

# **UPSC Daily Current Affairs** | Prelim Bits 05-04-2025

### **New Initiatives for Senior Citizens**

**Prelims** - Social Development- Inclusion, Social Sector Initiatives, etc. | Current events of national and international importance

#### Why in News?

Recently, President of India launched key initiatives for Senior Citizens at 'Ageing with Dignity' Event at Rashtrapati Bhawan.

• Ageing with Dignity' Event – It was organised by the Union Ministry of Social Justice and Empowerment that aimed at *fostering an inclusive society for the senior citizens*.

## New Initaives for Senior Citizens

- Senior citizens welfare portal
- Senior citizens homes
- Distribution of Aids and Assistive devices
- MoU between the Department of Social Justice and Empowerment and Brahmakumaris organization.
  - Senior Citizen Welfare Portal It is a comprehensive digital platform aimed at empowering elderly citizens through *seamless access to government services.* 
    - For example, accessing government schemes, healthcare benefits, welfare services, and updates on relevant events.
  - It *bridges the information gap and promote digital inclusion* and thereby it will enable senior citizens to lead more informed, independent, and fulfilling lives.
  - **5 new Senior Citizen Homes** These facilities are aligned with the Maintenance and Welfare of Parents and Senior Citizens (MWPSC) Act.
    - Tawang (Arunachal Pradesh), Wokha (Nagaland), Vellore (Tamil Nadu), Anakapalli (Andhra Pradesh), and Nainital (Uttarakhand).
  - They are designed to provide *safe, nurturing, and dignified living environments* for indigent senior citizens across the country.
  - Distribution of Aids and Assistive Devices They are implemented <u>under the</u> <u>Rashtriya Vayoshri Yojana (RVY).</u>
  - Signing of MoU with the Brahma Kumaris It reaffirms a collective commitment to *inter-generational bonding*, overall wellbeing and creating an *inclusive society for the senior citizens*.

Brahma Kumaris is a worldwide spiritual movement led by women, dedicated

to personal transformation and world renewal through Rajyoga Meditation.

## **Quick Facts**

- **Rashtriya Vayoshri Yojana (RVY)** It is a <u>Central Sector Scheme</u> for providing Physical Aids and Assisted-living Devices for Senior citizens belonging <u>to BPL</u> <u>category</u>.
- The expenditure for implementation of the scheme will be met from the "<u>Senior</u> <u>Citizens' Welfare Fund</u>".
- It will be implemented through Artificial Limbs Manufacturing Corporation (<u>ALIMCO</u>), a PSU under the Ministry of Social Justice and Empowerment.

#### References

- 1. PIB Launch of New Initiatives for Senior Citizens
- 2. India.Gov.In | Rashtriya Vayoshri Yojana

#### **Orange Economy (Creative Economy)**

**Prelims** - *Current events of national and international importance* | *Economic and Social Development* 

Mains (GS-III) - Indian Economy

#### Why in news?

Recently Prime Minister pointed the importance of Orange Economy in India at the WAVES 2025 summit.

World Audio Visual & Entertainment Summit (WAVES) 2025 is a summit Organized by Ministry of Information and Broadcasting, to position India as a global hub for media, entertainment, and digital innovation.

- **Orange Economy** It refers to industries that rely on individual creativity, skill, talent and *primarily based on ideas and knowledge*.
- It includes sectors like music, film, design, fashion, publishing, arts, advertising, and software development.



• **Origin** - Orange was chosen as a colour that resonates across cultures in creative, religious, and cultural spheres.

The term orange economy was first coined by former Colombian President Iván Duque Márquez and former culture minister Felipe Buitrago.

• The orange economy blends cultural, economic, and social elements and other sectors *like technology, tourism, and intellectual property.* 

United Nations General Assembly declared 2021 as the International Year of Creative Economy for Sustainable Development.

#### **India's Orange Economy**

- India is *emerging as a global hub* for film production, digital content, gaming, fashion, music, and live concerts.
- It is projected that India's media and entertainment industries could grow from 28 **billion to over \$100 billion** within the next decade.
- India's graphic and animation industry will face tremendous growth and bring economic prosperity for the nation.

## Significance of range economy

- It has the potential to *fuel growth, generate jobs, and promote innovation*.
- It will *drive entrepreneurship*, generate millions of jobs, and create a ripple effect across sectors.

- It has *cross-cutting linkages* at macro and micro levels to the overall economy.
- It contributes to *economic, social, and cultural development*.
- Contributes to achieve *sustainable development goals*.

#### Reference

First Post| Orange Economy

## **National Security Advisory Board (NSAB)**

**Prelims** - Current events of national and international importance.

Mains (GS-III) - Various Security forces and agencies and their mandate.

## Why in news?

Recently Government reconstituted National Security Advisory Board amid rising tensions with Pakistan.

- National Security Advisory Board (NSAB) It was constituted in 1998 following recommendations of a special Task Force headed by K.C. Pant, then Deputy Chairman of the Planning Commission.
- It is part of a *three-tier national security management* system consisting of,
  - $\,\circ\,$  National Security Council (apex body headed by the Prime Minister)
  - Strategic Policy Group (chaired by the Cabinet Secretary)
  - National Security Advisory Board
- Initially constituted for one year, but since 2004-6, the Board has been reconstituted for two-year terms.
- The NSAB meets at *least once a month or more frequently as needed.*
- The National Security Council Secretariat (NSCS) assists the NSC, NSAB, and the Strategic Policy Group.

The National Security Coordination Secretariat (NSCS) is a unit under the Prime Minister's Office responsible for national security planning and coordination.

- **Structure and Composition** The NSAB consists of senior retired officials from military, academics and distinguished members of civil society.
- Members are drawn from fields including Internal and External Security, Foreign Affairs, Defence, Science & Technology, and Economic Affairs.
- **Chairman** <u>Alok Joshi</u>, former Chief of the Research and Analysis Wing (R&AW), has been appointed as Chairman.
- The Reconstituted board includes seven new members:
  - D.B. Venkatesh Varma (Retired IFS)
  - Lt Gen A.K. Singh (Former Southern Army Commander)
  - Air Marshal P.M. Sinha (Former Western Air Commander)
  - Monty Khanna (Rear Admiral)

- Rajiv Ranjan Verma (Retired IPS)
- Manmohan Singh (Retired IPS)
- A.B. Mathur (Retired R&AW official)
- The board is reconstituted in a staggered manner to ensure continuity of expertise.

### **Functions**

- Undertake long-term analysis of and provide perspectives on issues of national security.
- Study specific issues referred to it by the National Security Council.
- Provide policy recommendations and options to the National Security Council for consideration.
- Contribute to the formulation of India's national security policies and strategies.

#### References

- 1. <u>The Hindu| Govt reconstitutes NSAB</u>
- 2. NSAB About National Security Advisory Board

## **Green Hydrogen Certification Scheme**

**Prelims** - Current events of national and international importance, Sustainable Development.

Mains (GS-I) - Conservation

## Why in news?

Recently Union Minister of New and Renewable Energy launched a scheme to measure, monitor, report, verify on-site, and certify green hydrogen based on a standard introduced by the Ministry in 2023.

- Green hydrogen certification It is a process that verifies the sustainability of hydrogen production, ensuring it's made using renewable energy and has low greenhouse gas emissions.
- Nodal agency The Bureau of Energy Efficiency (BEE).
- **Certification standards** The standard emissions capped at <u>2 kg of CO2 emitted per</u> <u>kg of hydrogen</u> produced in 12-month average.
- It is applied only to green hydrogen *production from electrolysis* or conversion of biomass.
- <u>Carbon Credit Trading Scheme (CCTS)</u> BEE also announced an offset mechanism for <u>hard-to-abate sectors</u> using green hydrogen under CCTS on.

Hard-to-abate sectors are those where reducing emissions is particularly challenging due to the nature of their industrial processes and their dependence on fossil fuels.

These sectors include iron and steel production, cement manufacturing, non-ferrous metals, and chemicals.

- This offset mechanism allows these sectors to use green hydrogen to earn and trade carbon credits.
- Current CCTS mechanism does not include sectors like steel, refineries, and shipping.

## Significance

- It will <u>boost India's green hydrogen exports</u> and encourage energy-intensive sectors to adopt the emerging fuel.
- It will help to ensure that the hydrogen produced in India truly qualifies as green.
- It *prevents greenwashing* and ensure quality and credibility, making it globally desirable and export-ready.

Government has identified Kandla, Paradip, and Tuticorin international ports as key hubs for green hydrogen production.

#### Quick facts

#### National Green Hydrogen Mission

- Nodal ministry Ministry of New and Renewable Energy (MNRE)
- Backed by an outlay of nearly Rs 20,000 crore.

• Supports domestic electrolyser manufacturing, green hydrogen production, and sectorspecific pilot projects.

• Encourages sustainable water use and R&D for technologies using seawater or wastewater.

To know more about this, click <u>here</u>

#### Reference

The Indian Express | Green Hydrogen Certification Scheme

## **Natural Hydrogen Fuel**

**Prelims -** General Science | Physical, Social, Economic Geography of India and the World

#### Why in News?

According to research firm Rystad Energy, by the end of 2023, 40 companies, including start-ups, were searching for deposits of natural hydrogen around the world, up from just 10 in 2020.

- **Hydrogen** It is a *gas of diatomic molecules with the formula*  $H_2$ , officially called "dihydrogen", but also called molecular hydrogen.
- It is a colorless, odorless, flammable gas.
- Natural Hydrogen It refers to hydrogen gas that is found in its natural form

beneath Earth's surface.

# Natural Hydrogen is sometimes known as **white Hydrogen or gold Hydrogen or geologic Hydrogen**.

- Generation It occurs as a free gas in geology, produced by
  - *Serpentinisation*, the interaction of water and iron-containing rocks.
  - *Radiolysis of water* by radioactive rocks, and from organic matter at depth.
- Helium co-exists with hydrogen in a few reserves points that radiolysis plays a role in its generation.



- **Discovery** It was <u>1<sup>st</sup> discovered by accident in Mali</u>, contains <u>no carbon and produces</u> <u>only water when burned</u>.
- Areas for geological hydrogen generation Gas seeps, volcanic outgassing, mines and in also in active mountain ranges with tectonic activity
  - $\circ~\ensuremath{\textbf{Examples}}$  : The Pyrenees, Alps, and Himalayas
- **Current reserves** Hundreds of hydrogen seeps have been in various countries, including Spain, France, Albania, Colombia, South Korea, Canada and
  - $\circ\,$  Australia Eyre Peninsula and Kangaroo Island
  - $\circ\,$  United States Kansas, Nebraska

Favourable Geological Structures for Natural Hydrogen in India

- Hard rock formations of diverse ultramafic/mafic and basaltic assemblages
- Andaman and Himalayan ophiolite complexes
- Greenstone volcanic-sedimentary sequences in cratons (Dharwar, Singhbhum)
- Sedimentary basis (for example, in Vindhyan, Cuddapah, Gondwana and Chhattisgarh)
- Basement rocks with fractures
- Areas where active hydrothermal systems as represented by hot springs exist
  - **Current production** It is *manufactured mostly from natural gas* through an energyintensive and polluting process.

Production of **Green Hydrogen** involves a process that involves splitting water into hydrogen and oxygen using renewable electricity.

 Significance - If harvested in a sustainable manner, it may provide a <u>clean and</u> potentially low-cost fuel.

#### **Quick Facts**

- **Serpentinization** It is a geological process where ultramafic rocks, rich in minerals like olivine and pyroxene, are altered by water and converted into serpentine minerals which <u>releases hydrogen gas</u> during the process.
- **Radiolysis** It is the process in which subatomic particles naturally emitted by radioactive rocks such as granite cause certain molecules to break apart, *releasing* <u>hydrogen</u>.

#### Reference

The Hindu| Potential of Natural Hydrogen Fuel

