



Jal Jeevan Mission (Urban)

Jal Jeevan Mission (Urban)

Nodal Ministry:

- Ministry of Housing and Urban Affairs

About:

- Announced in **Union Budget 2021-22**.
- To provide universal coverage of water supply to all households through functional taps in all 4,378 statutory towns.
- This in line with the Centre's rural water supply project (Jal Jeevan Mission) launched in 2019.

Objectives:

- Securing tap and sewer connections
- Rejuvenation of water bodies
- Creating a circular water economy
- Providing coverage of sewage/septage management in 500 AMRUT Cities
- To meet Sustainable Development Goal 6 (clean water and sanitation for all)

Features:

- **Pey Jal Survekshan** - Survey for Equitable Distribution
- Focus on Strengthening Urban Local Bodies
- Promoting Dual Piping Systems
- Promoting the PPP (Public-Private Partnership) Model
- A Technology Sub-Mission for water
- The Information, Education and Communication (IEC) Campaign to spread awareness about conservation of water.

Central Funding:

- For Union Territories: **100%**



- For North Eastern and Hill States: **90%**



- For Other States:

- Cities with less than 1 lakh population: 50%
- Cities with 1 lakh - 10 lakh population: 33.3%
- Cities with 1 million plus population : 25%

Constitution Bench of Supreme Court

For Prelims: Chief Justice of India, Supreme Court, Article 145(3), Article 143.

For Mains: Constitution Bench of Supreme Court.

Why in News?

Justice Uday Umesh Lalit, **49th Chief Justice of India (CJI)**, assured there will be at least one Constitution Bench functioning throughout the year in the **Supreme Court**.

What is the Constitutional Bench of the Supreme Court?

- **About:**
 - A Constitution Bench is a bench of the Supreme Court **having five or more judges on it**.
 - These benches are not a routine phenomenon.
 - A vast majority of cases before the Supreme Court are heard and decided by a bench of two judges (called a Division Bench), and sometimes of three.
- **Circumstances for Constitutional Bench to Exist:**
 - **Article 145(3):**
 - Article 145(3) provides, “The minimum number of Judges who are to sit for the purpose of deciding any case involving a substantial question of law as to the interpretation of this Constitution or for the purpose of hearing any reference under Article 143 shall be five.”
 - **Article 143:**
 - When the **President seeks the Supreme Court’s opinion** under law under **Article 143** of the Constitution.
 - As per the provision, the President of India **has the power to address questions to the Supreme Court**, which he deems important for public welfare.
 - The Supreme Court upon reference advises the President by answering the query. However, such referral advice by the apex court is **not binding on the President**, nor is it ‘law declared by the Supreme Court’.
 - **Conflicting Judgments:**
 - When two or more three-judge benches of the Supreme Court have **delivered conflicting judgments** on the same point of law, necessitating a definite understanding and interpretation of the law by a larger bench.
 - The Constitution benches are **set up on ad hoc basis** as and when the above-mentioned conditions exist.

Why does CJI seek a Permanent Constitutional Bench?

- Presently, Constitution Benches are set up on an **ad hoc basis (particular purpose)** as and when the need arises.
- It aims to help the judges **identify, hear and provide relief** in cases which need their urgent attention and also help **litigants and lawyers to avoid delay in getting their cases listed for hearing before judges** due to the long-winded processes of the Supreme Court Registry.
- It is also imperative because the Supreme Court's pendency has crossed **over 71,000 from a little over 55,000 in 2017**.

- This is despite the fact that the sanctioned judicial strength of the court was increased to 34 judges in August 2019.

Way Forward

- Unless Constitutional Bench decisions establish clear precedent, and large numbers of cases are dismissed through written orders without a hearing by the SC, the long-term benefits of a Constitutional Bench jurisdiction may be lost.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. We adopted parliamentary democracy based on the British model, but how does our model differ from that model? (2021)

1. As regards legislation, the British Parliament is supreme or sovereign but in India, the power of the Parliament to legislate is limited.
2. In India, matters related to the constitutionality of Amendment of an Act of the Parliament are referred to the Constitution Bench by the Supreme Court.

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (c)

Exp:

- Parliamentary sovereignty means supremacy of the legislative body i.e., Parliament over all other government institutions including executive and judicial bodies. In Britain there is Parliamentary sovereignty i.e., the legislature may change or repeal any previous legislation and is not bound by any written law like the Constitution.
- In India there is no Parliament sovereignty rather there is constitutional sovereignty and the authority and jurisdiction of Parliament are limited by:
 - Written Constitution which puts limitations on all organs of the state.
 - Distribution of legislative powers between the Union and the States (Articles 245-246 and the Seventh Schedule),
 - Incorporation of a code of justiciable fundamental rights (Articles 12-35 and 226), and
 - General provision for judicial review and an independent judiciary. The Judiciary can declare any law or ordinance passed by the legislature void, if any of its provisions violate one or more of the constitutional provisions. Hence, 1 is correct.
- **A Constitution Bench is a bench of the Supreme Court having five or more judges on it.**
- **Therefore, option (c) is the correct answer.**

Q. With reference to the Indian judiciary, consider the following statements: (2021)

1. Any retired judge of the Supreme Court of India can be called back to sit and act as a Supreme Court judge by the Chief Justice of India with the prior permission of the President of India.
2. A High Court in India has the power to review its own judgement as the Supreme Court does.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2

(d) Neither 1 nor 2

Ans: (c)

Exp:

- As per Article 128 of Indian Constitution, the Chief Justice of India may at any time, with the previous consent of the President, request any person to sit and act as a Judge of the Supreme Court with the following qualifications:
 - Who has held the office of a Judge of the Supreme Court. Hence, statement 1 is correct.
 - Who has held the office of a Judge of a High Court and is duly qualified for appointment as a Judge of the Supreme Court.
- Being a Court of Record, the High Court can review its own judgments under Article 226 of the Constitution of India. Similarly, under Article 137, the Supreme Court shall have the power to review any judgment pronounced or order made by it. **Hence, statement 2 is correct.**
- **Therefore, option (c) is the correct answer.**

Mains

Q. Critically examine the Supreme Court's judgement on 'National Judicial Appointments Commission Act, 2014' with reference to appointment of judges of higher judiciary in India. **(2017)**

Source: TH

Battery Waste Management Rules, 2022

For Prelims: Ministry of Environment, Forest and Climate Change (MOEFCC), Battery Waste Management Rules (2022), Extended Producer Responsibility (EPR), Waste Management, Principle of Polluter Pays.

For Mains: Management of Waste Batteries.

Why in News?

Recently, the [Ministry of Environment, Forest and Climate Change \(MOEFCC\)](#) notified the **Battery Waste Management Rules, 2022** to ensure environmentally sound management of waste batteries.

- These rules will replace the **Batteries (Management and Handling) Rules, 2001**.

What are the Key Highlights of the Rules?

- **Coverage:**
 - The rules cover **all types of batteries, including Electric Vehicle batteries, portable batteries, automotive batteries, and industrial batteries.**
- **Extended Producer Responsibility (EPR):**
 - The rules function based on the concept of [Extended Producer Responsibility \(EPR\)](#) where the **producers of batteries are responsible for the collection and recycling/refurbishment of waste batteries and the use of recovered materials**

from waste into new batteries.

- EPR mandates that all waste batteries be collected and sent for recycling/refurbishment, and it prohibits disposal in landfills and incineration.
- To meet the EPR obligations, producers may engage themselves or authorise any other entity for the collection, recycling, or refurbishment of waste batteries.
 - It will enable the **setting up of a mechanism and centralized online portal for the exchange of EPR certificates between producers and recyclers/refurbishers** to fulfill the obligations of producers.

▪ **Waste Management:**

- They promote the **setting up of new industries and entrepreneurship in the collection and recycling/refurbishment of waste batteries.**

▪ **New Business Opportunities:**

- Mandating the minimum percentage of recovery of materials from waste batteries under the rules will **bring new technologies and investment in the recycling and refurbishment industry and create new business opportunities.**

▪ **Reduce Dependency on Raw Materials:**

- Prescribing the use of a certain number of recycled materials in the making of new batteries will reduce the dependency on new raw materials and save natural resources.

▪ **Online Registration:**

- Online registration & reporting, auditing, and committee for monitoring the implementation of rules and taking measures required for removal of difficulties.

▪ **Principle of Polluter Pays:**

- Environmental **compensation will be imposed for non-fulfilment of Extended Producer Responsibility targets**, responsibilities and obligations set out in the rules.

▪ **Environmental compensation Fund:**

- The funds collected under environmental compensation shall be **utilized in the collection and refurbishing or recycling of uncollected and non-recycled waste batteries.**

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. In a dry cell (battery), which of the following are used as electrolytes? (2009)

- (a) Ammonium chloride and Zinc chloride
- (b) Sodium chloride and Calcium chloride
- (c) Magnesium chloride and Zinc chloride
- (d) Ammonium chloride and Calcium chloride

Ans: (a)

Exp:

- The most common dry cell, the Leclanche cell, is used in flashlights and transistor radios.
- The anode of the dry cell consists of a Zinc container which is in contact with Manganese Dioxide (MnO_2) and an electrolyte.
- **The electrolyte consists of Ammonium Chloride and Zinc Chloride in water to which starch is added to thicken the solution to a paste like consistency** so that it is less likely to leak. **Therefore, option (a) is the correct answer.**

Mains

Q. What are the impediments in disposing of the huge quantities of discarded solid waste which are continuously being generated? How do we remove safely the toxic wastes that have been accumulating in our habitable environment. (2016)

F/A 18 Super Hornet Fighter Jets

For Prelims: Aircraft Carrier, INS Vikrant, INS Vikramaditya, Significance of Aircraft Carriers, INS Vishal, F/A 18 Super Hornet Fighter Jets.

For Mains: Significance of Aircraft Carriers for Internal Security.

Why in News?

Ahead of Commissioning India's **first Indigenous Aircraft Carrier (IAC) Vikrant**, the US aviation major Boeing has proposed Indian Navy to choose its **F/A 18 Super Hornet fighter jet**.

LETHAL ADVANCED AFFORDABLE

F/A-18E/F BLOCK III SUPER HORNET



KEY FEATURES



MULTI-ROLE SUPERIORITY

Capable of tactical strike, aerial reconnaissance, air defense, and maritime roles



CUTTING-EDGE TECHNOLOGIES

Enhanced computing and data link, advanced cockpit system, signature improvements



LIFECYCLE AFFORDABILITY

Lowest cost per flight hour among all U.S. tactical fighter in production. High mission capability rates



FUTURE READY

Unrivaled growth potential to complement future air wing capabilities

40 Year legacy of carrier-based operations

1.5M+ Flight hours since 2008

10k+ Hours airframe life

400+ Sales opportunities

700+ F/A-18s delivered



ADVANTAGE INDIA

STATE-OF-THE-ART PRODUCTION FACILITY

World-class manufacturing ecosystem built on Boeing's broad presence in India

ADVANCED INDIGENOUS TECHNOLOGY

Scope for technology insertions, maximizing indigenous content

"BY INDIA - FOR INDIA" SUSTAINMENT

Lifecycle support in partnership with Indian partners and India's armed forces

What are the Key Features of F/A 18 Super Hornet Fighter Jets?

- The F/A-18 Super Hornet Block III is the world's **most advanced, combat proven, multi-role frontline naval fighter** that offers unique and differentiated capabilities and full compatibility with Indian Navy carriers.
- It has been designed and built **for carrier operations**, and is fully compliant with **INS Vikramaditya and INS Vikrant aircraft carrier**.
- F/A-18 will be able to **operate on the deck**, in the hangar and on the lifts of the Indian Navy's aircraft carriers.
- It will help further the interface between manned and unmanned systems in a carrier environment.
- The Super Hornet's Precision Landing Mode software is **specially designed to reduce pilot workload while landing** on the Indian Navy's Vikramaditya carrier by maintaining the proper glide slope and proper approach speeds.
- It has fully redundant systems and is independent of the carrier's optical landing system.
- F/A-18 Super Hornet is in single-seater (E-Variant) and two-seater variant (F-Variant), and both

variants are **carrier compatible** to perform the full range of combat missions and can fully operate from the carrier deck.

- The two-seater is also a capable trainer aircraft - both ashore and carrier borne.

What is IAC Vikrant?

▪ About:

- Vikrant is the **largest warship to have ever been built in India**, and the first indigenously designed and built aircraft carrier for the Indian Navy.
- It puts India in an **elite club of nations that have the capability to design and build** these giant, powerful warships.
- It is designed by the Cochin Shipyard Ltd (CSL), a public sector shipyard under the Ministry of Ports, Shipping & Waterways.
- The ship had **successfully completed its fourth and final phase of sea trials**.

▪ Operation Capabilities:

- It has a maximum designed speed of 28 knots (about 52 km/h) with an endurance of 7500 NM.
- The ship will be capable of operating 30 aircraft including [MiG-29K fighter jets](#), [Kamov-31 Air Early Warning Helicopters](#), **MH-60R Seahawk multi-role** helicopters, as well as the **Advanced Light Helicopters (ALH)**, and the Light Combat Aircraft (LCA).
- Using a novel aircraft-operation mode known as **Short Take Off But Arrested Recovery (STOBAR)**, the **IAC is equipped with a ski-jump for launching aircraft**, and a set of three 'arrestor wires' for their recovery onboard.

▪ Significance:

- It will enhance a **Navy's capability to travel far from its home shores** to carry out air domination operations.
- It is considered to be a "blue water" navy — that is, a navy that has the capacity to project a nation's strength and power **across the high seas**.

What is the Significance of Vikrant Building in India?

- Only five or six nations currently have the capability of manufacturing an aircraft carrier, and India has joined this prestigious club now.
 - Experts have said that India has demonstrated the capacity and self-reliance to build what is considered to be one of the most advanced and complex battleships in the world.
- India has had aircraft carriers earlier too — but **those were built either by the British or the Russians. The 'INS Vikramaditya'**, which was commissioned in 2013 and which is currently the Navy's only aircraft carrier, started out as the Soviet-Russian warship 'Admiral Gorshkov'.
- India's two earlier carriers, the 'INS Vikrant' and the 'INS Viraat', were originally the British-built 'HMS Hercules' and 'HMS Hermes'. These two warships were commissioned into the Navy in 1961 and 1987 respectively.

Why will the new warship IAC-1 be named 'INS Vikrant'?

- The name 'INS Vikrant' **originally belonged to India's much-loved first aircraft carrier**, a source of immense national pride over several decades of service before it was decommissioned in 1997.
 - The original 'Vikrant', a Majestic-class 19,500-tonne warship, which was acquired from the UK in 1961, **played a stellar role in the 1971 War with Pakistan**.
- Last year, as the IAC-1 started her first sea trial, the **Navy hailed the "proud and historic day for India as the reincarnated 'Vikrant' sails for her maiden sea trials**.

What are the Future Plans for IACs?

- Since 2015, the Navy has been seeking approval to build a third aircraft carrier for the country, which, if approved, **will become India's second Indigenous Aircraft Carrier (IAC-2)**.
- This proposed carrier, to be named **'INS Vishal'**, is intended to be a giant 65,000-tonne vessel, much bigger than both IAC-1 and the 'INS Vikramaditya'.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims

Q. Which one of the following is the best description of 'INS Astradharini', that was in the news recently? (2016)

- (a) Amphibious warfare ship
- (b) Nuclear-powered submarine
- (c) Torpedo launch and recovery vessel
- (d) Nuclear-powered aircraft carrier

Ans: (C)

Exp:

- INS Astradharini is an indigenously built Torpedo Launch and Recovery Vessel. It was commissioned on 6th October 2015.
- The design of the Astradharini was a collaborative effort of Naval Science and Technological Laboratory (NSTL), Shoft Shipyard and IIT Kharagpur.
- It is an advanced replacement for Astravahini which was decommissioned on 17th July 2015.
- It has a unique design of a catamaran hull form that significantly reduces its power requirement and is built with indigenous steel.
- It can operate at high sea states and has a large deck area with Torpedo Launchers for deploying and recovering various kinds of Torpedos during the trials.
- The ship also has modern power generation and distribution, navigation and communication systems.
- 95% of the systems of the ship are of indigenous design, thus demonstrating the Navy's continued adherence to the 'Make in India' philosophy.
- INS Astradharini will be used to carry out the technical trials of underwater weapons and systems developed by NSTL, a naval systems laboratory of DRDO.
- **Therefore, option (c) is the correct answer.**

Mains

Q. How is S-400 air defence system technically superior to any other system presently available in the world? (2021)

Source: HT

Net-Zero Emissions Target

For Prelims: Net Zero Emissions, Nationally Determined Contribution (NDC), 'Lifestyle for Environment (LIFE), Green Climate Fund (GCF), India Cooling Action Plan (ICAP), Bureau of Energy Efficiency (BEE), Efficiency Services Limited (EESL), Compensatory Afforestation Management and Planning Authority (CAMPA), Hydrogen Energy Mission.

For Mains: Essential Steps taken by India to Achieve Net-Zero Emission Target.

Why in News?

According to the report by **Getting India to Net Zero**, India needs a massive USD 10.1 trillion investment from now on if India is to achieve its [net-zero emissions target](#) by 2070.

What are the Key Highlights of the Report?

- **Investment:**
 - The investment required by India would be USD 13.5 trillion if the net zero emission target is to be met by 2050.
- **Nationally Determined Contribution (NDC):**
 - India's [Nationally Determined Contribution \(NDC\)](#) targets set in 2015 are likely to be met early within the next few years through current policies.
- **Peak Emission:**
 - India could peak in emissions as soon as 2030.
- **Benefits:**
 - Achieving net zero by 2070 would **increase annual GDP by up to 4.7% by 2036. and create 15 million new jobs by 2047.**
- **Suggestions:**
 - Suggested various policies to **boost renewables and electrification** could make net zero possible by mid-century.
 - Ending new coal by 2023 and transitioning from unabated coal power by 2040, would be particularly impactful for reaching net zero emissions closer to mid-century.

What is Net-Zero Target?

- It is referred to as **carbon neutrality**, which does not mean that a country would bring down its emissions to zero.
- Rather, it is a **state in which a country's emissions are compensated by the absorption and removal of greenhouse gases from the atmosphere.**
 - Further, **absorption of the emissions can be increased by creating more carbon sinks** such as forests.
 - While the removal of gases from the atmosphere requires **futuristic technologies such as carbon capture and storage.**
- More than 70 countries have promised to become Net Zero by the middle of the century i.e., by 2050.
- India has promised to cut its emissions to net zero by 2070 at the [conference of parties-26\(COP\)](#) summit.

What Steps Have been taken by India to Achieve Net- Zero Emissions by 2070?

- **India's Renewable Energy Targets:**
 - India's [renewable energy targets](#) have steadily become more ambitious, from **175 GW by 2022 declared at Paris, to 450 GW by 2030 at the UN Climate Summit, and now 500 GW by 2030**, announced at COP26.
 - India has also announced the **target of 50% installed power generation capacity from non-fossil energy sources by 2030, raising the existing target of 40%**, which has already been almost achieved.
- **Goals of NDC:**
 - There are EIGHT **GOALS** which are identified as follows:
 - To put forward and further propagate a **healthy and sustainable way of living based on traditions and values of conservation** and moderation, including through a mass movement for **'LIFE'- 'Lifestyle for Environment'** as a key to combating climate change.
 - To **adopt a climate-friendly and cleaner path** than the one followed hitherto by

others at the corresponding level of economic development.

- To **reduce the Emissions Intensity of its GDP by 45%** by 2030, from the 2005 level.
- To achieve about **50% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030**,
 - With the help of the **transfer of technology and low-cost international finance including from the [Green Climate Fund \(GCF\)](#)**.
- To create an **additional carbon sink of 2.5 to 3 billion tonnes of CO₂** equivalent through additional forest and tree cover by 2030.
- To better **adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change**, particularly agriculture, water resources, the Himalayan region, coastal regions, and health, and disaster management.
- To **mobilize domestic and new & additional funds from developed countries to implement the above mitigation and adaptation** actions in view of the resource required and the resource gap.
- To build capacities, and **create a domestic framework and international architecture for quick diffusion of cutting-edge climate technology** in India and for joint collaborative R&D for such future technologies.

▪ Initiatives:

◦ Solar Energy:

- India has undertaken one of the world's largest solar energy installation initiatives.
 - Irrespective of whether it achieves the 175 GW capacity by 2022 or the 450 GW target by 2030,

◦ Creating Carbon Sinks:

- **[India Cooling Action Plan \(ICAP\)](#)** will help address cooling requirements and reduce the cooling demand in the country.
 - **[The Bureau of Energy Efficiency \(BEE\)](#)** and Energy **[Efficiency Services Limited \(EESL\)](#)** has taken a number of initiatives under the **National Mission for Enhanced Energy Efficiency (NMEEE)** to combat climate change.
 - The **[Compensatory Afforestation Management and Planning Authority \(CAMPA\)](#)** Fund created under the Compensatory Afforestation Fund Act, 2016, has thousands of crores which will hopefully be utilised soon to compensate for deforestation and restore the green cover comprising native species of trees.

◦ Hydrogen Energy:

- India has also announced a **[Hydrogen Energy Mission](#)** for grey and green hydrogen.

Way Forward

- India's net-zero targets and updated NDCs are certainly aspirational, keeping in mind its development needs during the post-COVID recovery.
 - However, they fit a **general pattern of incremental progress on climate action at the global level that lacks the collective sense of urgency** required to limit global warming to 1.5 degrees Celsius below pre-industrial levels.
 - Further, whether India and the world can go with limited short-term emissions reduction and ambitious long-term climate action plans is something that remains to be seen.

UPSC Civil Services Examination Previous Year Question (PYQ)

Prelims

Q. The term 'Intended Nationally Determined Contributions' is sometimes seen in the news in the context of (2016)

(a) pledges made by the European countries to rehabilitate refugees from the war-affected Middle East

(b) plan of action outlined by the countries of the world to combat climate change

(c) capital contributed by the member countries in the establishment of the Asian Infrastructure Investment Bank

(d) plan of action outlined by the countries of the world regarding Sustainable Development Goals

Ans: (b)

Exp:

- **Intended Nationally Determined Contributions is the term used under the UNFCCC for reductions in greenhouse gas emissions in all countries that signed the Paris Agreement.**
- At COP 21 countries across the globe publicly outlined the actions they intended to take under the international agreement. The contributions are in the direction to achieve the long-term goal of the Paris Agreement; “to hold the increase in global average temperature to well below 2°C to pursue efforts to limit the increase to 1.5°C, and to achieve net zero emissions in the second half of this century.” **Therefore, option (b) is the correct answer.**

Mains

Q. Describe the major outcomes of the 26th session of the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC). What are the commitments made by India in this conference? **(2021)**

Source: IE

The Competition (Amendment) Bill, 2022

For Prelims: Competition Commission of India (CCI), Competition Act, 2002, Gun Jumping, Hub-and-Spoke, Vertical agreements, Abuse of dominance, National Company Law Tribunal (NCLT).

For Mains: Significance of Competition Commission due to the changing dynamics of the market.

Why in News?

Recently, the Bill to amend the [Competition Act, 2002](#), was finally tabled in the [Lok Sabha](#).

What was the Need to Bring these Amendments?

- **New Age Market:**
 - As the **dynamics of the market change rapidly due to technological advancements, artificial intelligence**, and the increasing importance of factors other than price, amendments became necessary to sustain and promote market competition.
- **Issue of Acquisition:**
 - According to **section 5 of the act**, parties indulging in **mergers, acquisitions, or**

amalgamation need to notify the Competition Commission of India of the combination only on the basis of asset or turnover.

- **Gun Jumping:**
 - It happens when the **two or more combining parties close a notified transaction before the approval** or have consummated a reportable transaction without bringing it to the Commission's knowledge.
- **Hub-and-Spoke Cartels:**
 - A **Hub-and-Spoke** arrangement is a **kind of cartelization in which vertically related players act as a hub and place horizontal restrictions on suppliers or retailers.**
 - At present, the prohibition on anti-competitive agreements **only covers entities with similar trades that engage in anti-competitive practices.**
 - This **ignores hub-and-spoke cartels operated at different levels** of the vertical chain by distributors and suppliers.

What are the Proposed Amendments?

- **Deal value Threshold:**
 - The new Bill **proposes to add a deal value threshold.**
 - Further, it will be **mandatory to notify the Commission of any transaction with a deal value in excess of ₹2,000 crores** and if either of the parties has substantial business operations in India.
- **Substantial Business Operations:**
 - The Commission shall **frame regulations to prescribe the requirements for assessing whether an enterprise has substantial business operations in India.**
 - It will **strengthen the Commission's review mechanism**, particularly in the digital and infrastructure space, **a majority of which were not reported earlier**, as the asset or turnover values did not meet the jurisdictional thresholds.
- **Speed Up Clearance of Combination:**
 - For any business entities wanting to execute a combination, they must inform the Commission.
 - Earlier it had 210 days to approve the combination, after which it is automatically approved.
 - The **new amendment accelerated the timeline from 210 working days to only 150 working days** with a conservatory period of 30 days for extensions.
 - It will **speed up the clearance of combinations** and increase the importance of pre-filing consultations with the Commission.
- **Gun Jumping:**
 - Earlier the **penalty for gun-jumping was a total of 1% of the asset or turnover which is now proposed to be 1% of the deal value.**
- **Exemption of Open Market Purchases:**
 - It proposes to **exempt open market purchases and stock market transactions from the requirement to notify the Commission in advance.**
- **Hub-and-Spoke Cartels:**
 - The amendment **broadens the scope of 'anti-competitive agreements' to catch entities that facilitate cartelisation even if they are not engaged in identical trade practices.**
- **Settlements and Commitments:**
 - The new amendment **proposes a framework for settlements and commitments for cases relating to vertical agreements and abuse of dominance.**
 - As in the case of **vertical agreements and abuse of dominance**, the parties may **apply for a commitment before the Director General (DG) submits the report.**
 - As per the amendment, the Commission's decision regarding commitment or settlement will not be appealable after hearing all stakeholders in the case.
- **Other Major Amendments:**
 - **Provision of Leniency Plus:**
 - It allows the commission to **give an additional waiver of penalties to an applicant who discloses the existence of another cartel in an unrelated**

market, provided the information enables the Commission to form a prima facie opinion about the existence of the cartel.

- **Appointment of Director General:**
 - The appointment of a **Director General by the Commission rather than the Central government gives the Commission greater control.**
 - It gives the Commission greater control.
- **Guidelines Regarding Penalties:**
 - The Commission will **develop guidelines regarding the number of penalties for various competition violations.**
 - For an appeal to be heard by the [National Company Law Tribunal \(NCLT\)](#) against the Commission's order, the party will have to deposit 25% of the penalty amount.

Way Forward

- With the new changes, the Commission should be **better able to manage certain aspects of the New Age market and make its operation more robust.**
 - The proposed changes are **undoubtedly necessary; however, these are highly dependent on regulations** subsequently notified by the Commission.
 - In addition, the government must recognize that market dynamics are constantly changing, so laws need to be updated regularly.

What is the Competition Commission of India?

- **About:**
 - The **Competition Commission of India (CCI)** was established in March 2009 by the Government of India under the Competition Act, 2002 for the administration, implementation, and enforcement of the Act.
 - It primarily pursues three issues of **anti-competitive practices** in the market:
 - **Anti-competitive agreements.**
 - **Abuse of dominance.**
 - **Combinations.**
- **Objectives:**
 - Eliminate practices having adverse effects on competition.
 - Promote and sustain competition.
 - Protect the interests of consumers.
 - Ensure freedom of trade in the markets of India.
 - Establish a robust competitive environment through:
 - Proactive engagement with all stakeholders, including consumers, industry, government, and international jurisdictions.
- **Composition:**
 - The Commission consists of **one Chairperson and six Members** who shall be appointed by the Central Government.
 - The commission is a [quasi-judicial body](#) which gives opinions to statutory authorities and also deals with other cases.
 - The Chairperson and other Members shall be whole-time Members.

UPSC Civil Services Examination Previous Year Question:

Mains

Q. What is the quasi-judicial body? Explain with the help of concrete examples. (2016)

Arth Ganga Project

Why in News?

Recently, Director General of the National Mission for Clean Ganga spoke about the **Arth Ganga model during World Water Week 2022**.

What are the Key Features of the Arth Ganga Project?

- **About:**
 - **'Arth Ganga' implies a sustainable development model with a focus on economic activities related to Ganga.**
 - PM Modi first introduced the concept during the first National Ganga Council meeting in Kanpur in 2019, where he urged for a shift from [Namami Gange](#) to the model of **Arth Ganga**.
- Under **Arth Ganga**, the government is working **on six verticals:**
 - The first is Zero Budget Natural Farming, which involves **chemical-free farming** on 10 km on either side of the river, and the **promotion of cow dung as fertilizer through the [Gobardhan scheme](#)**.
 - The **Monetization and Reuse of Sludge & Wastewater** is the second, which seeks to reuse treated water for irrigation, industries and revenue generation for Urban Local Bodies (ULBs).
 - Arth Ganga will also involve **Livelihood Generation Opportunities**, by creating haats where people can sell local products, medicinal plants and ayurveda.
 - The fourth is to **increase public participation** by increasing synergies between the stakeholders involved with the river.
 - The model also wants to **promote the cultural heritage and tourism of Ganga** and its surroundings, through boat tourism, adventure sports and by conducting yoga activities.
 - Lastly, the model seeks to promote institutional building by **empowering local administration for improved water governance**.

What is World Water Week?

- **World Water Week** is an **annual conference on global water issues** which is held in the **last week of August every year**.
- It was started in 1991 and initially part of a public water festival in the Swedish capital, Stockholm.
- **Stockholm International Water Institute (SIWI)** is the organizer of World Water Week.
- World Water Week is an opportunity to explore **water aspects of challenges like the climate crisis, food security, energy, and many other topics**.
- The week is also taken as an opportunity to discuss and accelerate progress toward the [Sustainable Development Goal 6 \(SDG6\)](#), which is about clean water and sanitation for all.
- **The theme** for World Water Week 2022 is **"Seeing the Unseen: The Value of Water."**
 - The **theme will look at three main areas:** the **value of water** among people and for development, the value of water with **respect to nature and climate change**, and the **economic and financial value of water**.

What is the Namami Gange Programme?

- Namami Gange Programme is an **Integrated Conservation Mission**, approved as a **'Flagship Programme'** by the Union Government in June 2014 to accomplish the **twin objectives of effective abatement of pollution and conservation and rejuvenation of National River**

Ganga.

- It is operated by the Department of Water Resources, River Development and Ganga Rejuvenation, **Ministry of Jal Shakti**.
- The program is being implemented by the **National Mission for Clean Ganga (NMCG)**, and its state counterpart organizations i.e State Program Management Groups (SPMGs).
- NMCG is the implementation wing of **National Ganga Council** (set in 2016, which replaced the National Ganga River Basin Authority - NGRBA).
- It has a Rs. 20,000-crore, **centrally-funded, non-lapsable corpus** and consists of nearly 288 projects.
- The **main pillars** of the programme are:
 - Sewage Treatment Infrastructure
 - River-Front Development
 - River-Surface Cleaning
 - Biodiversity
 - Afforestation
 - Public Awareness
 - Industrial Effluent Monitoring
 - Ganga Gram

UPSC Civil Services Examination, Previous Year Question (PYQ)

Q. Which of the following are the key features of 'National Ganga River Basin Authority (NGRBA)'? (2016)

1. River basin is the unit of planning and management.
2. It spearheads the river conservation efforts at the national level.
3. One of the Chief Ministers of the States through which the Ganga flows becomes the Chairman of NGRBA on rotation basis.

Select the correct answer using the code given below:

- (a)** 1 and 2 only
- (b)** 2 and 3 only
- (c)** 1 and 3 only
- (d)** 1, 2 and 3

Ans: (a)

Exp:

- Central Government in exercise of the powers conferred under the Environment (Protection) Act, 1986 on 20th Feb 2009 had set up 'National Ganga River Basin Authority' (NGRBA) as an empowered planning, financing, monitoring and coordinating authority for the Ganga River.
- Prime Minister is the ex-officio Chairperson of the Authority, and it has as its members, the concerned Union Ministers and the Chief Ministers of states through which Ganga flows, viz., Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal, among others. Hence, 3 is not correct.
- **Key Features**
 - River basin is the unit of planning and management. This is an internationally accepted strategy for the
 - integrated management of rivers. Hence, 1 is correct.
 - NGRBA will spearhead river conservation efforts at the national level. Implementation will be by the State Agencies and Urban Local Bodies. Hence, 2 is correct.
 - It will take into account the competing demands of water and will seek to ensure minimum ecological flows.

- Solid Waste Treatment Plants will be made functional to minimize the pollution load up to discharge standard of BOD of 30mg/litre requiring dilution to achieve river water quality of 3mg/litre.
- The minimum ecological flows of the entire Ganga will be determined through modelling exercises.
- NGRBA will take appropriate measures to regulate water abstraction for maintaining ecological flows in the river.
- **Therefore, option (a) is the correct answer.**

[Source: IE](#)

Paddy Dwarfing

Why in News?

Recently, a **mysterious disease hit the paddy crop** causing “**dwarfing**” of the plants in Punjab and Haryana.

- Scientists have decoded the mystery blaming it on ‘**Southern Rice Black-Streaked Dwarf Virus**’ (**SRBSDV**), named after **Southern China** where it was first reported in 2001.

What is Paddy Dwarfing?

- The characteristic symptoms of rice dwarf disease are **stunting of the plant** and **appearance of white chlorotic specks on foliage**.
- The height of the stunted plants showed a reduction from 1/2 to 1/3rd of the normal plants.
- These plants had shallow roots and could be easily uprooted.
- Such plants were observed in almost all the cultivated varieties in the farmers’ fields.
- Dwarfing of plants was reported at 10% to 25% in general and in some cases, it exceeded 40%.
- The incidence of stunting was more pronounced in early sown paddy crops, irrespective of the variety.

What is SRBSDV?

- **Southern rice black-streaked dwarf virus (SRBSDV)** is a non-enveloped **icosahedral virus** with a genome of **10 double-stranded Ribonucleic Acid RNA segments**, and is a novel species in the **genus Fijivirus (family Reoviridae)**.
 - An Icosahedral Virus is a virus consisting of identical subunits that make up equilateral triangles that are in turn arranged in a symmetrical fashion.
- The SRBSDV is transmitted by **white-backed plant hopper (WBPH)** in a persistent circulative and propagative manner.
- In addition to rice, SRBSDV also infects different weed species as nymphs of **WBPH** can transmit the virus more efficiently as compared to adults.
 - Long-distance transmission of this virus may occur through WBPH migrating with typhoons and strong convection winds.

What Could be Done for Prevention?

- **Since there is no corrective measure for the viral disease**, farmers should regularly monitor the crop for the presence of WBPH and a few **plants should be slightly tilted** and tapped 2-3

times at the base at weekly intervals.

- If WBPH nymphs/adults are seen floating on water, **then insecticides** can be sprayed towards the base of the plants.
- The farmers are advised to follow the **transplanting dates advised by Punjab Agricultural University PAU** since stunting was observed to be more in the early transplanted crops. It will not only help in managing viral disease but also save water.

UPSC Civil Services Examination Previous Year Question (PYQ)

Q. Consider the following: (2018)

1. Birds
2. Dust blowing
3. Rain
4. Wind blowing

Which of the above spread plant diseases?

- (a) 1 and 3 only
(b) 3 and 4 only
(c) 1, 2 and 4 only
(d) 1, 2, 3 and 4

Ans: (d)

Explanation:

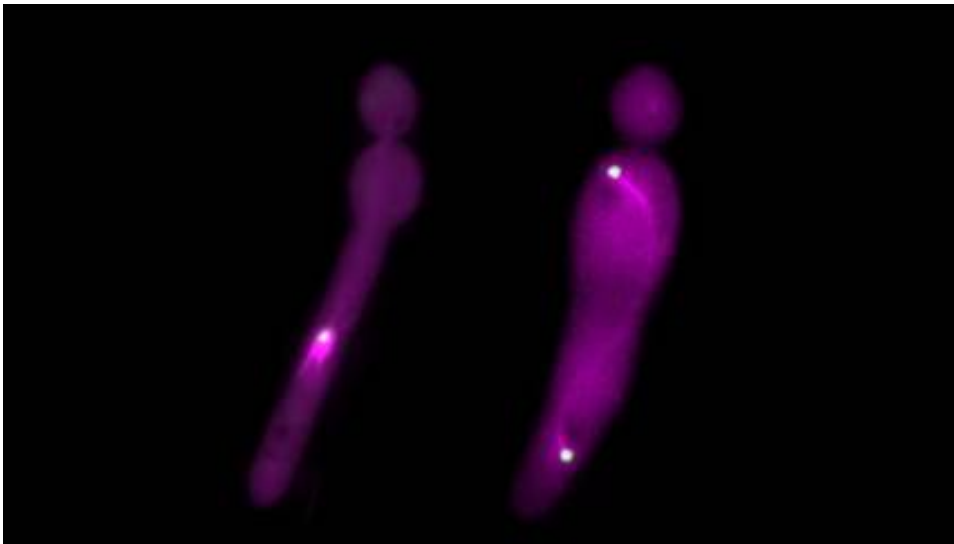
- Extensive and severe epidemics of plant diseases are mostly the results of wind blowing including dust blowing which cause transmission of the pathogens. **Hence, 2 and 4 are correct.**
- Splashing rain drops mostly transmit the foliar diseases from leaf to leaf, from shoot to shoot and even from plant to plant in case of closely spaced crops. **Hence, 3 is correct.**
- Birds play a minor role in disease transmission in plants. It is mainly by way of dispersal of seeds of higher flowering plant parasite, etc. **Hence, 1 is correct.**
- **Therefore, option (d) is the correct answer.**

[Source: IE](#)

New Gene to Prevent Fungal Infection

Why in News?

According to a recent study, researchers have **identified gene called CSA6** which could **hold the key to prevent fungal infection Candidiasis** that often affects intensive-care unit (ICU) patients, cancer patients and patients receiving immunosuppressive therapy.



What is Candida Albicans?

- ***Candida Albicans* is a fungal species infamous** for causing high rates of morbidity and mortality **under certain immuno-compromised conditions** such as [Acquired Immune Deficiency Syndrome \(AIDS\)](#) or during cancer treatment.
- It resides in the mucosal linings of the gastrointestinal and urogenital tract of healthy individuals.
- Further, **it turns into a pathogen under immuno-compromised conditions** breaching the host defense causing superficial as well as life-threatening systemic infection.

What are the Key Highlights of the Study?

- **About:**
 - It's a **collaborative study between Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore, India and Institut Pasteur, Paris, France.**
 - They carried out a **large-scale screen to identify regulators of chromosome stability** in *Candida albicans*, a clinically relevant fungal model system.
- **Findings:**
 - Researchers **screened the effect of overexpression of more than a thousand genes of *C. albicans* on genome stability.**
 - They were successful in identifying a **set of six chromosome stability (CSA) genes that are important for maintaining genome integrity.**
 - While five of the CSA genes identified in the study are known to be important for cell division in other species, **the sixth CSA gene, named CSA6 encoded for a protein that is essential for viability in *C. albicans*.**
 - They found that Csa6 was a **critical regulator of cell cycle progression** wherein both overexpression and deletion of CSA6 **lead to reduced growth of *C. albicans* cells.**
- **Outcomes:**
 - It **identifies and elucidates the functions of a novel regulator of chromosome stability** that is exclusively present in a group of medically relevant human fungal pathogens.
 - Besides, it also **provides a systematic scheme for identifying genes whose products may serve as potential therapeutic interventions for fungal infections** by posing lesser adverse effects on humans.
 - Hence, small molecule modulators that alter expression levels of the gene called **CSA6 offer potential avenues for treatment with no side effects in humans.**

[Source: PIB](#)

PDF Reference URL: <https://www.drishtias.com/current-affairs-news-analysis-editorials/news-analysis/27-08-2022/print>