

National Green Tribunal (NGT) asks CPCB to prepare pan India guidelines to tackle illegal sand mining

NGT stated that extraction of silica sand from silica sand mines causes health hazards like silicosis (lung disease caused by inhaling crystalline silica dust) to workers.

- NGT also observed that Silica sand washing plants lack proper record-keeping, and Statutory Regulators neglect compliance with laws.
- Silica sand is produced by crushing sandstone or quartzite of open texture, and washing and grading it to yield requisite grain distribution.

About Sand Resource

- Sand is world's second-most exploited natural resource, after water. (UNEP)
- Sand is classified as a minor mineral under Mines and Minerals (Development and Regulation) Act, 1957 (MMDR Act).

About Sand Mining

- Definition: Removal of primary natural sand and resources like minerals, metals from natural environment (land, rivers, etc.) for extracting valuable crushed stone etc. for subsequent processing.
- Factors responsible for illegal sand mining: High demand for sand in construction; organized sand mafias; lack of sustainable alternatives etc.

Consequence of Illegal Sand Mining

- Flooding and Sedimentation: Alters river course causing flooding and sedimentation, loss of fertile land, damage to infrastructure etc.
- Groundwater Depletion: Lowers groundwater table, affecting wells and causing water scarcity.
- Biodiversity Loss: Disrupts aquatic habitats, threatens endangered river species like gharial, freshwater turtles, otters, river dolphins etc.

Steps taken to tackle Illegal Sand Mining

- Section 23C of MMDR Act allows State Governments and UT Administrations to create rules to prevent illegal mining, transportation, and storage of minerals.
- Sustainable Sand Management Guidelines (2016) and Enforcement & Monitoring Guidelines (2020) focus on restoring river ecology.
- Sand Mining Framework (2018) promotes alternatives like Manufactured Sand and sand from Overburden of coal mines.
- Mining Surveillance System to use space technology for tracking and controlling illegal sand mining.

MSMEs facing Challenges in Doing Business Report released by ASSOCHAM-Egrow

Key findings

- MSMEs contribute nearly 30% of GDP, 45% of manufacturing output and 46% of exports in fiscal year 2024.
- By 2047, manufacturing and services sector are projected to employ 67% of workforce and contribute over 75% of GDP.

About MSME sector

- MSMEs are essential to global economy constituting 90% of businesses, and contribute 50% of global GDP.
- Indian MSME sector is projected to grow to \$1 Trillion by 2028.

Challenges faced by MSME sector

- Delay in registration: Due to cumbersome registration process, and inefficient single window clearance system.
- Confusion about Government schemes: Lack of awareness and confusion among schemes, and lack of Centre-State coordination.
 - E.g. Complex registration under GST, frequent amendments driving up cost of doing business.
- Administrative burden: Due to overlapping documentation for Professional Tax, Contract Labour, Minimum Wages etc. hindering their operations.
- Labour issues: Lack of well-defined trial period for new hires, unskilled workers, variation in wages across states, inefficient training centres etc.
- Finance issues: Limited access to institutional finance, opaque loan application process and lack of collateral etc. hinders their growth.
- Export issues: Inadequate infrastructure, Lack of Environmental, social and governance (ESG) reports by Indian MSMEs impacts exports competitiveness.

Recommendations

- Streamline registration through single window clearance with dedicated helpline, and standardized checklist for documents.
- Dedicated MSME Coordination Council to streamline scheme implementation, Simplify GST registration, and reduced frequency of amendments.
- Workforce management via uniform labour wages, affordable labour insurance schemes, industry aligned vocational training programmes.
- Adequate financing, enhance role and reach of MUDRA, develop fintech solutions, and focus on financial literacy.
- Strengthening infrastructure and a tailored ESG framework for MSMEs to enhance their cost competitiveness.

About Bhopal Gas Tragedy

- On 3rd December 1984, highly toxic Methyl Isocyanate (MIC) gas leaked from a pesticide plant owned by Union Carbide India Limited (UCIL).
 - Even after four decades of tragedy, hundreds of tonnes of toxic waste remain on premises of UCIL.
- It was India's first major Chemical (industrial) disaster.

Other Chemical Disasters in India

- Ammonia Gas Leak at Chennai (2024): Due to damaged gas pipeline caused by cyclone Michaung.
- Vizag Gas Leak (2020): Styrene gas leak at LG Polymers in Visakhapatnam.
- Tughlakabad Gas Leak (2017): Chemical Chloro methylpyridine (used in pesticides manufacturing) leaked from container.

Reasons for Chemical Disasters

- Process and safety systems failures due to Human, Technical, and Management errors; Induced effect of natural calamities; Hazardous waste processing/ disposal; Terrorist attack/ unrest leading to sabotage etc.

Impact of Chemical Disasters

- Health: Exposure to toxic chemicals can lead to reproductive health of women, respiratory issues, cancer, and genetic mutations.
- Environmental: Soil, water, and air contamination, further disrupting ecosystems and biodiversity.
- Crop health: Exposure to hazardous chemicals damages plant cells, inhibits photosynthesis, stunting growth, and decreased productivity.
- Bioaccumulation: Released toxins can enter food chain, leading to bioaccumulation.

About Methyl Isocyanate (CH₃NCO)

- Volatile, colorless liquid that is extremely flammable, and potentially explosive when mixed with air.
- Reacts with water, giving off heat and producing methylamine and carbon dioxide.
- Liquid and vapor are toxic when inhaled, ingested, or exposed to the eyes or skin.

Initiatives taken to tackle Chemical accidents

- NDMA guidelines on Chemical Disaster Management: Inspection System by Regulatory Bodies, Establish Information networking system with states and districts on priority basis etc.
- Explosives Act, 1884: To control manufacture, possession, use, transportation and importation of Explosives.
- Chemical Accidents (Emergency Planning, Preparedness, and Response) Rules 1996.

India, Bosnia and Herzegovina Hold 4th Foreign Office Consultations

India and Bosnia and Herzegovina recently conducted their fourth Foreign Office Consultations in Sarajevo. It was led by Arun Kumar Sahu from India and Tarik Bukvic from Bosnia and Herzegovina.

Participants and Leadership

The Indian delegation was headed by Arun Kumar Sahu, Additional Secretary for Central Europe. The Bosnian delegation was led by Tarik Bukvic. He oversees the Department for Asia and Africa in Bosnia and Herzegovina's Ministry of Foreign Affairs.

Key Discussion Topics

The consultations addressed various regional and international issues. Both sides discussed developments in their respective areas. They also focused on multilateralism, BRICS, the United Nations, the European Union, and the Non-Aligned Movement.

Additional Meetings

Arun Kumar Sahu met with advisors Marko Milisav and Maja Gacic. They are associated with the Chairwoman of the Presidency of Bosnia and Herzegovina. Sahu also had a courtesy meeting with Christian Schmidt, the High Representative of Bosnia and Herzegovina.

Both nations agreed to hold the next round of Foreign Office Consultations in New Delhi. The timing will be decided later. This continuation reflects their commitment to strengthening diplomatic relations.

Diplomatic Relations Milestone

India and Bosnia and Herzegovina are approaching milestone. They will celebrate 30 years of diplomatic relations in 2025. This anniversary marks their strong and friendly ties.

The consultations covered a wide range of cooperation areas. Topics included political, economic, educational, cultural, and scientific collaboration. Regional and global issues were also part of the discussions, showcasing a comprehensive approach to partnership.

Important Facts for Exams:

1. **Foreign Office Consultations (FOC):** FOCs are diplomatic meetings aimed at enhancing bilateral relations. They facilitate discussions on various topics, including political, economic, and cultural cooperation between nations.
2. **Non-Aligned Movement (NAM):** NAM is a group of states not formally aligned with major power blocs. It promotes peace, security, and cooperation, aiming to represent the interests of developing countries.

AMRUT 2.0 – Revitalising Indian Urban Spaces

The Atal Mission for Rejuvenation and Urban Transformation (AMRUT) 2.0 was launched on October 1, 2021, which aims to enhance the self-sufficiency and water security of Indian cities. The mission focuses on sewerage management, water body restoration, and increasing green spaces. A budget of ₹2,99,000 crore has been allocated over five years.

Project Approval and Funding

The mission has approved 8,998 projects worth ₹1,89,458.55 crore. The Ministry of Housing and Urban Affairs (MoHUA) manages the funding. Central government contributes ₹76,760 crore. States and Union Territories (UTs) receive funds to execute local projects.

State Water Action Plans (SWAP)

All States and UTs must submit their State Water Action Plans within two years of launch. So far, ₹63,976.77 crore has been approved from the ₹66,750 crore central assistance. Some states, like Arunachal Pradesh and Delhi, have yet to approve their plans for 90% of the funds.

Project Status and Contracts

By November 15, 2024, contracts worth ₹85,114.01 crore have been awarded for 4,916 projects. Another 1,198 projects are in the planning phase. States are urged to expedite this process. Remaining projects are at various implementation stages.

Financial Expenditure

Of the ₹63,976.77 crore in central assistance, ₹11,756.13 crore has been released. ₹6,539.45 crore of this has been spent. Total expenditure, including state contributions, is ₹17,089 crore. Projects worth ₹23,016.30 crore have been completed.

State High Powered Steering Committees (SHPSCs) oversee project execution at the state level. These committees are led by Chief Secretaries. State Level Technical Committees (SLTCs) support them. An Apex Committee monitors progress nationally. Independent Review and Monitoring Agencies (IRMAs) assess project status. Regular reviews occur through video conferences and site visits.

Important Facts for Exams:

1. AMRUT – The Atal Mission for Rejuvenation and Urban Transformation aims to enhance urban infrastructure in India. It focuses on sustainability and water security across 500 cities.
2. SWAP – State Water Action Plans are mandatory for all state of Indias and UTs under AMRUT. They must be submitted within two years to ensure proper water management strategies.

India, ISA Sign Agreement on Solar Project in Pacific Islands

India's Ministry of External Affairs has signed an agreement with the International Solar Alliance. This agreement, made on November 26, 2024, focuses on solar energy projects in Fiji, Comoros, Madagascar, and Seychelles, which aims to enhance energy access in these regions.

Context of the Agreement

The agreement follows the Quad Leaders' Summit in Delaware, held in September 2024. At this summit, the Quad countries committed to supporting clean energy initiatives. India has pledged an investment of \$2 million towards these solar projects.

Role of the International Solar Alliance

The International Solar Alliance will oversee the implementation of the solar projects, which will provide necessary assistance and financial backing to the participating countries. This support is crucial for the successful execution of the projects.

Energy Challenges Faced by Target Countries

A study conducted by the ISA brought into light the energy issues in these nations. Key challenges include inadequate electricity supply in healthcare facilities and unreliable power for agricultural irrigation. Additionally, limited energy access hampers the storage of agricultural products.

Focus Areas of the Solar Projects

The proposed solar projects will concentrate on three main areas. They include cold storage facilities for agricultural products, solarisation of healthcare centres, and solar-powered water pumps for irrigation. These initiatives aim to address the specific energy needs of the communities.

Expected Outcomes of the Projects

These solar energy projects are expected to yield multiple benefits. Improved energy access will enhance the quality of life in remote areas. The initiatives will also create job opportunities and provide reliable power supply, contributing to economic growth.

Solar energy is viewed as a viable solution to the climate challenges faced by these nations. India's investment aligns with the Quad's commitment to combat climate change. It will assist these countries in transitioning to sustainable energy sources for a brighter future.

Important Facts for Exams:

1. ISA – The International Solar Alliance promotes solar energy initiatives globally. It aims to facilitate financial support and collaboration among member countries to enhance energy access and sustainability.
2. Quad – The Quadrilateral Security Dialogue, known as the Quad, consists of India, the USA, Japan, and Australia. It focuses on strategic cooperation, including clean energy initiatives and regional security.
3. Comoros – The Comoros is an archipelago located in the Indian Ocean. It faces important energy challenges, including unreliable electricity supply and limited access to clean water for its population.