Indian MSMEs create about 10 crore jobs in last 15 months: Udyam Portal

Udhyam Portal has been launched by **Ministry of Micro, Small and Medium Enterprises (MSME)** to register and classify enterprises as micro, small and medium enterprises.

Status of MSME Sector

» **High growth in registered MSMEs:** from 2.33 crore (August 2023) to **5.49 crore**
» **Employment boost:** from 13.15 crore to **23.14 crore jobs** (5.23 crore jobs of which are held by women)

Significance of MSMEs

» **Economy:** contributes around **30% to India's GDP, ~46% of India's total exports**
» **Regional Development:** decentralizes economic activties and promotes balanced growth in rural and semi-urban areas.
» **Diversification:** reducing reliance on a single industry by operating across various sectors
» **Supports large-scale Industries:** by adding value with specialized products and services.

Steps taken by the government

» **Collateral-Free Loans:** MSMEs can now access loans up to Rs. 5 crore with 85% guarantee coverage under the **Credit Guarantee Scheme**
» **Composite formula of classification for manufacturing and service:** It does away with the difference between manufacturing and service sector and a new criterion of turnover is added.
» **Public Procurement Policy:** It mandates **25% of annual procurement by Central Ministries from Micro and Small Enterprises.**
» **PM Vishwakarma Scheme:** to provide support to traditional artisans and craftspeople and integrate them into domestic and global value chains.

Challenges faced by MSMEs in India

Lack of formalization & Inclusion, limited access to affordable credit and capital, lack of access to technology, and digital tools, infrastructural bottlenecks

Definition of Micro, Small and Medium Enterprises

Parameters	Micro	Small	Medium
Investment in Plant and Machinery	≤1 Crore INR	≤ 10 Crore	≤ 50 Crore INR
Annual Turnover	≤5 Crore INR	≤50 Crore INR	≤ 250 Crore INR

Central government notifies Telecommunications (Telecom Cyber Security) Rules, 2024

The rules have been issued by exercising power under **Telecommunications Act, 2023** and in **supersession of** the prevention of tampering of the **Mobile Device Equipment Identification Number Rules, 2017.**

Provisions of Telecommunications (Telecom Cyber Security) Rules, 2024

» **Defines terms** such as **Telecom Cyber Security, Telecommunication entity, Security Incident** etc.
» **Collection, sharing and analysis of data:** Central Government or designated agency may **seek traffic data and any other data** from a telecommunication entity and can share them with law enforcement and telecom entities.
  ⊖ It can also direct telecommunication entity to **establish necessary infrastructure** for collection and provision of such data from designated points to enable its processing and storage
» **Obligations relating to telecom cyber security:-**
  ⊖ **For Individuals**
    ◆ No person shall endanger or send any message which adversely affects telecom cyber security
  ⊖ **For Entities**
    ◆ Entities should develop and adopt **telecom cyber security policy** addressing risks, audits, and incident responses.
    ◆ Establish **Security Operations Centres (SOCs)** for telecom cyber security incidents, intrusions etc
    ◆ Entities should mandatorily appoint **Chief Telecommunication Security Officer (CTSO)** whose details shall be provided to Central Government
» **Reporting of security incidents:**
  ⊖ It is to be done **within 6 hours** of becoming aware of a security incident with reporting to the Central Government.
  ⊖ Within 24 hours of becoming aware of incidents, entities should furnish details such as number of users affected, duration, geographical area affected, remedial measures taken etc

Key Terms Defined

» **Telecom Cyber Security:** Cyber security of telecommunication networks and telecommunication services which includes tools, policies etc that can be used to safeguard telecommunication networks and telecommunication services against relevant security risks in the cyber environment;
» **Telecommunication Entity:** It means any person providing telecommunication services, or establishing, operating, maintaining, or expanding telecommunication networks etc.
» **Security Incident:** It means an event having real or potential risk on telecom cyber security

Report titled "Trading with Intelligence: How AI Shapes and is Shaped by International Trade" released

This report by **World Trade Organization (WTO)** examines key trade-related policy considerations raised by Artificial Intelligence (AI) and its convergence with global trade, along with WTO's critical role in facilitating AI-related trade.

Implications of AI on Trade

- **Regulation Fragmentation:** Differences in approaches to **AI regulation** may have particular impact on trade opportunities for MSMEs.
- **Concentration of Industry: Concentration** of development and control of AI technology **in large economies and companies creates significant trade divide.**
- **Data Governance challenges:** Restrictions on cross-border data flows can increase costs for firms and negatively impact trade.

Opportunities from AI in Trade

- **Overcoming Trade Costs** by automating and streamlining customs clearance processes, border controls, and predicting risks.
- **Increase in global real trade growth** by 14% until 2040 in case of universal AI adoption and high productivity growth.
- **Transforming patterns of trade in services,** especially digitally delivered services and those that rely on manual processes.

Impact of Trade on AI

- **Increasing Cost:** Tariffs on Information Technology equipment affect access to and cost of essential AI hardware.
- **Cross-border restrictions:** Restrictions in both movement of experts and data can negatively impact AI innovation and development.
- **Treaty Provisions:** Provisions regarding personal information and privacy included in Regional Trade Agreements has implications for data usage in AI.

> **WTO's role for Convergence of AI and Trade**
>
> - **Promoting global convergence** through transparency provisions in WTO agreements and promoting constructive dialogue.
> - **Promoting AI Development:** General Agreement on Trade in Services (GATS) facilitates the development and uptake of AI.
> - **Minimizing International negative spillovers** through non-discrimination principle and Agreement on Trade-Related Investment Measures (TRIMS).
> - **Promote Inclusiveness** through special and differential treatment and technical assistance for developing economies.

Indian Gig Firms have potential to become big international business: Finance Minister (FM)

Highlighting India's innovation capabilities by start-ups and gig economy, FM said these ventures can be capitalized to establish "brand India".

What is the Gig economy?

- It is characterized by task-based, piece-work or gigs.
- **Features:** Temporary short-term contracts, independent assignments with flexible work timings, mediated through digital labor platforms
- **Status in India**
  - Around 77 lakh **workers were** engaged in the gig economy in India (2020-2021). It is expected to **expand to 2.35 crore by 2029-30.** (NITI Ayog)
- **Opportunities:**
  - **India's fast-growing emerging markets** with increased pace of urbanization.
  - **Substantial rise in informal economies** along with rising middle-class consumption demands.
  - **Availability of an aspirational class of workers** ready to provide wide-ranging services.
  - **Potential for massive growth and diversification** across delivery and e-commerce.

Challenges faced by the Sector

- Lack of social security, employment uncertainty & exploitation, lack of legal status of employees, overlap in definition of gig workers, platform workers giving rise to implementational challenges.

Steps to be Taken

- Role of **Employer and Business Membership Organizations (EBMOs):** facilitate social dialogue and shape policies for sustainable growth and worker protection. **(ILO).**
- **Catalysing Platformization:** A **Platform India initiative** on the lines of **Startup India** to accelerate platformization by providing funding support etc **(NITI Ayog).**
- **Extending social security for gig & platform workers:** by making provisions for paid sick leave, insurance etc.

> **India's Initiatives**
>
> - **Code on Social Security, 2020:** It has categorized and defined gig workers, platform workers and unorganised workers and has formally recognized their existence.
> - **e-Shram portal:** For registration and creation of a Comprehensive National Database of Unorganized Workers including gig workers and platform workers.
> - **Open Network for Digital Commerce (ONDC):** ONDC is a globally first-of-its-kind initiative that aims to democratise Digital Commerce, moving it from a platform-centric model to an open-network.

World Bank releases "Jobs at Your Doorstep" Report

This study was commissioned as part of the **Strengthening Teaching-Learning and Results for States (STARS)" program.**

» It is a **skills gap analysis** that attempts to align **trades offered in schools with industry-specific needs** of the districts where the schools are present.

About STARS

» It is a **centrally sponsored scheme supported by the World Bank** and approved in 2020 for five years i.e. FY 2024-25.

» Being implemented in **six states i.e.** Himachal Pradesh, Maharashtra, Odisha, Rajasthan, Madhya Pradesh, and Kerala.

» It **aims** to **improve quality and governance of school education** with focus on early education, learning assessments, teacher performance, school-to-work transitions, and decentralized management.

» Aligned with the **Samagra Shiksha scheme,** it also supports operationalization of key tenets of the National Education Policy (NEP) 2020.

Key findings of the Report

» **Services sector jobs and agriculture income enhancement present large opportunities** for school-based skilling.

» **14 sectors** including electronics and hardware, beauty and wellness, healthcare, fashion etc. and corresponding trades can **cater to majority of high demand jobs** for school to work.

» **Factors for Skill gap in India** include learning gaps, gaps in employability skills like digital literacy, problem solving, non-alignment of vocational training with industry needs etc.

Suggested Measures to Improve Employability

» Expand access to Skill Education in more schools and **establish Skill Hubs.**

» **Realign trades** to school mapping basis local economy and existing skilling capacity.

» Enhance learning infrastructure with facility upgradation and focus on **experiential pedagogy.**

» **Strengthen assessments** to test for skills proficiency and **develop partnership with industry.**

Russia fired its new Intermediate-Range Ballistic Missile (IRBM) "Oreshnik" at Dnipro, Ukraine

Oreshnik Hypersonic missile is based on the design of a Russian Inter-Continental Ballistic Missile (ICBM).

» Hypersonic missiles are missiles that can travel at **speeds of at least Mach 5—five times the speed of sound.**

Ballistic Missile (BM)

» BM is a type of missile that **utilizes projectile motion** (utilizing gravity) to deliver warheads to a designated target.

» These are powered only during the initial phase of flight and then follow a **free-falling trajectory governed by the laws of physics.**

⊖ In contrast, **cruise** missiles remain powered throughout their flight, traveling within the atmosphere at low altitudes for precise, guided targeting.

» BM can carry either **nuclear or conventional** warheads.

India's Ballistic Missile Capabilities

» **Integrated Guided Missile Development Program (IGMDP):** Ballistic missiles such as **Prithvi, Agni** developed under this program.

» **Sea-based Ballistic Missiles** such as Dhanush, K-15 Sagarika and under-development K-4.

» **Ballistic Missile Defence System** consisting of Prithvi Air Defence (PAD) missile, Advanced Air Defence (AAD) missile, and long-range interceptor missiles systems.

Treaties to regulate missile development

» **Missile Technology Control Regime (MTCR):** Formed in 1987, it is an informal political understanding among states that seek to limit the proliferation of missiles and missile technology.

» **Hague Code of Conduct Against Ballistic Missile Proliferation (HCOC):** Adopted in 2002, it curbs the proliferation of WMD (Weapons of Mass Destruction)-capable ballistic missiles.

Table: Ballistic Missiles by Range

Name	Range
Tactical ballistic missile (TBM)	< 300 km
Short-range ballistic missile (SRBM)	300–1,000 km
Medium-range ballistic missile (MRBM)	1,000–3,500 km
Intermediate-range ballistic missile (IRBM)	3,500–5,500 kilometres
Intercontinental ballistic missile (ICBM)	>5,500 km

Source: UN Office of Disarmament Affairs

Also in News

Parliamentary Secretaries in State

The Supreme Court stayed Himachal Pradesh High Court's direction related to parliamentary secretaries in the state.

About Parliamentary Secretaries in State

» They are appointed to assist ministers with parliamentary work

» They often hold the rank of Minister of State and have the same entitlements and are assigned to a government department.

» Various high courts have deemed appointment of Parliamentary Secretaries as unconstitutional

» **Issues in Appointment:-**

⊖ Appointment of **Parliamentary Secretaries** goes against **91st Amendment of the Indian Constitution,** which introduced Article 164(1A).

◆ Article 164(1A) limits the total number of ministers, including the Chief Minister, **to 15% of the state's legislative assembly** members.

Compressed Biogas

India's first modern, self-sufficient gaushala with a state-of-the-art Compressed Biogas (CBG) plant launched in Gwalior, Madhya Pradesh.

» Here, **biogas** will be prepared from **cattle dung and garbage.**

About CBG

» **Composition:** Methane (CH_4) (>90%)

» **Source:** Derived from **organic waste materials through anaerobic decomposition.**

» **Green Fuel:** It has **calorific value and other properties similar to Compressed Natural Gas (CNG)** and hence can be utilized as green renewable automotive fuel.

» **Estimated Potential:** 62 million metric tons in India.

» **Policy Support:** SATAT (Sustainable Alternative Towards Affordable Transportation) Scheme on CBG, Galvanizing Organic Bio-Agro Resources Dhan (GOBAR-DHAN) scheme etc.

SEA VIGIL 24

Recently, the fourth edition of Sea Vigil 24, a major Pan-India coastal defense exercise, was concluded.

About SEA VIGIL 24

- **Conducted by:** Indian Navy
- **Objective:** maritime security, air defense, naval cooperation, and community engagement.
- **Coverage:** India's 11,098 km coastline and 2.4 million sq. km Exclusive Economic Zone.
- **Focus Areas:** Enhancing Security of vital maritime assets such as Oil Rigs, Cable Landing Stations, and Non-Major Ports and Nuclear installations along the coast, strengthening Inter-Agency Coordination

Coking Coal

A NITI Aayog research report suggests that India must **include Coking Coal in the list of critical minerals** for enhancing competitiveness of India's steel sector.

- While India is a **net steel exporter,** it is also the **second largest importer** of metallurgical coal in the World.

About Coking Coal

- Coking coal is **high-grade bituminous coal** with a quality that allows production of metallurgical coal.
- **High-temperature heating** of coking coal in the absence of oxygen produces Coke.
  - Coke is used in **iron & steel industry as energy source** and chemical agent (carbon source) in blast furnaces.

MeerKAT telescope

Astronomers have used the MeerKAT radio telescope to investigate giant radio galaxies in the field of Cosmological Evolution Survey (COSMOS).

About MeerKAT radio telescope

- **Location:** Northern Cape province of **South Africa**
- **Features:**
  - It consists of a **connected array of radio telescopes.**
  - It consists of **64 interlinked receptors,** including the main reflector, sub-reflector, receivers, and other electronics.
  - **Benefits:** Extremely **high sensitivity, wide field of view, and unprecedented imaging capabilities**
- It is a precursor instrument to mid-frequency component of **Square Kilometer Array (SKA) telescope**

Regenerative Agriculture

Government of Odisha and ICRISAT launched a 'Compendium of Regenerative Agriculture', for scaling regenerative agriculture practices.

About Regenerative agriculture (RA)

- Regenerative agriculture is a way of farming that **focuses on soil health.**
- **Key Principles include:**
  - **Minimizing soil disturbance** (minimum ploughing) keeping CO_2 in soil, and improving its water absorvency,
  - **Maximizing crop diversity** improving biodiversity,
  - **Maintaining soil cover,** keeping living roots year-round, and integrating livestock.
- **Significance:** Improved crop yields, water retention, reduction in soil erosion and greenhouse gas emissions.

Cis-Regulatory Elements

Researchers have **used Artificial Intelligence (AI)** to design **new DNA Switches** (also called Cis-Regulatory Elements (CREs)) that can precisely **control expression of a gene** in different cell types.

- It opens the possibility of c**ontrolling when and where genes are expressed** in human body, for **human health and research.**

About CREs

- CREs themselves are not part of genes, but are **separate, regulatory DNA sequences.**
- Although every cell in an organism contains the same genes, **not all the genes are needed in every cell,** or at all times. This gene expression is regulated by CREs.
- These play a crucial role in **cellular identity, developmental processes, and stimulus responses.**

King Cobra

The Karnataka king cobra locally known as 'Kaalinga Sarpa' will officially be named **Ophiophagus Kaalinga.**

About King Cobra

- **Habitat: thick forests and plains** of **India, China and Southeast Asia.**
- **Characteristics**
  - It is the **longest venomous snake,** reaching up to 18ft.
  - **Lifespan:** about 20 years in the wild.
  - **Diet: cold-blooded animals,** particularly other snakes.
  - **Threat display:** Raises their body about three to four feet (1 to 1.2 meters) off the ground and are able to follow their enemy in this position over considerable distances.

Places in News — 📰 Guyana (Capital : Georgetown)

The Indian Prime Minister paid a visit to Guyana and signed various agreements to strengthen bilateral ties.

- It is a **member of CARICOM (Caribbean Community) and Commonwealth Nations**
- **Political Features:**
  - **Location:** South America (North East)
  - **Bordering nations:** Suriname(East), Brazil (South and Southwest), Venezuela (West)
  - **Bordering water bodies:** Atlantic Ocean
- **Geographical features:**
  - **Major Mountain ranges:** Acaraí Mountains, Pakaraima Mountains.
  - **Highest Point:** Mount Roraima
  - **Major Rivers:** Courantyne, Berbice, Demerara, and Essequibo.

AHMEDABAD | BENGALURU | BHOPAL | CHANDIGARH | DELHI | GUWAHATI | HYDERABAD | JAIPUR | JODHPUR | LUCKNOW | PRAYAGRAJ | PUNE | RANCHI