National Judicial Data Grid

Context: The article was mentioned on the PIB Website.

- The National Judicial Data Grid (NJDG) is an online platform under the eCourts Project.
- It serves as a database for orders, judgments, and case details from District & Subordinate Courts and High Courts.
- Information is updated in near real-time by connected courts.
- NJDG covers 18,735 District & Subordinate Courts and High Courts.
- It provides data on judicial proceedings from computerized courts across the country.
- All High Courts are part of NJDG, offering easy access to the public.
- The platform employs elastic search technology for efficient search and retrieval.
- Litigants can access case status info for over 23.58 crore cases and 22.56 crore orders/judgments.
- Data includes both civil and criminal cases.
- Drill-down analysis is possible based on case age, State, and District.
- NJDG functions as a monitoring tool to manage and reduce case pendency.
- It aids in making policy decisions for timely case disposal.
- The platform facilitates better court performance monitoring and resource management.
- Land Records data from 26 States are linked with NJDG for tracking land dispute cases.

Network Integration in eCourts Project

- **Wide Area Network (WAN) Project under eCourts:**
  - Aims to connect District and Subordinate court complexes across the country using technologies like OFC, RF, and VSAT.
  - 2976 out of 2992 sites commissioned by March 2023 (99.5% completion rate).
  - Offers bandwidth speeds from 10 Mbps to 100 Mbps, forming a strong foundation for the eCourts project.
- **Computerization and WAN Connectivity:**
  - Extends connectivity to remote courts (Technically Not Feasible - TNF sites) through methods like RF, VSAT, and Submarine cable.
  - Successful collaboration with stakeholders reduces TNF sites from 58 (2019) to 1 (2022).
  - This achievement translates to savings of Rs. 95.45 crore for the government.
  - Work Order issued for the remaining 11 sites.
  - WAN connectivity becomes especially crucial during the COVID-19 period, improving Video Conferencing and access to justice.

Ayushman Bharat Digital Mission (ABDM)

Context: The inaugural ABDM Microsite, initiated as part of the 100 Microsites Project by the National Health Authority, has been inaugurated in Aizawl, Mizoram.

- The National Health Authority (NHA) introduced the 100 Microsites project to fast-track the adoption of Ayushman Bharat Digital Mission (ABDM) nationwide.
- Mizoram takes the lead as the first state in India to activate an ABDM Microsite in Aizawl, its capital city.
- The initiative aims to digitize healthcare facilities, including private clinics, small hospitals, and labs, offering digital health services to patients.
- The Microsites focus on enrolling small healthcare providers, mainly overseen by State Mission Directors of ABDM with NHA's financial support.
- Patients can link health records to Ayushman Bharat Health Accounts (ABHAs) via ABDM-enabled Personal Health Record (PHR) applications on their phones.
- NHA's past Microsites pilots in Mumbai, Ahmedabad, and Surat informed the structure of the 100 Microsites project under ABDM.

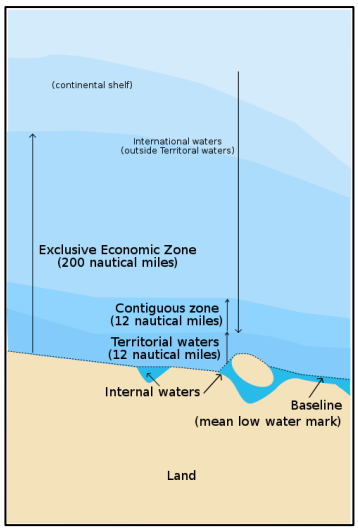
ABDM

- Launched in September 2021 via a Prime Minister-led video conference.
- **Goal**: Issue digital health IDs for all Indians, facilitating electronic access to health records for hospitals, insurance companies, and citizens.
- Pilot project announced on 15th August 2020 from the Red Fort by the Prime Minister.

- Initial implementation in six States & Union Territories.
- Implemented by the National Health Authority (NHA) under the Ministry of Health and Family Welfare.
- **Features:**
  - **ABDM Sandbox:**
    - Supports tech and product testing.
    - Aids private entities to join digital health system.
  - **ABHA Mobile App (Ayushman Bharat Health Account):**
    - Integrates health records, public health, insurance, and ABHA numbers.
    - Provides convenient record access.
  - **Ayushman Bharat Health Account Number (ABHA Number):**
    - Identifies and authenticates individuals for health records.
    - Works across systems with patient consent.
    - Collects key details like demographics, family, and contact info.
  - **Health Facility Registry (HFR):**
    - Houses varied health facilities.
    - Includes public/private places like hospitals, clinics, labs, pharmacies.
    - Registration connects to India's digital health network.
  - **Healthcare Professionals Registry (HPR):**
    - Stores diverse healthcare professionals.
    - Joining links to India's digital health system.
  - **Unified Health Interface (UHI):**
    - Forms open network for User and Provider apps.
    - Enables services like booking, teleconsultation, and discovery.

SOP on White Shipping Information Exchange

Context: The white shipping information exchange agreement between the Indian Navy and the Philippine Coast Guard has been signed.



- Admiral R. Hari Kumar, Chief of the Naval Staff, and CG Admiral Artemio M. Abu, Commandant of the Philippine Coast Guard, signed the Standard Operating Procedure (SOP) for white shipping information exchange on August 23, 2023.
- The signing took place in New Delhi during the visit of the Commandant, Philippine Coast Guard, to India.
- This agreement enables the exchange of merchant shipping traffic data, enhancing maritime safety and security in the region.

Definition of White Shipping Agreement

- White shipping information involves sharing advance data about the movements and identities of non-military merchant vessels.
- Ships are categorized as white (commercial), grey (military), and black (illegal) to aid identification.

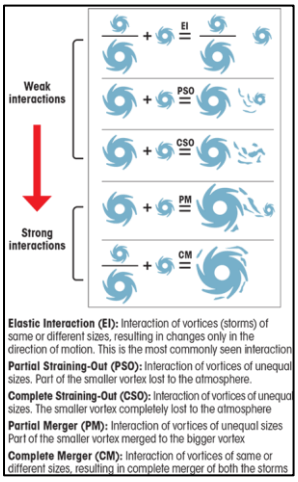
Importance of the White Shipping Agreement

- Vital due to global ocean connectivity, addressing security threats and potential movements.
- Ensures security by providing vessel identity information to counter maritime threats.
- Enhances regional maritime domain awareness, contributing to security measures.
- Enables identification of illegal vessels through prior knowledge of destinations and planned routes.

Fujiwhara effect

Context: Sub-tropical storm Hilary hit the U.S. west coast, leading to the first tropical storm watch in parts of Southern California by the National Hurricane Centre (NHC).

- **Definition**: The Fujiwhara Effect involves interactions between tropical storms that form simultaneously in the same ocean region. These storms have centers or eyes situated within a distance of less than 1,400 km from each other. The intensity of these storms can vary, ranging from a depression with wind speeds below 63 km per hour to a super typhoon with wind speeds exceeding 209 km per hour.
- When two hurricanes (or cyclones) move close together, they engage in an intricate dance around a shared centre.
- Described by the National Weather Service (NWS), this interaction results in fascinating cyclone behaviour.
- If one hurricane is stronger, the smaller one orbits and eventually merges into the vortex of the larger.
- Similar-strength storms might gravitate together, merging or spinning around each other before separating.
- Rarely, intense cyclones may fuse, forming a massive cyclone that poses coastal threats.
- Japanese meteorologist Sakuhei Fujiwhara identified the phenomenon, published in 1921.
- First observed in 1964 when typhoons Marie and Kathy merged over the western Pacific Ocean.



Fujiwhara Effect can take place in various ways

- **Elastic Interaction**: The direction of motion changes, a common interaction that requires close examination.
- **Partial Straining Out**: Involves a portion of the smaller storm being lost to the atmosphere.
- **Complete Straining Out**: The smaller storm is entirely lost to the atmosphere, with exceptions for storms of equal strength.
- **Partial Merger**: The smaller storm merges into the larger one.
- **Complete Merger**: Two storms of similar strength undergo a full merger.

NEWS IN BETWEEN THE LINES

New Car Assessment Programme

Ministry of Road Transport launched Bharat New Car Assessment Programme (Bharat NCAP) for car crash testing.
Rates cars from 1 to 5 stars indicating crash safety.
Effective from October 1, 2023.
Voluntary Ratings: Applies to vehicles up to 8 seats, weight below 3,500 kgs.
Parameters Evaluated:
- Rates adult & child occupant protection, safety assist tech.
- Tests include frontal offset, side impact, pole-side impact.

Mandatory Testing Cases:
- Voluntary but mandatory for base model of popular variant (min. 30,000 sales) or on Ministry recommendation for safety.

Program Goal:
- Inform buyers about safety, boost demand for safer cars.
- India has high road fatalities, impacting economy.

Global NCAP Connection:
- Bharat NCAP based on Global NCAP.

"Safer Cars for India" campaign initiated in 2014 for independent crash tests.

The Council of Scientific and Industrial Research

About:
Established: September 1942.
Headquarters: New Delhi.
- Operates as an autonomous body under the Societies Registration Act, 1860.
- It comprises 37 national labs, 39 outreach centers, 3 Innovation Complexes and 5 units.
- Encompasses diverse fields from genomics to aeronautics.
- Focuses on societal needs in health, environment, energy, agriculture, etc.
- Headed by Director-General, includes ex-officio and other members.
- Its objectives are to promote and coordinates scientific and industrial research.

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Current affairs summary for prelims

24 August, 2023

National Curriculum Framework

What is National Curriculum Framework?

The National Curriculum Framework (NCF) is a comprehensive document formulated by the National Council of Educational Research and Training (NCERT) in India.

Ministry: Union Education Ministry

Purpose: NCF guides educational policies and curriculum deve lopment in India.

Languages:

- Classes 9 and 10: Learn three languages, two being Indian.
- Classes 11 and 12: Study two languages, one Indian origin.

Linguistic Proficiency: Aim to achieve "literary level" linguistic capacity in at least one Indian language.

Board Exams: Students can take Board exams twice a year; best score counts.

Release and Drafting: Released by NCERT, drafted by K. Kasturirangan-led committee.

Alignment with NEP 2020: NCF follows the guidelines of the National Education Policy (NEP) 2020.

Subject Structure:

The NCF mandates an increase in mandatory subjects, with seven for Classes 9 and 10 and six for Classes 11 and 12, while also introducing optional subjects.

Astra Missile

Type and Purpose:

- Astra is an indigenous beyond-visual-range air-to-air missile (BVRAAM).
- Designed to engage and destroy fast-moving supersonic aerial targ ets.

Test-Firing: Recently test-fired from Tejas aircraft off the coast of Goa.

Precision and Altitude:

- Launched at around 20,000 ft altitude.
- Test met all objectives with a flawless launch.

Collaboration:

- Test monitored by Aeronautical Development Agency (ADA), DRDO, HAL, and other relevant organizations.

Target Capability: Astra targets beyond visual range, capable of engaging agile supersonic targets.

Strategic Importance: Reflects India's progress in indigenous defence technology.

Demon Particle

What is the Demon Particle?

- A "demon particle" is a theoretical concept predicted by physicist David Pines in 1956.
- Pines proposed that electrons passing through solids could lead to the fo rmation of a new type of particle, the "demon particle."
- These particles are massless, chargeless, and transparent to light.

Superconductivity:

- Superconductivity allows electric charge to move through a material with zero resistance.
- Energy transfer between points becomes highly efficient, devoid of heat loss.
- First discovered in 1911 by physicist Heike Kamerlingh Onnes, observing mercury's resistance drop at extremely low temperatures.

Meissner-Ochsenfeld Effect:

- Superconductors repel magnetic fields within their interiors when in the superconducting state.
- Known as the Meissner-Ochsenfeld effect, causing magnetic levitation.

Place in News

Port of Chancay

Recently, dozens of cranes are being used to compact soil in a vast area on Peru's coast as part of China's major port project in Latin America. The port of Chancay, near Lima, is aimed at enhancing trade between South America and Asia.

Location:

- Situated on Peru's Pacific coast.
- Approximately 60 kilometers north of Lima, the capital of Peru.

Purpose and Significance:

- China's ambitious port project in Latin America.
- Aims to facilitate trade between South America and Asia.
- Designated as the "gateway from South America to Asia."

Ownership:

- Majority owner: COSCO Shipping, a Chinese state-owned company.
- Part of China's Belt and Road Initiative (BRI).

Project Details:

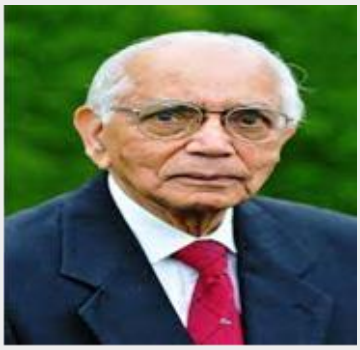
- Project cost: $1.3 billion.
- Envisaged to handle container ships that cannot dock in other South American ports.
- Offers a direct trade route to China, reducing travel time by 10 days.

Personality in News

Calyampudi Radhakrishna Rao

About Calyampudi Radhakrishna Rao:

Calyampudi Radhakrishna Rao, an eminent statistician renowned for his contributions to the field of statistics, was born on September 10, 1920, in Hadagali, Karnataka, and hailed from a Telugu family.



Academic Journey:

- Joined ISI during its early years, contributing to the development of statistics as a distinct subject.
- Earned a doctorate from Cambridge University under the supervision of Ronald Fischer.

Legacy and Influence:

- Served as an inspiration to generations of students and researchers, shaping their careers.
- Integral to the growth of ISI as an institution of statistical learning.
- Contributed to the establishment of statistical bureaus across India.

Honors and Recognitions:

- Received several awards and honors, including India's highest civilian honors: Padma Bhushan (1969) and Padma Vibhushan (2001).
- Former U.S. President George Bush conferred the National Medal of Science.

POINTS TO PONDER

- **What was the name of the rover carried by the lander during the mission Chandrayan 3?** -Pragyan
- **What groundbreaking vaccine got FDA approval to protect infants?** -Abrysvo
- **Which company is launching 'India's first kerosene-oxygen-powered rocket'?** -Agnikul Cosmos
- **What role has Sachin Tendulkar assumed with the Election Commission of India?** -National Voter Awareness Ambassador
- **Who supervised the construction of Maitri Setu?** - NHIDCL