

- Along with TAL, 6 other initiatives has been recognised (refer to infographics).
- Recognized initiatives will be eligible for technical and financial UN support.
- In 2022, **Namami Gange initiative** has been also recognized under it.

About Terai Arc Landscape (TAL)

- A Trans-boundary biodiversity hotspot, launched in 2001.
 - TAL is **Critical habitats** for tigers, rhinos, elephants, etc.
- Aims to conserve ecosystems of the **Terai and Churia hills**.
 - Covers several protected areas such as Corbett Tiger Reserve, Rajaji National Park etc.
- Extend over 900 km from the **Bagmati River (Nepal)** in the east to the **Yamuna River (India)** in the west.
- Stretching across 5.10 million hectares and over seven million people depend on the Landscape.

About World Restoration Flagship (commenced in 2022)

- Recognized under the **UN Decade on Ecosystem Restoration (2021-30)**.
- Led by **UN Environment Programme (UNEP)** and the **Food and Agriculture Organisation (FAO)** and other partner organisation.
- Objective:** Prevent, halt, and reverse the degradation of ecosystems on every continent and in every ocean.
- Selection Criteria:** On the basis of Geographic and probability of success criteria.
- Progress is monitored through the **Framework for Ecosystem Restoration Monitoring**.

Recognized other Six World Restoration Flagships initiatives

Restoring Mediterranean Forests Initiative

Living Indus initiative

Acción Andina Initiative

Sri Lanka Mangrove Regeneration Initiative

Regreening Africa initiative

Forest Garden Program

Parliamentary Standing Committee releases Report on 'Employment Generation and Revenue Earning Potential of Fisheries Sector'

Status of fisheries sector

- India is the **third largest** fish producer in the world. In aquaculture fishing, ranks second after China.
- Contribution of **freshwater** and **marine fisheries** is about **75%: 25%**.
- Recognized as the **Sunrise Sector**.
 - Sunrise sector** includes sector which is growing fast and is expected to become important in the future.

Opportunities: Nutritional and food Security (omega-3 fatty acids, etc.), economic benefits (Exports, etc.), etc.

Challenges

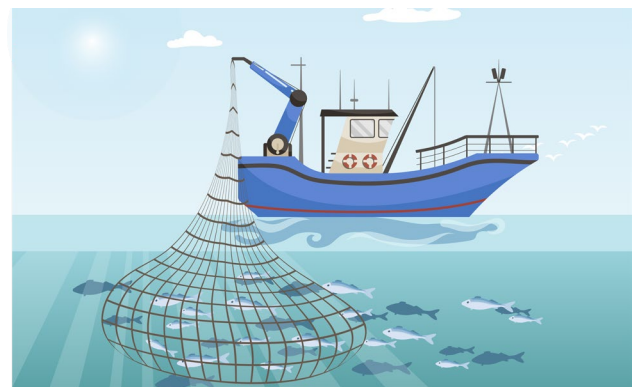
- Poor Value Chain: Post-Harvest Losses (PHL)** is reported to be 20-25%.
- Untapped potential:** Large dams known as sleeping giants are not much utilised.
 - Commercial breeding of species having medicinal properties and nutritional (e.g. Magur, Singhi, Pabda) is low.
- Other:** Overfishing, harmful fishing practices (Bull Trawling, and LED Light fishing), etc.

Key Recommendations

- Betterment in Infrastructure:** Encourage participation of private players from all the States/UTs in the **Fisheries and Aquaculture Infrastructure Development Fund Scheme**.
 - Strengthening the infrastructure of Fishing Harbors and Fish Landing Centres.
- Promote **Cage Culture in big reservoirs** to utilise full potential
- Separate Research Council** for Fishery Sector.
- Explore the possibility of providing Interest Free Loans to Farmers under **Kisan Credit Card (KCC)** initiative.

Steps Taken for Fisheries sector

- Pradhan Mantri Matsya Sampada Yojana**
- National Genetic Improvement Facility**
- Establishment of the **National Fisheries Development Board (NFDB)**
- National Surveillance Programme for Aquatic Animal Diseases (NSPAAD)** for disease surveillance in aquaculture.
- Promoting Fish Farmer Producer Organizations (FFPOs)
- River Ranching Scheme and Artificial Reefs



Sugam

- **Bima Sugam-insurance electronic market** is a robust digital public infrastructure with open standards and an interoperable platform.
 - ⊕ It shall be a **one-stop solution for all Insurance stakeholders** vis-a-vis customers, insurers, intermediaries, or insurance intermediaries.
- **Regulatory framework for Bima sugam:**
 - ⊕ Will be formed under **Section 8 of the Companies Act, 2013** as a **not-for-profit company**.
 - ⊕ Shareholding of the company will be widely held amongst **life, general, and health insurers**, with no single entity having a controlling stake.
 - ⊕ **Consent-based architecture** for the services.
 - ⊕ **Consumers will not be charged** for availing services of bima sugam. IRDAI
 - ⊕ would **nominate two members** to the Board of the Company.
- **Significance**
 - ⊕ It will enable insurance companies to **easily access validated and authentic data** from multiple touchpoints in real time.
 - ⊕ It will help to increase **insurance penetration and density by enhancing the "availability, accessibility, and affordability"** of insurance products and services.
 - ◆ Insurance penetration is measured as the **percentage of insurance premiums to GDP**, and insurance density is calculated as the **ratio of premiums to population (per capita premium)**.
 - ⊕ **Promote transparency, efficiency, and collaboration** across the entire insurance value chain.

About IRDAI

- ⊕ **Statutory body** formed under **IRDA Act, 1999**.
- ⊕ **Purpose-** Overall supervision and development of the Insurance sector in India.
- ⊕ **Key objectives-** Protecting the interest of policyholders, Speedy and orderly growth of the insurance industry, Speedy settlement of genuine claims.

International Energy Agency (IEA) to start full membership talks with India

- The announcement was made in a joint communique following the **IEA's 2024 Ministerial Meeting and 50th Anniversary events**.
- India joined the IEA as an **associate member in 2017** and sent a formal request for full membership last year.
 - ⊕ In 2021, India signed a **strategic partnership agreement with the IEA** to strengthen cooperation in global energy security, stability, and sustainability.
- **Criteria for IEA membership**
 - ⊕ Must be a member country of the **Organisation for Economic Co-operation and Development (OECD)**.
 - ⊕ Crude oil and/or product reserves **equivalent to 90 days of the previous year's net imports**.
 - ◆ India has **strategic oil reserves of 9.5 days** of its needs and combined with storage at refineries and depots, it is **equal to the 66-day requirement**.
 - ⊕ A **demand restraint program** to reduce national oil consumption by up to 10%.
 - ⊕ **Legislation and measures to ensure that all oil companies** under its jurisdiction report information upon request.
- **The IEA Governing Board** makes the final decision on a country's membership.
- **Significance for India**
 - ⊕ Recognized **India's 'strategic importance'** in tackling global energy and climate challenges.
 - ⊕ For energy security as India is the **world's third-largest energy consumer**.

- Guidelines have been released by the **Ministry of New & Renewable Energy** under the **National Green Hydrogen Mission (NGHM)**.
 - ⊕ **NGHM** was launched in 2023, to facilitate demand creation, production, utilization, and export of Green Hydrogen.
 - ⊕ **Strategic Interventions for Green Hydrogen Transition Programme (SIGHT)** and **Green Hydrogen Hubs** are its sub-components.
- **Key Features**
 - ⊕ **Implementing agencies** will be nominated by the Ministry of Road Transport and Highways.
 - ⊕ Scheme will be implemented till 2025-26 (total budgetary outlay of Rs. 496 Crores).
- **Key Objectives of the Scheme**
 - ⊕ Validate technical feasibility and performance of Green Hydrogen operated vehicles, along with economic viability.
 - ⊕ Support Green Hydrogen as fuel in buses, trucks and four wheeler vehicles.
- **Need of Promoting Green Hydrogen in Transport sector:**
 - ⊕ **Decarbonization**, transport sector accounts for 18% of country's carbon emissions.
 - ⊕ Reduced dependence on fossil fuel.
 - ⊕ Fulfil Panchamrit commitment, **net zero emission by 2070**.
- **Key Challenges:**
 - ⊕ Lack of an existing clean hydrogen value chain such as hydrogen production plants, refuelling stations, storage facilities.
 - ⊕ Retrofitting of vehicles
 - ⊕ Lack of Research and Development
 - ⊕ Lack of international standards and regulations

Other Initiatives for decarbonisation of Transport Sector

- ⊕ **Faster Adoption and Manufacturing of Electric Vehicles (FAME scheme)**
- ⊕ **Bharat Stage VI Emission Standards**
- ⊕ **Forum for Decarbonising Transport** by NITI Aayog and World Resources Institute (WRI), India (2021) Promotion of **Biofuels Blending** (20% blending of ethanol in petrol under Ethanol Blended Petrol (EBP) Programme)

- JET is a large tokamak that was the first device to produce controlled fusion power with deuterium and tritium situated in the United Kingdom.
- ⊕ A tokamak is a machine that confines a plasma using magnetic fields in a donut shape
- Nuclear fusion is the process by which two light atomic nuclei combine to form a single heavier one while releasing massive amounts of energy.

➤ Advantages of Nuclear Fusion

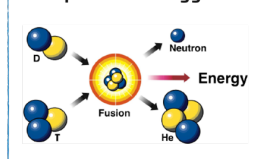
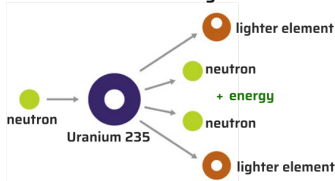
- ⊕ No carbon emissions as the only by-products are small amounts of helium.
- ⊕ Abundant fuels such as Deuterium can be extracted from water.
- ⊕ Reliable power as they continue to produce energy for longer periods.

➤ Challenges

- ⊕ High temperature required- as per IAEA, temperatures of over 100 million degrees Celsius are required to make deuterium and tritium fuse.
- ⊕ Neutron radiation during the reaction can travel tens of centi-meters out into the containment structure.

➤ India Initiatives

- ⊕ Joined the International Thermonuclear Experimental Reactor (ITER) project in 2005, a global initiative attempting to build the world's largest tokamak reactor.
- ⊕ The Institute of Plasma Research (IPR) is an autonomous institute under the Department of Atomic Energy (DAE) leads the Indian program in Fusion.

Parameter	Nuclear Fusion	Nuclear Fission
Process	<ul style="list-style-type: none"> ➤ Two light nuclei combine to produce energy. 	<ul style="list-style-type: none"> ➤ Splitting of a heavy, unstable nucleus into two lighter nuclei. 
Safety	<ul style="list-style-type: none"> ➤ Amounts of fuel used less so less chance of disaster. 	<ul style="list-style-type: none"> ➤ Large-scale nuclear accidents are possible. eg-Fukushima nuclear accident.
Energy efficiency	<ul style="list-style-type: none"> ➤ More efficient 	<ul style="list-style-type: none"> ➤ Less efficient

Also in News



Eat Right India

- Food Safety and Standard Authority of India (FSSAI) certified more than 500 hospitals as 'Eat Right Campuses', under the Eat Right India initiative.
- About Eat Right India (2018)
 - ⊕ Objective: Ensure safe, healthy and sustainable food for all Indians.
 - ⊕ Adopts a judicious mix of regulatory, capacity building, collaborative and empowerment approaches to ensure that food is good both for the people and the planet.
 - ⊕ Aligned to the National Health Policy 2017.
- FSSAI is a statutory body, established under Food Safety and Standards Act, 2006.



Chronic diseases

- Central Drugs Standard Control Organisation (CDSCO) approved Boehringer's Jardiance for chronic kidney disease in India.
- ⊕ CDSCO is the national regulatory authority responsible for the approval of Drugs, Conduct of Clinical Trials, laying down the standards for Drugs, etc.
- About Chronic diseases
 - ⊕ It is a disease or condition that usually lasts for 3 months or longer and may get worse over time.
 - ⊕ Tends to occur in older adults
 - ⊕ Can usually be controlled but not cured.
 - ⊕ Most common types of chronic disease: cancer, heart disease, stroke, diabetes, and arthritis.



AHIDF Scheme

- Union Ministry of Fisheries, Animal Husbandry & Dairying, launches the realigned Animal Husbandry Infrastructure Development Fund (AHIDF) Scheme.
- About Scheme
 - ⊕ Objective: Incentivise investments in dairy, meat processing infrastructure and Animal Feed Plant and related sector.
 - ⊕ Scheme Type: Central Sector Scheme
 - ⊕ Eligible entities: Individual entrepreneurs, private Companies, Dairy Cooperatives, Farmer Producer Organization (FPOs), Medium Small and Medium Enterprises (MSMEs) etc.
 - ⊕ It will provide:
 - ◆ Interest Subvention of 3% payable up to 8 years and ceiling on the loan amount
 - ◆ Credit guarantee cover upto 25% of the term loan.
 - ◆ Loan up to 90% of the estimated/actual project cost



Diphtheria

- WHO releases guidelines for clinical management of diphtheria. ➤
- Diphtheria is an infection caused by strains of bacteria called **Corynebacterium diphtheriae**.
 - ⊕ It spreads from person to person, usually through respiratory droplets.
 - ⊕ It infects the respiratory tract and skin. ⊕
- Incubation Period: 2 to 5 days
- ⊕ Symptoms: Weakness, Sore throat, Mild fever, and Swollen glands in the neck.
- ⊕ Vaccines are available.



Vermin

- Kerala passed a resolution urging the center to amend **Wildlife Protection Act (WPA)** to decrease man-animal conflict and declare wild boar as **vermin**.
- Vermins are animals that threaten humans, crops, livestock or property and are declared as per **section 62 of WPA by central government**
- **Section 11 (1) (a) of WPA**, empowers the **Chief Wildlife Warden** to permit any person to kill a wild animal specified in **Schedule I**.

WPA was amended to reduce the earlier six schedules to four.



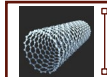
Cuscuta dodder

- Parasitic creeper **Cuscuta dodder** is choking the Chengalpet forests and Vedanthangal Bird Sanctuary threatening the local vegetation,
- **Cuscuta dodder**
 - ⊖ Also known as **Akashbel or Amarbel**. ⊕ **invasive weed**, native to North America.
 - ⊖ This parasitic **angiosperm** plant grows a **large cover on the host plant** and sends out many **tendrils**.
 - ◆ It creates a thick display before it chokes and finally kills the host plant.
- **Vedanthangal Bird Sanctuary**-one of the oldest bird-protected areas in the country.
 - ⊖ Located at **Chengalpattu District** (erstwhile Kancheepuram) of Tamil Nadu.



Changes introduced in National Film Awards

- **Regulations of 70th National Film Awards 2022** reflect the changes suggested by the **Committee for Rationalization of Film Awards**.
- **Key changes**
 - ⊖ Indira Gandhi Award for Best Debut Film of a Director **renamed as 'Best debut film of a director'**. **Prize money will now only go to director**.
 - ⊖ Nargis Dutt Award for Best Feature Film on National Integration renamed as **Best feature film promoting national, social and environmental values**.
 - » This category also **merges award sections for social issues and environment conservation into one**.
 - ⊖ **Dadasaheb Phalke Award** money increased to Rs. 15 lakh.
 - ⊖ **Swarn Kamal awards** Prize money increased to **Rs 3 lakh** and **Rs 2 lakh for Rajat Kamal winners** across categories.



Carbon nanotubes (CNTs)

- A novel method for directly synthesising Carbon nanotubes (CNTs) on glass substrates at a temperature of 750 °C has been developed.
 - ⊖ It used **Plasma Enhanced Chemical Vapour Deposition (PECVD)** Technique.
- **About Carbon nanotubes (CNTs)**
 - ⊖ Nanocarbon materials with **tubular structures** composed of rolled-up **graphene** sheets.
 - ⊖ They can be single-walled (SWCNT) or multi-walled (MWCNT).
 - ⊖ **Properties:** High surface to volume ratios, enhanced conductivity and strength, biocompatibility, etc.
 - ⊖ **Applications:** Rechargeable batteries, flexible electronics, aerospace, transparent electrodes, touch screens, supercapacitors, and medicine.

Places in News



Madagascar (Capital: Antananarivo)

- Indian PM met President of Madagascar on the occasion of the World Governments Summit 2024 (Dubai).
- **Political Boundaries**
 - ⊖ Island country, lying off the southeastern coast of Africa.
 - ⊖ **Maritime borders:** Comoros, France, Mauritius, Mozambique and Seychelles.
- **Geographical features**
 - ⊖ **Physiographic Division:** Central plateau, the coastal strip in the east, and the zone of low plateaus and plains in the west.
 - ⊖ **Major Rivers:** Mangoky River
 - ⊖ **Highest point:** Maromokotro

