus should foster more trust in the process and in multilateral cooperation, so that ambitious plans for mitigation and adaptation action can be put in place.*

Who should pay up for climate action?

- *The expansion of the contributor base for the new goal was deadlocked.*
- *Simply put, parties from the Global North, including the United States, the European Union and Australia, are calling for an increase in the contributor base to the new finance goal in order to “**reflect new economic realities**.”*
- *Developing countries argue that this debate is irrelevant because the NCQG is intended to facilitate the transfer of climate finance from developed to developing countries.*
- *This is a fundamental schism that is likely to escalate.*
- *The **UNFCCC (or the Convention) and the Paris Agreement** do not include a legal definition of ‘developed’ and ‘developing’ countries.*
- *The interpretation of the terms within these contexts has primarily been based on the grouping into ‘**Annex II**’ and ‘**Non-Annex I**’ Parties, set in 1992 at the time of the adoption of the Convention.*
- *The former are the developed countries that must provide financial assistance to developing countries under the Convention.*
- *Several of these Annex II nations are currently arguing that this categorisation is outdated in the NCQG context.*
- *This was strongly opposed by the Group of 77 and China bloc, who argued that the question of who ‘else’ should provide finance was outside the mandate of the NCQG for several reasons.*
- *Firstly, because it is supposed to be a goal for the provision of finance from developed to developing countries, with historical responsibility for emissions by developed countries being the premise.*
- *Secondly, they pointed to Articles 9.1 and 9.3 of the Paris Agreement to be read together, which speak to developed countries’ obligations to provide financial support.*
- *Further, the goal is a continuation of the \$100 billion commitment by developed countries.*

- *Developing countries stood steadfast in their argument that the climate finance negotiations were not meant to push more responsibility onto them, but rather to create a goal that honours the obligations of developed countries to provide long overdue means of implementing climate action.*
- *Developed countries, on the other hand, focused more on Article 9.3 alone, which states they “**take the lead**” in mobilising climate finance, but doesn’t specify the obligatory aspect as such, observers told Delhi-based think tank Centre for Science and Environment.*
- *Relatedly, most of the interventions by countries in the Global North attempted to push the understanding that the NCQG is a “**broad goal**”.*
- *This is in stark contrast to the positions of over 100 developing countries that say, as a continuation of the \$100 billion commitment of developed country Parties, the NCQG’s mandate is simply to be a goal based on their needs and priorities, which ensures the provision of finance to them and an emphasis on international public finance.*