1.Orange Economy: Recently, at the inaugural session of the World Audio Visual and Entertainment Summit (WAVES), Prime Minister spotlighted India's emergence as a rising force in the **'orange economy'.**

- **About Orange Economy:** Refers to the cultural and creative sectors that generate value through art, design, media, innovation, and intellectual property.
  - **Global Demand:** Highlighted the rising international appetite for Indian films, digital content, animation, and gaming.
  - **Responsible Creativity:** Stressed the need for ethical storytelling — creativity that enriches human values and avoids dehumanization.
  - **WAVES Awards Announcement:** Unveiled a new WAVES Awards platform to honor excellence in global content creation.
  - **Cultural Showcase:**Emphasized that India is a land of a billion stories, ranging from courage and science to spirituality and drama, ready to reach global audiences.
  - **Cinematic Legacy:** Celebrated India's journey from Raja Harishchandra to RRR's Oscar win, showcasing Indian cinema's evolving global influence.
  - **Tribute to Icons:** Paid homage to Indian cinematic legends like Raj Kapoor, Satyajit Ray, Guru Dutt, A.R. Rahman, and S.S. Rajamouli for elevating India's cultural identity worldwide.

2. Kendu Leaves Or Green Gold : Eight Gram Sabhas in Baipariguda, Koraput, await government approval to deregulate the trade of kendu leaves under the Forest Rights Act (FRA).

- **About Kendu Leaves :** A vital non-wood forest product, is similar to other nationalized products like bamboo and sal seed.
  - It is primarily used for rolling bidis (local cigarettes).
  - Major producing states include Madhya Pradesh, Chhattisgarh, Odisha, Andhra Pradesh, Jharkhand, Gujarat, and Maharashtra, with Odisha being the third-largest producer.
- **Legal Provisions and the Role of the FRA**
  - The Forest Rights Act (FRA), 2006, recognizes tribal communities' rights over non-timber forest products like kendu leaves, allowing them to process, store, transport, and sell without paying royalties.

- The FRA supersedes state laws, such as the Odisha Kendu Leaf (Control of Trade) Act, which has historically restricted trade and hindered economic progress.
- Precedents from other districts (Nabarangpur, 2013; Kalahandi, 2017) show that deregulation boosts tribal incomes and economic outcomes.

3. **Global Action On Chemicals:** Recently, at the Basel, Rotterdam, and Stockholm (BRS) Conventions Conference of the Parties (COPs) 2025 in Geneva, India made key contributions to global environmental governance.

- The discussions focused on the sustainable management of chemicals and waste.
- **About the BRS Conventions :** Are international environmental agreements aimed at safeguarding human health and the environment from the harmful effects of hazardous chemicals and waste.
  - **Conference Theme:** "Make visible the invisible: Sound management of chemicals and wastes," reflecting India's focus on environmental regulation and leadership in addressing global pollution, especially plastic waste.
- **India's Regulatory Framework:**
  - **Key Focus:** India highlighted the role of finance, technology transfer, and international cooperation in achieving BRS Conventions' goals.
  - **National Legislation:** India's Environment (Protection) Act, Hazardous and Other Wastes Management Rules, and E-Waste Management Rules (2016) were emphasized as essential tools for sustainable governance.
  - **Leadership in Waste Management:** India's institutional and technical investments position it as a leader in sustainable waste management, setting an example for global action.
- **India's Role in the Global Fight Against Plastic Pollution**
  - **Consultation with Norway:** India participated in a consultation on the ongoing work of the Intergovernmental Negotiating Committee (INC) on plastic pollution.
  - **Domestic Efforts:** India has implemented domestic bans on specific single-use plastics and Extended Producer Responsibility (EPR) for plastic packaging.
  - **Global Advocacy:** Under Prime Minister Modi's leadership, India introduced a resolution on single-use plastics at UNEA-4, bringing the issue to the global forefront.

4. Para-Phenylenediamine (PPD): Recently, health experts have raised concerns over the widespread use of para-phenylenediamine (PPD) in commercially available henna.

- **About Henna:** The ancient art of applying henna has long been cherished in Indian culture as a symbol of joy, purity, and new beginnings.
  - Traditionally made from the leaves of the Lawsonia inermis plant, natural henna is valued for its reddish-brown hue and its cooling, soothing effect on the skin.
- **About PPD**:A synthetic chemical commonly found in hair dyes.
  - **Legal Status:** While it is allowed in low concentrations for hair applications under global safety guidelines, its use on the skin is banned in many countries.
- **Health Risks of PPD Exposure:**
  - **Skin reactions:** Intense itching, burning, redness, inflammation, swelling, fluid-filled blisters, and ulcers.
  - **Permanent Effects:** Can lead to permanent scarring or pigmentation changes.
  - **Sensitization**: Repeated exposure to PPD can cause long-term allergic reactions. Once sensitized, individuals may react to various products such as hair dyes, textile dyes, rubber products, and certain adhesives, drastically impacting daily life.

5. Vizhinjam International Seaport: The Vizhinjam International Seaport, located in Kerala, is set to redefine India's maritime trade landscape as it is officially commissioned by PM.

- This all-weather, semi-automated port aims to become a key South Asian transshipment hub, boosting India's capacity for large container ships.
- **Key Features and Technological Advancements:**
  - **Tech Sophistication**: AI-powered control room with Vessel Traffic Management System for optimized vessel tracking and traffic flow.
  - **Economic Impact:** Aims to reduce India's $200-220 million annual loss from reliance on foreign ports for 75% of transshipment cargo.
  - **Infrastructure:** 2,960-meter breakwater allows handling of 18,000 TEU vessels. Capacity to increase from 1 million to 3 million TEUs by 2028.
  - **Financials**: ₹8,867 crore project funded by State government (63%), Adani Group (28%), and ₹818 crore Central Government loan.

- **Strategic Location:** Positioned 10 nautical miles from key international shipping routes.
- **Significance:** Marks a major step for Kerala and India, enhancing global maritime trade and positioning Kerala as a South Asian transshipment hub.

6.Natural Hydrogen : Natural hydrogen, a clean, abundant, and cost-effective energy source, is emerging as a key solution for decarbonizing the future and meeting growing energy demands.

- **About Natural Hydrogen:** Occurs naturally in geological formations and is produced through processes like serpentinisation (water reacting with iron-rich rocks), radiolysis (water interacting with radioactive elements), and decomposition of deep organic matter.
  - Unlike conventional hydrogen derived from natural gas, it offers a cleaner and more sustainable energy alternative.
- **Current Reserves and Potential**

  Untapped Reserves: Natural hydrogen remains largely unexplored but shows immense promise globally and in India.
  - **India's Geological Advantage:** Unique formations like ultramafic rocks, volcanic-sedimentary belts, and hydrothermal systems offer high natural hydrogen potential.
  - **Estimated Reserves:** India may hold around 3,475 million tonnes of natural hydrogen—enough to significantly reduce manufacturing needs and support decarbonization.
  - **Global Discoveries:** Large reserves found in places like Lorraine, France, suggest long-term global energy potential.
  - **Rising Global Interest:** Over 40 companies (up from 10 in 2020) are exploring natural hydrogen across Australia, the U.S., Spain, and France.
  - **Lower Extraction Cost:** Natural hydrogen is cheaper to extract than green hydrogen, attracting major firms like BP, Rio Tinto, and start-ups like Koloma.
  - **India's Strategic Edge:** With hydrogen demand projected to rise from 6 Mt/year (2020) to 50+ Mt/year by 2070, tapping natural reserves can cut costs and speed up net-zero targets.

7. World Bank's Report on Climatewash : Recently, during the World Bank's 2025 Land Conference, a report by the Oakland Institute accused the Bank of "climatewash" and raised concerns over its growing influence on land policies in the Global South.

- **Climate washing** (also known as greenwashing in the climate context) refers to the deceptive practice of presenting policies, actions, or products as environmentally beneficial or climate-friendly, while in reality, they do little to address the climate crisis or may even worsen it.
- **Major Findings of the Oakland Institute Report**
  - **Report Title:** "Climatewash: The World Bank's Fresh Offensive on Land Rights"
  - **Main Allegation:** The World Bank is using global climate goals to justify controversial land reforms that favor corporate access over community rights and environmental sustainability.
  - The report cites examples from Indonesia, Madagascar, Malawi, the Philippines, and Argentina, illustrating how World Bank–backed land reforms have resulted in:
    - ✓Evictions and loss of customary land rights
    - ✓Consolidation of land under agribusiness and mining corporations
    - ✓Increased conflict over natural resources
    - ✓Widening socio-economic inequalities

8. International Thermo-Nuclear Experimental Reactor (ITER): Recently, the ITER project,has made significant progress toward demonstrating nuclear fusion as a large-scale, carbon-free energy source.

- **Key Developments in 2025:** ITER has successfully completed the components for its pulsed superconducting electromagnet system, which will function as the heart of the **tokamak.** This system will be crucial for confining and controlling plasma inside the **donut-shaped reactor.**
  - Aims for a **tenfold energy gain** by injecting deuterium and tritium into the tokamak.
  - ITER is designed to produce 500 megawatts of fusion power from just 50 megawatts of input heating power, marking a milestone in fusion energy research.
- **International Thermonuclear Experimental Reactor (ITER):** It is an international nuclear **fusion** research and engineering megaproject **aimed at creating energy by replicating, on Earth, the fusion processes of the Sun.**
  - **Launched in 1985,** it is a collaboration of 35 nations including - China, the European Union, India, Japan, Korea, Russia and the United States.
  - In **southern France**, it is **world's largest tokamak**, a magnetic fusion device that has been designed to prove the feasibility of fusion.