

NEWS TODAY

Ministry of Road Transport and Highways (MoRTH) released its Annual Report 2024-25

According to the report, India has the world's second-largest road network of around 63.45 lakh kilometres.

Key Highlights of Report

- **Highway Network:** National Highway (NH) network increased by 60% from 91,287 km in 2014 to 1.46 lakh km at present.
 - ⊕ Pace of NH construction increased **2.8 times** to 33.8 km/day (2023-24) from 12.1 km/day (2014-15).
- **Capital Expenditure:** MoRTH's capex has risen **5.7 times** from 2013-14 to **₹3.01 lakh crore** in 2023-24.
- **Infrastructure Investment Trust (InvIT):** **₹25,900 crore** has been raised under InvIT mode.
- **State Road Transport Undertakings (SRTUs):** 58 SRTUs reported consolidated net loss of around **₹30,000 crore**, a **68% increase** in three years.
 - ⊕ Factors responsible are low fleet utilization, rising fuel costs, and free bus travel schemes.
- **New Technologies:**
 - ⊕ **Bio Binders from Agricultural Waste:** For utilization in bituminous road construction.
 - ⊕ **Ultra-High-Performance Fiber Reinforced Concrete (UHPFRC):** In bridge construction to enhance durability and load-bearing capacity.
 - ⊕ **Graphene Modified Asphalt (GIPAVE):** To improve the performance and longevity of asphalt pavements.
 - ⊕ **Gap-graded Rubberised Bitumen (GGRB):** It incorporates rubber particles into the bitumen mix.
 - ⊕ **Other materials:** Geo-Synthetics including Coir/Jute, Steel and Iron Slag, Copper Slag, Zinc Slag, Bio-Bitumen, Bio-Cement, Recycled Glass Aggregate, Graphene Enhanced Concrete, Silica-fume etc.

Internet shutdowns in 2024 report released by advocacy body Access Now

According to report, Global internet shutdowns reached a **record high in 2024**, with **India leading in government-imposed restrictions**.

Key Findings of Report:

- **296 shutdowns** were recorded across 54 countries in 2024, an increase from 283 in 2023.
 - ⊕ Myanmar (85 shutdowns), India (84), Pakistan (21), and Russia (19) accounted for 71% of total.
- **Human Rights Concerns:** 72 shutdowns were linked to grave human rights abuses, **including war crimes, police brutality, and airstrikes**.
- **India-Specific Findings:** India recorded **84 shutdowns (Highest in any democracy)** affecting 16 states and territories.
 - ⊕ **Primary Reasons for Shutdowns:** Protests, Elections, Communal Violence and **examinations**.

Legal Provisions for Internet Shutdown in India:

- **Legal Basis:** Governed by Telecommunications (Temporary Suspension of Services) Rules, 2024 under **Telecommunications Act, 2023**.
 - ⊕ **Mandating publication of suspension orders:** Including detailed justifications, geographical scope, and affected services.
 - ◆ Suspension duration **cannot exceed 15 days**.
 - ⊕ **Authority: Order can be issued by** Union Home Secretary for Central Government, or Secretary to State Government in-charge of Home Department for State Government;
- **Section 144 of erstwhile CrPC (section 163 of the Bharatiya Nagarik Suraksha Sanhita):** Used by authorities to impose restrictions.
- **Anuradha Bhasin case (2020) Judgement:** Apex Court (SC) held that internet restrictions must be **temporary, lawful, necessary, and proportionate**.

Concerns related to Internet shutdowns

Economic Loss:
India suffered loss of **\$322 Mn** due to internet shutdowns in 2024 (**Top10VPN report**).



Affect Right to Trade {Article 19(1)(g)}:
Digital businesses suffer, particularly small traders relying on online payments.



Violation of Fundamental Rights:
Supreme Court (**Anuradha Bhasin case, 2020**) ruled that indefinite shutdowns are unconstitutional.



Educational Disruptions:
Internet access is part of the **right to education and right to privacy** under Article 21 {**Faheema Shirin vs State of Kerala (2019)**}.



UNCCD releases report on Land Restoration for International Peace and Security

It highlights that cooperation over **management of shared natural resources/ecosystem restoration** can pave way for broader political agreements and even prevent conflict.

Link between land degradation and global conflicts

- **Loss of economic opportunities:** Land degradation can nudge the negatively affected communities towards criminal activities. Eg. **smuggling, human trafficking.**
- **Food insecurity:** Recurrent crop failures and rising inflation increases risk of political and economic turmoil in the country. Eg. **Clashes in Somalia.**
- **Human mobility:** Land degradation can increase migration and displacement.
- **Increasing inequalities:** It leads to marginalisation and discrimination of minority and vulnerable groups.
- **Governance:** Weakened land related governance structures can escalate conflict, including across borders. Eg. In Amazon rainforest, weak environmental governance led to conflicts **between Brazil, Peru, and Colombia.**

Leveraging land restoration for international peace:

- The report identifies five key enablers for ecosystem restoration initiatives to promote peace in conflict areas.
 - ⊕ **Focus on technical and scientific collaboration:** can create a neutral ground to pursue shared goals.
 - ⊕ **Inclusive dialogue:** must be prioritised in transboundary ecosystem restoration.
 - ⊕ **Transboundary governance mechanisms:** as confidence-building mechanisms.
 - ⊕ **Conflict-sensitive approaches to land restoration:** to build trust and cooperation.
 - ⊕ **Capacity building:** Improving dialogue between parties.

Flagship Initiatives for Land Restoration:

- **Vertical climate funds:** Primary recipients of this funding are designated state institutions, government ministries and international organizations.
- **Carbon market mechanisms:** Main project types include avoided conversion, afforestation and reforestation, improved forest management etc.
- **UN Peacebuilding Fund (PBF):** To make explicit efforts to expand cross-border programming.
- **Peace Forest Initiative (PFI):** Flagship programme of **United Nations Convention to Combat Desertification (UNCCD)** for ecosystem restoration in conflict-affected locations.

IIT Bombay study highlights role of mangroves in mitigating Tsunami and Coastal Flood Impacts







Study shows that **emergent coastal vegetation including mangroves** is an **effective defence system** that significantly reduces the damage caused by tsunami waves to coastal infrastructure.

- **Emergent vegetation** is aquatic plants rooted in the soil, while their stems, leaves, and flowers emerge above the water surface.

About Mangroves

- **Mangroves are emergent trees** with sturdy submerged roots, stiff stems, and trunks to reduce wave forces and acts as natural bio-shields against extreme ocean disasters.
- **Significance:**
 - ⊕ **Improve water quality:** By filtering out nutrients and sediments.
 - ⊕ **Supports biodiversity:** Serve as nursery, feeding and breeding grounds for crabs, prawns, mollusks, birds, reptiles and mammals.
 - ⊕ **Food and Livelihood Security:** Source for essential nutrients such as protein, omega-3 fatty acids, vitamins, grazing grounds for livestock, source of fuelwood and charcoal etc.
 - ⊕ **Carbon Sink:** Mangroves stores an average of 394 tonnes of carbon per hectare.
- **Coastal Protection:** Lower propagation speeds, inundation depths and overall flood extent by **slowing down and redirecting storm surges and attenuating wind and swell waves.**
- **Threats:** According to IUCN, **50% of mangrove ecosystems are at risk of collapse.**
 - ⊕ **Main threats** include coastal development, deforestation for agriculture and shrimp farming, climate change and consequent sea-level rise and increased frequency of cyclonic storms.

Characteristics of Mangroves

 <p>Ecosystem Type Mangroves represent the littoral forest ecosystem.</p>	 <p>Salt Tolerance Mangroves are known as halophytes, meaning they tolerate salt.</p>	 <p>Root Structure They have blind roots called Pneumatophores for respiration.</p>
 <p>Habitat Location Found in intertidal zones of tropical and sub-tropical regions.</p>	 <p>Tree Height Mangrove trees typically grow between 8 to 20 meters tall.</p>	 <p>Reproductive Method Seeds germinate on trees before falling, known as viviparity.</p>

Meeting of Western Zonal Council discussed contribution of Western Region in India's Economic Growth

Western Zonal Council is one of the five zonal councils set up under the **States Re-organisation Act, 1956** and comprises the states of Goa, Gujarat, Maharashtra and UT of Dadra & Nagar Haveli and Daman & Diu.

Contribution of Western Region

- It contributes **25% to India's GDP**, falling only behind the **Southern region** which contributes around 30%.
 - Northern, Central and Eastern Region accounts for around 18.5%, 13.6% and 12.5% respectively to India's GDP, highlighting **regional disparity**.
- It accounts for **more than half of India's trade** with the world and acts as a **gateway to Northern and Central regions** for global trade.

Factors responsible for Regional Disparity

- Historical:** **British policies favoured** resource-rich areas (like Kolkata, Mumbai and Chennai).
- Geographical:** Uneven growth due to availability of resources like ports, raw materials etc. in some regions while difficult terrain (e.g. **Himalayan and North-Eastern states**) and disaster-risk in others.
- Economic:** Inadequacy of basic infrastructure like transport, power, technology etc. and dominance of primary economic activities in some states.
- Governance:** Industries prefer developed states having efficient governance systems and policy continuity.

Strategies to eliminate regional disparities

- Aspirational Districts Programme (ADP):** It aims to quickly transform 112 most under-developed districts across the country.
 - Aspirational Block Programme (ABP)** on lines of ADP.
- Infrastructure development** through PM Gati Shakti National Master Plan, Bharatmala, Sagarmala etc.
- Promotion of Cooperative and Competitive Federalism through **NITI Aayog**.
- Development Funds to State Governments** in the form of Loans linked to reforms and Special Assistance to States for Capital Investment.

India's social protection coverage doubles to 49%: ILO chief

According to ILO's **World Social Protection Report 2024-26**, proportion of India's population covered by **at least one social protection benefit (excluding health)** increased from 24% (2021) to 49% (2024).

- Social protection** provides benefits to people on **basis of risks faced across life cycle** (e.g., unemployment, disability etc.) and to those suffering **general poverty and social exclusion**.

Significance of Social Protection

- Inclusive Society:** Providing security for children, women, old age and divyang.
- Tackling Climate Adaptation:** Can tackle poverty, inequality and social exclusion.
- Others:** Transition to greener jobs, Sustainable economic practices etc.

Challenges regarding Social Protection in India

- Social protection coverage:** Lack of comprehensive protection for informal workers.
 - Only 26% of Indian women** are covered by at least one social protection measure, compared to 39% for men.
- Inadequate Financing:** India **spends only 5% of GDP on social protection** (excluding healthcare) lower than global average of 13%.
- Automation:** AI could potentially disrupt around **12 million jobs in India by 2030** (McKinsey).

Way Forward

- Strengthening Social Protection:** Expanding unemployment insurance and pension schemes to cover its informal workforce.
- Addressing Gender disparities:** Expanding maternity benefits and ensuring access to pension schemes.
- Improving data collection, monitoring** to reach more beneficiaries and **reskilling** in age of AI.

Initiatives Taken for Social Protection:

- National Rural Employment Guarantee Act
- Targeted Public Distribution System
- Pradhan Mantri Shram Yogi Maan-Dhan (PMSYM)
- Pradhan Mantri Jeevan Jyoti Yojana (PMJJBY)
- Pradhan Mantri Suraksha Bima Yojana (PMSBY)

Also In News



Palaeognathae Group of Birds

A **new study by the University of Bristol** challenges the assumption that Palaeognathae groups birds are 'dumb'.

About Palaeognathae Group of Birds

- Palaeognathae is a **group of flightless birds** that evolved **early from dinosaurs**.
- It includes birds such as **ostriches, emus, rheas, cassowaries, and kiwis**.
- Classification:**
 - Tinamiformes:** e.g. tinamous of South and Central America;
 - Tinamous have a keeled sternum and can fly (weakly),
 - Ratitae, or ratite birds:** With flat sterna and reduced wings, and cannot fly at all.
 - It includes **African ostrich, rhea of South America; Australian emu and New Guinea cassowary; and the kiwi of New Zealand**.

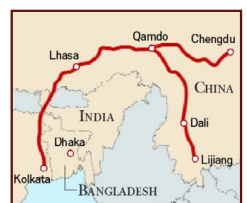


Tea Horse Road (THR)

China's Ambassador to India recently posted on X about historic Tea Horse Road.

About THR

- It connected India to China, through Tibet** (Although not as well-known as **Silk Road, which linked China and Europe**).
- It does not refer to a single road but a **network of branching paths** that began in southwest China and ended in the Indian subcontinent.
- Two main pathways passed through **cities like Dali and Lijiang in Yunnan province**, and reached **Lhasa in Tibet**, before entering the Indian subcontinent where they branched into present-day India, Nepal, and Bangladesh.
- Origin:** Tang dynasty in China (618-907 CE).
- It was a **crucial commercial pathway** for centuries.





PM-KISAN Scheme

Prime Minister congratulated farmers on **completion of six years of Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme.**

About PM-KISAN Scheme

- **Ministry:** Launched in 2019 by Ministry of Agriculture & Farmers Welfare.
- **Objective:** To supplement financial needs of all eligible landholding farmers' families in procuring various inputs.
- **Benefits:** Provides **Rs.6,000 annually** to small and marginal farmers in **three Rs.2,000 installments via DBT.**
- **Beneficiaries:** All landholding farmer families, excluding institutional landholders, higher-income taxpayers etc.
- **Funding:** A **Central Sector scheme** with 100% funding from Government of India.



Adolescent Girls Club

First 'Adolescent Girls Club' under **Mission Shakti** was launched in Nagaland.

- Such adolescents' girls' clubs are formed at **both government and private schools** for the girls in the age group of 10-19 years.

About Mission Shakti

- **Ministry:** Ministry of Women and Child Development.
- **Two sub-schemes:** Sambal (for safety and security of women) and **Samarthya** (for empowerment of women).
 - ⊕ **Sambal** includes One Stop Centre (OSC), Women Helpline (WHL), Beti Bachao Beti Padhao (BBBP) and Nari Adalat.
 - ⊕ **Samarthya** includes Ujjwala, Swadhar Greh, Working Women Hostel, National Creche Scheme for children of working mothers and Pradhan Mantri Matru Vandana Yojana (PMMVY).



Black Plastic

A study highlighted that black plastic products contain a flame-retardant chemical called **decabromodiphenyl ether (BDE-209)** that had been linked to potential human health risks.

About Black Plastic

- Black plastic is often **made from recycled electronic waste** such as computers, TVs, and appliances.
 - ⊕ The electronics typically **contain substances such as the flame retardants** bromine; antimony; and heavy metals such as lead, cadmium, and mercury.
 - ⊕ These substances and heavy metals are known to be **toxic to humans at high levels of exposure** and are now banned in many countries.



Kaziranga National Park

India's External Affairs minister and Heads of missions of 61 countries visited the Kaziranga National Park.

About Kaziranga National Park (KNP)

- KNP is located between the **Brahmaputra River and the Karbi (Mikir) Hills in Assam, India.**
- **Status:** National Park, Tiger Reserve, Important Bird Area (IBA), and UNESCO World Heritage Site (1985).
- **Famous For:** Largest population of **Indian one-horned rhinoceros** (2,613 as per 2022 census).
- **Biodiversity:** Home to **tigers, elephants, swamp deer, wild buffalo** (Big Four).
- **Important area for migratory birds** as it is located at the **junction of the Australasia and Indo-Asian flyway.**



Soliga Tribe

Prime Minister praised the efforts of **soliga tribe in increasing the tiger population in Biligiri Ranganatha Swamy Temple (BRT) Tiger Reserve.**

About Soliga Tribe

- Soligas are nomadic people who live in the **Biligiriranga Hills region of Southern Karnataka** and some parts of **Tamil Nadu.**
- In 2011, they became **first tribal community** living inside a tiger reserve to get **legal rights to the forest.**
 - ⊕ They live off forest produce like **honey, berries and timber** and **practice subsistence agriculture.**
- They speak **Soliga, a Dravidian language** closely related to Kannada.
- They worship **tigers as sacred beings** and refer to the tiger as **Dodda Nayi.**



Zagros Mountains

According to a recent study, a hilly area surrounding **Zagros Mountains in Iraq is being pulled into Earth.**

- Ancient **Neotethys oceanic slab** is developing a significant tear from **southeast Turkey to northwest Iran, causing it to split and sink** into Earth's mantle.

About Zagros Mountain

- **Location:** Major mountain range in **Central Asia.**
- **Geographical Extent:** Covers **around 1,500 kilometers** in a northwest to southeast direction from border areas between eastern Turkey and northern Iraq to Strait of Hormuz (**Iran**).
- **Highest Peak:** Mount Dena
- **Climate:** Semi-arid temperate climate
- **Vegetation:** Temperate broad-leaved forests and **steppe vegetation.**

Place in News



Germany (Capital: Berlin)

Friedrich Merz, of the Christian Democratic Union of Germany, set to become Germany's new chancellor.

Political Features

- Located in **Central Europe.**
- **Bordering Countries:** Denmark (North), Poland and Czech Republic (East), Austria and Switzerland (South), and France, Luxemburg, Belgium and Netherlands (West).
- **Bordering water bodies:** Baltic and North Sea in North.

Geographical Features

- **Mountain ranges:** Alps (Highest point – Zugspitze), Black Forest.
- **Major Rivers:** Rhine and Danube.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI