



Annual Survey of Industries Report 2022-23

For Prelims: [Annual Survey of Industries](#), [Gross Value Added](#), [Gross Domestic Product \(GDP\)](#), Net Value Added, [National Statistical Office \(NSO\)](#)

For Mains: Gross Value Added and its significance in assessing economic growth, Annual Survey of Industries (ASI), Growth & Development

[Source: IE](#)

Why in News?

Recently, the **Ministry of Statistics and Programme Implementation (MoSPI)** released the [Annual Survey of Industries \(ASI\)](#) for **2022-23** which presents significant insights into the **recovery and growth of the manufacturing sector** in India.

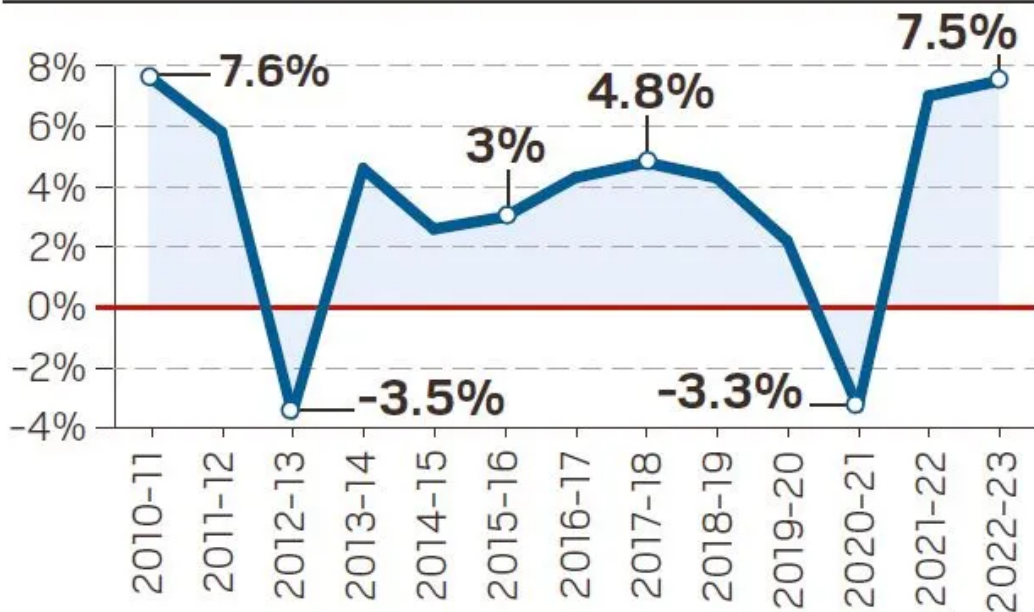
- The survey fieldwork was conducted from **November 2023 to June 2024** for ASI 2022-23.

What are the Key Highlights of the ASI Report 2022-23?

- **Employment Growth in Manufacturing:**
 - The ASI indicates that [employment in manufacturing](#) grew by **7.5%** from 1.72 crore in 2021-22 to **1.84 crore in 2022-23**, the **highest rate of growth in the last 12 years**.
 - In 2022-23, the manufacturing sector created 13 lakh jobs, an increase from 11 lakh in FY22.

//

EMPLOYMENT GROWTH IN MANUFACTURING



▪ Gross Value Added (GVA) and Output Growth:

- The manufacturing **GVA** grew robustly by **7.3%**, reaching **Rs 21.97 lakh crore** in **2022-23**, up from Rs 20.47 lakh crore in 2021-22.
- The **total industrial input** increased by **24.4%**, while the **output** grew by **21.5%** in the sector in 2022-23 compared to 2021-22, reflecting a significant rebound in manufacturing activities.

INDUSTRY PERFORMANCE

	Persons engaged (in mn)	Additional jobs created (in mn)	Sector GVA (₹ trn)
FY20	16.6	0.344	14.85
FY21	16.08	-0.534	16.17
FY22	17.2	1.1	20.47
FY23	18.49	1.3	21.97

Note: *Total emoluments is defined as the sum of wages and salaries including bonus; output and GVA in current prices

▪ Main Drivers of Manufacturing Growth:

- The primary drivers of manufacturing growth in **2022-23** were **basic metals, coke and refined petroleum products, food products, chemicals, and motor vehicles**.
 - Together, these industries accounted for about **58% of total output**.

▪ Regional Performance:

- Top 5 states in terms of employment were Tamil Nadu, Maharashtra, Gujarat, Uttar Pradesh, and Karnataka.

▪ Increase in Number of Factories:

- The number of factories increased from **2.49 lakh** in 2021-22 to **2.53 lakh in 2022-23**, marking the first full recovery phase after **Covid-19** disruptions.

▪ Informal Sector Decline:

- The informal sector saw a **1.5%** decline in employment, dropping by 16.45 lakh to **10.96 crore in 2022-23**, indicating a shift towards formal employment in manufacturing as per the [Annual Survey of Unincorporated Enterprises \(ASUSE\) 2022-23 report](#) released in July 2024.

▪ Average Salaries:

- Average emolument per person **rose by 6.3%**, reaching Rs 3.46 lakh in 2022-23 compared to 2021-22.

▪ Capital Investment Surge:

- **Gross fixed capital formation (GFCF)** surged by **over 77%** to **Rs 5.85 lakh crore in 2022-23**, while **net fixed capital formation** saw **781.6% rise** to Rs 2.68 lakh crore, supporting sustained manufacturing growth.
 - **Gross fixed capital formation (GFCF)**, or "investment," refers to the acquisition of produced assets, including second-hand purchases, as well as the production of assets by producers for their own use, minus disposals.
 - **Net fixed capital formation** is the amount of **Gross fixed capital formation**

- (GFCF) minus the amount of consumption of fixed capital.
- **Profits in the manufacturing sector increased by 2.7%** to Rs 9.76 lakh crore.

Note

- Workers encompass **all individuals employed directly or through an agency**, including **paid and unpaid workers** involved in manufacturing processes or cleaning machinery and premises.
- Employees include **all workers receiving wages**, as well as those in clerical, supervisory, or managerial roles, and those involved in purchasing raw materials or fixed assets, along with watch and ward staff.

Gross Value Added (GVA)

- GVA represents the **value that producers add to goods and services** throughout the production process.
- It's calculated by **subtracting the cost of inputs (intermediate consumption) from total** output.
- It's a key component of **Gross Domestic Product (GDP)**, reflecting economic growth. GVA growth rates provide insights into sectoral performance, aiding economic analysis and policymaking.
 - **GVA = GDP + subsidies on products - taxes on products.**
- **Net Value Added (NVA)** is obtained by deducting depreciation from Gross Value Added (GVA).
 - It represents the value of output after subtracting both intermediate consumption and the consumption of fixed capital.

What is the Annual Survey of Industries (ASI)?

- **About:**
 - The **Annual Survey of Industries (ASI)** is the primary **source of industrial statistics** in India.
 - It **began in 1960**, using **1959 as the base year**, and has been **conducted annually** since then, with the **exception of 1972**, in accordance with the **Collection of Statistics Act of 1953**.
 - Since ASI 2010-11, the survey has been conducted under the **Collection of Statistics Act, 2008**, which was **amended in 2017** to **extend its coverage to All India**.
- **Implementing Agency:**
 - The **National Statistical Office (NSO)**, a part of the **Ministry of Statistics and Programme Implementation (MoSPI)**, conducts the ASI.
 - The MoSPI is responsible for ensuring the coverage and quality of the released statistics.
- **Scope and Coverage of ASI:**
 - The ASI extends to the **entire country**. It covers **all factories** registered under **Sections 2(m)(i) and 2(m)(ii)** of the **Factories Act, 1948**.
 - **Bidi and cigar manufacturing establishments**, registered under the Beedi and Cigar Workers (Conditions of Employment) Act, 1966.
 - **Electricity undertakings** engaged in the generation, transmission, and distribution of electricity, are **not registered** with the **Central Electricity Authority (CEA)**.
 - Units with **100 or more employees** registered in the **Business Register of Establishments (BRE)** maintained by State Governments, as shared by the respective states.
- **Data Collection Mechanism:**
 - Data for the ASI are collected from selected factories in accordance with the **Collection of Statistics Act, 2008**, as amended in 2017, and the rules established under it in 2011.

What are the Opportunities and Challenges to the Manufacturing Sector in

India?

- **Opportunities:**
 - **Broad Domestic Market and Demand:** The Indian manufacturing sector has witnessed **robust demand for its products** from both domestic and international clients.
 - The [Purchasing Managers' Index \(PMI\)](#) recorded at 58.8 in May 2024 indicates expansion within India's manufacturing landscape.
 - **Sectoral Advantage:** Key manufacturing sectors, including **chemicals, pharmaceuticals, automotive, electronics, industrial machinery, and textiles**, have shown significant growth in recent years.
 - **Pharmaceutical manufacturing costs** in India are approximately **30%-35% lower** than those in the US and Europe.
 - **Outreach to the Global South Market:** Indian manufacturing is shifting from European to Asian **Global Value Chains (GVC)**, with foreign value-added (FVA) from Global Southern partners increasing from **27% to 45%** in 2005-2015.
 - This offers Indian firms a chance to establish their own GVCs and position India as a regional growth hub.
 - **Rise of MSMEs: [Micro, Small, and Medium Enterprises \(MSMEs\)](#) contribute around 30% to India's GDP** and play a vital role in driving economic growth, accounting for nearly **45%** of the country's total exports.
 - As of March 2024, **over 4 crores MSMEs** were registered on the Udyam portal, with **67%** identified as manufacturing MSMEs.
 - **Potential for Growth:** The Indian manufacturing sector has the potential to reach USD 1 trillion by 2025 highlighting its critical role in the economy.
- **Challenges:**
 - **Outdated Technology and Infrastructure:** Reliance on outdated technology and insufficient infrastructure hampers Indian manufacturers' ability to compete globally and meet international quality standards.
 - **Shortage of Skilled Workforce:** According to the [World Bank](#), **only 24%** of India's workforce possesses the skills needed for complex manufacturing jobs, compared to **52% in the US and 96% in South Korea**.
 - **High Input Costs:** The [Reserve Bank of India](#) (2022) reported that **logistics costs in India are 14% higher** than the global average, affecting the overall competitiveness of the manufacturing sector.
 - Also the land acquisition process is complex in India.
 - **Competition from China and Import Dependence:** In 2023-24, China accounted for nearly **42%** of India's textiles and clothing imports, **40%** of machinery, and **38.4%** of electronics imports.

What are the Government Initiatives in the Manufacturing Sector in India?

- [Production-Linked Incentive \(PLI\)](#)
- [PM Gati Shakti- National Master Plan](#)
- [Bharatmala](#) and [Sagarmala](#) Project
- [Start-up India](#)
- [Make in India 2.0](#)
- [Atmanirbhar Bharat Campaign](#)
- [Special Economic Zones](#)
- Liberalised [foreign direct investment \(FDI\)](#)
- [MSME Innovative Scheme](#)
- [Ease of Doing Business](#)
- [Goods and Services Tax \(GST\)](#) and Reduction in [Corporate tax](#)

Way Forward

- **Investment in Infrastructure:** Enhancing **infrastructure quality and accessibility** while **reducing logistics costs** can attract more investment in manufacturing.
- **Need for Industry 4.0:** Industry 4.0 adoption can help the manufacturing sector contribute **25% to GDP by FY26**. Indian manufacturers are investing 35% of their operating budgets in digital transformation, and this amount should be increased.
- **Promoting Export-Oriented Manufacturing:** Supporting the development of export-oriented manufacturing can help Indian businesses **enter new markets and improve competitiveness** through targeted policies.
- **Financial Assistance:** Many MSMEs face challenges in securing credit for exports, **making enhanced financial support for SMEs** crucial for their growth.
- **Enabling Regulations:** Streamlining regulations can **reduce burdens on businesses and promote investment** in manufacturing.
- **Skill Development:** Increasing training programs can **address the skilled labour shortage** and enhance the **sector's competitiveness**, as demonstrated by **Vietnam's success in becoming a global manufacturing hub**.

Drishti Mains Question:

Discuss the key opportunities and challenges facing the manufacturing sector in India and suggest measures to enhance its competitiveness in the global market.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q1. In the 'Index of Eight Core Industries', which one of the following is given the highest weight? (2015)

- (a) Coal production
- (b) Electricity generation
- (c) Fertiliser production
- (d) Steel production

Ans: (b)

Q2. With reference to Indian economy, consider the following statements: (2015)

1. The rate of growth of Real Gross Domestic Product has steadily increased in the last decade.
2. The Gross Domestic Product at market prices (in rupees) has steadily increased in the last decade.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (b)

Mains

Q.1 "Industrial growth rate has lagged behind in the overall growth of Gross-Domestic-Product(GDP) in the post-reform period" Give reasons. How far are the recent changes in Industrial Policy capable of increasing the industrial growth rate? **(2017)**

Q.2 Normally countries shift from agriculture to industry and then later to services, but India shifted directly from agriculture to services. What are the reasons for the huge growth of services vis-a-vis the industry in the country? Can India become a developed country without a strong industrial base? **(2014)**

International Day of Awareness of Food Loss and Waste

For Prelims: [International Day of Awareness of Food Loss and Waste](#), [Food and Agriculture Organization](#), [Natural disasters](#), [2030 Agenda for Sustainable Development](#), [Greenhouse gas](#), [Methane](#), [United Nations Environment Programme](#), [Farmer Producer Organisations](#)

For Mains: Impact of Food Loss and Waste on Food Security in India, Environmental Consequences of Food Waste

Source: FE

Why in News?

Recently, on **29th September**, the world observed the [International Day of Awareness of Food Loss and Waste \(IDAFLOW\)](#), highlighting its implications for [food security](#) and [environmental sustainability](#).

- A 2023 report by the [Food and Agriculture Organization \(FAO\)](#) reveals that about **30% of global food production is lost or wasted**, which could feed the hungry. This urgent issue demands immediate action, especially in **India**, where [post-harvest losses](#) are significantly high.

Key Terms

- **Food Loss:** It refers to a decrease in **mass (dry matter) or nutritional value (quality)** of food intended for human consumption.
 - This occurs primarily due to **inefficiencies in food supply chains**, including poor infrastructure, inadequate logistics, lack of technology, and insufficient skills and management. Additionally, [natural disasters](#) contribute to these losses.
- **Food Waste:** It refers to food suitable for human consumption that is **discarded**, whether due to **spoilage or exceeding its expiry date**.
 - This waste can result from factors such as **market oversupply or individual consumer shopping and eating habits**.
- **Food Wastage:** It refers to any food lost by **deterioration or waste**. Thus, the term “wastage” encompasses both food loss and food waste.

What is the International Day of Awareness of Food Loss and Waste?

- The IDAFLOW, designated by the [United Nations General Assembly \(UNGA\)](#) in 2019, focuses on the critical issue of [food loss and waste \(FLW\)](#), it aims to raise awareness and mobilise efforts to reduce FLW, highlighting the need for financial support to achieve [climate goals and the 2030 Agenda for Sustainable Development](#).
- The initiative aligns with **SDG Target 12.3**, which aims to halve global food waste and reduce food losses by 2030, and is linked to the [Kunming Montreal Global Biodiversity Framework](#).
 - Reducing FLW is a climate solution that requires increased [climate finance](#).

What are the Implications of Food Loss and Waste (FLW)?

- **Impact on Food Security:** According to a study published in *Nature*, approximately **29% of the global population experiences moderate to severe food insecurity** while one-third of food produced (1.3 billion tonnes) is lost or wasted.
 - FLW contributes to a significant **decrease in the availability of food for consumption**, exacerbating hunger and **malnutrition**, especially in vulnerable populations.
- **Environmental Consequences:** Enormous resources **land, water, energy, and labour** are wasted alongside food, contributing to the depletion of natural resources.
 - **Carbon Footprint:** Food wastage generates **3.3 billion tons of CO2 equivalents** annually, contributing heavily to **global greenhouse gas (GHG) emissions**.
 - **Water Usage:** The amount of water wasted on uneaten food is equivalent to the **annual flow of Russia's Volga River or three times the volume of Lake Geneva**.
 - **Land Usage:** Nearly **1.4 billion hectares of land** are used to produce food that is ultimately wasted, roughly 28% of the world's agricultural land.
 - **Energy Waste:** About **38% of total global food system energy** is consumed in producing food that is lost or wasted.
 - **Methane Emissions:** Food waste in landfills produces **methane**, a greenhouse gas far more potent than CO2, thus accelerating **climate change**.
 - **Climate Goals:** The agricultural sector's inefficiencies make it difficult to meet **global climate targets**, as emissions from food systems account for up to **37% of all GHG**.
- **Economic Impacts:** The economic costs associated with FLW are significant, leading to lost income for producers and higher prices for consumers.
 - Food prices often fail to reflect the **true social and environmental costs of food production**, resulting in market inefficiencies and reinforcing inequalities.

How Significant are FLW in India?

- **Post-Harvest Losses:** According to the **National Bank for Agriculture and Rural Development Consultancy Services (NABCONS)** survey conducted in 2022, India incurs food losses worth Rs 1.53 lakh crore (USD 18.5 billion).
 - Major losses include 12.5 million metric tonnes of **cereals**, 2.11 million metric tonnes of **oilseeds**, and 1.37 million metric tonnes of pulses.
 - Around 49.9 million metric tonnes of horticultural crops are lost annually due to inadequate cold chain infrastructure.
 - **Key Causes of Post-Harvest Losses:** A survey by **Indian Council for Research on International Economic Relations (ICRIER)** found that food loss largely occurs during **harvesting, threshing, drying, and storage** due to low levels of mechanisation.
 - Poor storage facilities contribute to roughly **10% of total food grain losses in India**, according to the **Indian Grain Storage Management and Research Institute (IGSMRI)**.
- **National Food Loss:** The **United Nations Environment Programme (UNEP)** estimates that **India wastes 74 million tonnes of food each year**, representing a loss of 92,000 crore rupees.
 - **Food waste in restaurants** stems from overproduction, large portion sizes, and the complexity of offering a wide variety of dishes, leading to spoilage.
 - Additionally, customers often **over-order, leaving food uneaten or discarded**. A lack of awareness among staff and patrons about the economic, social, and environmental impacts further exacerbates the problem.
 - According to the **UNEP Food Waste Index Report 2021**, Indian households generate **50 kg of food waste per capita per year**, resulting in a total of 68,760,163 tonnes annually.

Why is Reducing FLW Crucial for India's Future?

- **Climate Change:** Reducing food wastage could significantly lower GHG emissions, addressing a key contributor to **climate change**.

- Reducing FLW can cut emissions by as much as 12.5 gigatons of CO₂ equivalent (Gt CO₂e), which is equivalent to removing emissions from 2.7 billion cars from the road.
- By minimising FLW, the strain on natural resources like water and land, can be significantly reduced to ensure that more food reaches those in need.
- **Food Security:** Globally, Between 691 and 783 million people faced hunger in 2022 . As per the [Food and Agriculture Organization \(FAO\)](#), over 74% of India's population is unable to afford a healthy diet.
 - With millions of people in India still **malnourished**, cutting food loss could help ensure that **more food reaches those in need**, particularly in times of crisis.
- **Economic Efficiency:** By improving post-harvest processes, India can enhance farm productivity, reduce waste, and **boost farmer incomes**, fostering a more resilient agricultural economy.

What are India's Initiatives to Combat Food Loss and Waste?

- **Pradhan Mantri Kisan Sampada Yojana:** It is a central sector umbrella scheme by the Ministry of Food Processing Industries (MoFPI) aimed at reducing food loss and waste through the development of robust **food processing and preservation infrastructure across India**.
 - **Key Components:**
 - **Cold Chain, Value Addition & Preservation Infrastructure:** Establishes [integrated cold chain, preservation infrastructure and value addition infrastructure](#) to minimise post-harvest losses.
 - **Mega Food Parks:** Aims to streamline food processing and distribution (was discontinued by the Government of India in April 2021).
 - **Agro Processing Clusters:** Promotes localised food processing units to reduce food wastage and enhance local supply chains.
 - **Operation Greens:** Provides credit linked financial aid in the form of grants-in-aid / subsidy is provided for establishing food processing projects leading to creation of food processing and preservation infrastructure facilities.
- **Save Food, Share Food, Share Joy (IFSA):** This initiative, led by the [Food Safety and Standards Authority of India \(FSSAI\)](#), brings together various stakeholders to prevent food loss and waste throughout the supply chain. It also facilitates the safe distribution of surplus food.

International Models Addressing Food Waste

- **Incentives for Businesses:** In the US, the **Protecting Americans from Tax Hikes (PATH) Act of 2015** introduced enhanced tax deductions for food donations, encouraging businesses to donate excess food.
- **Italy's Incentive Model:** Italy has allocated approximately USD 10 million annually to reduce one million tonnes of food waste by offering businesses incentives to donate food to charities.
- **UN Global Food Loss and Waste Protocol:** It is a global standard for the measurement of food loss and waste. It was proposed as an **indicator for the SDG target 12.3**, regarding processing, retail, consumers.
 - It can be used by both countries and companies to measure FLW within their borders and supply chains.

What Actions are Needed to Address FLW?

- **Promote Mechanisation:** Farmers using mechanised equipment like combine harvesters report significantly lower losses in paddy production. However, only a small percentage of Indian cultivators own such machinery.
 - Expanding mechanisation through [Farmer Producer Organisations \(FPOs\)](#) and [Custom Hiring Centres \(CHCs\)](#) can make technology more accessible to small and marginal farmers, reducing on-field losses.
- **Improve Storage and Packaging Solutions:** Traditional storage methods, including **sun drying and jute packaging**, are prone to **contamination, quality degradation**, and spoilage

due to rodent attacks or pilferage.

- Implementing **solar dryers, airtight packaging**, and upgrading India's grain storage capacity by **70 million metric tons (MMT) over five years**, as planned by the government, could significantly **curb post-harvest losses**.
- **Waste Management Protocols and Recycling:** Adopting the **UN Global Food Loss and Waste Protocol** could enable India to quantify food loss across the value chain and develop targeted solutions.
 - **Recycling** food waste into **compost, biogas, or energy** provides a sustainable way to manage excess production and post-harvest waste.
- **Redistribute Surplus Food:** Surplus food can be redistributed to those in need, reducing hunger and food insecurity. Alternatively, surplus food can be converted into animal feed or organic manure, offering an effective **recycling solution**.
- **Consumer Responsibility:** Consumers play a vital role in reducing food waste by **purchasing only what is necessary**.
 - Changing consumer behaviour through awareness campaigns can drive responsible consumption patterns.
- **Adopt Innovative Technologies:** Innovations such as **mobile food processing systems**, better logistics, and **e-commerce** platforms can help bridge the gap between food production and consumption, reducing inefficiencies in storage, transportation, and distribution.
- **Food Collection from Social Events:** Social events often lead to significant food wastage. **City-based organisations** are already collecting surplus food from events and distributing it to slum areas, addressing both food waste and hunger.
- **Align Food Production with Demand:** To minimise **resource wastage, aligning food production with actual demand** can optimise the use of water, energy, and land, ensuring that excess resources are not expended on food that will eventually go **to waste**.

Conclusion

Reducing food loss and waste in India is not just a matter of improving economic efficiency; it is about **safeguarding food security for millions** while mitigating **environmental damage**. Technological innovations, along with supportive policies, can pave the way for reducing food wastage by 50%. As India moves toward a **sustainable future**, addressing food loss and waste is an essential part of the solution to feeding its population and protecting the planet.

Drishti Mains Question:

Discuss the implications of food loss and waste on food security in India. What measures can be taken to address this issue?

UPSC Civil Services Examination Previous Year Question (PYQ)

Mains

Q. What are the challenges and opportunities of food processing sector in the country? How can income of the farmers be substantially increased by encouraging food processing?(**2020**)

Q. Food Security Bill is expected to eliminate hunger and malnutrition in India. Critically discuss various apprehensions in its effective implementation along with the concerns it has generated in WTO.(**2013**)

NAMASTE Scheme

For Prelims: [NAMASTE Scheme](#), [Urban Local Bodies](#), [Scheduled Caste \(SC\)](#), [Scheduled Tribe \(ST\)](#), [AB-PMJAY](#), Sanipreneurs, [Untouchability](#), [Swachh Bharat Mission](#), [Self-help groups \(SHGs\)](#)

For Mains: Manual Scavenging in India, Government Initiatives to Curb Manual Scavenging, Rehabilitation and Employment

Source: [TH](#)

Why in News?

Recent government data as part of the [NAMASTE scheme](#), from over 3,000 [Urban Local Bodies \(ULBs\)](#), reveals that **92% of the 38,000 manual scavengers and workers** involved in hazardous sewer and septic tank cleaning across India's cities belong to [Scheduled Caste \(SC\)](#), [Scheduled Tribe \(ST\)](#), or [other backward class \(OBC\)](#) communities.

- This highlights [caste-based occupational segregation](#) and the dangers these manual scavengers face.

Definitions

- **Manual Scavenger:** A manual scavenger is anyone employed to manually clean, carry, or handle human excreta from insanitary latrines, open drains, pits, or railway tracks, before it fully decomposes, as per the [Prohibition of Employment as Manual Scavengers and their Rehabilitation Act \(PEMSR\), 2013](#).
- **Hazardous Cleaning:** Refers to the manual cleaning of sewers or septic tanks without adequate protective gear.
- **Sanitation Workers/Safai Karamcharis:** Individuals employed in sanitation work, including waste pickers and those cleaning sewers/septic tanks, but excluding domestic workers.
- **Sewer and Septic Tank Workers (SSWs):** Workers engaged in the hazardous cleaning of sewers and septic tanks.
- **Sewer Entry Professionals (SEPs):** Trained sanitation workers who clean sewers/septic tanks with **permission and proper safety equipment** are identified as SEPs.

What is the NAMASTE Scheme?

- **About:** The **National Action for Mechanised Sanitation Ecosystem (NAMASTE) scheme**, a joint initiative of the **Ministry of Social Justice and Empowerment (MoSJE)** and the **Ministry of Housing and Urban Affairs (MoHUA)**, focusing on eliminating manual scavenging and promoting sanitation worker safety.
 - NAMASTE, with an outlay of Rs. 349.70 crore, aims to cover all 4800+ ULBs by 2025-26, replacing the earlier **Self-Employment Scheme for Rehabilitation of Manual Scavengers (SRMS)**.
 - As per the new modified scheme, **profiling of Sewer/Septic Tanks Workers (SSWs)** engaged by ULB would be undertaken.
 - These SSWs are proposed to receive occupational safety training, personal protective equipment (PPE) kits, and health insurance [Ayushman Bharat Pradhan Mantri Jan Arogya Yojana \(AB-PMJAY\)](#).
- **Goal of NAMASTE:** The goal is to profile SSWs engaged by ULB, provide safety training and equipment, and offer capital subsidies to turn them into "**sanipreneurs**" or **sanitation entrepreneurs**, promoting self-employment and formal employment opportunities.
 - A key objective is to **eliminate fatalities in sanitation work** and improve the living conditions and health of sanitation workers.
 - Between **2019 and 2023, at least 377 people** across the country have **died**

from hazardous cleaning of sewers and septic tanks, according to government data tabled in Parliament.

- **Progress of Profiling:** As of September 2024, 3,326 ULBs have profiled approximately 38,000 SSWs. 283 ULBs reported zero SSWs, while 2,364 reported fewer than 10 SSWs.
 - **State-Level Efforts:** 12 states and Union Territories, including Kerala and Rajasthan, have completed the profiling process.
 - 17 states, such as Andhra Pradesh and Uttar Pradesh, are still in the process.
 - Some states like Tamil Nadu and Odisha are running their own separate programmes and not reporting to the Centre.
 - The Ministry of Housing and Urban Affairs estimates around **100,000 SSWs are currently employed in India's urban areas** based on urban population statistics and decadal growth rates.

What is Manual Scavenging?

- **About:** Manual scavenging (MS) refers to the practice of removing human excreta by hand from sewers or septic tanks. Although banned in India under the **PEMSR Act, 2013** the practice persists.
 - The Act prohibits employing anyone for **cleaning or handling human excreta and broadens** the definition to include cleaning septic tanks, ditches, or railway tracks.
 - It recognizes the practice as "**dehumanising**" and seeks to address the historical injustices faced by manual scavengers.
- **Efforts to Reduce MS:**
 - **Constitutional Safeguards:**
 - **Article 14:** Guarantees **equal protection of the law** for all citizens, ensuring **manual scavengers are not subjected to discriminatory practices** based on caste or occupation.
 - **Article 16:** Ensures **equal employment opportunities** for all, **prohibiting caste-based discrimination** in government jobs, promoting the economic upliftment of manual scavengers.
 - **Article 17:** Abolishes **untouchability** and punishes those enforcing it. This protects **manual scavengers from caste-based exclusion** and stigmatisation.
 - **Article 21:** Ensures the **right to live with dignity**, offering manual scavengers the legal grounds to demand protection from dehumanising work.
 - **Article 23:** Protects against **forced labour**, ensuring manual scavengers cannot be coerced into working under harsh conditions without proper wages or safety standards.
 - **Legal Framework:**
 - **Prohibition of Employment as Manual Scavengers and Their Rehabilitation Act, 2013:** The Act prohibits manual scavenging, including the construction of insanitary latrines, and mandates the demolition or conversion of such latrines into sanitary ones.
 - It also provides for the identification and rehabilitation of manual scavengers through skill development, financial assistance, and alternative employment.
 - **SC/ST (Prevention of Atrocities) Act, 1989:** It criminalises the employment of scheduled castes in manual scavenging.
 - **Government Initiatives and Schemes:**
 - **Self Employment Scheme for Rehabilitation of Manual Scavengers (SESRM):** This scheme provides assistance to identified manual scavengers to help them transition into self-employment.
 - **National Safai Karamcharis Finance and Development Corporation (NSKFDC):** NSKFDC provides concessional loans and financial support for the socio-economic upliftment of Safai Karamcharis and their families.
 - **Rashtriya Garima Abhiyaan:** It is a national campaign to **eradicate the practice of manual scavenging and** rehabilitate the manual scavengers.
 - **Swachh Bharat Mission 2.0:** Encourages ULBs to ensure the safety of sanitation workers, focusing on mechanisation and the promotion of protective measures.
 - **SafaiMitra Suraksha Challenge (SSC)** launched as part of the **Swachh**

Bharat Mission, this initiative encourages cities to mechanise sewer cleaning and prevent fatalities by reducing manual intervention.

- **The Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM)**: Guideline suggests that at least 10% of **self-help groups (SHGs)** formed should be of persons engaged in vulnerable occupations, including sanitation workers.
 - These SHGs would then be empowered to run their own enterprises.

How does Caste-Based Occupation Perpetuate Manual Scavenging in India?

- **Caste Hierarchy and Social Discrimination**: Dalits are at the bottom of the social hierarchy in the Indian varna system. They are often associated with tasks deemed "**polluting**," such as **handling human excrement**.
 - This caste-based discrimination not only ostracises them from mainstream society but also **subjects them to exploitative labour practices**.
 - The stigma attached to their work exacerbates their marginalisation, as they face discrimination from both upper castes and, at times, within their communities.
- **Jajmani System and Inherited Occupations**: The traditional **jajmani system**, which **reinforces inherited caste-based roles**, plays a vital role in perpetuating manual scavenging.
 - This inheritance **normalises manual scavenging** within their communities, making it difficult to escape these occupations.
- **Lack of Alternatives**: Many Dalits in manual scavenging continue this degrading work due to a lack of **viable alternatives**. Families depend on meagre food handouts, as **caste discrimination limits job opportunities**, perpetuating poverty and exclusion.
- **Structural Barriers and Discrimination**: Legal frameworks like the **Protection of Civil Rights Act, 1955**, aim to prohibit caste-based discrimination, but enforcement is weak. Despite the introduction of the **PEMSR Act, 2013**, the **conviction rate remains very low**, further **exacerbating the problem**.
 - **Manual scavengers often lack access to basic rights** and services such as water, education, and healthcare, reinforcing the caste nature of this occupation and hindering their ability to pursue alternative livelihoods.
- **Discrimination in Education**: Children from manual scavenging families face discrimination in schools, leading to **high dropout rates**. They are often treated as **outcasts**, **subjected to bullying**, and forced into labour themselves.
 - This cycle of discrimination limits educational opportunities, further ensuring that the next generation remains trapped in caste-based occupations.

What are the Challenges of Abolition and Rehabilitation of Manual Scavenging in India?

- **Lack of Understanding and Awareness**: The PEMSR Act, 2013 clearly defines manual scavenging. However, many government officials are **unaware of who qualifies as a manual scavenger**.
 - Often, these individuals work under the titles of scavengers or sweepers, leading to concealed and inaccurate data collection.
- **Inefficiency in Demolishing Insanitary Latrines**: The root cause of manual scavenging are **insanitary latrines that remain unaddressed** due to slow and ineffective administrative actions.
 - According to **Socio Economic and Caste Census (SECC) 2011**, India has **over a million of insanitary latrines**, many of which still dispose of **night soil** (term for human waste that was collected from areas without sewer systems or septic tanks) into **open drains and are manually serviced**.
 - The mandated conversion or demolition of these latrines has not been effectively implemented across states.
- **Inadequate Sewage and Drainage Systems**: Despite advancements in other sectors, **wastewater management** and drainage systems **in India remain underdeveloped**. Poor planning and insufficient investment in modern sewage systems perpetuate the need for manual scavenging.

- **Failure to Enforce Legal Prohibitions:** The Indian government has been ineffective in penalising those who continue to employ manual scavengers illegally.
 - Laws like the **Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993**, and PMSR Act, 2013, are routinely ignored, allowing the practice to persist.
- **Barriers in Accessing the Criminal Justice System:** Dalits and marginalised communities face significant barriers to justice, as police often ignore or refuse to investigate crimes against manual scavengers, particularly when perpetrators are from dominant castes.
 - **This systemic bias undermines legal protections** and discourages victims from seeking redress.
- **Harassment from Employers and Community:** Manual scavengers seeking to leave the occupation often **encounter threats, physical violence, and social exclusion**.
 - Community pressure and retaliation from dominant caste groups keep individuals trapped in exploitative conditions, making it difficult for them to abandon manual scavenging.
- **Scarcity of Alternative Employment Opportunities:** Manual scavengers rely on daily donations for survival, making it difficult to leave the occupation without **immediate access to alternative livelihoods**.
 - Social and economic barriers, including caste and gender discrimination, limit **their ability to secure new employment. Corruption further exacerbates these challenges**, with bribes often required to obtain reserved government positions.
- **Inadequate Data:** Government surveys have been ineffective in accurately identifying and documenting the number of manual scavengers.
 - Discrepancies in reports from various sources highlight a significant underestimation of the problem. Without comprehensive and regular surveys, targeted interventions remain challenging.

Way Forward

- **Link Rehabilitation to Social Security Schemes:** Link rehabilitation programs with the [Mahatma Gandhi National Rural Employment Guarantee Act \(MNRGA\)](#) and other social security laws. This will facilitate access to employment for scavenging communities, helping to eliminate the practice.
- **Enhance Coordination:** Establish a coordination committee involving key ministries to facilitate a unified approach to **abolishing manual scavenging**. Strengthening the role of NGOs and community organisations can help enforce the Act at the local level.
- **Address Railway Practices:** The Indian Railways, as a **significant contributor to manual scavenging**, must transition to **bio-toilets** and provide regular progress reports to Parliament to ensure accountability and transparency.
- **Auditing Mechanisms:** Form a national-level monitoring committee to regularly oversee the implementation of the NAMASTE scheme and conduct comprehensive social audits to identify and address systemic issues.
- **Revise Legislative Framework:** Amend existing laws to ensure consistency and enhance protections for manual scavengers. Encourage accountability among monitoring agencies.
- **Invest in Technology and Resources:** Allocate sufficient funds to local authorities for procuring advanced cleaning technologies, thereby reducing manual intervention and improving working conditions for sanitation workers.

Drishti Mains Question:

Q. What are the systemic barriers that hinder the effective implementation of laws prohibiting manual scavenging in India? Discuss possible solutions.

UPSC Civil Services Examination, Previous Year Question (PYQ)

Prelims

Q. 'Rashtriya Garima Abhiyaan' is a national campaign to (2016)

- (a) rehabilitate the homeless and destitute persons and provide them with suitable sources of livelihood
- (b) release the sex workers from their practice and provide them with alternative sources of livelihood
- (c) eradicate the practice of manual scavenging and rehabilitate the manual scavengers
- (d) release the bonded labourers from their bondage and rehabilitate them

Ans: (c)

MP-Rajasthan MoU on PKC-ERCP Link Project

For Prelims: Parbati-Kalisindh-Chambal (PKC) Linking Project, Eastern Rajasthan Canal Project (ERCP), [National Perspective Plan for Interlinking Rivers](#), [Chambal basin](#), [Vindhya mountains](#), [Yamuna River](#), National Interlinking of Rivers Authority (NIRA)

For Mains: Interlinking of Rivers in India and associated issues, Issues Relating to Development, Water Management

[Source: TOI](#)

Why in News?

Recently, a **Memorandum of Understanding (MoU)** was signed between **Rajasthan** and **Madhya Pradesh** to implement the **Modified Parbati-Kalisindh-Chambal Eastern Rajasthan Canal Project (PKC-ERCP)** river link project.

- This project is being implemented as part of the Government of India's [National Perspective Plan \(NPP\)](#) for the interlinking of rivers (ILR).

What is the Modified PKC-ERCP?

- **Parbati-Kalisindh-Chambal (PKC):** It is a **river-linking initiative** designed to **divert surplus water** from the **Parbati, Newaj, and Kalisindh** rivers to the **Chambal River**.
 - It is part of the 30 links in the **National Perspective Plan (1980)**, formulated by the **Central Water Commission** and the **Union Ministry of Irrigation**.
 - It aims to **provide water for domestic use, optimise water** resources within the Chambal basin, and benefit regions in **Madhya Pradesh** and **Rajasthan**.
 - **Rivers Involved in the Project:**
 - **Chambal River:**
 - Origin: Singar Chouri Peak, Vindhya Mountains, Indore, Madhya Pradesh.
 - Major Tributaries: Banas, Kali Sindh, Sipra, Parbati.
 - **Parvati River:**
 - Origin: Vindhya Range, Sehore District, Madhya Pradesh.
 - Significant Tributaries: None.
 - **Kali Sindh River:**
 - Origin: Bagli, Dewas District, Madhya Pradesh.
 - Major Tributaries: Parwan, Newaj, Ahu.
- **Eastern Rajasthan Canal Project (ERCP):** The ERCP was proposed by Rajasthan in 2019 to

optimise water resources.

- It aims to **facilitate intra-basin water transfer within the [Chambal basin](#)**.
- It aims to harness **surplus monsoon water** from the **Kalisindh, Parvati, Mej, and Chakan** sub-basins and divert it to the water-deficient sub-basins of **Banas, Gambhiri, Banganga, and Parbati**.
- This initiative will supply **drinking and industrial water** to **13 districts in eastern Rajasthan**, including Alwar, Bharatpur, Sawai Madhopur, and Jaipur.
- The ERCP aims to establish a **network of water channels** that will span **23.67% of Rajasthan's area** and **benefit 41.13% of the state's population**.
- **Benefits:**
 - The ERCP is expected to create an **additional command area of 2 lakh hectares** and provide **irrigation to 4.31 lakh hectares**.
 - It aims to **improve groundwater levels** in rural Rajasthan, enhancing socio-economic conditions.
 - The project also supports the **Delhi-Mumbai Industrial Corridor (DMIC)** by ensuring sustainable water sources to boost industrial growth and attract investment.

▪ **Modified PKC-ERCP:**

- The **Modified Parbati-Kalisindh-Chambal-ERCP (PKC-ERCP) Link Project** is an inter-state project that **merges the PKC link** with the **Eastern Rajasthan Canal Project (ERCP)**.
 - This integration addresses issues like water sharing, cost-benefit distribution, and water exchange between the concerned states.

▪ **Need of Such Project:**

- Rajasthan, the **largest state in India** with a **geographical area of 342.52 lakh hectares (10.4%** of the country's total), has **only 1.16% of the nation's surface water** and **1.72% of its groundwater resources**, as reported by the Water Resources Department of Rajasthan.

Chambal River

- **About:** It originates at Janapav, south of Mhowtown, near Manpur Indore, on the south slope of the **Vindhya Range** in Madhya Pradesh. From there, it flows in the North direction in Madhya Pradesh for a length of about 346 km and then follows a north-easterly direction for a length of 225 km through Rajasthan.
 - It enters UP and flows for about 32 km before joining the **Yamuna River** in Etawah District.
 - It is a rainfed river and its basin is bounded by the Vindhyan mountain ranges and the Aravallis. The Chambal and its tributaries drain the Malwa region of northwestern Madhya Pradesh.
 - The Hadoti plateau in Rajasthan occurs in the upper catchment of the Chambal River to the southeast of the Mewar Plains.
- **Tributaries:** Banas, Kali Sindh, Sipra, Parbati, etc.
- **Main Power Projects/ Dam:** Gandhi Sagar Dam, Rana Pratap Sagar Dam, Jawahar Sagar Dam, and Kota Barrage.
- The **National Chambal Sanctuary** is located along the Chambal river on the tri-junction of Rajasthan, Madhya Pradesh, and Uttar Pradesh. It is known for **the critically endangered gharial, the red-crowned roof turtle**, and the endangered Ganges river dolphin.



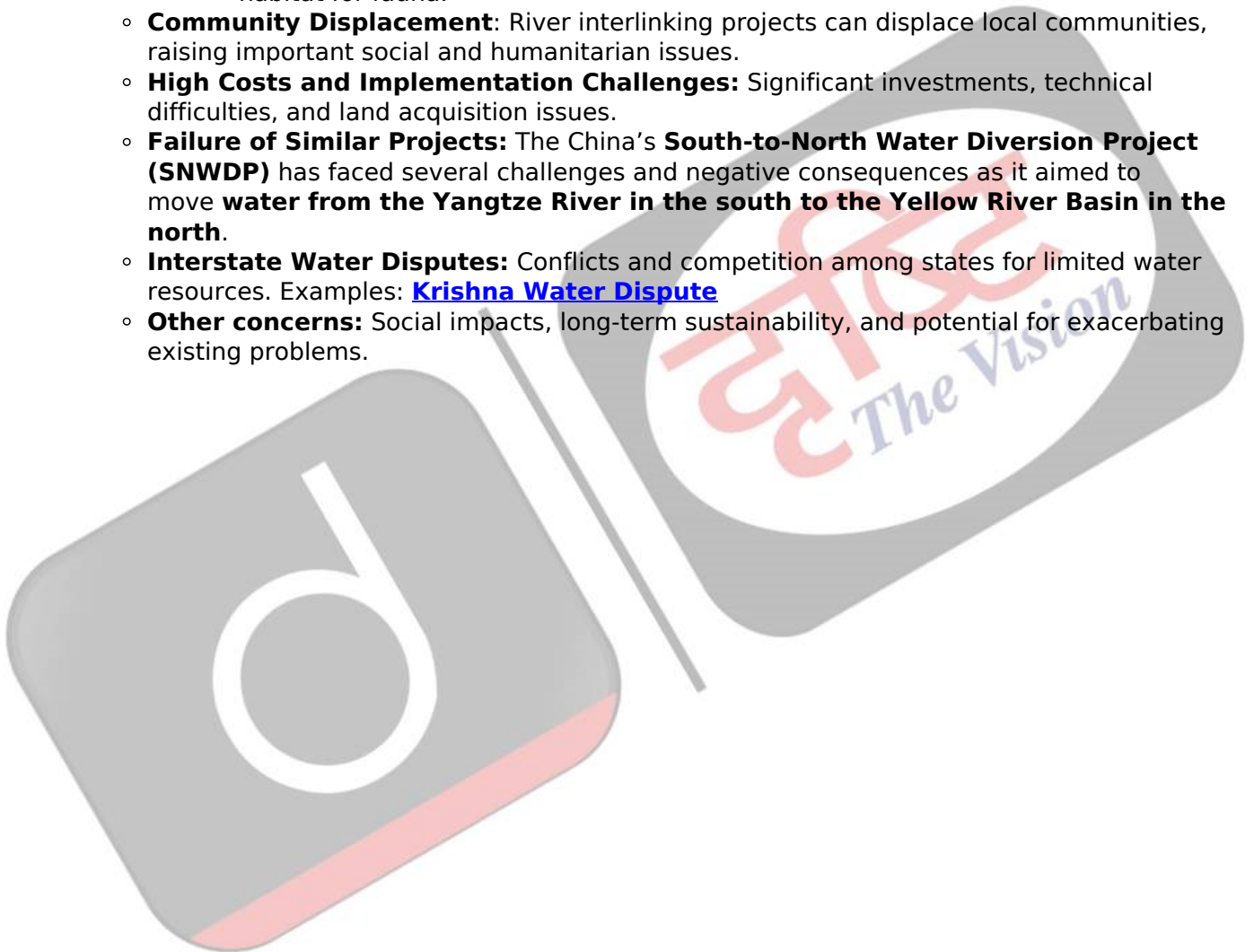
Yamuna

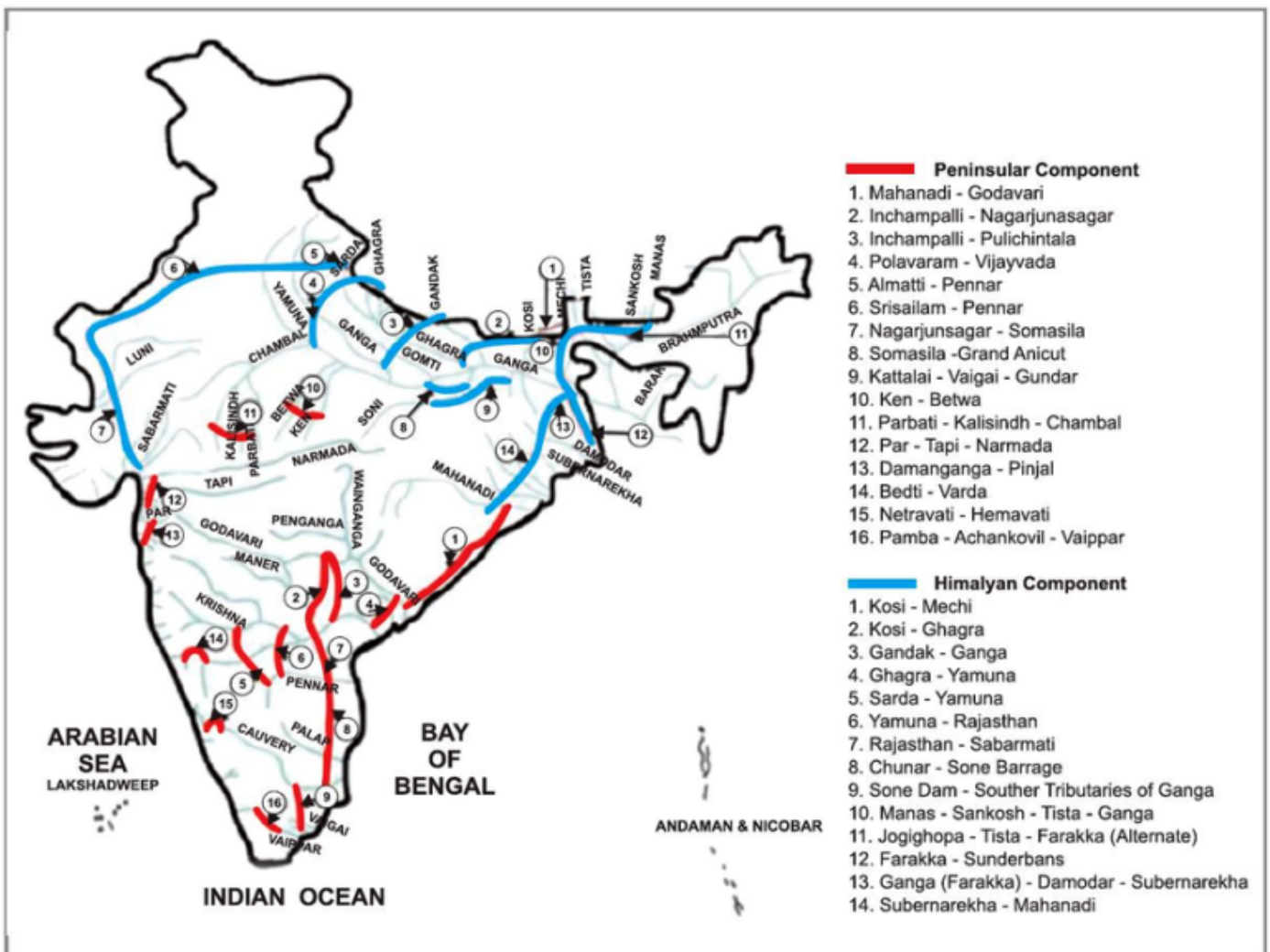
- The river Yamuna, a major tributary of river **Ganges**, originates from the **Yamunotri glacier** near **Bandarpooch peaks** in the Mussoorie range of the lower Himalayas in Uttarkashi district of Uttarakhand.
- It meets the Ganges at the Sangam in **Prayagraj, Uttar Pradesh** after flowing through **Uttarakhand**, Himachal Pradesh, **Haryana** and Delhi.
- **Important Dam:** Lakhwar-Vyasi Dam (Uttarakhand), Tajewala Barrage Dam (Haryana) etc.
- **Important Tributaries:** **Chambal**, Sindh, **Betwa and Ken**.

What is the National Perspective Plan for Interlinking Rivers?

- **About:**
 - The **River Interlinking Project**, also known as the **National Perspective Plan (NPP)**, formulated in **1980** by the **Ministry of Jal Shakti** is a large-scale civil engineering project that aims to **transfer water from surplus basins to deficit basins** in India.
 - It involves the **creation of artificial channels** to connect rivers and water bodies.
- **Components:**
 - Himalayan and Peninsular Rivers Development Component
- **Projects Identified:**
 - **A total of 30 link projects** have been identified, with 16 under the Peninsular Component and 14 under the Himalayan Component.
 - **Key Projects Under Peninsular Component:** Mahanadi-Godavari Links, Godavari-Krishna Links, Par-Tapi-Narmada Link, and **Ken-Betwa Link** (first project under the NPP to begin implementation).
 - **Key Projects Under Himalayan Component:** Kosi-Ghagra Link, Ganga (Farakka)-Damodar-Subernarekha Link, and Kosi-Mechi Link.
- **Significance:**
 - **Flood Management:** It aims to **manage flood risks** in flood prone areas such as Ganga-Brahmaputra-Meghna basin.
 - **Addressing Water Shortages:** It seeks to **mitigate water shortages** in western and peninsular states, including Rajasthan, Gujarat, Andhra Pradesh, Karnataka, and Tamil Nadu.

- **Irrigation Improvement:** It aims to **enhance irrigation in water-scarce regions**, thereby boosting agricultural productivity and improving food security, with the potential to double farmers' incomes.
 - Example: [Ken-Betwa link project](#).
 - **Infrastructure Development:** It facilitates the establishment of **environmentally friendly inland waterways** for efficient freight movement such as [national waterway-1](#).
 - **Sustainable Water Use:** It is designed to **optimise surface water utilisation** to **alleviate groundwater depletion** and minimise the freshwater flowing into the sea.
- **Concerns:**
- **Biodiversity Loss:** Altering natural river courses may lead to significant biodiversity loss and habitat disruption.
 - Example: The [Ken-Betwa link project](#) in Madhya Pradesh is expected to submerge a significant portion of the [Panna Tiger Reserve](#), leading to a loss of habitat for fauna.
 - **Community Displacement:** River interlinking projects can displace local communities, raising important social and humanitarian issues.
 - **High Costs and Implementation Challenges:** Significant investments, technical difficulties, and land acquisition issues.
 - **Failure of Similar Projects:** The China's **South-to-North Water Diversion Project (SNWDP)** has faced several challenges and negative consequences as it aimed to move **water from the Yangtze River in the south to the Yellow River Basin in the north**.
 - **Interstate Water Disputes:** Conflicts and competition among states for limited water resources. Examples: [Krishna Water Dispute](#)
 - **Other concerns:** Social impacts, long-term sustainability, and potential for exacerbating existing problems.

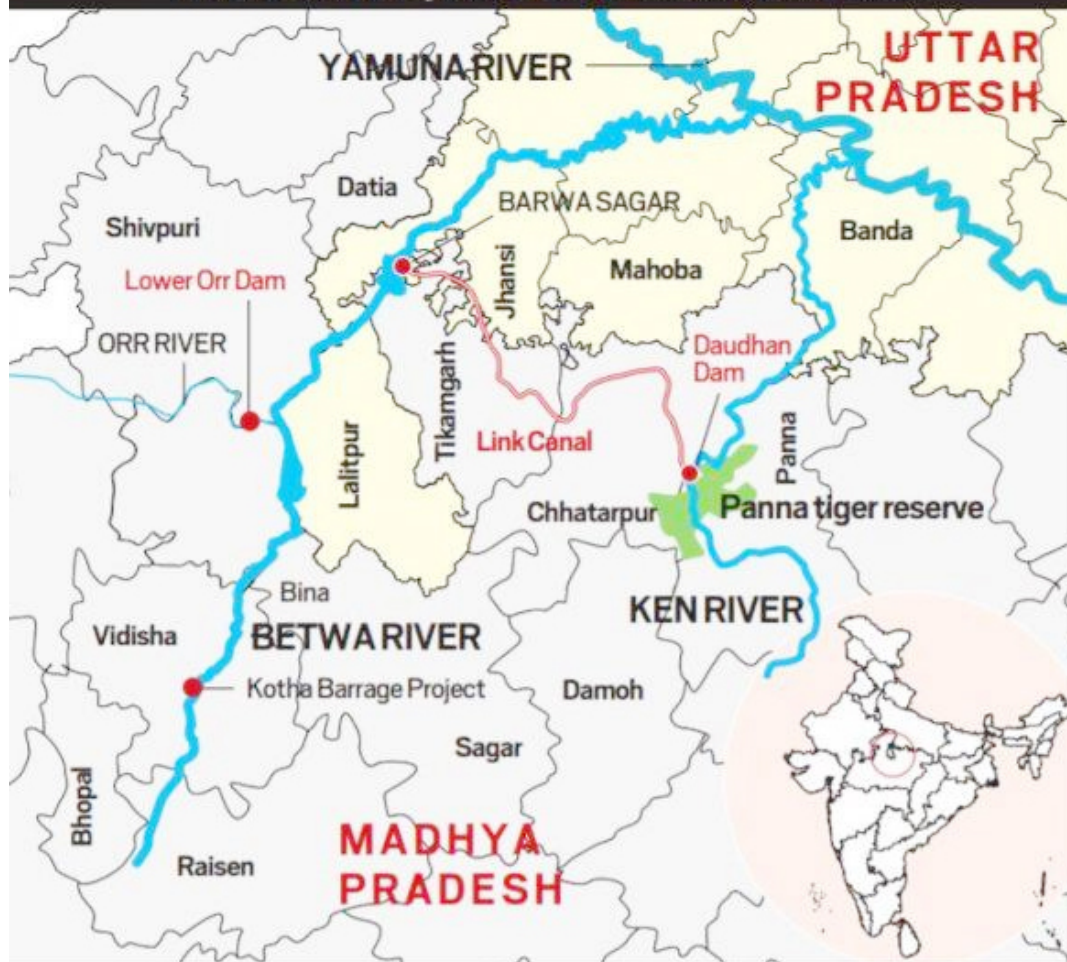




Ken-Betwa River Link Project (KBLP)

- It is the **first project** under the **National Perspective Plan (NPP)** for the **interlinking of rivers**.
- The KBLP involves **transferring water** from the **Ken River in Madhya Pradesh** to the **Betwa River in Uttar Pradesh**, both of which are tributaries of the Yamuna River.

TWO STATES, TWO RIVERS AND A LINK



National Interlinking of Rivers Authority (NIRA)

- It is a **proposed independent body** that will replace the **National Water Development Agency (NWDA)**.
- **It will be** responsible for the planning, investigation, financing, and implementation of river interlinking projects in India and will serve as an umbrella organisation for all river-linking initiatives.
- It will **coordinate with neighboring countries, relevant states, and departments**, and will have authority over environmental, wildlife, and forest clearances related to these projects.

Drishti Mains Question:

Discuss the potential benefits and challenges of the river interlinking project in India. How can these projects contribute to water management and socio-economic development in the country?

UPSC Civil Services Examination, Previous Year Question (PYQ)

Q. The interlinking of rivers can provide viable solutions to the multi-dimensional inter-related problems of droughts, floods, and interrupted navigation. Critically examine. (2020)

Global Warming Affecting Weather Forecast

[Source: TH](#)

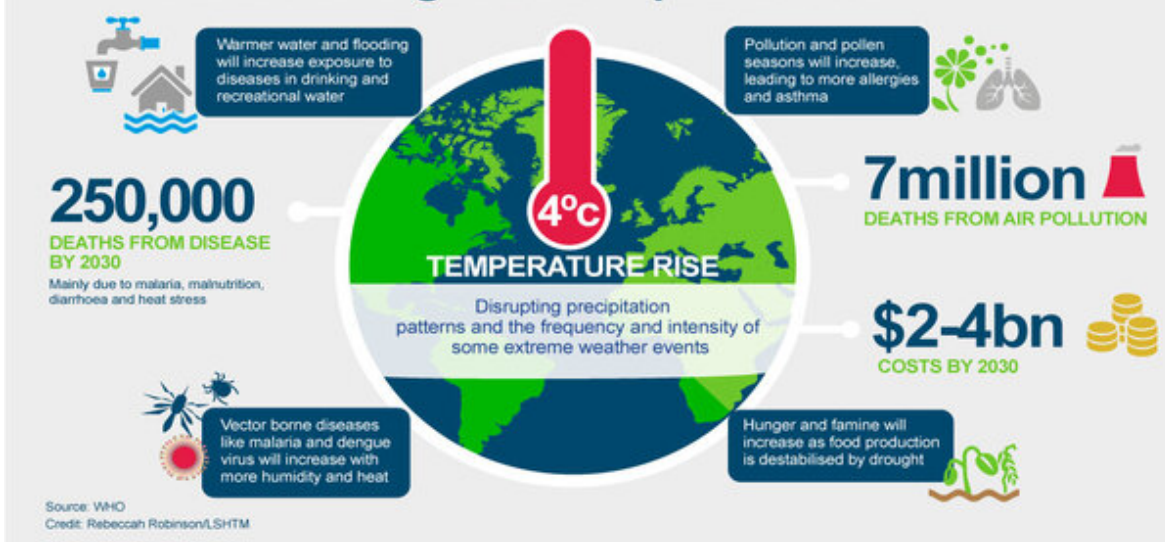
Why in News?

Unprecedented warming in 2023-2024 has pushed global temperatures beyond the **1.5°C** threshold, increasing the unpredictability of weather patterns and challenging current forecasting models amid extreme events like [heatwaves](#), [cyclones](#), and [floods](#).

What are the Factors Affecting Weather and Climate Forecasting?

- **Global Warming:**
 - [Global warming](#) refers to the **long-term increase in Earth's average surface temperature** due to human activities, primarily the emission of [greenhouse gasses \(GHG\)](#) like **carbon dioxide (CO₂)** and **methane (CH₄)**.
 - **Impact of Global Warming on Climate Forecasting:**
 - **Increased Unpredictability of Weather:**
 - Rising global temperatures decrease weather predictability, reducing forecast accuracy by about **one day per celsius** increase.
 - Rising temperature is also complicating current forecasting models to accurately predict extreme events such as [heatwaves](#), [hurricanes](#), [monsoons](#) and [El Niño](#).
 - **Changes in Atmospheric Dynamics:**
 - Rising temperatures **accelerate the growth of atmospheric eddies**-small-scale circulations in the troposphere which impact weather systems.
 - This faster growth **reduces the memory of initial conditions in weather models**, leading to a **narrower window for accurate predictions**, especially in warming regions.
 - **Impact on Forecasting Models:**
 - **Lorenz's "butterfly effect":**
 - It shows that **small changes in temperature, humidity, and wind** can lead to **significant impacts on climate forecasting**.
- **Other Factors:**
 - **Data Quality and Availability:**
 - Accurate forecasts depend on **comprehensive and high-quality data**. Gaps in data may hinder the ability to make precise predictions.
 - **Model Limitations:**
 - Climate models, while sophisticated, have inherent limitations as they often **struggle to replicate historical trends** and can produce varying results based on their configurations.
 - **Natural Variability:**
 - Weather patterns are influenced by natural phenomena such as [El Niño](#), [La Niña](#), and the [Indian Ocean Dipole \(IOD\)](#) which further complicates predictions.

How climate change could impact the world



Causes and Effects of Climate Change

Causes

- Rapid industrialization
- Energy use
- Agricultural practices
- Deforestation
- Consumer practices
- Livestock
- Transport
- Resource extraction
- Pollution



Effects

- Rising temperatures
- Rising sea levels
- Unpredictable weather patterns
- Increase in extreme weather events
- Land degradation
- Loss of wildlife and biodiversity

What are the social impacts of climate change?

Displaced people. Poverty. Loss of livelihood. Hunger. Malnutrition. Increased risk of diseases. Global food and water shortages.



Read More: [World's Oceans Approaching Critical Acidification Level, Rising Global Temperatures.](#)

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q1. Which of the following statements is/are correct about the deposits of 'methane hydrate'? (2019)

1. Global warming might trigger the release of methane gas from these deposits.

2. Large deposits of 'methane hydrate' are found in Arctic Tundra and under the sea floor.
3. Methane in atmosphere oxidises to carbon dioxide after a decade or two.

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: (d)

Samajik Adhikarita Shivirs

Source: PIB

Why in News?

Recently, a **Samajik Adhikarita Shivr** was organised at 75 locations across India for distribution of aids and assistive devices to over 9000 pre-identified **Divyangjan** beneficiaries under the **ADIP (Assistance to Disabled Persons) Scheme**.

What is Samajik Adhikarita Shivr?

- **About:**
 - The **Samajik Adhikarita Shivr (Social Empowerment Camps)** are a series of **distribution camps** organised to provide **assistive devices** to **people with disabilities and senior citizens**. It has been in operation **since 1981**.
- **Organisers:**
 - These are organised by the **Department of Empowerment of Persons with Disabilities (DEPWD)** under the **Ministry of Social Justice and Empowerment** in collaboration with **ALIMCO (Artificial Limbs Manufacturing Corporation)** and the **District Administration**.
- **Definition:**
 - The scheme follows the definitions of various types of disabilities as given in the **Right of Persons with Disabilities Act 2016**.
- **Grants:**
 - Grants-in-aid are released to various implementing agencies (**ALIMCO**, National Institutes, Composite Regional Centres, District Disability Rehabilitation Centres, State Handicapped Development Corporations, **Non-governmental Organizations (NGOs)** etc.) for purchase and distribution of aids and assistive devices under **ADIP Scheme**.
- **Scheme of Assistance to Persons with Disabilities for Purchase/Fitting of Aids /Appliances (ADIP Scheme)**
 - The ADIP Scheme **assists persons with disabilities** by **providing modern aids and appliances for rehabilitation**.
 - It includes **support for corrective surgeries** before providing assistive devices.
 - It was last updated in April 2024, continuing **March 2026**.

Other Related Initiatives for PwD:

- [Accessible India Campaign: Creation of Accessible Environment for PwDs](#)
- [DeenDayal Disabled Rehabilitation Scheme](#)

- [National Fellowship for Students with Disabilities](#)
- [Unique Disability Identification Project](#)
- [International Day of Persons with Disabilities](#)
- **Initiatives for Mental Health:**
 - [National Mental Health Programme.](#)
 - [KIRAN: Mental Health Rehabilitation Helpline.](#)

Read More: [International Day of Persons with Disabilities - Drishti IAS](#)

Vice-President Address to IN-STEP

Source: [PIB](#)

Recently, The Vice-President of India addressed the participants of the **inaugural International Strategic Engagement Programme (IN-STEP)**, in New Delhi.

- During this gathering, the Vice-President stressed the need for **multilateral cooperation** to address modern threats like [cybercrime](#), [terrorism](#), and [climate change](#).
- He reinforced the philosophy of "**Vasudhaiva Kutumbakam**" (the world is one family) emphasizing that these principles are **vital for fostering unity and cooperation to tackle cross-border challenges**.
- **IN-STEP:**
 - This serves as a **valuable platform** for participants **to exchange ideas, explore different perspectives, and develop strategies** to address the pressing security challenges.
 - This gathering comprised **27 international delegates** from 21 countries and 11 senior Indian military and civil officers.
 - The programme is a collaborative effort between the [National Security Council Secretariat](#), [the Ministry of External Affairs](#), and the **Ministry of Defence**.

Read More: [18th G20 Summit in New Delhi](#)

SASTRA Ramanujan Prize 2024

Source: [TH](#)

Recently, the **2024 SASTRA Ramanujan Prize** was awarded to **Alexander Dunn** from the **Georgia Institute of Technology, US**.

- Dunn has made significant breakthroughs in the study of **modular forms, half-integral weight forms, metaplectic forms**, and their relationships with prime numbers and integer partitions.
- **About SASTRA Ramanujan Prize:**
 - It was **established in 2005** and given by the **Shanmugha Arts, Science, Technology & Research Academy (SASTRA) University**, Tamil Nadu.
 - It includes a **cash prize of USD 10,000**.

- It is awarded annually to **mathematicians aged 32 or below** for exceptional contributions, particularly in **areas inspired by the work of [Srinivasa Ramanujan](#)**.
- **About Srinivasa Ramanujan:**
 - He was born on **22nd December 1887** in Tamil Nadu, made pioneering contributions to **number theory, elliptic functions, partition theory, and hypergeometric series**.
 - His talent was recognized by **G.H. Hardy** in 1913, leading to his work at Cambridge.

Read More: [Srinivasa Ramanujan](#)

India and Uzbekistan Signed BIT

Source: [HT](#)

Recently, **India and Uzbekistan** signed a **Bilateral Investment Treaty (BIT)** to assure appropriate **protection for investors** from both countries.

- It assures a **minimum standard of treatment** and **non-discrimination** while offering independent **arbitration** for dispute resolution.
- However, both countries have the **right to regulate** and provide **adequate policy space** for public interest regulation, without compromising investor protection.
- India is among the **top 10 trade partners** of Uzbekistan with bilateral trade **USD 756.60 million**.
- Total **Indian investments** in Uzbekistan amount to **USD 61 million**.
 - Notable Indian investments are in the field of **pharmaceuticals**, amusement parks, automobile components, and **hospitality industry**.
- In **2019**, India and Uzbekistan agreed to conduct a feasibility study for negotiating a **preferential trade agreement (PTA)**.
- The 2nd Prime Minister of India **Lal Bahadur Shastri** died in **Tashkent, Uzbekistan** just hours after signing the **Tashkent Declaration**, which brought a ceasefire in the **Indo-Pakistani War of 1965**.

MAJOR TRADE AGREEMENTS OF INDIA

Free Trade Agreement (FTA) With Neighbouring Countries

- ⌚ India-Sri Lanka FTA
- ⌚ India-Nepal Treaty of Trade
- ⌚ India-Bhutan Agreement on Trade, Commerce, and Transit

A free trade agreement is a comprehensive deal between countries, offering preferential trade terms and tariff concessions, with a negative list excluding specific products and services.

Regional FTA's of India

- ⌚ **India ASEAN Trade in Goods Agreement (11):** 10 ASEAN countries + India
- ⌚ **South Asia Free Trade Agreement (7):** India, Pakistan, Nepal, Sri Lanka, Bangladesh, Bhutan, and the Maldives
- ⌚ **Global System of Trade Preferences** (41 countries + India)

India's CECA's and CEPAs

CECA/CEPA is broader than FTAs, addressing regulatory, trade, and economic aspects comprehensively, with CEPA having the widest scope including services, investment, etc while CECA mainly focuses on tariff and TQR rates negotiation.

- ⌚ CEPA with **UAE, South Korea, Japan**
- ⌚ CECA with **Singapore, Malaysia**

Others:

- India-Australia Economic Cooperation and Trade Agreement (ECTA)
- India-Thailand Early Harvest Scheme (EHS)
- India-Mauritius Comprehensive Economic Cooperation and Partnership Agreement (CECPA)

An EHS precedes an FTA/CECA/CEPA, where negotiating countries select products for tariff liberalisation, paving way for broader trade agreements and fostering confidence.

Preferential Trade Agreements (PTAs)

Partners in a PTA grant preferential access to specific products by lowering duties on agreed tariff lines, maintaining a positive list of products eligible for reduced or zero tariffs.

- ⌚ **Asia Pacific Trade Agreement (APTA):** Bangladesh, China, India, S. Korea, Lao PDR, Sri Lanka, and Mongolia
- ⌚ **SAARC Preferential Trading Agreement (SAPTA):** Same as SAFTA
- ⌚ **India-MERCOSUR PTA:** Brazil, Argentina, Uruguay, Paraguay and India
- ⌚ India's PTA with **Chile, Afghanistan**



Read More: [Bilateral Investment Treaties](#)

Rosh Hashanah

Source: [PIB](#)

Recently, **Prime Minister wished** the Prime Minister of [Israel](#) and greeted **Jewish community** on the occasion of [Rosh Hashanah](#).

- Rosh Hashanah is **Jewish New Year** and is among the most sacred days in the Jewish faith.
- It marks the **beginning** of the Jewish month of **Tishri**, which is the **7th month** according to the **Hebrew calendar**.
- It is believed by the Jewish community to be the day when **God created the world**, including **Adam and Eve**.
- Rosh Hashanah is also known as **Yom Hadin (Day of Judgment)** on which God opens the **Books of Life and Death**, which are then **sealed on Yom Kippur**.
 - Yom Kippur means "**Day of Atonement**" on which Jewish people **pray, seek forgiveness and a fresh start**.
- The central ceremony features the blowing of the **shofar horn** in select **synagogues**, along with community prayers held beside a body of water.
 - A shofar is an ancient **musical instrument** typically made of a **ram's (a species of**

sheep) horn, used for Jewish **religious** purposes.

Read More: [Hanukkah](#)

PDF Reference URL: <https://www.drishtias.com/current-affairs-news-analysis-editorials/news-analysis/03-10-2024/print>

