NEXT IAS

DAILY CURRENT AFFAIRS (DCA)

Time: 45 Min

Date: 27-09-2024

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CDSCO RELEASES A LIST OF "NOT OF STANDARD QUALITY" DRUGS

In News

- A recent quality control check by the **Central Drugs Standard Control Organisation (CDSCO)** has raised alarms over the **safety and effectiveness of 53 medicines**, including widely used drugs like Paracetamol and Pan D.

About

- Several medicines were found to be **"not of standard quality" (NSQ)**, with some being declared spurious by drug testing labs.
- This raises serious **public health concerns** and it also highlights **failure of several states** in submitting data on quality of drugs.
- Earlier, the drug regulator has actively **banned risky fixed-dose drug combinations**, further highlighting the **need for stricter quality control measures in pharmaceuticals.**

Drug Regulation in India

- Drug regulation in India is primarily governed by the Central Drugs Standard Control Organisation (CDSCO), operating **under the Ministry of Health and Family Welfare.**
  - CDSCO acts as the **National Regulatory Authority (NRA) of India**. The Drug Controller General of India (DCGI) heads the CDSCO and is responsible for the approval of new drugs and clinical trials, along with setting standards for drugs.
  - **Each state has its own regulatory authority** to monitor the manufacturing, sale, and distribution of drugs within its jurisdiction.
- The regulation of drugs and pharmaceuticals in India is governed under the **Drugs and Cosmetics Act, 1940 and the Drugs and Cosmetics Rules, 1945**, which aim to ensure the safety, efficacy, and quality of drugs sold and consumed in India.

Issues Associated with Drug Regulation in India

- **Quality Control Issues**: Frequent reports of **substandard and spurious drugs** highlight the gaps in quality control.
- **Inadequate Monitoring and Enforcement**: The capacity of both **CDSCO** and **State Drug Control Authorities** is limited in terms of resources and manpower.
- **Lack of Comprehensive Post-Market Surveillance**: There is a lack of a robust **post-marketing surveillance system** to ensure that drugs continue to meet safety standards after they are marketed.
- **Fragmented Regulation**: The division of regulatory responsibilities between the **central** and **state governments** often leads to **coordination issues**, inefficiencies, and variations in enforcement across states.
- **Other issues** like, lack of trained manpower, lack of transparency in clinical trials, pressure on the regulatory bodies for approval etc.
  - The **Mashelkar Committee (2003)** identified the lack of trained and adequate personnel as a significant issue in India's drug regulatory framework.

Way Ahead for Improvement

- **Strengthening Regulatory Infrastructure**: India needs to **augment the capacities** of both central and state drug regulatory authorities, with better resources, skilled personnel, and infrastructure to ensure robust drug regulation.
- **Enhanced Coordination Between Central and State Agencies**: Improved **collaboration** and sharing of information between CDSCO and State Drug Control Authorities is necessary to address issues like inconsistent regulation and enforcement.
- **Focus on Quality Assurance**: There should be a stringent focus on improving **Good Manufacturing Practices (GMP)**, ensuring that manufacturers adhere to the highest quality standards.
- **Robust Post-Marketing Surveillance**: A **comprehensive post-marketing surveillance system** needs to be established to continuously monitor the safety, efficacy, and quality of drugs after they are approved and released in the market.
- **Establishment of National Drug Authority:** As recommended by the Mashelkar committee to revamp the structure of drug regulation.

Source: TH

INDIA-INDONESIA: 75TH ANNIVERSARY OF DIPLOMATIC RELATIONS

In News

- 8th India-Indonesia Foreign Office Consultations were held in New Delhi

Key Highlights

- Both sides undertook a comprehensive review of bilateral ties, including political exchanges, defense and security, the maritime domain, trade and investment, healthcare, and connectivity. They also exchanged perspectives on regional and global issues of mutual interest.
- The two sides discussed the ongoing commemoration of the 75th anniversary of the establishment of India-Indonesia diplomatic relations and the various activities organized to mark this milestone.
- Both sides expressed satisfaction with the progress made across different sectors of engagement and agreed to explore new avenues of cooperation. It was agreed to hold the next FOC at a mutually convenient date..

India -Indonesia Bilateral Relations

- **Cultural & Historical Ties**: India and Indonesia share over two millennia of close cultural and commercial contacts.
  - Hinduism, Buddhism, and later Islam spread to Indonesia from India.
  - Indian epics like Ramayana and Mahabharata influence Indonesian folk art and dramas.
  - The Bali Yatra festival is celebrated in both countries with enthusiasm.
- **Political Relations:** Both countries have common experiences of colonialism, democracy, pluralism, and progressive leadership.
  - President Sukarno of Indonesia was the Guest of Honour during India's first Republic Day in 1950.
  - Both nations were instrumental in the independence movements of Asia and Africa, and contributed to the Bandung Conference (1955) and the formation of the Non-Aligned Movement (1961).
  - India's 'Look East Policy' (1991) and 'Act East Policy' (2014) have accelerated bilateral relations, particularly in politics, security, defense, commerce, and culture
- **G20 Engagement:**Indonesia chaired the G20 Presidency in 2022 with the theme "Recover Together, Recover Stronger."
  - India participated actively in G20 events hosted by Indonesia, and Prime Minister Modi attended the G20 Leaders' Summit in Bali in November 2022.
  - India assumed the G20 presidency in December 2022, hosting over 100 meetings with strong Indonesian participation.
- **Economic Relations:** Bilateral trade for 2022-23 was USD 38.85 billion, with Indian exports at USD 10.02 billion and imports at USD 28.82 billion.
  - India is a major buyer of Indonesian coal, crude palm oil, and other resources. India exports refined petroleum, vehicles, agricultural products, and more.
- **Investment**:Indian investment in Indonesia reached USD 1,219 million in 4,750 projects (2000-2022).
  - Much of Indian investment enters Indonesia via Singapore and other gateways, so the actual volume may be higher.
  - Areas for Indian investment include joint ventures in diverse sectors.
- **Blue Economy Opportunities:** The blue economy focuses on sustainable economic activities related to oceans and seas.
  - Indonesia is a leader in leveraging its maritime resources for sustainable economic growth.
- **Digital & Technological Cooperation**:Both India and Indonesia are highly digitalized and use technology for public services and e-governance.
  - India's success with Digital Public Infrastructures (DPI) can serve as a model for Indonesia, which is also developing its DPIs.
  - Cybersecurity is a key area for cooperation as both countries face new security risks in digital public services.
- **Defence:** India and Indonesia have strong defence and security cooperation. In May 2018, during Prime Minister Narendra Modi's visit, both nations signed a new Defence Cooperation Agreement, marking the elevation of their relationship to a Comprehensive Strategic Partnership.
  - Exercise GARUDA SHAKTI is a joint training exercise between Indian Special Forces and the Indonesian Special Forces.

Future outlook

- Cooperation in the blue economy and digital technology offers promising opportunities for India and Indonesia.
- These collaborations will not only strengthen bilateral ties but also contribute to the broader Indo-Pacific region's prosperity.
- There is potential for India and Indonesia to collaborate on marine pollution, overfishing, sea

farming, maritime security, waste management, blue carbon spaces, and marine resource utilization for fuel and food production.

Source: AIR

INDIA'S VIEWS ON GLOBAL GOVERNANCE REFORMS

Context

- External Affairs Minister of India, S Jaishankar addressed the G20 Foreign Ministers' Meeting in New York, emphasizing India's stance on global governance reforms.

About

- India highlighted its views on the **three key areas** of global governance reform, which includes;
  - Reform of the **United Nations** and its subsidiary bodies,
  - Reform of the **International Financial Architecture** and
  - Reform of the **Multilateral Trading System.**

Reform of the UN and its subsidiary bodies

- **Current Situation:** UN was established in **1945** and since then the global order has become more interconnected and multipolar.
  - Despite this, the UN, particularly the UN Security Council, is dominated by a few major powers.
- **India's Argument:** The UN, especially the UNSC, struggles to deal with modern challenges like terrorism, climate change, or conflicts in diverse regions, due to its outdated structure.
  - India has long sought permanent membership in the UNSC, asserting that the council should reflect the global distribution of power

Reform of the International Financial Architecture

- **Current Situation:** The International Monetary Fund (IMF) and the World Bank, which were established after World War II are now seen as inadequate to handle contemporary global challenges, such as the Sustainable Development Goals (SDGs) and climate change.
- **India's Argument:** The Multilateral Development Banks (MDBs) should be reformed to focus on inclusive development, combating poverty, and addressing climate-related financing needs.

Reform of the Multilateral trading system

- **Current Situation:** The World Trade Organization (WTO) serves as the foundation of the global trading system, promoting free trade by enforcing rules.
  - However, concerns over protectionist policies, subsidies, and market-distorting practices by some countries have disrupted fair competition, especially for developing nations.
- **India's Argument:** India advocates for a rules-based, nondiscriminatory, fair, open, inclusive, equitable and transparent multilateral trading system.

Concluding remarks

- By pushing for reforms at the UN, financial institutions, and in trade, India aims to ensure that these systems reflect the interests of all nations, particularly developing ones, rather than being skewed toward a few powerful countries.
- This aligns with India's broader diplomatic efforts to advocate for a more multipolar world order.

Source: AIR

GLOBAL GUIDANCE FOR MORE EFFECTIVE AND EQUITABLE CLINICAL TRIALS

In News

- WHO released new guidance to improve clinical trial design, conduct, and oversight globally, targeting all income levels.

About

- The guidance was developed based on World Health Assembly resolution WHA 75.8, with input from nearly 3,000 stakeholders across 48 countries.
- **Scope**: The guidance covers trials for a wide range of health interventions, including medicines, vaccines, diagnostics, preventive care, digital health, and traditional or herbal measures.
- It aims to strengthen country-led research and development (R&D) to accelerate access to safe and effective health interventions worldwide.

Key Findings

- **Global Inequities in Clinical** Trials:There is a divide between high-income countries (HICs) and low- and middle-income countries (LMICs) in trial numbers (27,133 in HICs vs. 24,791 in LMICs in 2022).

- LMICs are often included in trials due to disease burden, but results are mainly used for approvals in HICs, leaving LMICs behind.

- **Limited Representation of Vulnerable Groups:**Pregnant women participated in less than 5% of trials, and only 13% of trials included children in 2022, lowering the quality of evidence and reducing access to interventions for these groups.
  - **The lack of inclusion of vulnerable populations limits treatment options for them and erodes their trust in health recommendations.**

Recommendations

- **National Authorities:** For the first time, WHO offers recommendations for health authorities, regulators, and funders to facilitate better clinical trials.
  - It addresses challenges like poor trial design, limited participant diversity, infrastructure gaps, and bureaucratic inefficiencies.
- **Need for Participant Diversity:**WHO emphasizes including diverse participants, particularly underrepresented groups such as pregnant women (less than 5% in trials) and children (13% in trials), to improve the quality and applicability of evidence.
- **Focus on Vulnerable Groups:**Special guidance for including pregnant, lactating women, and at-risk populations in trials, with safety prioritized early in the process.
  - Appropriate procedures for consent and assent, especially for children, are stressed.
- **Community Engagement:**WHO recommends centering patient and community engagement in trials to ensure research aligns with public needs and maintains trust.
- **Strengthening National R&D Ecosystems**:The guidance calls for sustainable financing to strengthen national R&D ecosystems, improve decision-making, and accelerate access to health innovations.

Source : DTE

PM MODI DEDICATES TO THE NATION 3 PARAM RUDRA SUPERCOMPUTERS

In News

- Prime Minister Narendra Modi recently inaugurated t**hree PARAM Rudra Supercomputers** worth 130 crore under the **National Supercomputing Mission (NSM)**.

About

- These indigenously developed supercomputers, **deployed in Pune, Delhi, and Kolkata**, will drive advanced research in physics, cosmology, earth sciences, and other scientific fields. The **Giant Metre Radio Telescope (GMRT)** in Pune, Inter-University Accelerator Centre (IUAC) in Delhi, and S.N. Bose Centre in Kolkata will utilize these systems for **cutting-edge research, enhancing India's scientific capabilities.**
- Additionally, the Prime Minister launched a High-Performance Computing (HPC) system focused on weather and climate research. They are located at the Indian Institute of Tropical Meteorology (IITM) in Pune and the National Center for Medium Range Weather Forecast (NCMRWF) in Noida.
- These systems, named '**Arka' and 'Arunika'**, are tailored to provide more accurate predictions for tropical cyclones, thunderstorms, heat waves, and other critical weather phenomena.

National Supercomputing Mission (NSM)

- **About:**
  - It is an important initiative by the Government of India to boost indigenous efforts to be in the forefront of supercomputing capability for socio-economic development of the nation.
  - The mission was j**ointly steered by the Ministry of Electronics and IT and Department of Science & Technology**.
- **Key Features:**
  - **Indigenous Development:** A core focus of NSM is on developing indigenous hardware and software for supercomputing systems, including processors, networks, and storage solutions.
  - **Collaborative Effort:** The mission is jointly led by the Ministry of Electronics and Information Technology (MeitY) and the Department of Science and Technology (DST), with implementation support from the Centre for Development of Advanced Computing (C-DAC) and the Indian Institute of Science (IISc), Bengaluru.
  - **PARAM Series:** Several supercomputers, like the PARAM series, have already been developed under the mission, with installations in major research institutions across India.

- **Impact:**
  - This initiative supports the government's vision of **"Digital India" and "Make in India"** and will place India at the forefront of the global supercomputing map.
  - The mission enables advanced research in crucial areas like climate change, healthcare, material science, and defense.
  - Supports India's ambition to be a global leader in emerging technologies like quantum computing, AI, and big data.

Key Facts on Supercomputers

A **supercomputer** is a powerful computing machine that performs at the highest operational rate, typically measured in **floating-point operations per second (FLOPS)**.

Key Performance Indicators:

- **FLOPS (Floating-point Operations per Second)**: The performance of supercomputers is measured in **teraflops** (trillions of FLOPS) or **petaflops** (quadrillions of FLOPS).
- **Top500**: A bi-annual ranking of the **top 500 supercomputers** globally, based on their performance.

Applications of Supercomputers:

- **Weather Forecasting**: Supercomputers are critical in predicting weather patterns, forecasting storms, and monitoring climate change.
- **Space Exploration**: Used for simulations related to space missions, spacecraft design, and orbital mechanics.
- **Artificial Intelligence (AI)**: Supercomputers are increasingly being used for **machine learning** and **deep learning** models, as they can process large datasets quickly.
- **Healthcare and Genomics**: Essential for **drug discovery**, **genome sequencing**, and **biomedical simulations**.

India's Supercomputers:

- **PARAM Rudra**: Recently launched under India's **National Supercomputing Mission**, these supercomputers are deployed in **Pune, Delhi, and Kolkata**.
- **Pratyush and Mihir**: India's major supercomputers, installed for weather forecasting, housed at the **Indian Institute of Tropical Meteorology (Pune)** and **National Centre for Medium-Range Weather Forecasting (Noida)**.
- **PARAM Yuva-II**: Developed by the **Centre for Development of Advanced Computing (C-DAC)**, it was one of the fastest supercomputers in India, used for scientific research.

Top Supercomputers in the World:

- **Frontier (USA)**: As of 2023, **Frontier**, developed by **Oak Ridge National Laboratory**, is the **fastest supercomputer** in the world, with a performance exceeding **1 exaFLOP** (1 quintillion operations per second).
- **Fugaku (Japan)**: Developed by **Riken** and **Fujitsu**, **Fugaku** was previously the fastest supercomputer and is still among the top performers, widely used for various applications like drug discovery and climate modeling.

Source: TH

WORLD TOURISM DAY 2024

Context

- World Tourism Day is celebrated on **27th of September** every year.

About

- **Background:** The United Nations World Tourism Organization (UNWTO) established World Tourism Day in **1980,** marking the adoption of the UNWTO Statutes on September 27, 1970.
- **Objectives:** The day is celebrated with the aim of using tourism as a major means for sustainable development and poverty alleviation
- **Theme for 2024:** 'Tourism and Peace.'

Potential of Tourism in India

- **India is geographically diverse and offers a variety of cultures** that come with its own experiences, making it one of the leading countries in terms of international tourism expenditure.
- **By 2028**, India's tourism and hospitality industry is projected to **generate revenue of over $59 Bn.**
  - Additionally, Foreign Tourist Arrivals (FTAs) are anticipated to reach **30.5 Mn by 2028.**

- According to the **Travel and Tourism Development Index (TTDI) 2024 report** published by the World Economic Forum (WEF), India is ranked **39th among 119 countries.**
- In the World Travel & Tourism Council (WTTC's) Economic Impact 2023 report, **India's Travel and Tourism GDP contribution grew by 5.9%.**

Benefits of Promoting tourism

- **Preservation of Heritage:** Tourism leads to restoring and maintaining historical monuments, temples, forts etc. ensuring their preservation for future generations.
- **Rural and village tourism** initiatives can provide economic benefits to smaller towns and villages, promoting inclusive growth.
- **Soft Power Diplomacy:** Tourism serves as an important tool for soft power diplomacy by showcasing India's culture, art, and history to the world.
- **Job Creation:** It leads to the creation of employment opportunities in various sectors, including hospitality, transportation, tour guiding, and handicrafts etc.

Challenges in Tourism Sector

- **Infrastructure Deficits:** Many sites lack adequate infrastructure such as transportation, accommodation, and sanitation facilities, hindering the tourist experience.
- **Crime Against Tourists:** Incidents of theft, scams, and even violent crimes against tourists negatively impact the perception of safety.
- **Degradation:** Unregulated tourism has led to **environmental damage** in some regions (e.g., Himalayas, beaches in Goa) and **cultural erosion**, where local traditions and heritage sites are over-commercialized or poorly managed.
- **Problem of Carrying Capacity:** Certain sites experience short but intense tourist seasons, leading to overcrowding and straining local infrastructure.
    - **The Char Dham Yatra in Uttarakhand** causes pressure on transport infrastructure and leads to safety hazards like landslides during the monsoon season.

Initiatives taken

- **Swadesh Darshan scheme:** The scheme Focuses on developing theme-based tourist circuits such as **Buddhist Ramayana, Coastal, Himalayan, Desert etc.**
- **National Mission on Pilgrimage Rejuvenation and Spiritual Heritage Augmentation Drive (PRASHAD):** It was launched in 2015 to identify and develop pilgrim sites across the country to promote religious tourism.
- **Bharat Gaurav Tourist Trains:** These trains provide tourists with an opportunity to explore famous heritage sites, religious places, and historically significant locations.
- **Spiritual projects** across India such as the Kashi Corridor, the Mahakal Corridor and the Ram Temple in Ayodhya are attracting a high volume of tourists and have been helping boost the local economy.
- **The Ministry of Tourism** has undertaken a Destination Based Skill Development training programme to train local people residing near the tourist sites and destinations.
- **100% FDI** is permitted for tourism construction projects, including the development of exquisite hotels, resorts, and unparalleled recreational facilities.

Way ahead

- World Tourism Day highlights the impact of tourism on the global economy and its role in promoting mutual understanding among different cultures.
- Tourism is not just a leisure activity; it is a crucial **driver for economic growth,** creating jobs, supporting local economies, and contributing to the protection of natural and cultural heritage.
- **Secretary-General of the UN World Tourism Organisation**, Zurab Pololikashvili said, tourism builds trust and respect, and it drives inclusive growth and safeguards against conflict.

Source: PIB

ARMED FORCES (SPECIAL POWERS) ACT (AFSPA) EXTENDED TO PARTS OF NAGALAND AND AP

Syllabus: GS3/ Security

In News

- The Ministry of Home Affairs has extended the Armed Forces (Special Powers) Act (AFSPA) in some districts of Nagaland and Arunachal Pradesh for a period of six months.

About

- Currently, AFSPA is in effect in parts of **Nagaland, Assam, Manipur, and Arunachal Pradesh.**
- In Jammu and Kashmir, the law is enforced through the Armed Forces (J&K) Special Powers Act, 1990. The AFSPA grants special powers to the armed forces to maintain public order in **"disturbed areas."**

About AFSPA

- Enacted by the Parliament and approved by the President in 1958.
- Grants **extraordinary powers & immunity** to the armed forces to bring back order in the **"disturbed areas".**
  - An area can be disturbed due to **differences or disputes b/w members** of **different religious, racial, language or regional groups or castes or communities.**
- **Provisions:**
  - **Section 3**: **Empowers the Governor** of the State/Union territory to declare the whole or part of the State or Union Territory as a **disturbed area.**
  - **Section 4**: Gives the **powers to the Army** to **s**earch premises and make arrests **without warrants.**
  - **Section 6:** Stipulates that **arrested persons and the seized property are handed over to police.**
  - **Section 7:** The prosecution is permitted only after the sanction of the Central Government.
- **Rationale behind its imposition**
  - Effective functioning of forces in **counter-insurgency / terrorist operations.**
  - Protection of members of Armed forces
  - Maintaining Law & Order
  - Security & sovereignty of the nation
- **Criticisms**
  - **Atrocities and human rights violations** by security agencies.
  - **Against democratic regime** & threat to Fundamental Rights
  - **Ineffectiveness** in countering insurgency.
  - Justice **Jeevan Reddy Committee** & **Santosh Hegde Committee** recommended repealing.
- **Way Forward**
  - Transparency & removing ambiguity in the law, development in NE, check on HR violations are the need of the hour.

Source: TH

SPONGE CITIES: A SOLUTION FOR URBAN FLOODING

Context

- Heavy rainfall in northern India has caused widespread flooding, landslides, that damage basic infrastructures and food supplies can be tackled using the innovative concept of sponge cities.

Urban Flooding in India

- Urban flooding occurs when built-up areas — such as cities and towns — experience inundation due to heavy rainfall, rapid snowmelt, or other sources of water runoff.
- Unlike rural floods, which typically affect flat or low-lying regions, urban flooding is a man-made disaster exacerbated by factors like unplanned urbanisation and inadequate drainage systems.
- As our cities grow, they alter natural processes, replacing permeable land surfaces with concrete and asphalt, which limits the ground's ability to absorb rainwater.
- Consequently, surface runoff overwhelms drainage systems, leading to disruptions, property damage, and even loss of life.

Causes of Urban Flooding in India

- **Unplanned Urbanisation:** Rapid urban growth often occurs in low-lying areas due to rising land prices and limited availability in city centres.
  - Unfortunately, these developments often encroach upon lakes, wetlands, and riverbeds, reducing the capacity of natural drains and exacerbating flooding.
- **Impervious Surfaces:** Roads, buildings, and other impervious structures prevent rainwater from seeping into the ground.
  - As cities expand, the natural ability of soil to absorb water diminishes, leading to increased surface runoff.
- **Ground Subsidence:** The weight of heavy buildings and excessive groundwater extraction can cause ground subsidence, making urban areas more susceptible to flooding.

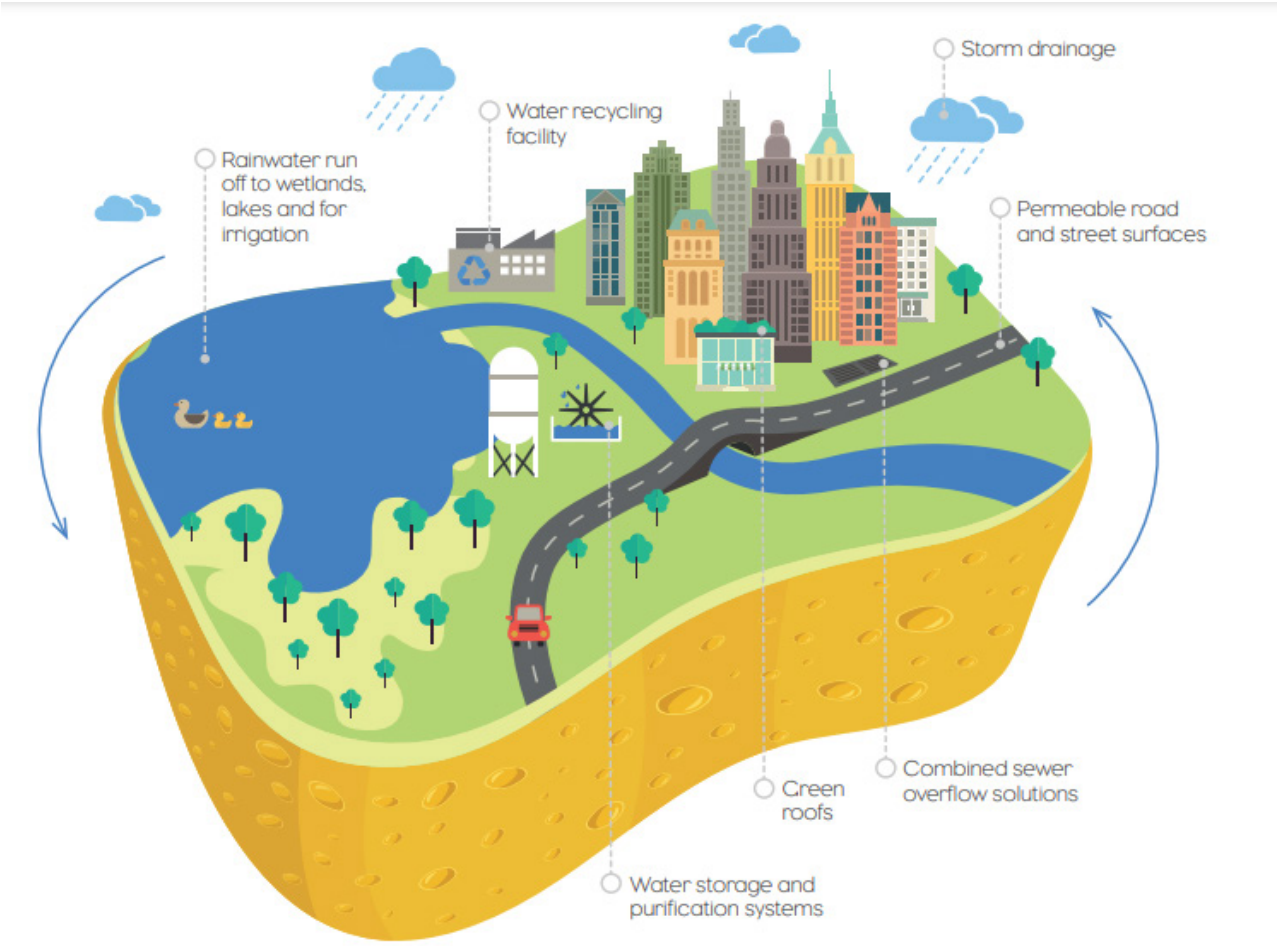
Sponge Cities: A Nature-Based Solution

- The **concept of 'sponge cities' originated in China** and has gained attention worldwide. These cities **prioritise flood management** by emphasising **green infrastructure** over traditional grey infrastructure (pipes and pumps).
- **Green Infrastructure:** Instead of relying solely on concrete drainage systems, sponge cities

incorporate **natural elements** like plants, trees, wetlands, and permeable pavements. These act as 'sponges' by absorbing rainwater, slowing down its flow, and purifying it.

Working

- **Permeability**: Sponge cities prioritise permeable surfaces. Instead of vast concrete jungles, they incorporate green spaces, parks, and porous pavements. These surfaces allow rainwater to infiltrate the ground, replenishing aquifers and reducing surface runoff.
- **Storage and Retention:** These cities store rainwater strategically. They create retention ponds, wetlands, and underground storage tanks to capture excess water during heavy rainfall. By doing so, they prevent sudden floods downstream.
- **Natural Drainage:** Sponge cities restore natural drainage systems. They revive rivers, streams, and wetlands, allowing water to flow naturally. This approach mimics nature's hydrological cycle, preventing urban floods.



Benefits

- **Flood Reduction**: By retaining and gradually releasing rainwater, sponge cities prevent flash floods.
- **Ecological Biodiversity:** Urban parks, green spaces, and wetlands improve biodiversity and provide habitats for wildlife.
- **Heat Island Mitigation:** Vegetation helps cool urban areas, reducing the heat island effect.
- **Water Scarcity Alleviation:** Capturing rainwater contributes to water availability during dry spells.

Case Study: Guwahati's Flooding Challenges

- **Infrastructure Mess:** Citizens face anxiety due to inadequate infrastructure. The Guwahati Metropolitan Development Authority (GMDA) often operates without engaging with the public or understanding their needs. The municipal corporation, responsible for urban planning, is sidelined, leaving a governance gap.
- **Haphazard Urban Development:** Brokers have played a role in sub-letting land and plots, resulting in haphazard development.

Open spaces have been encroached upon, exacerbating the problem.

- **Incomplete Drainage System:** The drainage system remains inadequate due to poor planning and incomplete execution of past development plans.

Steps Toward Resilience

- **Town Planning Schemes:** Recent adoption of town planning schemes in Guwahati signals progress. However, more needs to be done to fix fundamental flaws.
- **Revisit Drainage Plans:** Focusing on major drainage channels and revisiting the 1972 drainage plan could improve water flow. Implementing this effectively is crucial.

Examples of Sponge Cities

- **China** has been at the forefront of implementing sponge city principles. China launched the **Sponge City Initiative in 2015**, investing in projects that can absorb floodwater. They are building these projects in 30 cities, including Shanghai, Wuhan, and Xiamen.
- **Wuhan**: This city transformed its urban landscape by creating permeable pavements, green roofs, and wetlands to manage stormwater.
- **Chengdu**: By integrating natural features like lakes and green spaces, Chengdu reduced flood risk and improved water quality.
- **Xiamen**: Xiamen's sponge city initiatives include rain gardens, retention ponds, and porous pavements.

Learning from Other Cities

- **Chennai:** The Greater Chennai Corporation aims to transform the entire city into a sponge. Fifty-seven ponds are being developed as model Sponge City Parks, emphasising both flood control and groundwater recharge.
- **Bengaluru:** Bengaluru is exploring sponge city systems, including underground storage tanks, to combat flash floods.

Conclusion

- As India faces the dual challenges of rapid urbanisation and climate change, adopting sponge city principles could be transformative.
- By blending nature with urban design, sponge cities can create resilient, sustainable cities that effectively manage water, reduce flooding, and enhance overall livability.

Source: IE

NEWS IN SHORT

INDIAN OCEAN RIM ASSOCIATION (IORA)

In News

- The second edition of the **Indian Ocean Rim Association (IORA)** seminar on Illegal, Unreported and Unregulated (IUU) Fishing was conducted at Naval War College, Goa.

About Indian Ocean Rim Association (IORA)

- **Formation:** Established in 1997, is a multilateral organization comprising 23 member countries from Africa, West Asia, South Asia, Southeast Asia, and Australia.
  - IORA was inspired by a speech by Nelson Mandela in 1995, where he emphasized the need for cooperation among Indian Ocean states.
- **Aim:** It focuses on fostering cooperation in the Indian Ocean region on issues like maritime safety, trade facilitation, fisheries management, disaster risk management, and climate change.
- **Membership:** Comprises 23 member countries from Africa, West Asia, South Asia, Southeast Asia, and Australia, all located around the Indian Ocean. These include countries like India, Australia, Indonesia, South Africa, Malaysia, UAE, and more.
- **Dialogue Partners:** The IORA has 11 dialogue partners, including China, U.S., Japan, Germany, Russia, and Saudi Arabia.
- **Troika Leadership:** The IORA's apex body is the Council of Foreign Ministers, which meets annually. The Chair rotates every two years among members. Currently, Sri Lanka is the Chair, India is the Vice-Chair, and Bangladesh was the previous Chair.

Significance

- The Indian Ocean is of immense strategic importance, with **80% of global oil trade and 50% of containerized cargo** passing through it.
- IORA provides a platform for India to engage with regional partners, avoiding geopolitical rivalries, particularly with China. IORA's strategic focus includes keeping the Indian Ocean free and open for trade while emphasizing respect for sovereignty.

- India, currently the Vice-Chair of IORA, uses the organization to strengthen regional ties without the contention seen in other organizations like SAARC and BIMSTEC.

Some Flagship Projects of IORA

- **IORA Working Group on Maritime Safety and Security:** Aims to enhance maritime cooperation, ensure safe and secure sea lanes, combat piracy, and address maritime challenges across the Indian Ocean.
- **Counter Piracy and Armed Robbery against Ships (ReCAAP-ISC):** A collaboration to strengthen regional capacities and share intelligence to prevent piracy and armed robberies in the Indian Ocean.
- **Indian Ocean Tsunami Warning and Mitigation System (IOTWMS):** Works with member states to monitor and respond to natural disasters like tsunamis.
- **IORA Blue Economy Initiatives:** Promote sustainable use of ocean resources, focusing on industries like fisheries, maritime trade, tourism, and renewable energy.

Source: PIB

IMF APPROVES $7 BILLION BAILOUT FOR PAKISTAN

Context

- The International Monetary Fund's board (IMF) approved a **$7 billion Extended Fund Facility (EFF)** for Pakistan, providing a critical boost to the country's struggling economy.

About

- **The International Monetary Fund (IMF)** provides financial assistance to countries facing economic crises, primarily through different lending mechanisms.
- In return, the recipient countries have to **implement specific economic reforms.**

IMF Lending Mechanisms

- **Stand-By Arrangements (SBA):** This is intended to address short-term balance of payments problems.
  - Typically lasts **12 to 24 months** and involves conditions such as fiscal consolidation, monetary tightening, and structural reforms.
- **Extended Fund Facility (EFF):** This is used for countries with prolonged structural imbalances or deeper economic problems, as in the case of Pakistan.
  - It typically covers a **longer time horizon (up to four years)** and focuses on medium- to long-term reforms.
  - The conditions focus on structural reforms, fiscal policies, and debt sustainability.
- **Rapid Financing Instrument (RFI):** It is used for urgent balance of payments needs due to economic shocks, natural disasters, or conflict without the need for a fully-fledged economic program.
- **Poverty Reduction and Growth Trust (PRGT):** Concessional lending aimed at low-income countries to support poverty reduction and growth programs.
- **Flexible Credit Line (FCL) and Precautionary Liquidity Line (PLL):** These are aimed at countries with relatively strong economic fundamentals but in need of precautionary funding to guard against external shocks.

International Monetary Fund (IMF)

- The IMF was established in **1944** in the aftermath of the Great Depression of the 1930s.
- The organization is currently composed of **190 member** countries.
  - Each member has representation on the IMF's executive board in proportion to its financial importance.
- The primary goal of the IMF back then was to bring about international economic coordination to **prevent competing currency devaluation** by countries trying to promote their own exports.
- Eventually, the IMF evolved to be a **lender of last resort** to governments of countries that had to deal with severe currency crises.

Source: BS

INDIA IS THE WORLD'S THIRD LARGEST PRODUCER AND CONSUMER OF ETHANOL

Context

- The Union Minister for Food and Public Distribution during the India Sugar & Bio Energy Conference said that India is now the world's third largest producer and consumer of Ethanol.

About

- **During 2014-24,** the area of **sugarcane cultivation increased by about 18%** while the sugarcane **production has increased by 40%**.
- Also India is the **second largest producer of sugarcane** after Brazil.

Steps taken to increase ethanol production

- **The Minimum Selling Price (MSP)** of sugar was introduced in **2018** to protect the interests of farmers and the sugar industry by the Centre.
- **Bio-Refineries:** India is setting up multiple **second-generation ethanol biorefineries** to produce ethanol from agricultural waste.
  - For example, in **2022**, Indian Oil Corporation Limited (IOCL) launched Asia's first 2G Ethanol Biorefinery in **Panipat, Haryana.**
- **Tax reduction:** The Government has **lowered the Goods and Services Tax** rate to **5% from 18%** on ethanol meant for blending under the Ethanol Blended Petrol (EBP) Programme.
- **The National Policy on Biofuels-2018,** as amended in 2022, has identified various feedstocks for ethanol production, like C & B – Heavy Molasses, sugarcane juice, sugar containing materials, starch containing materials such as corn cassava, rotten potatoes etc.

Conclusion

- The farmers are evolving from being the **Anna Dattas to becoming Urja Dattas**, reflecting the vital role they play in India's renewable energy landscape.
- **The synergy between agriculture and green energy** is essential for building a sustainable and resilient future for India, aligning with the country's global climate goals of **Net Zero Emissions by 2070.**

Source: PIB

ABHED

In News

- The Defence Research & Development Organisation (DRDO), in collaboration with researchers from IIT Delhi, has developed the **ABHED bulletproof jacket.**

About ABHED

- These are the **lightweight bulletproof jackets.**
- The jacket uses a combination of polymers and **boron carbide ceramic materials**, known for their high **strength-to-weight ratios.**
- It is capable of withstanding high-velocity projectiles, enhancing soldier safety during combat.
- ABHED's indigenous development strengthens India's defence capabilities and positions the country as a potential competitor in the global defence market.

Source: FE

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