Role of Trade in reducing Food Insecurity and preventing famine examined by UNCTAD Report

The report analyses various drivers of food insecurity and how can trade play a mitigating role in addressing these challenges

Role of Trade in addressing Food Insecurity

- **Sustainable supplies can ensure food availability:** E.g. 30% of Africa's cereal needs are met through imports
- **Stabilizing prices and markets:** E.g. **Black Sea Initiative** (brokered by UN and Türkiye) during Russia-Ukraine war facilitated food and fertilizer exports

Challenges

- **Higher costs: E.g.** non-tariff measures, such as sanitary standards, can increase food import costs by 20%.
- **High Import dependency:** It exposes countries to global price hikes and supply chain disruptions.
- **Rising transportation costs:** It affects developing and least developed countries disproportionately.

Recommendations

- Reach a **"Short Term Export Facilitation Mechanism to Combat Severe Food Insecurity"** at international forum, such as WTO
- **Reduce trade barriers & boost export capacities** of food insecure countries.
- **Invest in trade infrastructure** such as ports, transport networks and storage f**acilities to shorten supply chains and reduce vulnerabilities to global disruptions** especially for low-income countries.
- **Support climate-smart and sustainable farming in developing countries.**

Factsheet

- >280 million faced acute hunger whereas ~733 million faced chronic hunger (2023)
- Without urgent action, 582 million could be chronically hungry by 2030.

Drivers of global hunger

- **Armed conflict:** affected 5 million people in 20 countries(2022)
- **Climate change:** It has led to reduction in agricultural productivity by 21% since 1961.
- **Urbanization:** It is blurring lines between rural and urban areas thereby impacting agrifood systems

Union Minister of Housing & Urban Affairs highlights need for better Urban Planning

The minister emphasized sustainable urban environments and better urban planning as **50% of the population are expected to reside in cities by 2047.**

Present issues related to Urban Planning

- **Out-dated Spatial & Temporal plans** fail to accommodate population growth.
- **Lack of modern planning framework,** rigid master plans and restrictive zoning regulations
- **Housing Issues: E.g.** building regulations often limits urban density leading to proliferation of slums. **E.g. 17.3% of the total urban population was under slums in India (Census 2011)**
- **Environmental challenges such as air pollution** affect people's health and productivity, diminishing quality of life.
- **Lack of disaster resilience for cities: E.g. Chennai Flood (2015)** caused due to encroachment of lakes and riverbeds

Steps to be taken

- **Enhancing Ease of living:** by empowering staff with skills and knowledge required to plan better and manage cities
- **Use of data and Technology:** to make capacity-building initiatives a catalyst for strengthening urban governance.
- **Integration of Traditional Wisdom:** To reimagine historic Indian cities and shape future cities.
- **Develop cities as examples of equity, equality, and sustainability:** with use of innovation and citizen centric governance to achieve inclusiveness, especially for marginalized communities

Initiatives taken

- **Smart Cities Mission:** Launched in 2015, aims to improve the quality of life in 100 cities by providing efficient services, robust infrastructure, and sustainable solutions.
- **Pradhan Mantri Awas Yojana (Urban) Mission** intends to provide housing in urban areas.
- **Rental housing for industrial workers** to be facilitated in PPP mode, Transit Oriented Development plans, etc.

Stampede Caused by Overcrowding At Tirupati Resulted In Loss of Lives

Stampede is "an **impulsive mass movement of a crowd** that often results in injuries and deaths" due to Traumatic asphyxia (cessation of respiration) or other injuries.

- Reportedly, **religious gatherings** accounted for **79% of India's stampedes between 1954-2012.**
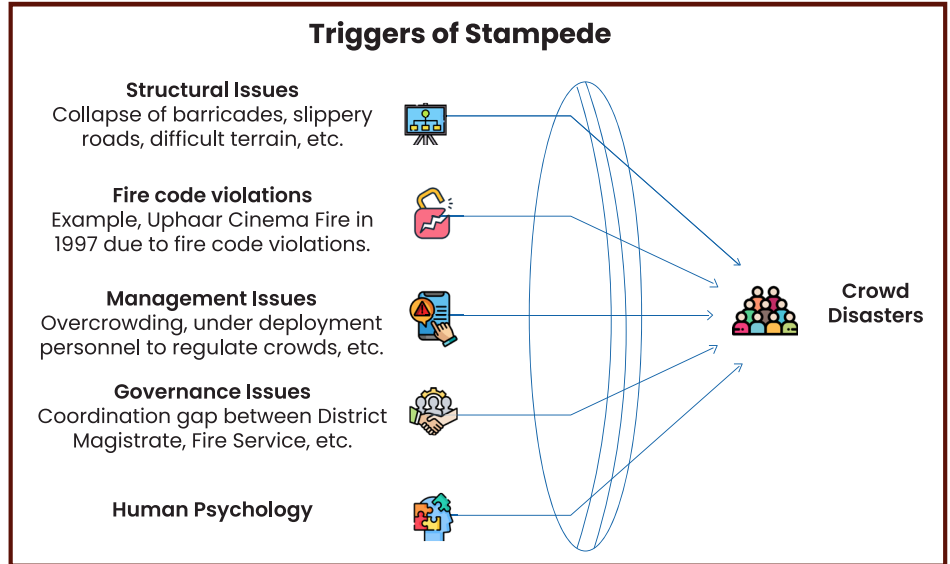- Recent examples include the 2024 incidents at **Hathras and Kalkaji temple.**

Crowd Management

Highlights of **National Disaster Management Authority (NDMA) Guidelines** on crowd management:

- **Crowd management strategies and arrangement:** Capacity Planning (infrastructure development), Understanding of crowd Behaviour and Crowd Control by restricting or limiting group behaviour.
- **Risk Assessment & Mitigation:** Identify and address potential **hazards.**
- **Information Management:** Clear communication with visitors and stakeholders.
- **Safety & Security:** CCTV surveillance and emergency exits.
- **Medical Services:** Equipped facilities and trained personnel.
- **Traffic Management:** Efficient transportation and clear route marking.

Best Practices in Crowd Management

- **Japan and Singapore:** Leverages advanced technology such as AI-powered crowd monitoring systems, real-time data analysis, mobile applications etc.
- **Saudi Arabia – Hajj Pilgrimage Management:** Saudi Arabia uses a combination of crowd flow modeling, designated time slots for rituals etc.

Triggers of Stampede

Structural Issues
Collapse of barricades, slippery roads, difficult terrain, etc.

Fire code violations
Example, Uphaar Cinema Fire in 1997 due to fire code violations.

Management Issues
Overcrowding, under deployment personnel to regulate crowds, etc.

Governance Issues
Coordination gap between District Magistrate, Fire Service, etc.

Human Psychology

→ **Crowd Disasters**

Home Minister Chair the Review meeting of Bureau of Police Research and Development (BPR&D)

Home Minister reviewed BPR&D's work on implementing new criminal laws and urged it to address grassroots policing challenges while improving the police's global image.

- **BPR&D** was established in **1970** under the Home Ministry, with the primary the **objective of modernisation of the police force.**
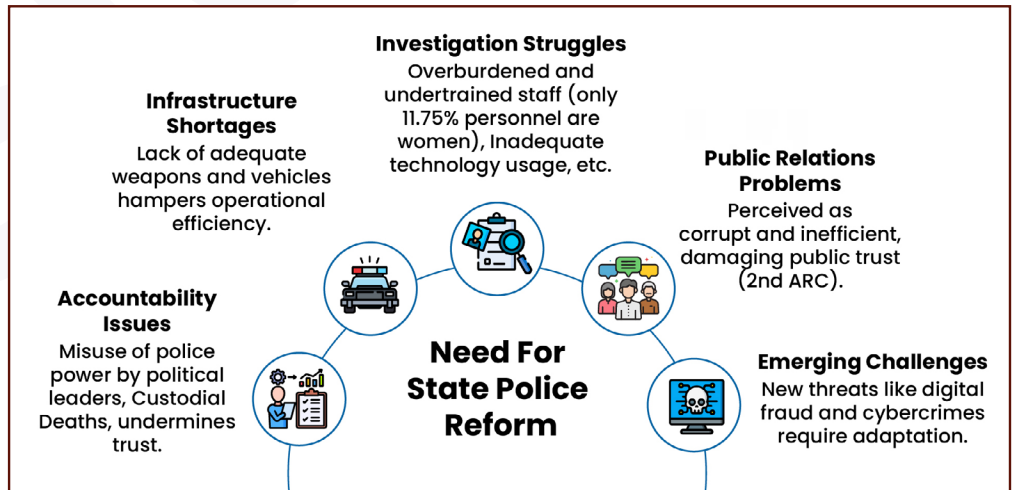
Overview of Police Organization in India

- **State Subject:** Policing is primarily governed by states under the Indian Constitution.
- **Centre's Assistance to States:** Central police forces assist State Police with intelligence and internal security challenges (e.g., insurgencies).
- **Functions of Police:** Enforce laws and investigate crimes, maintain law and order, provide security and ensure public safety.
- **Accountability of Police:** Ministers have superintendence and control over police forces to ensure accountability.

Need For State Police Reform

Infrastructure Shortages
Lack of adequate weapons and vehicles hampers operational efficiency.

Investigation Struggles
Overburdened and undertrained staff (only 11.75% personnel are women), Inadequate technology usage, etc.

Public Relations Problems
Perceived as corrupt and inefficient, damaging public trust (2nd ARC).

Accountability Issues
Misuse of police power by political leaders, Custodial Deaths, undermines trust.

Emerging Challenges
New threats like digital fraud and cybercrimes require adaptation.

Initiatives for State Police Reform

- **Modernisation of State Police Forces (MPF) Scheme:** A five-year program (2021-26) with 15 sub-schemes to improve police infrastructure and operations.
- **SMART Policing: Introduced by the Prime Minister in 2014, focusing on making police SMART (S**trict and Sensitive; **M**odern and Mobile; **A**lert and Accountable; **R**eliable and Responsive; **T**ech-savvy and Trained
- **Women Representation:** MHA advised States/UTs to set up all-women police stations in each district and increase women personnel to 33%.

Strengthening state police can be further achieved through **community policing, and implementing the Supreme Court's directions in the Prakash Singh vs Union of India (2006)** case, etc.

Government makes 10,000-Genome Database available to researchers across the globe

The database created under **Genome India Project** will be made available to researchers as **digital public good** through:-

- **Indian Biological Data Centre (IBDC) Portals**
  - ⊕ It archives and provides access to India's genomic data, enabling researchers to explore genetic variations and develop precise genomic tools and
- **'Framework for Exchange of Data Protocols (FeED)'** .
  - ⊕ Launched under **Biotech-PRIDE Guidelines,** FeED ensures ethical, transparent, and responsible sharing of high-quality, nation-specific genomic data.
    - ◆ Biotech-PRIDE Guidelines provide a **framework for the responsible, ethical, and transparent sharing** of biological and genomic data in India.

Significance and Future Outlook of Initiative

- **Revolutionizing Personalized Healthcare:** by enabling treatments tailored to India's demographics ensuring low-cost diagnostics and precise genetic studies
- **Growth of Bioeconomy: India's bioeconomy grew from $10 billion in 2014 to $130 billion in 2024,** with a target of **$300 billion by 2030**
  - ⊕ India now **ranks 12th globally in biotech** and 3rd in the Asia-Pacific region.
- **Catalyzing Interdisciplinary Research:** By providing insights, in agricultural, environmental, and industrial sectors
- **Catalyst for Healthcare Transformation:** Drives advancements in mRNA vaccines, protein manufacturing, and genetic disorder treatments etc.

About Genome India Project:

- **Launched in 2020 by Department of Biotechnology,**
- **Aim:** to catalogue genetic variations across India's diverse population through large-scale genome sequencing.
- **Genome is made up of DNA** and is embedded in 23 pairs of chromosomes

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Ministry of Commerce & Industry launched 8th edition of National Programme for Organic Production (NPOP)

8th edition of NPOP is aimed at promoting **ease of operations and enhancing transparency** for stakeholders, including farmers.

- NPOP **strengthens India's organic certification system (refer to the infographics).**
- **APEDA,** Ministry of Commerce & Industries, **is implementing Agency.**
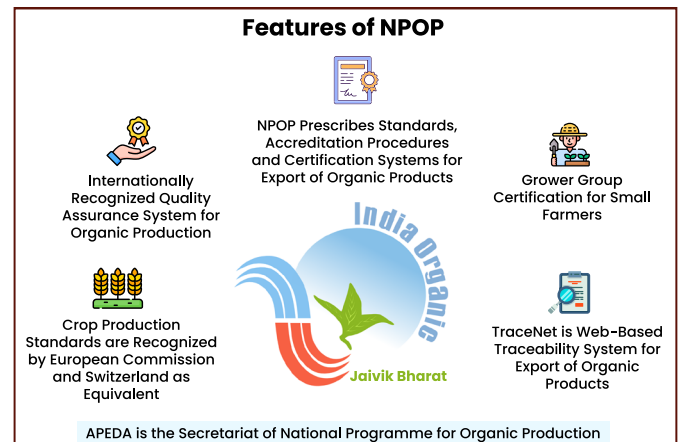
Key highlights of 8th Edition of NPOP

- **Simplified Certification: Organic grower groups** have been **granted legal status** in place of the Internal Control System (ICS).
- **Market Support:** ICS of organic grower groups must ensure the procurement of the entire organic produce or **establish market linkages to support farmers.**
- **Faster land conversion to organic farming:** Reducing the transition period by up to three years under specific conditions.

Portals unveiled during the event:

- **NPOP Portal** for streamlined stakeholder operations
- **Organic Promotion Portal** linking farmers to global buyers
- **TraceNet 2.0** for enhanced traceability
- **Revamped APEDA Portal** for improved user experience

Achievements of NPOP

- **Global Ranking: India** ranks **first globally in organic producers and second in organic agricultural land.**
- **Certified area:** Total certified area reaches **7.3 million hectares** (2023-24), with **Madhya Pradesh leading,** followed by Maharashtra and Rajasthan.
- **Organic Exports:** Currently at ₹4,007.91 crore, are projected to reach ₹**20,000 crore in three years.**

Features of NPOP

Internationally Recognized Quality Assurance System for Organic Production

NPOP Prescribes Standards, Accreditation Procedures and Certification Systems for Export of Organic Products

Grower Group Certification for Small Farmers

Crop Production Standards are Recognized by European Commission and Switzerland as Equivalent

India Organic
Jaivik Bharat

TraceNet is Web-Based Traceability System for Export of Organic Products

APEDA is the Secretariat of National Programme for Organic Production

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Also In News

⚖ Supriyo vs. UoI Case 2023

Supreme Court dismissed the review petitions against the verdict delivered in **Supriya Chakraborty vs. UoI Case .**

Supriyo vs. UoI Case 2023

- **Court declined to recognize queer marriages,** leaving it to the legislature.
  - ⊕ **Queer** refers to people who identify themselves as LGBTQ+ (lesbian, gay, bisexual, transgender, queer and intersex).
- **Directed** Centre to **form a committee to examine queer rights** without recognizing marriage.
  - ⊕ Centre has formed a committee, l**ed by the Cabinet Secretary in compliance with this direction.**
- **Queer couples have the right to cohabit** without violence or interference, but no marriage recognition.

Kisan Pehchaan Patra(Farmer ID)

The Centre has made it **mandatory for new applicants to obtain a farmer ID for enrolment** into the **Pradhan Mantri Kisan Samman Nidhi (PM-Kisan).**

- PM Kisan provides **income support of 6,000/- per year** in three equal instalments to **all land-holding farmer families.**

Kisan Pehchaan Patra

- This **Aadhaar-like digital identity** links farmers to state land records and **verifies land ownership.**
- The database created through the farmer ID will be known as **Farmer's Registry.**
  - ⊕ **Farmer's Registry** is one of the three registries under the **Agri-Stack (others being** Geo-referenced village maps, and Crop Sown Registry).
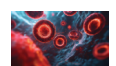
E-way bills

E-way bills in December was at second highest level in two years signalling supply chain recovery

About E-way bills

- E-way bills/electronic bills are required for **transporting goods valued over ₹50,000** within and across states.
- They serve as an **early indicator of economic activity** by tracking goods movement.
- It is generated from the **GST Common Portal** for the E-Way Bill system by registered persons or transporters
- Starting April 1, **Multi-Factor Authentication will become mandatory** for all taxpayers using the e-way bill system.

AnemiaPhone

Cornell University's AnemiaPhone technology, now transferred to ICMR, offers quick, accurate, and cost-effective iron deficiency assessment.

- ICMR will integrate it into its programs for anemia, women's health and maternal and child health throughout the country.

About Anemia in India

- **Anaemia** is a condition in which number of red blood cells or the haemoglobin concentration within them is lower than normal.
- It affects 59% of **adolescent girls, 57% of women (15-49 years) and 67% of children (6-59 months) in India** (NFHS-5)
- **Anaemia Mukt Bharat strategy** uses a **6x6x6 approach** (6 target beneficiary groups, 6 interventions, 6 institutional mechanisms) **to reduce anaemia in the life cycle approach.**

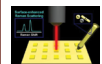## Dhruv Advanced Light Helicopters (DALHs)

Hindustan Aeronautics Limited (HAL) has stated that DALHs flying safety records are better in comparison to global standards.

About Dhruv ALHs

- Is an **indigenously** developed utility aircraft by HAL with a **twin engine.**
- It has a **multi-role, multi-mission dimension** to it.
- It can be used for the **military as well as for civil operations.**

Variations

- **ALH Dhruv Mk III UT (Utility):** Indian Army version, is designed for Search & Rescue, Troop Transportation, Internal Cargo, etc.
- **ALH Mk III MR (Maritime Role):** Indian Coast Guard version, designed for Maritime Surveillance and Interdiction, Search and Rescue, Rappelling Operations, etc.

Surface-enhanced Raman spectroscopy (SERS)

Sustainable, efficient nano catalysts have been developed which have uses in environmental remediation, nanoscale electronics, and surface-enhanced Raman spectroscopy (SERS)

About Surface-enhanced Raman spectroscopy (SERS)

- It is a highly sensitive technique that enhances **Raman scattering** of molecules supported by nanostructured materials.
- **Raman Spectroscopy is a non-destructive chemical analysis technique** and provides Information such as
  - chemical structure and identity,
  - Intrinsic stress/strain,
  - contamination and impurity.
- **Applications:** Nanotechnology, Biomedicine, Food Science, Environmental Analysis, Biochemistry and Biosensing etc.

EmpowHER Biz

The Women Entrepreneurship Platform (WEP) of NITI Aayog has launched EmpowHER Biz – Sapno Ki Udaan.

- WEP, incubated in NITI Aayog in 2018 as an aggregator platform have transitioned into a **public-private partnership** in 2022

EmpowHER Biz

- **Objectives**
  - Empower women entrepreneurs by equipping them with the skills and resources needed.
  - It will offer mentorship covering retail management, digital tools, financial literacy and business development to aspiring women entrepreneurs.

Gulf of Mexico

Recently, there has been a proposal to change name of **Gulf of Mexico** to "Gulf of America".

About Gulf of Mexico

- **Boundaries:** United States (North), Mexico (West and South), Cuba (South-east).
- It connects to the **Atlantic Ocean** through the **Straits of Florida** and to the **Caribbean Sea via the Yucatán Channel.**
- **Draining Rivers:** Mississippi River, Rio Grande
- **Control and Ownership:** Shared by **U.S., Mexico, and Cuba**
- **Significance:** Large continental shelf, oil and natural gas extraction, fisheries etc.
- **Vulnerability : Prone to hurricanes and twisters** due to warm waters and atmospheric conditions

Place in News — Chad (Capital: N'Djamena)

A recent assault on the Chadian presidential complex has left multiple dead.

Physical features:

- It is a **landlocked country in north-central Africa,** is **often referred to as the "Dead Heart of Africa"** due to its central location and arid climate.
- **Land Boundaries:** Libya (North), Sudan (East), Central African Republic (South), Cameroon (Southwest), Nigeria (Southwest), Niger (West).

Geographical Features

- **Climate:** Tropical in the south, desert in the north, with distinct wet and dry seasons.
- **Major Rivers:** Chari River, Logone River, and their tributaries.
- **Mineral Resources: Oil, Gold, Uranium, Natron**

AHMEDABAD BENGALURU BHOPAL CHANDIGARH DELHI GUWAHATI HYDERABAD JAIPUR JODHPUR LUCKNOW PRAYAGRAJ PUNE RANCHI