



India-EFTA Trade and Economic Partnership Agreement (TEPA) to come into effect from October 1, 2025: Commerce Minister

TEPA, a **Free Trade Agreement (FTA) signed in March, 2024** focuses on market access related to goods, rules of origin, trade facilitation, trade remedies, sanitary and phytosanitary measures etc.

Key Provisions of TEPA

- **First Binding Commitment:** 1st FTA making a binding commitment of \$100 bn investment (FDI) and 1 million direct jobs in India in next 15 years.
 - ⊕ In return, **India** will allow several products (e.g. Swiss watches, chocolates, and cut and polished diamonds) at **lower or zero duties**.
 - **Market Access:** EFTA's market access offer covers **100% of non-agri products** and tariff concession on Processed Agricultural Products (PAP).
 - ⊕ Sectors such as **dairy, soya, coal and sensitive agricultural products** are kept in the **exclusion list**.
 - **Tariff Reduction:** EFTA will eliminate or reduce import tariffs on 99.6% of India's exports. India will eliminate or reduce import tariffs on 95.3% of the exports from EFTA nations.
 - **Others:** IPR commitments, Mutual Recognition Agreements in **Professional Services** E.g. nursing
- India-EFTA trade Relation:**
- In 2024–25, India-EFTA trade totaled USD 24.4 billion, with India facing a **large trade deficit**.
 - ⊕ A large part of the deficit is due to **imports of gold from Switzerland**.
 - Among EFTA countries, **Switzerland** is the **largest trading partner** of India followed by Norway.

Kashi Declaration adopted in Youth Spiritual Summit for Drug-Free India

As part of broader **Mera Yuva (MY) Bharat** framework, the **Youth Spiritual Summit** laid the foundation for a **national youth-led anti-drug campaign**.

- MY Bharat is an **autonomous body** set up by the Government of India to provide an institutional mechanism powered by technology for **youth development** and **youth-led development**.

About Kashi Declaration

- Sets a 5 year **roadmap** for De-Addiction Movement.
- Affirms a **national consensus** to treat substance abuse as a **multi-faceted public health** and **societal challenge**.
- **Approach to be followed:**
 - ⊖ Proposes **institutional mechanisms** for **multi-ministerial coordination**, including the formation of a **Joint National Committee, annual progress reporting**, and a national platform for linking affected individuals to support services.
 - ⊖ **Integration** of spiritual, cultural, educational, and technological efforts to prevent addiction.

Other Initiatives taken to reduce Drug Abuse

- The Narcotic Drugs and Psychotropic Substances Act, 1985
- The Prevention of Illicit Traffic in Narcotic Drugs and Psychotropic Substances Act, 1988
- National Action Plan for Drug Demand Reduction (NAPDDR), 2018-25
- Nasha Mukt Bharat Abhiyaan (NMBA), 2020

Status of Drug-abuse in India (as per National Survey on Substance Use, 2019)

- **Prevalence of Alcohol Use:** **14.6%** between the age of **10 and 75 years** are current users of alcohol.
- **Cannabis and Opioids** (e.g., heroin) are the next commonly used substances in India.

Driving factor behind Drug Abuse



Social Factors: E.g., Peer pressure, family conflicts, and social isolation



Economic Factors:
E.g., Unemployment
and poverty



Psychological Factors: E.g., Mental health issues like anxiety and depression



Academic/Work Stress: E.g.,
High pressure in education
and jobs increases risk,
especially among youth.



Availability: India is located between Golden crescent and golden triangle.

China begins construction of World's largest Dam on Brahmaputra river (Yarlung Tsangpo)

The dam is being built across a **huge gorge** in the **Himalayas** where the river makes a **U-turn** near India's border (**Arunachal Pradesh**).

- Once completed, it can **surpass** the scale of **China's Three Gorges Dam** on the **Yangtze River**.
- Brahmaputra flows across the **Tibetan Plateau**, carving out the **deepest canyon** on Earth.

Key Concerns associated with the Dam

- **Disaster Risk:** This increases the threats related to **earthquakes**. Tibetan plateau frequently experiences earthquakes as it is located over the **tectonic plates**.
 - ⊕ E.g., 1950 Assam-Tibet Earthquake
- **Environmental Challenges:** It may cause disruption to local **ecology** and downstream **water flow**.
 - ⊕ It will affect **biodiversity** and **agriculture**.
- **Geopolitical challenges:** China can potentially **weaponize** (as a 'water bomb') dam during **conflicts** by **causing floods**.
- **Cultural challenges:** E.g., Project threatens **tribes** like the **Adi Tribe** in **Siang valley** in **Arunachal Pradesh**.



China and India have established **Expert Level Mechanism (ELM)** in 2006 to address trans-border river issues by sharing hydrological **data** on Brahmaputra and Sutlej rivers during flood seasons. India is also building its hydropower dam on the Brahmaputra in Arunachal Pradesh.

- Both countries are not signatories to the **United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses, 1997**.

ICMR is developing indigenous multi-stage Malaria vaccine named 'AdFalcivax'

Vaccine is being developed through **ICMR's Regional Medical Research Centre, Bhubaneswar** and **National Institute of Malaria Research** in partnership with **Department of Biotechnology-National Institute of Immunology**.

About AdFalcivax Vaccine

- **Dual-Stage Targeting of Plasmodium falciparum (Deadliest malaria parasite Species):** Unlike existing vaccines that target only one life stage, it targets two critical stages in parasite's lifecycle i.e.
 - ⊕ **Pre-erythrocytic (liver) stage**
 - ⊕ **Transmission (sexual) stage**
- **Recombinant Chimeric Vaccine:** A "chimeric" vaccine refers to vaccine that **combines antigens from different stages of a parasite's life cycle** into a single immunogen.
 - ⊕ Recombinant DNA technology is a process where **DNA molecules from different sources are combined** to create a new DNA sequence.
- **Indigenous Development:** It marks India's entry into the global league of advanced malaria vaccine R&D.

Advantages over Existing Malaria Vaccines

- **Broader protection:** Unlike existing WHO-recommended vaccines **RTS, S/AS01 (Mosquirix)** and **R21/Matrix-M**, AdFalcivax offers dual-stage protection.
- **Lower risk of immune evasion** and potential for better long-term immunity
- **Extended thermal stability** with functionality maintained for over nine months at room temperature
- **Cost-Effective Manufacturing:** Produced in a safe and scalable **bacterial system** i.e. **Lactococcus lactis**.

About Malaria

- **Life-threatening disease** caused by **Plasmodium** parasites and does not spread from person to person.
 - ⊕ Malaria mostly spreads to people through bites of some **infected female Anopheles mosquitoes**.
- **Geographical prevalence:** Mostly found in tropical countries.
- **Five Plasmodium species cause malaria in humans:** *P. falciparum*, *P. vivax*, *P. malariae*, *P. ovale*, *P. knowlesi*.

National Sample Survey (NSS) completes 75 Years

NSS was established in **1950** by **P.C. Mahalanobis** to collect economic and social information from the whole country on the basis of random sampling.

About NSS

- **Ministry:** Ministry of Statistics and Programme Implementation.
- **Headed by a Director General:** Responsible for conduct of large scale sample surveys on All India basis.
- **Coverage:**
 - ⊕ **Household surveys on socio-economic subjects:** E.g. surveys on population, birth, death, migration, fertility, family planning etc.
 - ⊕ **Surveys on land holding, livestock and agriculture.**
 - ⊕ **Establishment surveys and enterprise surveys:** E.g. non-agricultural enterprises in unorganized sector and collection of rural retail prices in rural areas.
 - ⊕ **Village surveys:** Formation on availability of infrastructure facilities in Indian villages.
- **Four Divisions of NSS:**
 - ⊕ **Survey Design and Research Division (SDRD):** Located at Kolkata, it is responsible for technical planning of surveys, formulation of concepts and definitions, sampling design etc.
 - ⊕ **Field Operations Division (FOD):** With its headquarters at Delhi/Faridabad is responsible for the collection of primary data.
 - ⊕ **Data Processing Division (DPD):** Headquarters at Kolkata is responsible for sample selection, software development, processing, validation and tabulation of data.
 - ⊕ **Survey Coordination Division (SCD):** Located at New Delhi, coordinates all the activities of different Divisions of NSS.

Major Surveys of NSS

- **Urban Frame Survey (Phase 2022-27):** To establish and update a reliable sampling frame for urban areas, crucial for conducting socio-economic surveys.
- **Annual Survey of Industries (ASI):** To assess and evaluate changes in the growth, composition and structure of organized manufacturing sector.
- **Periodic Labour Force Survey (PLFS)** conducted from 2017 has been the primary source of statistics on labour force.
- **Price Survey** (Consumer Price Index-Urban & Rural, Consumer Price Index (AL/RL) and Wholesale Price Index)

Also In News



M23 Rebels

Democratic Republic of Congo (DRC) and **Rwanda-backed M23 rebels** have committed to a permanent ceasefire in eastern Congo.

About M23 rebels

- **M23, or March 23 Movement** primarily consists of ethnic **Tutsis** is a major armed group fighting **Congolese forces** in **mineral-rich eastern DRC**.
- It is named after date in **2009** of the signing of an **accord** between **CNDP, a Tutsi-led rebel group**, and the **Congolese government** to end a revolt led by the Tutsi people.
- CNDP members formed the M23 movement in **2012** to protest the **failed implementation of the 2009 accord**, for protecting minorities and distributing resources evenly.



Bitra island

Lakshadweep administration is considering acquisition of Bitra for defence purposes.

About Bitra Island

- It is the **smallest inhabited island** in the territory of Lakshadweep having a land area of **0.105 sq km**.
- **Location:** Near the Agatti Island, Arabian Sea.
- **Climate:** Categorised as 'Aw' i.e., tropical savannah according to the Köppen-Geiger system of climate classification.
- ⊕ The average rainfall received is **~1600 mm a year**.

About Lakshadweep

- It is **India's smallest** Union Territory.
- Lakshadweep Island consists of **36 coral islands**, located in the **Arabian Sea**. Atoll, lagoon and reefs are the three main geographical features.



Codex Alimentarius Commission (CAC)

India's leadership in standards development for **Millets** gained recognition at the **88th Session** of the **Executive Committee** of the **CAC** at **Food and Agriculture organization (FAO)** Headquarters in **Rome, Italy**.

About CAC

- It an **international food standards body** established jointly by the **FAO** and the **World Health Organization (WHO)** in **1963**.
- It is responsible for the **implementation** of the **Joint FAO/WHO Food Standards Programme**.
- **Codex Alimentarius** are **international food standards** and codes of practice that contribute to the safety, quality and fairness of this **international food trade**.
- **Members: 189** (188 Member Countries and 1 Organization (EU))

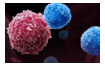


Kamchatka Peninsula

Five powerful **earthquakes** struck offshore in **Russia's Kamchatka Peninsula**.

About Kamchatka Peninsula

- Located in the **Russian Far East**.
 - ⊕ It is surrounded by the **Bering Sea** and the **Pacific Ocean (east)** and the **Sea of Okhotsk (west)**.
- Lies on the **Pacific Ring of Fire**.
- Often known as a **land of fire and ice**.
- **Kuril Archipelago** extends from the southern tip of Russia's Kamchatka Peninsula to the **northeastern coast of Japan's Hokkaido Island**.
 - ⊕ The Kuril Islands are a group of territories disputed between Russia and Japan.



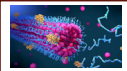
Invitro bioTransformation (ivBT)

Chinese researchers have developed an in vitro biotransformation (ivBT) system that **synthesizes sucrose from methanol**.

- While **Methanol** was derived from industrial waste or carbon dioxide.
- This **Artificial conversion of CO2 into food and chemicals** can address environmental and population related challenges

About ivBT system

- Biotransformation is process by which a **substance is chemically altered** by metabolic activity of **biological agents, mainly enzymes**.
- When this process is **carried out outside the body (in vitro)** using isolated cells or enzymes, it is termed **in vitro biotransformation (ivBT)**.



Biomolecular Emulator (BioEmu)

A new deep learning system, BioEmu-1, has been developed to accurately predict protein structures and their dynamic conformations.

About BioEmu

- Developed by Microsoft and researchers at Rice University in the US and Freie Universität in Germany.
- Predicts the full range of shapes a **protein naturally explores** under biological conditions.
- Allows **high-resolution protein flexibility modelling**.
 - ⊕ Database of **AlphaFold** (AI Model developed by **Google DeepMind to predict protein's structure**) has been used for its training.
- **Benefits:** It is faster and cheaper, enabling large-scale predictions.
 - ⊕ It can generate thousands of protein structures per hour on a single **graphics processing unit (GPU)**.
 - ⊕ Also, it is an open source model



Hatti Tribe

Recently, a traditional polyandrous marriage known as '**Jajda**' was performed among the Hatti tribe (**Scheduled Tribes (ST)**) in Himachal Pradesh.

- Revenue laws recognize this practice as '**Jodidara**'.
- **Polyandry** is a form of polygamy where a **woman marries more than one man at the same time**.
- **Reasons for polyandry:** ensuring ancestral land is not divided, promoting brotherhood and joint family, etc.

About Hatti Tribe

- It is a **close-knit community** in **Trans-Giri region** (near Giri and Tons rivers) of **HP and Uttarakhand**.
- The tribe is named after their **traditional occupation** - selling homegrown produce, meat, etc. at small markets (called **Haats**).



Mangarh Massacre, 1913

Tribal communities from Rajasthan, Madhya Pradesh, Gujarat, and Maharashtra gathered at Mangarh Dham to reiterate their demand for a separate Bhil Pradesh.

- **Mangarh Dham** is the site of the **Mangarh massacre of 1913**, also called **Jallianwala Bagh of Rajasthan**.
- It is located in Banswara district of **Rajasthan**.

About Mangarh Massacre, 1913

- Under the leadership of **Guru Govindgiri**, **Bhils** assembled to **demand higher wages from their landlords at Mangarh hill**.
- Rumors spread that the tribals **were planning to revolt against rulers and the British government**.
- Thus, British forces used **bombs and fired directly into the crowds of assembled tribals**
- Approximately **1,000-1,500 tribals were killed in the incident**.

Personality in News



Mangal Pandey (1827 - 1857)

PM pays **tribute to the great freedom fighter Mangal Pandey** on his birth anniversary.

About Mangal Pandey (1827 - 1857)

- **Born:** Ballia district, Uttar Pradesh.
- He joined **34th Bengal Native Infantry of the British East India Company** in 1849 at the age of 22.

Key contributions:

- Key role in the revolt of **1857 also known as the Sepoy mutiny of 1857**.
- He protested against the **issue of greased cartridges to the soldiers**.
- Broke into **open mutiny on March 29, 1857, at Barrackpore** near Calcutta, which also ignited fire of Revolt of 1857.
- He was court-martialed and hanged at **Barrackpore on April 8, 1857**.

Values: Courage, leadership, Determination, Patriotism etc.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI