

NEWS TODAY

MS SWAMINATHAN, FATHER OF INDIA'S 'GREEN REVOLUTION,' PASSES AWAY

About MS Swaminathan:

- Born in 1925 in Tamil Nadu's Thanjavur district.
- **International accolades:** the Ramon Magsaysay Award in 1971, UNEP Sasakawa Environment Prize in 1994, UNESCO Gandhi Gold Medal in 1999, etc.
- **Member of the Planning Commission (1980-82)** and director general of the International Rice Research Institute in the Philippines.
- **Values:** visionary, scientific temperament, leadership, hard work.

Contribution in Agriculture:

- **Architect of India's Green Revolution** (began in 1965).
 - Process of **boosting agricultural output using contemporary methods and instruments.**
 - **Components of Green Revolution:** Use of High-Yielding Variety (HYV) seeds, Application of fertilizers, Mechanization of farming, Price Incentives.
- Along with **Norman Borlaug (won the Nobel Peace Prize for work on wheat)** developed the high-yield variety seeds of wheat.
- Chaired the **National Commission on Farmers and submitted report (known as Swaminathan report)** on ways to enhance the productivity, profitability, and sustainability of the farming systems in India.
 - Recommended minimum support prices (MSP) should be 50% more than average production costs (input cost of capital plus the rent on the land).

Advantages of Green Revolution	Disadvantages of Green Revolution
<ul style="list-style-type: none"> • More food production, India became self-sufficient in foodgrain. • Consistent yields regardless of seasonal changes • Production of improved varieties 	<ul style="list-style-type: none"> • Hampered the environmental equilibrium due to chemical fertilizers • Creates seed sterility • Loss of biodiversity due to the killing of insect

UN-HABITAT RELEASED "SMART CITIES MISSION, INDIA: LOCALISING SUSTAINABLE DEVELOPMENT GOALS" REPORT

- Report was prepared in collaboration with **Ministry of Housing and Urban Affairs.**
- It examined the **transformation of 100 cities across India as part of Smart Cities Mission (SCM)** that aligns with SDGs.

Key highlights

- **Three pillars of mission**—Liveability, Economic-ability, and Sustainability—are aligned with **15 out of 17 SDGs.**
- **44 percent of total SCM projects contribute to SDG 11 (Sustainable Cities and Communities)** followed by **SDG 6 (Clean Water and Sanitation)** at 13.3 percent and **SDG 7 (Clean and Affordable Energy)** at 8.6 percent.
- Selected **Six SDGs** for in-depth coverage i.e. **6, 7, 8 (Decent Work and Economic Growth), 9 (Industries, Innovation, and Infrastructure), 11, 17 (Partnerships for the Goals).**

- Localisation of SDGs is the process of taking into account sub-national contexts in achievement of SDGs.

SCM Projects in compliance with SDGs

- **SDG 6: Sensor-based monitoring of water network** resulted in an additional supply of 50 million litres a day (MLD) by detecting leakages in Ahmedabad.
- **SDG 7: Mudasarlova Reservoir Floating Solar Plant** in Visakhapatnam led to an annual electricity generation of 3,613 MWh and prevented emission of over 3,000 tonnes of CO2.

SMART CITIES MISSION (SCM)

- **Launched: 2015.**
- **Type:** Centrally-sponsored Scheme.
- **Nodal Ministry:** Ministry of Housing & Urban Affairs.
- **Objective:** Promote cities that provide core infrastructure, clean and sustainable environment, and give a decent quality of life to their citizens through 'smart solutions.'
- **6 Fundamental Principles:** Community at core; More from less; Cooperative and Competitive federalism; Integration, Innovation and Sustainability; Technology as means, not goal; and Convergence.

INDIA MAINTAINS 40TH RANK IN THE GLOBAL INNOVATION INDEX (GII) 2023, RELEASED BY WORLD INTELLECTUAL PROPERTY ORGANIZATION (WIPO)

- The GII is a **reliable tool for governments across the world to assess the innovation-led social and economic changes** in their respective countries.
 - It is co-published annually by Cornell University, INSEAD Business School, and WIPO.
 - **Criteria to measure innovation:** Covers institutions, human capital and research, infrastructure, credit, investment, linkages, creation, absorption and diffusion of knowledge, and creative outputs.
- **Key Findings:**
 - For a 13th consecutive year, **Switzerland ranks first in the GII.**
 - Strong technological progress and Technology adoption like electric vehicle and automation.
 - **Status of Innovation in India:**
 - India **leads the lower middle-income group and is stable.**
 - India continues as record holder by being **innovation overperformer for a 13th consecutive year.**
 - The **ascent of India in terms of publication output (ranking 4th in 2022)**, overtaking the UK (5th) and Germany (3rd).
 - India has **4 technology clusters among the top 100 clusters:** Bengaluru, Delhi, Chennai and Mumbai.



World Intellectual Property Organization (WIPO)

Geneva

- **Genesis:** Specialized agency of the United Nations, established in 1967.
- **Objective:** Dedicated to developing a balanced and accessible international Intellectual Property (IP) system which rewards creativity, stimulates innovation and contributes to economic development.
- **Membership:** 193 members (**India is a member since 1975**)
- **Organizational structure:** The General Assembly and the Coordination Committee
- **Major Treaties:** India is a member of all the three treaties.
 - Paris Convention for the Protection of Industrial Property (1998)
 - Berne Convention for the Protection of Literary and Artistic Works (1928)
 - Patent Cooperation Treaty (1998)

MINISTRY OF NEW AND RENEWABLE ENERGY (MNRE) ISSUED TENDER FOR CONSTRUCTION OF INDIA'S FIRST OFFSHORE WIND PROJECTS IN TAMIL NADU

- MNRE has appointed **National Institute of Wind Energy as the nodal agency** for conducting the bidding. MNRE had **suggested three models** for bidding i.e.
 - Under Model A, **government will provide viability gap funding.**
 - Model B identified **sites will be leased out without any central financial assistance.**
 - First set of offshore wind projects being tendered will **follow Model B.**
 - In Model C, wind sites would be awarded through bidding process on **lease/allocation fee or revenue-sharing basis.**
- India's **7,600 kilometer-wide coastline** has **potential to generate approximately 140 Gigawatt of electricity** from offshore wind.
 - MNRE has set a target of **30 GW offshore wind installations by 2030.**
- Offshore wind energy is generation of electricity from wind blowing across the sea.
- **Benefits of Offshore wind energy:** Offshore wind turbines are more efficient, more land for projects and lack of physical interference etc.
- **Challenges in harnessing offshore wind energy**
 - **Economic:** High capital and operational expenditure, lack of dedicated supply chain, etc.
 - **Social-environmental:** Potential impact on marine animals, shipping, etc.
 - **Regulatory challenges:** Lack of concrete framework on offshore energy, regulatory hurdles in Marine National Park and Sanctuary Zones, etc.

INITIATIVES TAKEN FOR OFFSHORE WIND ENERGY

- National Offshore Wind Energy Policy, 2015.
- Global Collaborations on Facilitating Offshore Wind Energy in India (FOWIND) with European Union.

SOCIAL AUDIT UNITS UNDER MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACT (MGNREGA) IN DISMAL STATE

- Ministry of Rural Development highlighted that Social Audit Units i.e. SAU (meant to detect any cases of malpractice) are **lacking funds** and do **not have trained or adequate personnel** working for them.
 - SAU are established as per **MGNREGA Audit of scheme rule 2011** to facilitate social audit by Gram Sabhas.
 - Less than 14% of the amount flagged by the auditors has been recovered so far.
- **Social Audit** is a process in which **details of resource** (financial and non- financial) used by public agencies for development initiatives are **shared with the people.**
 - It **empowers people to enforce accountability and transparency**, and provide them an opportunity to scrutinize development initiatives.
- MGNREGA 2005 **guarantees 100 days** of wage employment in a **financial year** to a rural household whose adult members volunteer to do unskilled manual work.
 - 100 days **may extend up to 150 days in drought/natural calamity** notified rural areas.
- **Challenges in implementation of MGNREGA**
 - MGNREGA wage rates in many states are less than corresponding state minimum wages.
 - **Insufficient budget allocation** and regular payment delays.
 - Fake job cards, widespread corruption etc.

INTERNATIONAL SHIPPING EMISSIONS INCREASED BY 20% IN THE LAST DECADE: UNCTAD REPORT

- **Key highlights of UNCTAD's Review of Maritime Transport 2023 report:**
 - **Argues that maritime transport needs to decarbonize** as soon as possible
 - **Shipping industry** accounts for over 80% of global trade volume and **nearly 3% of global GHG emissions.**
 - **Oil and gas trade volumes grew in 2022**, and tanker freight rates rose due to geopolitical events.
 - **About 98.8% of the global fleet still relies on conventional fuels like heavy fuel oil**, light fuel oil, and diesel/gas oil, Only 1.2% use alternative fuels like LNG, battery/hybrid, LPG, and methanol.
- **Recommendations:**
 - **Facilitate the fuel transition** and an equitable decarbonization process
 - **The readiness and availability of alternative fuels** and vessel designs must be assessed.
 - **Reform and invest** in port efficiency and performance
- **Other Initiatives to Protect Environment from Shipping Emissions:**
 - The **International Maritime Organization (IMO)** has set a target to achieve **net-zero GHG emissions by around 2050** and aims for **at least 5-10% use of zero or near-zero GHG fuels by 2030.**
 - **IMO's Energy Efficiency Existing Ship Index (EEXI)** is driving the uptake of sustainable marine fuels.
 - **The MARPOL Treaty** is among the most important legal instruments relating to international shipping under the auspices of IMO.

United Nations Conference on Trade and Development (UNCTAD) Geneva, Switzerland

Genesis: A permanent intergovernmental body established by the UNGA in 1964.

Objective: Promotion of trade and development, particularly in developing countries.

Membership: 190 members - **India is a member.**

Organizational structure: The highest policy-making body of UNCTAD is the Conference, which meets once every four years to set policy guidelines and to formulate a program of work.

Flagship Reports: Trade and Development Report and World Investment Report.

ALSO IN NEWS

 <p>Net Neutrality</p>	<ul style="list-style-type: none"> ● TRAI's recent consultation on 'revenue sharing' and 'selective banning' of OTTs providing communication services, sparked the debate on net neutrality in India. ● Net Neutrality is a principle advocating for an open and equal playing field for all online content and services. <ul style="list-style-type: none"> ➢ It ensures that Internet Service Providers treat all data on internet without discriminating or charging differently based on the content, source, or destination. ➢ Regulatory framework on Net Neutrality was notified by the Department of Telecommunication in 2018, which upholds the principle of non-discriminatory treatment, subject to some exceptions.
 <p>Sonobuoys</p>	<ul style="list-style-type: none"> ● Indian Navy plans to equip MQ-9B Sea Guardian Drones with Sonobuoys. ● Sonobuoy is a small device used for underwater acoustic surveillance. <ul style="list-style-type: none"> ➢ It contains hydrophones that detect underwater sounds, especially those made by submarines. ➢ These devices are deployed from aircraft or ships and transmit real-time acoustic data, helping pin-point potential submarine threats.
 <p>Cell Broadcast Alert System (CBAS)</p>	<ul style="list-style-type: none"> ● Department of Telecommunications with National Disaster Management Authority will be conducting the testing of CBAS. <ul style="list-style-type: none"> ➢ It aims to bolster emergency communication during disasters and prioritize safety and well-being of citizens. ● CBAS represent a cutting-edge technology used to disseminate critical and time-sensitive disaster management messages. <ul style="list-style-type: none"> ➢ Messages are delivered to all mobile devices within specified geographical areas, regardless of whether the recipients are residents or visitors. ➢ Government agencies and emergency services employ Cell Broadcast to keep the public informed about potential threats and to provide vital updates during critical situations.
 <p>Kamlang Tiger Reserve</p>	<ul style="list-style-type: none"> ● Kamlang Tiger Reserve conducted a butterfly walk and nature trail event for the first time ever in association with NGOs. ● About Kamlang Tiger Reserve <ul style="list-style-type: none"> ➢ It is located in the Lohit district of Arunachal Pradesh and is named after the Kamlang river which flows through it. ➢ Climate: Sub-tropical ➢ Flora: Common species of trees include Ammora wallichii (Amari), Gmelina arborea (Gamari), etc. ➢ Fauna: Snow Leopard, Clouded Leopard, Tiger, Himalayan Palm Civets, Hornbill, etc. ➢ Glow Lake falls within this reserve.



Manis Mysteria (newly discovered species of Pangolin)

- Scientists have discovered a **new species of highly endangered Pangolin**.
- **About Pangolins**
 - **Only mammals wholly covered in scales.**
 - **Four species live in Africa:** Black-bellied pangolin, White-bellied pangolin, Giant Ground pangolin and Temminck's Ground pangolin.
 - **Four species found in Asia:** Indian pangolin, Philippine pangolin, Sunda pangolin, and the Chinese pangolin.
 - **IUCN status:** **Chinese, Philippine, and Sunda pangolins** are listed as **Critically Endangered** on the IUCN Red List.
 - Indian Pangolin: Listed in Schedule I of Wildlife (Protection) Act, 1972, and as Endangered on IUCN Red List.



Fish mint

- **Herbal plant full of medicinal properties**
- **Distribution:** Extends from the Himalayan foothills through Southeast Asia, China, Korea and Japan.
 - In Meghalaya, known as ja mardoh, tokning-khok in Manipur, in Assam, as masunduri.
- **Features: Has a fish-like taste and smell.** Hence, the name, fish mint.
- **Invasive plant:** Because of its ability to regrow from underground rhizomes forming new plants when disturbed.
- **Medicinal Properties:** used to treat digestive issues, insect bites, fevers, coughs, etc.
 - Its benefits have been **documented in ancient texts of Ayurveda and Siddha.**



Global Terrorism Index

- **Released by:** Institute for Economics and Peace (IEP)
- **Report ranks 163 countries** on the impact of terrorism.
 - **Indicators:** Include the number of terrorist incidents, fatalities, injuries, and hostages.
- **Highlights of Global Terrorism Index 2023:**
 - Islamic State (IS) and its affiliates remained the world's deadliest terrorist group in 2022.
 - **Afghanistan retains the top spot** on the list of the country impacted by terrorism.
 - **India ranked 13th** on the index, marking only a marginal decrease from the previous year.



SPECS2030 Initiative

- **It's a WHO initiative** to address global vision impairment and blindness. It aims to ensure access to eye care and treatment for all.
- **Purpose:** Reporting of the number of people who receive spectacles.
- **India's Role:** In India, where over 100 million people may lack access to eye care and glasses, Specs 2030 will bring positive change.
- **Myopia**-Near sightedness-can be corrected by concave lens.
- **Hypermetropia**-Farsightedness-can be corrected by convex lens.
- **Presbyopia**-the gradual loss of the eyes' ability to focus on nearby objects, bifocal lens is prescribed.



Rough Diamond

- **Gems and Jewellery Export Promotion Council (GJEPC)** appealed to diamond industries to stop importing rough diamonds.
 - GJEPC (HQ: Mumbai) is the **apex body driving India's export-led growth** in gem and jewellery sector.
- Rough Diamonds refer to **diamonds which are still in their natural state** after being removed from the earth.
 - They are sorted into groups according to their crystal qualities just like the categories of polished diamonds, such as shape, size, quality and colour.



Toto language

- The Toto is a **primitive and isolated tribal group** of population of about 1,600 only and their language is called Toto language.
- Toto Para is located at the foot of the Himalayas just to the south of the **borderline between Bhutan and West Bengal** (on the western bank of Torsa River).
- Toto language belongs to the **Sino-Tibetan family**.
- The Toto language **does not have its own script**.
- **Dhaniram has created the Toto language script** and Toto alphabet, for which he received 'Padma Shri'.



Personality in News

Bhagat Singh (28 September 1907 – 23 March 1931)

- He was born in Banga village of Punjab, British India (now Pakistan).
- In 1925, inspired by European nationalist movements, he formed **Naujawan Bharat Sabha**.
- Bhagat Singh was arrested in the **Lahore Conspiracy Case**, charged with the killing of J.P. Saunders.
- In 1929, he threw bomb at Central Assembly Hall in Delhi, and shouted slogan of "Inquilab Zindabad!" with Batukeshwar Dutt to oppose the Public Safety Bill and Trade Dispute Bill.
- **Books:** Why I am an Atheist, Jail notebook.
- **Ideology:** Revolutionary, Socialist, secular.
- **Values:** Sacrifice, Courage, Bravery.