MISHTI SCHEME

Gujarat has emerged as the national leader in mangrove afforestation, covering 19,020 hectares in just two years under the Centre's 'MISHTI' scheme.

● The **Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI)** scheme is a government-led initiative aimed at increasing the mangrove cover along the coastline and on salt pan lands.

- "MISHTI" comes **after India joined the 'Mangrove Alliance for Climate' launched during** the 27th Conference of Parties (**COP27) to the UNFCCC** held in Egypt in November 2022.

- It was l**aunched by the Ministry of Environment, Forest & Climate Change** on the occasion of **World Environment Day, i.e., 5th June 2023.**

- MISHTI envisages the **restoration/reforestation of mangroves** covering approximately 540 sq.km., spreading across 9 states and 3 union territories for a period of **five years commencing 2023-24 onwards.**

- The scheme is **primarily focused on the Sundarbans delta, Hooghly Estuary** in West Bengal, India, and **other bay parts** of the country, but also includes other wetlands in the country.

- Under the MISHTI scheme, the government is providing **financial assistance to local communities** to undertake mangrove plantation activities.

- The scheme also involves **awareness campaigns** to educate people about the importance of mangroves and their role in protecting the environment.

- The **plantation activities** are **carried out in a participatory manner, involving local communities and NGOs,** to ensure sustainability and **community ownership** of the initiative.

AADHAAR GOOD GOVERNANCE PORTAL

Recently, the central government launched Aadhaar Good Governance portal to streamline approval process for Aadhaar authentication requests.

- It is aimed at **streamlining the approval process** for Aadhaar authentication requests.
- It was launched by the **Ministry of Electronics and Information Technology** (MeitY).
- The platform follows the recent amendments to the **Aadhaar Authentication for Good Governance** (Social Welfare, Innovation, Knowledge) **Rules, 2025**, under the Aadhaar Act of 2016.
- The new rules are **designed to support good governance** and improve the delivery of various welfare services and benefits.
- This portal is part of ongoing efforts to simplify processes, enhance service delivery, and improve the overall ease of living for citizens.
- The portal shall work as a resource rich guide, and **offer detailed SOP** for authentication seeking entities on how to apply and how to onboard for Aadhaar authentication.
- Face Authentication may also be integrated in the customer facing apps of private entities, which will enable anytime anywhere, authentication.

Key Facts about Aadhaar:

- It is a **12-digit unique identification number** issued by the Unique Identification Authority of India (UIDAI) to every individual resident of India.
- It serves as proof of identity, which is linked to the individual's biometric and demographic information.
- The **Aadhaar programme was launched in 2009** by the UIDAI with the goal of providing a unique and verifiable identity for every resident of India.
- It is now mandatory for a number of government services and is also being used by private companies for identification purposes.

TRANSFORMING INDIAN CITIES - CHALLENGES AND THE ROAD AHEAD

Urban Challenges in India:

- **Rapid urbanization:**
    - **According to the 2011 Census**, census towns increased from 1,362 in 2001 to 3,894 in 2011, contributing to nearly one-third of the urban growth during that decade.
    - **By 2036**, more than 600 million people will live in Indian cities, which are not ready for this growth.

- **Pollution crisis:**
    - **Overview:** 42 Indian cities are among the top 50 most polluted cities in the world. Nearly 50% of 603 rivers in India are polluted.
    - **Major causes:** Vehicle emissions, industrial waste, and construction dust.
    - **Impact:** Respiratory diseases, economic losses ($95 billion annually), and deteriorating quality of life.

- **Climate change and environmental degradation:**
    - **Overview:** Extreme weather events (heatwaves, floods) are becoming frequent.
    - **Causes:** Lack of green infrastructure worsens urban heat and flooding.

- **Water and waste mismanagement:**
    - Major rivers like the **Yamuna and Ganga** are heavily contaminated, making them unsafe for consumption and harmful for marine biodiversity.
    - **Less than one-fifth of waste is treated in India.**

Solutions and Policy Interventions:

- **Solutions:**
    - **Transforming Indian** cities will require an overhaul of planning, strengthened governance, and sustainable financing.

- o With action on these fronts, India can **develop liveable, resilient, and economically vibrant cities** that can become global attractions.
  - o **The first step** must be to notify census towns as urban areas in their own right. States must take the lead.
- **Other solutions:**
  - o **Green spaces** (like parks and green roofs), modern drainage systems, and early warning systems.
  - o Need for comprehensive **waste and water management**
  - o **Focus areas:**
    - ▪ Cities as growth hubs, creative redevelopment, and sanitation improvements.
    - ▪ Cities must compete to achieve sustainability through transit investments and pollution control.

Conclusion:

- The fate of Indian cities depends on **proactive planning and governance reforms.**
- Without urgent action, cities will face worsening pollution, congestion, and insecurity.
- The coming decade is crucial for making Indian cities smart, green, and globally competitive.

BLUE GHOST MISSION

Firefly Aerospace's Blue Ghost lunar lander has successfully touched down on the Moon's Mare Crisium region after a nerve-wracking powered descent.

- Blue Ghost lander, developed by **Firefly Aerospace,** is carrying 10 NASA payloads as part of the **Commercial Lunar Payload Services (CLPS) program,** which aims to stimulate lunar commerce through private-sector competition.
- The Blue Ghost mission aims to enhance our **understanding of the lunar environment.**

- The lander carries a vacuum, called **Lunar PlanetVac (LPV)**, to collect lunar soil samples and a drill capable of measuring temperatures up to 10 feet (3 meters) below the surface.

Objectives of Blue Ghost Mission:
- o The lander will **study heat flow from the Moon's interior**, helping scientists understand its thermal evolution.
- o It will analyse plume-surface interactions to improve landing techniques by examining how lunar regolith reacts to the lander's engine plumes.
- o By collecting data on the Moon's magnetic and electric fields, researchers will gain insights into its geological history.
- o The lander will operate for **approximately 14 Earth days**, equivalent to one complete lunar day, conducting scientific investigations and technology demonstrations.

THE STUDENT AND THE THREE LANGUAGE DEBATE

- **Language policy in education has always been a contentious issue in India**, and the debate surrounding the three-language formula is no exception.
- **While the National Education Policy (NEP) advocates the introduction of a third language** to enhance cognitive ability, mobility for employment, and national integration, **several issues arise with this approach.**
- These include the **practical difficulties of implementation, the prioritisation of foundational learning,** and the potential political ramifications of language imposition.
- **A careful assessment of these factors is necessary** to ensure that educational reforms genuinely serve students rather than becoming political battlegrounds.

Practical Challenges in Implementation of Three Language Policy

- The implementation of a three-language formula **raises serious logistical concerns. Public schools already face teacher shortages and infrastructure deficits.**

- **Recruiting competent teachers** for a third language, particularly if multiple language options are offered, would strain educational budgets further.
- With Tamil Nadu already spending a significant percentage of its education budget on teacher salaries, **diverting funds to accommodate third-language instruction could reduce resources available for critical infrastructure improvements.**

Political Dimensions and the Way Forward

- The debate over language education is also **influenced by political factors.**
- **Tamil Nadu has historically resisted the imposition of Hindi,** viewing it as a threat to linguistic and cultural identity.
- However, **the political stance on language policy should not come at the cost of students' career prospects.**
- **A rigid opposition to Hindi could disadvantage students** if national employment and educational opportunities begin favouring Hindi proficiency.
- **A balanced approach would be to introduce Hindi as an optional third language at the middle-school level,** starting in district headquarters and expanding based on demand.
- This **gradual implementation would allow flexibility** without burdening all students unnecessarily.
- **The focus should remain on improving English proficiency and overall educational quality** while ensuring that language policy decisions are made in students' best interests.

Conclusion

- **The three-language formula, while well-intentioned, presents more challenges** than benefits, especially for public school students.
- Rather than imposing a third language, **efforts should be directed toward enhancing teaching quality, improving literacy levels,** and ensuring **students gain proficiency in languages that offer the best career opportunities.**
- **A pragmatic approach, rather than a rigid stance,** will ensure that Tamil Nadu's students are not left behind in an increasingly competitive world.

REVIEW OF PLI SCHEME

- The **Production-Linked Incentive (PLI) scheme**, introduced in April 2020, aims to enhance India's manufacturing capabilities and attract global companies to set up production facilities in the country.
- Covering 14 sectors, the scheme incentivizes incremental sales to drive manufacturing growth.
- However, five years into its implementation, **the government is considering modifications for PLI 2.0**, linking incentives to additional metrics such as **domestic value addition and incremental exports**.

Overview of the PLI Scheme

- The PLI scheme was launched with the following key objectives:
    - Boost domestic manufacturing and reduce import dependence.
    - Attract **original equipment manufacturers (OEMs)** and contract manufacturers.
    - Encourage investment in **high-tech sectors like electronics, semiconductors, pharmaceuticals, and specialty steel**.
    - Enhance **India's participation in global supply chains**.
    - Create employment and promote skill development in manufacturing.
- The scheme has seen **notable success** in sectors such as mobile phones, pharmaceuticals, and food processing. However, in certain sectors like **IT hardware, advanced chemicals, textiles, and specialty steel**, progress has been slower than expected.

Conclusion

The PLI scheme has **set India on the path to becoming a global manufacturing hub**, but challenges remain in **scaling up, increasing local value addition, and making domestic firms globally competitive**. As discussions on **PLI 2.0** progress, the government aims to introduce reforms that **prioritize exports, component localization, and MSME support**.

With the right policy interventions, India can **bridge gaps in the supply chain, improve competitiveness, and establish itself as a leader in global manufacturing**.

RUSHIKULYA RIVER

Forest officials recently restricted entry along a 5-km stretch from Gokharakuda to Bateswar near the Rushikulya river mouth in Ganjam district to protect Olive Ridley turtle eggs.

- It is one of **Odisha's prominent rivers**, flowing primarily through the districts of Kandhamal, Ganjam, and Boudh.

   Course:
   - **Originating** at an elevation of approximately 1000 meters from the **Daringbadi hills** in the **Eastern Ghats**, often referred to as the '**Kashmir of Odisha**' for its scenic beauty, the river travels a length of around **165 kilometers** before **emptying into the Bay of Bengal** near the town of Ganjam.
   - Unlike many other rivers, the Rushikulya River does **not form a delta at its mouth,** and it flows directly into the Bay of Bengal.
- The Rushikulya River basin encompasses a catchment area of roughly 7500 sq.km.
- **Tributaries**: Its tributaries are the **Baghua**, the **Dhanei** and the **Badanadi,**

   Olive Ridley Turtle Nesting Site (Rushikulya Beach):
   - It is one of the most famous attractions near the river is the **Olive Ridley Turtle Nesting Site,** located on the coast **where the** Rushikulya **River meets the Bay of Bengal.**
   - Each year, between January and March, **thousands of Olive Ridley Turtles come** to the shores **to lay their eggs**, creating a spectacular natural **event known as Arribada.**

KAWAL TIGER RESERVE

- It is located in the **Telangana State** along the **banks of river Godavari**, forming part of the Deccan peninsula-central highlands.
- The reserve is nestled in the **Sahyadri Mountain Ranges (Western Ghats).**
- The Government of India declared Kawal Wildlife Sanctuary a Tiger Reserve in

Rivers: The reserve is the catchment for the **rivers Godavari and Kadam,** which flow towards the **south of the sanctuary.**

- The reserve is situated at the southernmost tip of the Central Indian Tiger Landscape, having linkages with the Tadoba-Andhari (Maharashtra) and Indravati (Chhattisgarh) tiger reserves.

Habitat: It has diverse habitats comprising dense forests, grasslands, open areas, rivers, streams and water bodies.

Vegetation: Southern Tropical Dry Deciduous Forest.

Flora: It consists of teak along with Bamboo and other species like Anogeissus latifolia, Mitragyna parviflora, Terminalia crenulata, Terminalia arjuna, Boswellia serrata,

Fauna: The major wild animals include: nilgai, chousinga, chinkara, black buck, sambar, spotted deer, wild dog, wolf, jackal, fox, tiger, leopard, and the jungle cat.