Mains Topics

India and New Zealand FTA

Context

India and New Zealand have concluded a comprehensive Free Trade Agreement.

Salient Features of the FTA

- **Zero-duty market access:** Customs duties eliminated on **100% of Indian exports**, boosting export competitiveness.
- **Healthcare cooperation:** Inclusion of New Zealand's **first-ever annex on Health and Traditional Medicine Services**.
- **Agricultural integration:** Launch of an **Agricultural Productivity Partnership** to enhance farm productivity and link Indian farmers to global value chains.

Benefits of India and New Zealand FTA

Area	Key Benefits for India
Market Access (Goods)	Zero-duty access on **100% of New Zealand tariff lines (8,284)** from entry into force; elimination of ~10% tariffs on ~450 Indian export lines; average applied tariff of **2.2% reduced to zero**
Services Trade	New Zealand's **best-ever offer**: commitments in **118 services sectors**; **MFN treatment in 139 sectors**
Health & AYUSH	First-ever **Health & Traditional Medicine Annex**; global promotion of **AYUSH** (Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa-Rigpa, Homeopathy); boost to medical value travel and wellness services
Education & Student Mobility	Students allowed **20 hrs/week work** during study; protected against future policy changes; **extended post-study work visas** (STEM Bachelor: 3 yrs; Master's: up to 3 yrs; Doctorate: up to 4 yrs)
Professional Mobility	**5,000 skilled visas (up to 3 years)** for Indians in AYUSH, Yoga, Indian cuisine, music, IT, engineering, healthcare, education, construction
Working Holiday Scheme	**1,000 Indian youth annually** eligible for multiple-entry stays up to **12 months**
Investment	**USD 20 billion FDI commitment** from New Zealand over **15 years**
Regulatory Facilitation	Faster approvals for **pharmaceuticals & medical devices**; recognition of inspections from **US, EU, UK, Canada** regulators

Intellectual Property	Binding commitment to amend laws within **18 months** for **EU-level GI protection** for Indian products
Customs & Trade Facilitation	**Advance rulings, e-documentation**, clearance within **48 hours** (**24 hours for perishables**)

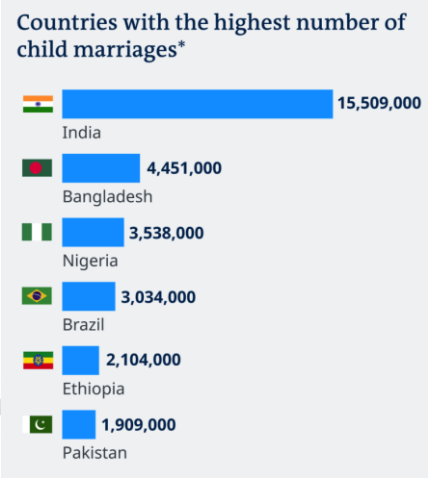
Source: PIB

Child Marriages in India

Context

The Union government marked the first anniversary of its Bal Vivah Mukt Bharat Abhiyan.

Facts Related to Child Marriages in India



- **Decline in Child Marriages:** Child marriage rates in India **halved from 47.4% to 23.3% between 2006 and 2019-21**, following the enactment of the **Prevention of Child Marriage Act, 2006.**
  - Over **2 lakh child marriages** were prevented in the past year.
- **Prevalence of Child Marriage in India: One in five girls** in India is still married before turning 18.
- **Improvement in Sex Ratio at Birth:** 918 in 2014-15 to 930 in 2023-24.
- **States with High Burden of Child Marriages:**
  - **West Bengal (41.6%), Bihar (40.8%), Tripura (40.1%),** Rajasthan, Jharkhand, Assam, and Andhra Pradesh.

UNICEF Report (2023)

- **One in three** of the **world's child brides live in India**.
- Over half of the girls and women in India who married in childhood live in five states: Uttar Pradesh (highest), Bihar, West Bengal, Maharashtra and Madhya Pradesh.
- The majority of young women who married in childhood gave birth as adolescents.

Key Reasons Behind Child Marriage

- **Poverty & economic insecurity:** Families marry off children early to reduce household expenses and perceived economic burden.
- **Gender inequality & patriarchy:** Girls are viewed as dependents, with marriage seen as their primary role.
- **Social norms & traditions:** Deep-rooted customs and community pressure normalise early marriage.
- **Lack of education:** Low school enrolment and high dropout rates, especially among girls, increase vulnerability.
- **Safety concerns:** Parents marry daughters early to avoid sexual harassment, trafficking, or social stigma.
- **Weak law enforcement:** Poor implementation of the Prohibition of Child Marriage Act and low conviction rates.
- **Crisis situations:** Disasters, pandemics, migration, and conflicts intensify economic stress and early marriages.

What are the impacts?

- **On Health:**

- **High maternal mortality and morbidity** due to early pregnancies.
- **Poor child health outcomes**, including low birth weight and malnutrition.

- **On Education & Economy:**
  - **School dropouts**, especially among girls, limiting skill development.
  - **Intergenerational poverty**, as early marriage restricts earning potential.
- **On Rights & Well-being:**
  - **Increased domestic violence and abuse** due to power imbalance.
  - **Loss of agency and decision-making capacity** for young girls.
- **On Society:**
  - **High population growth** due to early and repeated pregnancies.
  - **Hampered human capital development**, affecting national growth.

Key Measures to Address Child Marriage

- **Legal framework:** The *Prohibition of Child Marriage Act, 2006* mandates States to appoint **Child Marriage Prohibition Officers** for prevention, monitoring, and enforcement.
- **Government schemes:** Initiatives such as **Beti Bachao Beti Padhao (BBBP)** promote girls' education, awareness, and empowerment to reduce early marriages.
- **Grassroots initiatives:** The **Surajpur Model (Chhattisgarh)** demonstrated community-led action, with **75 Panchayats declared 'Child Marriage-Free'** through local vigilance and social mobilisation.
- **Global commitments:** India is a signatory to the **United Nations Convention on the Rights of the Child (UNCRC)** and has committed to achieving **SDG 5**, which aims to eliminate child, early, and forced marriage by **2030**.

Source: The Hindu

Prelims Topics

Micrometeoroids and Orbital Debris (MMOD)

Context

A piece of **space debris** recently struck the Chinese crewed spacecraft **Shenzhou-20**, has renewed global concern over **Micrometeoroids and Orbital Debris (MMOD).**

About Micrometeoroids and Orbital Debris (MMOD)

- **Micrometeoroids:**
  - Naturally occurring, extremely small particles in space, typically **micrometres to ~2 mm** in size.
  - Mostly originate from **asteroid collisions** in the asteroid belt; a smaller share comes from **comets**.
  - Travel at **very high velocities (11–72 km/s)**, making even tiny particles highly destructive.
  - **Micrometeoroids** exist throughout space but are slightly denser near Earth due to gravitational attraction.
- **Orbital Debris (Space Junk):**
  - Human-made objects in Earth's orbit that no longer serve any purpose.
  - Includes defunct satellites, spent rocket stages, fragments from collisions and **anti-satellite (ASAT) tests**.
  - **Orbital debris** is concentrated mainly in **Low Earth Orbit (200–2,000 km)**.

What are the risks posed by MMOD?

- **Catastrophic damage risk:** Even millimetre-sized particles can disable satellites due to extreme kinetic energy.
- **Threat to astronauts:** Penetration of crew modules or life-support systems can be fatal.
- **Mission disruption:** Damage to sensors, solar panels, and communication systems reduces mission life.
- **Kessler Syndrome:** A runaway collision cascade where debris generates more debris, potentially making orbits unusable.
- **Economic & strategic risk:** Loss of satellites affects navigation, communication, weather forecasting, and defence.

Source: The Hindu

Anjadip Anti-Submarine Water Craft

Context

The Indian Navy has inducted Anjadip, the third of eight Anti-Submarine Warfare Shallow Water Crafts (ASW SWC).

About Anjadip

- **Named after: Anjadip Island**, off the coast of Karnataka.
- **Designed and Built Indigenously:** By **Garden Reach Shipbuilders and Engineers (GRSE)** under a **PPP model** with **L&T Shipyard**.
  - Over 80% indigenous content
- **Length:** ~77 metres.
- **Propulsion: Waterjets** (largest Indian naval warship to use waterjet propulsion).
- **Role:**
  - Anti-submarine warfare in shallow coastal waters
  - Coastal surveillance
  - Mine-laying operations
- **Legacy:** Continues the heritage of the earlier **INS Anjadip**, a **Petya-class corvette** decommissioned in 2003.

ASW SWC is a **specialised class of Indian naval warships** designed for **littoral and shallow-water operations**.
Primary purpose: Detect, track, and neutralise **enemy submarines** close to the coast.

Source: The Hindu

MAVEN Craft

Context

NASA's MAVEN (Mars Atmosphere and Volatile EvolutioN) spacecraft experienced a loss of signal with ground stations on Earth on December 6.

About MAVEN Spacecraft

- It is a **NASA Mars-orbiting mission** launched to study the **upper atmosphere, ionosphere, and solar wind interaction** of Mars.
- **Objective:** To understand **how Mars lost most of its atmosphere and water over time**, transforming from a warm, wet planet to a cold, arid one.
- **Launch vehicle:** Atlas V
- **Orbit type:** Highly elliptical orbit around Mars

Source: The Hindu

IUCN Species Survival Commission (SSC)

Context

Vivek Menon (founder of Wildlife Trust of India) becomes the first Asian chair of the IUCN Species Survival Commission.

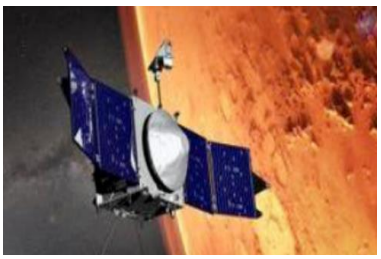
About Species Survival Commission

- It is **one of the six expert commissions** of the **International Union for Conservation of Nature (IUCN)**.
- It comprises **more than 9,000 experts and scientists** from around the world.
- The SSC **advises the IUCN Secretariat** on global biodiversity and species conservation matters.
- It plays a major role in:
  - Preparing and updating the **IUCN Red List of Threatened Species.**
  - **Coordinating specialist groups** on different species and ecosystems
  - Providing **scientific input for conservation policy and action**

Source: Mongabay

Rapid Financing Instrument (RFI) - IMF

Context



The International Monetary Fund (IMF) has approved $ 206 million for Sri Lanka under the Rapid Financing Instrument (RFI) following the devastation caused by Cyclone Ditwah.

About Rapid Financing Instrument (RFI)

- It is an **emergency lending facility** of the **International Monetary Fund (IMF)**.
- **Purpose of RFI:** To support countries affected by **Natural disasters, Pandemics and health emergencies, Commodity price shocks, and Conflict, war, or sudden economic crises**.
- **Key Features:**
  - **Rapid disbursement:** Funds are released **quickly**, often in a

single tranche.

- **Limited conditionality:** No requirement for a full-fledged economic reform programme.
  - Only basic policy commitments and safeguards.
- **Flexible use:** Can be used for **budget support**, health spending, imports, or stabilising the economy.
- **Applicable to all IMF members**, regardless of income level.

Source: The Telegraph

Ghost Pairing

Context

What is Ghost Pairing?

- A **new cyber fraud technique** that enables attackers to **take control of a WhatsApp account** without requiring the user's password or SIM card.
- **How the attack works:**
  - The scam **misuses WhatsApp's device-linking feature**.
  - Users are **tricked into approving a pairing request** that appears legitimate.
  - Attackers send **deceptive messages** such as *"Hi, check this photo"* to prompt user action.
- **Nature of the compromise:** Once pairing is approved, the attacker's device becomes a **hidden linked device**.
  - The hacker gains **full access to chats, contacts, and account activity**, effectively hijacking the account.

Source: Hindustan Times

Kuttanad Wetland Agricultural System

Context

Kuttanad paddy fields globally recognised below-sea-level farming are under stress due to rising soil acidity and aluminium toxicity.

About Kuttanad Wetland Agricultural System (Kerala)

- A **unique agro-ecological system** comprising a **mosaic of interconnected landscapes**.
- **Three key components:**
  - **Wetlands:** Used for paddy cultivation and fish harvesting.
  - **Garden lands:** Support food crop plantations.
  - **Water bodies:** Utilised for inland fisheries and shell collection.
- **Unique feature:** The **only agricultural system in India** where **rice is cultivated below sea level**, on land reclaimed from **brackish deltaic swamps**.
- **Global recognition:** Designated as a **Globally Important Agricultural Heritage System (GIAHS)** by the **FAO**.

Source: The Hindu

Places in News

Great Indian Bustard

News?

About Great Indian Bustard

- **Distribution:** It is endemic to the Indian subcontinent, confined mostly to **Rajasthan and Gujarat**. Small population found in Maharashtra, Karnataka and Andhra Pradesh.
  - Desert National Park in Jaisalmer (Rajasthan) is known for population of Great Indian Bustard.
- **Features:**
  - **Habitat:** open grasslands, arid plains and scrub forests
  - Males have a distinctive black crown, a long neck, and a buff-coloured body with white underparts.
  - Females are generally smaller and lack the prominent black crown.
  - One of the heaviest flying birds, weighing between 10 to 15 kg.
  - It is primarily omnivorous. It feeds on insects like grasshoppers, beetles and sometimes even small rodents and reptiles. It also feeds on grass seeds.
  - Only less than 150 GIBs are left in the wild and almost exclusively restricted to India.
- **Conservation Status**
  - **IUCN status:** Critically Endangered
  - **Wildlife Protection Act, 1972:** Schedule I
  - **CITES:** Appendix 1
  - Covered under species recovery program.
- **Threats:**
  - Power lines (disturbs visibility)
  - Free-ranging dogs
  - Pesticides in farmlands
  - Loss of grassland and nesting sites
- **Steps taken to conserve GIB:**
  - **Species Recovery Programme:** It is kept in the species recovery programme under the Integrated Development of Wildlife Habitats

	of the Ministry of Environment, Forests and Climate Change (MoEFCC). ○ **Firefly Bird Diverters:** Firefly bird diverters are flaps installed on power lines.They work as reflectors for bird species like the GIB. Birds can spot them from a distance of about 50 metres and change their path of flight to avoid collision with power lines ○ **Artificial Hatching:** Collecting eggs from the wild and artificially hatching them. ○ Supreme Court Judgements: In **2021**, the Supreme Court directed: ■ **Undergrounding of power transmission lines** in **priority GIB habitats**. ■ Mandatory installation of **bird diverters** where undergrounding is not feasible. **Source:** Down to Earth