

➤ Report assesses the growth and impact of India's existing unicorn and startup ecosystem (**Unicorn 1.0**) and provides a vision for its future (**Unicorn 2.0**).

➤ **Impact of Unicorn 1.0 (2010-23):**

Economy: Contribution of 10-15% to GDP growth with 100+ unicorns (3rd highest globally) and 1 lakh startups. Increased inclusivity and sustainability: 20-25% of new employment creation, 50 million plus fintech powered MSMEs, and 40th rank in global innovation index. Democratizing consumption: Greater affordability with 30-40% lower cost of education and healthcare, and improved e-commerce reach.

➤ **Unicorn 2.0 (2024-35)** has the potential to substantially transform India's society and economy with additional contribution of **\$1 trillion to GDP and wide-scale democratization of digital services by 2030.**

Shifts that will define Unicorn 2.0 will include 15-25 globally leading startups, 25+ innovation led companies, near zero instances of corporate governance lapses and broad-basing of investor ecosystem etc.

➤ Recommendations for Unicorn 2.0:

Capital: Participation of retail investors, and public sector institutions in funding.

Re-wired Governance: Defined guidelines and corporate governance framework for startups.

Regulation: Supportive tax environment.

Innovation: Encouraging startups to invest in academic research and monetize resulting IP.

Talent: Development of a deeper talent pool through apprenticeship-based certification/courses.

➤ Report has been developed by Ministry of New and Renewable Energy (MNRE) and Council on Energy, Environment, and Water (CEEW), under the **NITI Aayog Action Plan for Circular Economy (CE) – Solar Panels.**

NITI Aayog has finalized **10 sectoral CE action plans** for implementation by stakeholder ministries/departments.

➤ **Need for Solar Waste Management:**

India's installed **66.7 GW capacity** (FY23), has generated about 100 kilotonnes (kt) of waste, with cumulative waste increasing to **600 kt by 2030.** **Solar waste contains:**

waste contains:

- ◆ **Critical minerals** such as silicon, copper, tellurium, and cadmium, whose recycling will **reduce import dependency.**
- ◆ **Toxic metals** like lead and cadmium, which can **contaminate water and soil** and impact workforce health.
- ◆ **Metals** like silver and silicon, having **high economic value** with applications in manufacturing industries.

➤ **Recommendations:**

Maintain a **comprehensive database of the installed solar capacity** for accurate mapping of waste generation centres.

⊕ Solar cell and module producers should start **developing waste collection and storage centres** to adhere to the **E-waste Management Rules 2022.**

⊕ Promoting **safe recycling of and recovery from solar waste.**

⊕ Academia and industry should accelerate **module recycling technology innovation.**

Initiatives for Circular Economy in India's Solar Energy Sector

- **Report on Circular Economy** in Solar Panels to NITI Aayog
- Solar PV cells made part of **Electronic Waste (Management) Rules 2022**
Solar PV recycling as priority thrust area under **Renewable Energy**
- **Research and Technology Development (RE-RTD) Programme**

Preventive Detention (PD) orders passed mechanically must be nipped in the bud by Advisory Board (AB) : Supreme Court (SC)

➤ SC in **Nenavath Bujji etc vs State of Telangana** and ors said that **AB** must play **active role in ascertaining whether the detention is justified under the law or not.**

➤ **About AB**

⊖ **Article 22(4):** Any law pertaining to PD must provide for constitution of an AB

⊖ It comprises any persons who have **been or qualified to be appointed as judges of High Court.**

⊖ **Parliament can lay down procedures to be followed by an AB during an inquiry.**

The detention of a person cannot exceed 3 months unless an AB reports sufficient cause for extended detention.

➤ **Preventive detention (PD) means detention of a person without trial and conviction by a court, on a mere reasonable apprehension of him doing an activity dangerous to public order.**

Parliament has exclusive authority to make a law of PD on **defence, foreign affairs and security of India.**

Both Parliament and state legislatures, can concurrently make a law for reasons connected with Security of a state, Maintenance of public order, etc.

National Security Act 1980, Unlawful Activities (Prevention) Amendment Act, 2019 provide for PD.

SC judgments on PDs:

AK Gopalan vs State of Madras (1950): SC upheld constitutional validity of PD Act of 1950.

Khudiram Das v. State of W.B., (1975): SC observed that power of detention is clearly a preventive measure. It does not partake in any manner of the nature of punishment.

➤ The disputes include:

US's imposition of tariffs on **steel and aluminium imports**; India's renewable energy **subsidies for solar cells and modules** etc.

➤ Both submitted notification to WTO's Dispute Settlement Body (DSB) of mutually agreed solution in **dispute titled DS430** Concerning Importation of Certain Agricultural Products.

➤ **WTO Dispute Settlement Method:** There are two main ways to settle a dispute once a complaint has been filed in the WTO.

Mutually Agreed Solution

◆ **At any stage during dispute settlement process,** parties can settle dispute by a "mutually agreed solution".

◆ **The solutions** must be consistent with relevant WTO agreement.

◆ Parties are **required to notify DSB** and relevant committees of mutually agreed solution.

Dispute Settlement Process

◆ **Consultation (60 days):** Members try to reach a mutually agreeable solution through direct talks.

◆ **Adjudication (if consultations fail):** A panel of experts is established by DSB to examine the case and deliver a report.

◆ It can be appealed to **Appellate Body.**

◆ **Implementation:** DSB adopts Appellate Body report, making it binding on parties.

Appellate Body (AB)

➤ AB was established in **1995.** It has **7 members** and its seat is in **Geneva, Switzerland.**

➤ Decision to appoint persons to AB is **taken by consensus** among all WTO Members.

➤ It has been **dysfunctional since 2019,** because **US has blocked appointment of appellate body members.**

➤ The term of the last sitting Appellate Body member expired on **30 November 2020.**

It examines the **challenge of youth employment** in India and changes over the past two decades.

Key findings:

Employment growth remained **stagnant up to 2019** and then moved upward, dominated by poor-quality employment in informal sector (nearly 82% in informal sector).

Slow and steady transition of the workforce to non-farm employment has **reversed** due to the covid pandemic.

Women largely account for **increase in self-employment and unpaid family work.**

Wages has remained low and are stagnant or declining. **Labour productivity consistently increased** alongside **capital deepening,** indicating association of growth with technological progress and productivity gains rather than employment.

Challenges in youth employment:

India is at an inflexion point, as youth population, at 27% in 2021, is expected to decline to 23% by 2036.

Education participation of youths who are **out of labour force drive the low youth labour force participation rate.** Probability of any kind of employment is lower as education rises but **higher for youths having technical education.**

Youth unemployment increased nearly **threefold, from 5.7% in 2000 to 17.5% in 2019.**

Five Key policy areas for action:

➤ **Make production and growth more employment-intensive.**

➤ **Improve job quality** through investing in emerging sectors, creating inclusive migration policy and ensuring basic rights.

➤ **Overcome labour market inequalities** boosting participation of women and youth.

➤ **Make systems for skills training** and active labour market policies more effective.

➤ **Bridge knowledge deficits on labour market patterns** with reliable statistics.

Government of India submits two applications for approval of plans of work for seabed exploration in the Indian Ocean

- India has applied with **International Seabed Authority** for rights to **explore two vast tracts in Indian Ocean seabed**.
 - ⊕ These **rights are specific to areas** that are **part of open ocean**, where no countries can claim sovereignty.
- **Applied regions are:**
 - ⊕ For exploration of **polymetallic sulfides in Indian Ocean Ridge (Carlsberg Ridge)**, located in Central Indian Ocean. ⊕ For exploration of cobalt-rich ferromanganese crusts of **Afanasy-Nikitin (AN) Seamount** in Central Indian Ocean. **Currently, India**
- holds two contracts for **exploration in Indian Ocean**. These are
 - For exploration for **polymetallic nodules** in Central Indian Ocean Basin.
 - ◆ **Polymetallic nodules** contain **manganese, iron, nickel, copper, cobalt, and lead**. These metals are of **economic and strategic importance**.
 - For exploration of **polymetallic sulphides** in Indian Ocean Ridge.
- Seabed exploration outside of territorial limits are decided by **United Nations Convention on Law of Sea (UNCLOS)**.
- UNCLOS (adopted in 1982) lays down **comprehensive regime of law and order in world's oceans and seas**.
- **Bodies established under UNCLOS** are: International Seabed Authority, International Tribunal for Law of the Sea and Commission on Limits of the Continental Shelf.

International Seabed Authority

Headquarter: Kingston, Jamaica

Autonomous international organization established under UNCLOS.

Members: 169 Members, including 168 Member States and European Union.

Functions:

Organize and control all mineral-resources-related activities in sea for benefit of humankind.

Protection of marine environment from harmful effects arising from deep-seabed-related activities.

Global Trade Update report

- Report was released by United Nations Conference on Trade and Development (UNCTAD).
- **Key Findings:**
 - Services exports from India rose by 14% in 2023, while goods export declined by 6%.
 - International trade is expected to rebound in 2024. Logistical challenges such as shipping disruptions in Red Sea, Black Sea etc. can raise costs and disrupt supply chains.
- **UNCTAD:** Established in 1964 as permanent intergovernmental body, it is main authority of UN General Assembly in sphere of trade and development.

PSLV Orbital Experimental Module-3 (POEM-3)

- POEM-3, successfully concluded its mission by **re-entering Earth's atmosphere and disintegrating**.
- Achievement: It virtually left no debris in orbit, demonstrating a commitment to **minimizing space clutter**.
- **About POEM-3:**
 - ⊕ It used spent PS4 stage of the PSLV-C58 rocket that launched XPoSat.
- POEM initiative utilizes **fourth stage of PSLV as platform to conduct scientific experiments** in orbit converting it into a functioning laboratory for space-based research.

Hepatitis B

Public knowledge about Hepatitis B is dismal in India, according to study.

Viral hepatitis is an **inflammation of liver** caused by a virus.

Main hepatitis viruses are:

Hepatitis A: Effective **vaccine available**; Outbreaks related to contaminated food or to person-to-person transmission.

Hepatitis B: Effective **vaccine available**; is a leading cause of liver cancer.

Hepatitis C: It is spread when a person who is not immune comes in contact with body fluids from an infected person. There's **no vaccine** to prevent it.

Operation SANKALP

Launched by Indian navy in December 2023, it completed 100 days.

- It operates across **three key areas:** Gulf of Aden and adjoining regions, Arabian Sea, and off East Coast of Somalia.
- **Objective:** safeguarding India's maritime interests, countering maritime threats, thwarting resurgence of piracy and significantly denting narcotics trade in Indian Ocean Region.



Statio Shiv Shakti

- ▶ **International Astronomical Union (IAU)** has approved the name '**Statio Shiv Shakti**' for the landing site of **Chandrayaan-3's Vikram lander**.
- ▶ **Name was included in Gazetteer of Planetary Nomenclature**, which documents planetary names approved by IAU.
 - ⊖ Planetary nomenclature **uniquely identifies a feature on surface of a planet or satellite**.
- ▶ IAU was founded in **1919** with its **Secretariat in Paris, France**.
 - Its mission is to promote and safeguard the science of astronomy in all its aspects.
 - 92 member** countries including **India**.
- ▶ It serves as **international authority for assigning designations to celestial bodies and surface features** on them.

Shinkun La Pass

- ▶ Border Road Organisation has connected **strategically important** road from **Manali (Himachal Pradesh) to Leh (Ladakh)** through **Darcha and Nimmu** on Kargil–Leh Highway.
- ▶ Road is not only **shorter**, but crosses only **one pass—Shinkun La (16,558 feet)**.
 - Shinkun La Pass connects **Lahaul and Spiti** in Himachal Pradesh with **Zaskar Valley in Kargil, Ladakh**.
- ▶ This will result in road having **all weather connectivity to Ladakh** region.



Mekong River

- ▶ Vietnam faces crop losses as saltwater seeps into the Mekong Delta region, known as “**Vietnam’s rice bowl**”.
- ⊖ The Mekong delta, **one of the largest and most fertile deltas** in Asia, is situated in **Cambodia and Vietnam**.
- ▶ Mekong River is **longest river in Southeast Asia**. ⊖
 - Origin:** Tibetan Plateau.
 - It passes through** China, Myanmar, Thailand, Laos, Cambodia and Vietnam.
 - It forms part of international border between **Myanmar and Laos, and Laos and Thailand**.
 - It drains into **South China Sea**.
 - Cities on its banks include **Phnom Penh, Ho Chi Minh City and Vientiane**.

Bahá’í Community

The **faith of Bahá’í community is not recognised** by the **Iran’s Constitution**.

Bahá’í faith is a **relatively young monotheistic religion** with spiritual roots dating back to **early 19th century in Iran**.

Founder of Bahá’í faith is Bahá’u’lláh.

Holy shrine of Bahá’u’lláh and **Holy shrine of the Báb (Haifa)**, as the most holy places of the Bahá’í faith, are **located in Israel**.

Bahai core beliefs are “**the unity of religion**”, “**the unity of God**”, and “**the unity of humanity**”.

New Delhi's Lotus Temple is a Bahá’í House of Worship.

Mauritania (Capital: Nouakchott)

- ▶ **India and Mauritania held their first Foreign Office Consultations (FOC)** in Nouakchott.
- ▶ **Political features:**
 - Located in **Northwest Africa**, on the **Atlantic coast**.
 - Bordering Countries/Territories:** Western Sahara territory (most of which is occupied by Morocco), Algeria, Mali, and Senegal.
 - Bordering water bodies:** Atlantic Ocean
- ▶ **Geographical Features:**
 - Much of Mauritania encompasses **part of the Sahara Desert**.
 - ⊖ **Major river: Senegal River** (forms its border with Senegal).
 - ⊖ Topography include **Inselbergs (isolated steep sided rock hills or small mountains)**, of which the highest is **Mount Ijill**.
 - ⊖ **Vegetation** includes regions of Savanna and Sahel.