

CORPORATE SOCIAL RESPONSIBILITY

Companies that pushed the envelope of charitable spending beyond legal requirements helped take the aggregate CSR (corporate social responsibility) expenditure by all listed companies closer to the cumulative mandatory amount in 2021-22.



About Corporate Social Responsibility:

- **What it is?** It is a business model by which companies make a concerted effort to operate in ways that **enhance** rather than degrade **society and the environment**.
- It helps both improve various aspects of society as well as **promote a positive brand image of companies**.
- **Section 135 of the Companies Act, 2013** makes it mandatory for the following companies having in the immediately preceding financial year:
 - Every company having a **net worth of rupees five hundred crores or more**, or
 - Every company having a **turnover of rupees one thousand crores** or more, or
 - Every company has a **net profit of rupees five crores** or more to comply with CSR provisions.

SVAMITVA SCHEME

Recently, the Uttar Pradesh state government completed the distribution of 55,14,921 'gharaunis' (rural house records) under the Svamitva scheme.



About Svamitva scheme:

- A survey of villages and mapping with improvised technology in village areas (SVAMITVA) is a **Central Sector Scheme**.
- It was **launched in 2021** after the successful completion of the pilot phase of the scheme (2020-2021) in 9 states.
- It seeks to give **ownership of property in rural inhabited areas**, by mapping land parcels using drone technology and providing a 'Record of Rights' to village household owners with the issuance of legal ownership cards (Property cards/Title deeds) to the property owners.

- **Implementation:** It is implemented with the collaborative efforts of the Ministry of Panchayati Raj, State Revenue Department, State Panchayati Raj Department and Survey of India.
- Full coverage of nearly 6.62 lakh villages in India and establishment of an extensive **CORS network** with 567 CORS stations.

What is the CORS network?

- A **Continuously Operating Reference Stations (CORS)** network provides regional positioning service.
- In CORS Infrastructure, the **corrections to the map are instantly** sent to the rover receiver from the control centre which helps to find the very accurate positioning of the rover in real me.
- It plays a major role in **achieving centimetre accuracy positioning** in many applications, for example, cadastral mapping, land information management, large-scale mapping etc.

WHAT IS OSTEOARTHRITIS?

Scientists have recently developed a new injectable cell therapy to treat osteoarthritis.



About Osteoarthritis:

- It is a **degenerative joint disease** that can **affect the many tissues of the joint**.
- It is the **most common type of arthritis**. Arthritis refers to biomechanical changes within a joint.
- Osteoarthritis **occurs when the protective cartilage that cushions the ends of the bones wears down** over time.
- Although osteoarthritis can damage any joint, the disorder **most commonly affects joints in your hands, knees, hips and spine**.
- It is more **likely to develop as people age**. But it can **affect much younger people, too**, especially those who have had a prior joint injury
- **Symptoms:**
 - Symptoms often **develop slowly and worsen over time**.
 - It includes **Pain, Stiffness, Tenderness, Loss of flexibility**, Grating sensation, Bone spurs and

- **Treatment:**

- There is **no cure for Osteoarthritis**, but **medication, assistive devices and other therapies** that don't involve drugs **can help to ease the pain.**
- As a **last resort**, a **damaged joint may be surgically fused or replaced** with one made of a combination of metal, plastic and/or ceramic.

WHAT IS UNIQUE LAND PARCEL IDENTIFICATION NUMBER (ULPIN)?

The Rural Development Ministry recently said that ULPIN has been adopted by 26 states and union territories so far.



About Unique Land Parcel Identification Number (ULPIN):

- It is part of the **Digital India Land Records Modernization Programme (DILRMP).**
- ULPIN or Bhu-Aadhar is a **14-digit identification number accorded to a land parcel.**
- It would uniquely **identify every surveyed parcel of land** and prevent land fraud, **especially in rural India, where land records are outdated and disputed.**
- The identification is **based on the longitude and latitude coordinates** of the land parcel and **depends on detailed surveys and geo-referenced cadastral maps.**
- It aims to **compile every detail pertaining to different properties** from across the country.
- ULPIN is a **Single, Authoritative Source of Truth for information** on any parcel of land or property to **provide Integrated Land Services to the citizens** as well as all stakeholders.
- **Various types of data** relating to the landed properties, which are **currently under the possession of different ministries and departments**, too **will be linked with the ULPIN.**

Digital India Land Records Modernization Programme (DILRMP):

- It is a **central sector scheme** being implemented by the Department of Land Resources **under the Ministry of Rural Development.**
- **Aim:** It attempts to **build upon the commonalities** that exist in the arena of **land records in various States to develop an appropriate Integrated Land Information Management System (ILIMS)** across the country.

- The **ILIMS** integrates all the processes and lands records databases with the banks, financial institutions, circle rates, Registration Offices and other sectors.
 - **Major components: Computerization of land records, Survey/re-survey, Computerization of Registration.**
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WHAT IS OPERATION KAVERI?

India recently launched ‘Operation Kaveri’ to evacuate its nationals from conflict-torn Sudan.



About Operation Kaveri:

- It is a rescue operation being carried out by the Indian Government to bring back Indian citizens stranded in Sudan.
- According to the official data, the number of Indians in Sudan is around 4,000.
- As part of the operation, two C-130 aircraft and the navy ship INS Sumedha is on standby to safely evacuate stranded Indians.
- **Why the need for evacuation?** Sudan has been witnessing deadly fighting between the country's army and a paramilitary group, the paramilitary Rapid Support Forces (RSF) that has reportedly left several hundred's dead.
- **Cause of fighting?** It was triggered by disagreement over an internationally backed plan to form a new civilian government four years after the fall of autocrat Omar al-Bashir and two years after the military coup. Both sides accuse the other of thwarting the transition.

Key facts about Sudan:

- It is located in northeastern Africa.
- It is bounded on the north by Egypt, on the east by the Red Sea, Eritrea, and Ethiopia, on the south by South Sudan, on the west by the Central African Republic and Chad, and on the northwest by Libya.
- **Capital: Khartoum**
- Sudan is mainly composed of vast plains and plateaus that are drained by the Nile River and its tributaries.

- The country is **dominated by Muslims**, most of whom speak Arabic and identify themselves as “Arabs.
- **Arabic is the primary language** of much of the population and is the most common medium for the conduct of government, commerce, and urban life throughout the country.

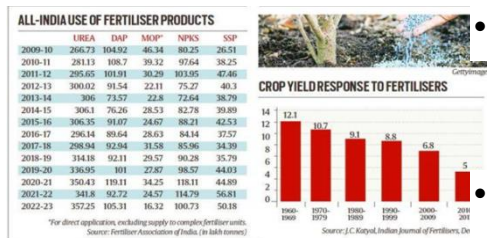
ISSUES RELATED TO FERTILISER SUBSIDIES: WHY UREA RULES INDIA'S FARMS?

Why in News?

- Sales of urea crossed a record 35.7 million tonnes (mt) in the fiscal year ended March 31, 2023.

Urea Consumption in India:

- Like humans, **crops need nutrients** - primary (N, P, K), secondary (S, calcium, magnesium) and micro (iron, zinc, copper, manganese, boron, molybdenum) - for plant growth and grain yield.
- **Fertilisers** are essentially food for crops, which provides essential **nutrients** to the crops.
- High doses of these fertilisers produced more grains and led to the success of the **Green Revolution** in the 960s.
- However, crop yield response to fertiliser use has more than halved over time. **For example**, 1 kg of NPK nutrients yielded 12.1 kg of cereal grains in India during the 1960s, 5 kg during the 2010s.
- The underlying reason has been the **disproportionate application of N by farmers**.



Government Efforts to Reduce Urea Consumption in India:

The introduction of the nutrient-based subsidy (NBS) regime in 2010.

- Under NBS, the government fixed a per-kg subsidy (unlike the earlier product-specific subsidy regime) for each fertiliser nutrient: **Nitrogen (N), phosphorus (P), potash (K) and sulphur (S)**.
- **It aims to promote balanced fertilisation** by discouraging farmers from applying too much urea (46% N), di-ammonium phosphate (DAP - 46% P plus 18% N) and muriate of potash (MOP - 60% K).

- NBS was expected to **induce product innovation**, besides more use of complex fertilisers (having lower concentrations of N, P, K and S in different proportions) and single super phosphate (SSP - containing only 16% P but also 11% S).
- In 2015, the Centre made it **mandatory to coat all indigenously manufactured and imported urea with neem oil**.
- Consumption did dip in the initial two years, but that trend reversed from 2018-19.
- This was followed by replacing 50-kg bags with 45-kg ones in 2018, and the launch of liquid 'Nano Urea' by the Indian Farmers' Fertiliser Cooperative (IFFCO) in 2021.
- None of the above government measures for **checking illegal diversion for non-agricultural use, increasing nitrogen use efficiency** have failed in reducing urea consumption.

What needs to be Done to Reduce Urea Consumption?

- **The obvious solution is to reduce the consumption of N** and promote products containing other nutrients in desired (crop- and soil-specific) combinations.
- For this, the government should make **incorporation of urease and nitrification inhibitors compulsory in urea**.
- These are chemical compounds that inhibit the activity of **urease** (a soil enzyme that breaks down urea into ammonium and further to ammonia) and **nitrifying bacteria** (that convert ammonium to nitrate), making more N available to the crops.
- There are two approaches to cut urea consumption - **raising prices and improving NUE** - enabling farmers to harvest the same or more grain yields with fewer bags.
- **Nano Urea** - ultra-small size of its particles (20-50 nanometers - is primarily aimed at boosting NUE by allowing easier penetration through the stomatal pores of leaves.
- IFFCO claims that **a single 500-ml Nano Urea bottle** containing just 4% N **can replace at least one 45-kg bag of regular 46% N urea**.
- If the government wants to promote Nano Urea (for foliar application directly to the leaves), it may have to **subsidise the cost of spraying**.

VIBRANT VILLAGES PROGRAMME TO BE INTEGRATED WITH PM GATI SHAKTI FOR BETTER MONITORING

Why in News?

- Centre's ambitious Vibrant Villages Programme (VVP) which aims to develop infrastructure and open up villages to tourists along the China border will be integrated with the Prime Minister Gati Shakti mega project.

About Vibrant Village Programme (VVP):

- The Vibrant Village Programme is a scheme announced in the **Union Budget 2022-23**.
- **Objective** – To enhance infrastructure in villages along India's border with China, in states like **Himachal Pradesh, Sikkim, Uttarakhand, and Arunachal Pradesh**.
- The activities will include –
 - Creating infrastructure, housing and tourism centres in villages;
 - Providing 'Direct to Home' facility for Doordarshan and Educational channels;
 - Establishment of road connectivity;
 - Providing assistance for livelihood generation.
- The availability of Doordarshan and Indian educational channels is aimed to thwart any propaganda from Pakistan or China in remote areas of northern Indian states.
- The scheme has been allocated **4,800 crore** for the financial years 2023-24, 2024-25 and 2025-26. The amount allocated for road construction is Rs. 2,500 crore.
- Nodal Ministry – **Ministry of Home Affairs**

Significance of the Vibrant Village Programme:

- The border villages of India are characterised by difficult terrain, weak transport networks and suboptimal socioeconomic indicators.
- Such villages have sparse population, limited connectivity and infrastructure and are often get left out from the development gains. These regions lack development benefits that other states enjoy.
- The programme will help to ensure the inclusion of these border areas in the mainstream gains.
- This is imperative to secure the country's sovereignty and further safeguard them from any possible friction with the neighbours.

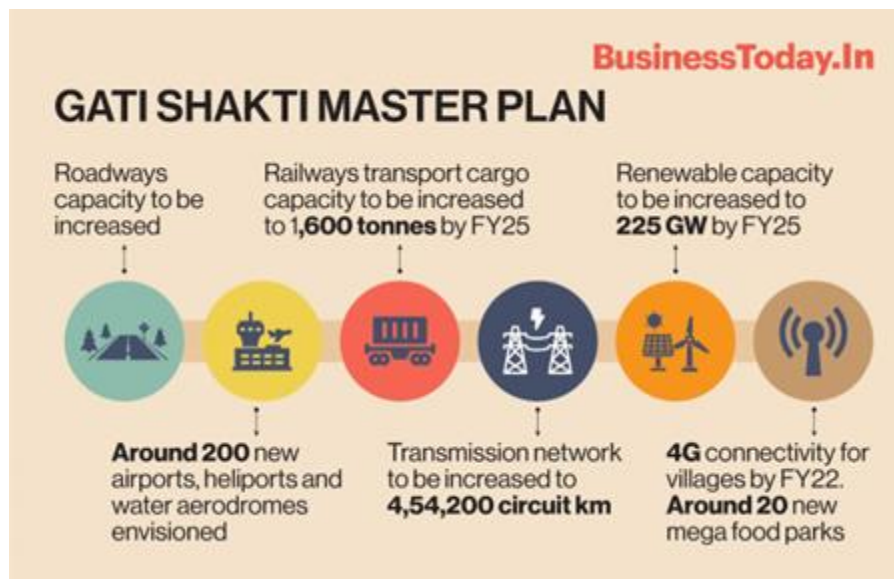
Benefits:

- It will create sustained opportunities for locals, which will stave off out-migration due to economic reasons and may even act as a motivation for reverse migration.
- It will lead to investment in infrastructure and the creation of permanent settlements in far-flung areas in the form of housing and business to cater to the rise of tourists to remote locations like Ladakh.

About PM Gati Shakti:

- The Prime Minister Gati Shakti – National Master Plan was announced in 2021 by Prime Minister Narendra Modi.
- It is essentially a **digital platform** to bring 16 Ministries including Railways and Roadways together for integrated planning and coordinated implementation of infrastructure connectivity projects.
- The multi-modal connectivity will a from one mode of transport to another.
- It will facilitate the last mile connectivity of infrastructure and also reduce travel time for people.

Targets under PM Gati Shakti:



- The **Rs 100 lakh crore national master plan** includes 11 industrial corridors, achieving a Rs 1.7 lakh crore turnover in defence production and having 38 electronics manufacturing clusters and 109 pharma clusters by 2024-25.
- It fixes targets up to 2024-25 for all infrastructure ministries.

- Implementing Agency – **National Networking Group**
 - National Networking Group will consist of experts or officials from all the stakeholder departments.
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ECO BIOTRAPS

Recently, in order to prevent the spread of vector-borne infections in the city, the Brihanmumbai Municipal Corporation (BMC) announced to launch of a pilot project called ‘Eco Biotraps’



About Eco Biotraps:

- **What it is?** Eco Biotraps is pegged as an eco-friendly trap with ‘attractants’ that attract female mosquitoes and lay eggs in its water.
- Eco Biotraps are made from **recycled cardboard**.
- It consists of a **small bag containing** a mixture of **attractant and insecticide**.
- These traps are filled with water and placed in mosquito-infested areas.
- The **attractant and insecticide** (Insect Growth Regulator granules) in the trap bag are immediately mixed with water. After which, the attractant in the water attracts the female mosquito to lay her eggs there.
- The insecticide present in the water destroys the mosquito eggs.

What are Vector-borne diseases?

- These are human **illnesses caused by parasites, viruses and bacteria** that are transmitted by vectors.
 - The burden of these diseases is **highest in tropical and subtropical areas**, and they disproportionately affect the poorest populations.
 - Every year there are more than 700,000 deaths from diseases such as malaria, dengue, schistosomiasis, human African trypanosomiasis, leishmaniasis, Chagas disease, yellow fever, Japanese encephalitis and onchocerciasis.
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