

# NEWS TODAY

## Second Arihant-Class submarine 'INS Arighaat' commissioned into Indian Navy

With this Addition, Indian navy now have two SSBN (Ship, Submersible, Ballistic, Nuclear) submarines (INS Arihant and INS Arighat).

### India's Nuclear Powered Submarines:

- **Arihant-class submarines** are being developed and built indigenously under the Advanced Technology Vessel (ATV) Project.
  - ⊕ **INS Arihant, India's first indigenous nuclear submarine** under ATV project, was **commissioned in 2016**.
    - ◆ **INS Arihant** carried out a successful launch of a **Submarine Launched Ballistic Missile (SLBM) in 2022**.
    - ◆ It can carry up to four **nuclear-capable K-4 SLBMs** (Range exceeding 3,500 km) or twelve **K-15 SLBMs** (Range of around 750 km).
- In 2019, **India signed a \$3 billion deal with Russia** to lease an Akula-class nuclear-powered attack submarine for 10 years.

### Significance:

- **Nuclear Deterrence capability:**
  - ⊕ **Strengthening nuclear triad** (consisting of Land-based intercontinental ballistic missiles, Submarine-launched ballistic missiles, and Strategic bombers).
  - ⊕ **Credible second-strike capability:** In line with India's 'no first-use policy'.
- **Strategic Significance:** SSBN will help maintain strategic stability in South Asia, particularly in context of **India's nuclear-armed neighbors, China and Pakistan**.
- **Increased India's naval prowess:** By building towards blue water naval capability (Navy that operates into deep oceans).
- **Other Significance:** Contributing towards **Atmanirbhar Bharat**, enabling critical defense and attack capabilities etc.

### Issues with India's Submarine capabilities:

- **China Challenge:** China currently **operates six Jin-class SSBNs**, each equipped with **JL-2 ballistic missiles** with a range of 7,200 kilometers, vastly outstripping range of India's K-15 missiles.
- **Other issues:** Lack of sustained investment, continuous technological advancement etc.

## A pan-India analysis has been conducted of fluoride in groundwater by National Remote Sensing Centre (NRSC)

Fluoride which is naturally occurring in groundwater has a national drinking water limit of 1.50 milligrams/litre.

- **Excessive fluoride** can cause **skeletal fluorosis, accelerate dental decay, and pose health risks**, particularly for children.

### Key findings on Fluoride Contamination

- **States with above-permissible levels:** Rajasthan (highest), Telangana, western Andhra Pradesh, eastern Karnataka, etc.
- Fluoride contamination is **highest during the dry summer pre-monsoon months**.
- **Arid regions**, especially western India, showed **higher contamination than humid areas**.

### Status of other groundwater contaminants in India

- **Arsenic contamination :** West Bengal, Bihar, Jharkhand, Uttar Pradesh, etc constitute 90% of arsenic contamination in India.
- **Uranium contamination:** Found in around 12 states. E.g., Punjab.
- **Iron contamination:** States of Rajasthan, Jharkhand, Assam, etc
- Other contaminants are **antimony, cadmium, copper, barium, etc**. All of them have adverse impact on human health like toxicity, hypertension, liver and kidney damage, etc.

### Steps taken

- **The legislative provisions:** Water (Prevention and Control of Pollution) Act 1974, and Environment Protection Act 1986 and The Water Cess Act, 1977.
- **Groundwater recharged through rainwater harvesting:** E.g., Prime Minister Krishi Sinchayee Yojna- watershed Development, Atal Bhujal Yojana, etc.



## 'Pathways & Strategies for Accelerating Growth in Edible Oils Towards Atmanirbharta' Report Released by NITI Aayog

The report focuses on bridging the demand-supply gap to attain self-sufficiency in edible oils (olive oil, palm oil, soyabean oil, canola oil, etc.)

### Need for Self Sufficiency

- **Minimizing Import Dependency:** India imports ~57% of its edible oil which makes it vulnerable to global price fluctuation and supply disruption.
  - ⊖ Domestic supply is ~12.4 million tonnes (MT) whereas import is ~16.5 MT.
- **Achieving Nutritional Security:** Contributes to absorption of fat-soluble vitamins.
- **Enhancing Economic Development:** Positively impacts balance of payments, fosters growth of processing industry.

### Strategies for Self Sufficiency

- **Area retention and diversification**
  - ⊖ Development of customized cluster technology for yield improvement.
  - ⊖ Oilseed Development in Bundelkhand and the Indo-Gangetic Plain.
  - ⊖ Prioritizing Wasteland and Fallow land utilization.
- **Seed Traceability and Quality Assurance**
  - ⊖ Establishment of "One Block-One Seed Village" for enhancing seed replacement rate.
  - ⊖ Promotion of bio fortified and genetic varieties of oilseeds.
- **Improved and Advanced Production Technologies**
  - ⊖ E.g. Heterosis breeding for sunflower, castor, mustard, sesame. etc.
    - ◆ Heterosis is process wherein hybrids formed are more robust than their parents.
    - ◆ It is used to increase the crop yield.



### Key Initiatives

- National Mission on **Edible Oil-Oil Palm**.
- Integrated Scheme on **Oilseeds, Pulses, Oil palm and Maize**.

# Digital on-the-go reading

Better Search and Navigation

Dashboard to track Progress

Share articles with others

Test Yourself through Quiz

Scan Here to Know More

## UK's University of Southampton is set to open a campus in Gurugram Delhi-NCR

The University is ranked among the top 100 in the QS World University Rankings.

### Provisions under National Education Policy (NEP) 2020 and UGC guidelines

- NEP seeks to **promote global universities to setup their campuses in India**.
  - ⊖ **Internationalization at home:** Offering courses in Indian culture, sciences, and traditions, leveraging global interest in these areas.
- **UGC guidelines, 2023:** It focuses on eligibility criteria, admissions, fee structure, etc for the foreign universities in India.

### Significance

- **Mitigating brain drain** and financial strain.
- To **attract reputed Institutions** in India.
- **Push emerging private universities** to enhance their quality and capacity.

### Implementational Challenges

- **Incorporating Indian culture and multilingualism** into the curriculum for Foreign higher Educational Institutions (FHEIs) operating in India.
- FHEIs may evolve into large centres for **India-specific research** rather than general research, limiting the efficacy of UGC guidelines.
- **Global experiences** highlights that elite world-class institutions tend to remain domestic, which explains few **FHEIs operating globally**.

### Future Roadmap

- Promoting **FHEIs partnerships with local institutions** for more profound research based on global experience.
- **Reforming the governance models of local universities** by involving a pool of global academics with significant autonomy.
- **Promoting studying in India in foreign countries** to attract international students.

## Government allows sale of rice from Food Corporation of India for ethanol production

Food ministry has allowed ethanol producers to participate in Open Market Sale Scheme of rice between August and October 2024.

- Ministry also permitted use of sugarcane juice, sugar syrup, B heavy molasses and C heavy molasses for ethanol production in 2024-2025, reversing last year's ban.
- ⌚ Earlier ban was to ensure sugar availability for domestic consumption and price stability.

### Rationale behind Latest orders

- **Manage Excess Stock:** India has Surplus rice stocks (Exceeding 540 lakh tonnes).
- **Contribute to India's energy security and self-reliance:** By boosting renewable energy use through ethanol blending.

### Ethanol Blending Program

- **Objective:** Blending of ethanol in petrol with multiple objectives including reducing import dependence, savings in foreign exchange etc.
- **Target:** 20% ethanol blending by 2025-2026.
- **Status:** Amount of ethanol blended with petrol has surged to over 500 crore liters in 2022-23, with a current blending rate exceeding 15%.

### Challenges faced in ethanol Blending

- **Producers:** Availability of feedstock, weather related issues
- **Oil Marketing Companies:** Need for additional storage tanks, logistics cost and emissions
- **Vehicle manufacturers:** Optimization of engine for higher blends, conduct of durability studies on engines and field trials

### Way Forward for ethanol Blending

- Encouraging use of water saving crops to produce ethanol. E.g. Maize
- Production from non-food feedstock to prevent tradeoff with food security
- Clustering of ethanol distilleries, transfer from surplus to deficit states

### Initiatives Taken

- **National Policy on Biofuels (2018)**
- **Reduced GST** on ethanol for Ethanol Blending Program from 18% to 5%;
- **Amendment to Industries (Development & Regulation) Act, 1951** for smooth movement of ethanol across country

## Also in News



### She-Box Portal

The Ministry of Women and Child Development launched a new She-Box Portal to make Workplaces safer for Women.

#### About She-Box Portal

- **Centralized platform** for registering and monitoring complaints of sexual harassment of women at workplace.
- **Objective:** Provide a single window access to every woman, (organised or unorganised sector) for registering complaint related to sexual harassment.
- It also has repository of Resources on Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.



### Securities Contracts Regulation Rules (SCRR), 1956

The Department of Economic Affairs amended SCRR, 1956, facilitating direct listing of securities by public Indian companies on International Exchanges of International Financial Service Centres (IFSCs).

#### Significance:

- Facilitate easier access to global capital for Indian start-ups and companies in the sunrise and the technology sectors.
- Indian companies going global benefit from expanded opportunities to grow their presence in international markets.
- **Securities Contracts (Regulation) Act, 1956:** An Act to prevent undesirable transactions in securities by regulating the business.



### Retired Sportsperson Empowerment Training (RESET) Programme

The Ministry of Youth Affairs & Sports has launched RESET Programme

#### About RESET Programme

- It aims to empower retired sports persons with knowledge and skills for career development and increased employability.
  - ⌚ Retired athletes aged 20-50 who have participated or received medals in international or national events.
- **Key Features:**
  - ⌚ **Two levels based on educational qualifications**—Class 12th and above, and Class 11th and below.
  - ⌚ **Mode:** Hybrid, including self-paced learning and on-ground training with internships.
  - ⌚ **Placement assistance** and guidance for entrepreneurial ventures.



### Monsoon Currents

Recently, visitors to RK Beach (Visakhapatnam) witnessed the sea receding by 150 meters.

- Experts believe it may have been caused due to shifting of ocean currents from north to south in the Indian Ocean.
- The Ocean Currents in the region are influenced by the Monsoon.
  - ⌚ The monsoon currents are seasonally reversing, open-ocean currents that flow between the Arabian Sea and the Bay of Bengal.

#### Other reasons for receding of Sea

- Change in tidal patterns
- Fluctuations in sea temperatures



### World Gold Council (WGC)

WGC raises India's gold consumption projection to 850 tonnes in 2024

#### About WGC

- It was formed in **1987 by some mining companies.**
- It is the authority on Gold and explores unique gold markets and conducts research.

#### About gold as a commodity

- Leading exporters (2022):** Switzerland, United States, United Arab Emirates.
- Leading importers (2022):** Switzerland, China, United Arab Emirates, United Kingdom, and India.
- Top producers:** China, Australia, Russia.
- In India, largest resources of gold** are located in Bihar (44%) followed by Rajasthan (25%), Karnataka (21%).
- India is the **2nd largest consumer after China.**



### Dhaincha

Distribution of green manure, Dhaincha has recently been commenced in Tamilnadu.

#### About Dhaincha:

- Generally grown as a **green manuring crop** in India.
- Tall annual herb adapted to wet areas and heavy soils.
- Significance:** Used for **feeding livestock and soil improvement.**

#### Green Manuring:

- Growing of plants** belonging to leguminous family and incorporating them into soil after sufficient growth.
- Significance:**
  - Improves soil structure, increases **water holding capacity** and decreases soil loss by erosion.
  - Reduces **weed proliferation** and helps reclamation of alkaline soils.
  - It adds **organic matter to the soil** and stimulates **activity of soil microorganisms.**



### Payment Passkey Service

Mastercard chooses India for launch of its Payment Passkey Service

#### About Payment Passkey Service

- It provides customers with a non-OTP-based solution for transactions
- Working:**
  - It **uses passkeys and tokenization** to secure a consumer's online checkout interaction
  - To confirm payment, **biometric authentication** such as fingerprint, face scan or PIN is used as per availability on device
- Benefits**
  - Eliminates **inconvenience of forgetting or inadvertently sharing one's passwords** or OTPs thereby simplifies online shopping,
  - Faster and secure Transactions (Since **Financial account data is not shared with third parties.**)



### Samudra Pratap

First indigenously developed Pollution Control Vessel of ICG, 'Samudra Pratap' have been launched.

#### About Samudra Pratap

- The Ship has been built by **Goa Shipyard Limited (GSL)** for the ICG.
- The vessel will help to **check the oil spillage in the country's sea coast.**

#### About Indian Coast Guard (ICG)

- Established** In 1977 under Ministry of Defence
- Jurisdiction:** Over the **entire maritime zone up to 200 nautical miles, including 12 nautical miles** of territorial waters.
- Role:** Ensuring safety and **protection of artificial islands**, offshore terminals, providing **protection to fishermen**, Assisting customs and other **authorities in anti-smuggling operations etc.**

## Personality in News



### Srimanta Sankaradeva

Assam govt has signed MoUs with Visva Bharati University to set up Srimanta Sankaradeva chair

#### About Srimanta Sankaradeva

- Born in Aali-pukhuri situated in Nagaon district of Assam.
- He was 16th century saint scholar, polymath, social-religious reformer.

#### Key contributions

- Propagated a form of Vaisnavism, called **Ek-Sarana-Hari-NaamDharma** (considered Lord Krishna to be one, eternal and absolute)
  - His religious system was strictly monotheistic.
- Also founded unique **Vaishnavite monasteries** called Sattras.
- He is known for creating:
  - New forms of music (**Borgeet**)
  - Theatrical performance (**Ankia Naat, Bhaona**),
  - Dance (**Sattriya**)
  - Literary language (**Brajavali**)
- Literary works:** Bhakti Pradipa, Bhakti Ratnakara, Kirtanna Ghosh etc.

**Values:** Spiritualism, Syncretism, humanism, etc

