

December - 22

TNPSC BITS

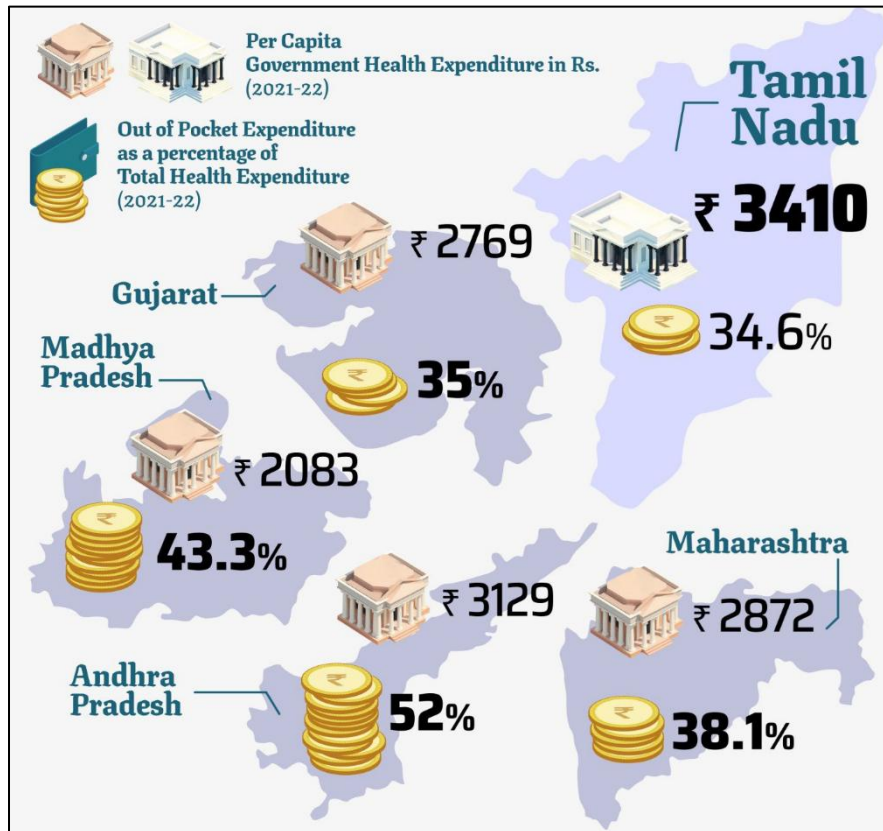
- ❖ The first session of the Tamil Nadu Legislative Assembly in 2025 is set to commence on January 6 with the customary Governor's address.
- ❖ The State Industries Promotion Corporation of Tamil Nadu Limited (SIPCOT) has signed an MoU with the FICCI-FLO Chennai to establish creche facilities in 17 SIPCOT industrial parks in the State.
- ❖ Renowned Kannada writer and social activist Devanura Mahadeva was honoured with the very prestigious 2024 Vaikom Award for social justice by the Tamil Nadu government.
- ❖ The Southern Bench of the National Green Tribunal (NGT) directed the Kerala government and the Kerala State Pollution Control Board (KSPCB) to remove the biomedical and mixed solid waste dumped in villages of Tirunelveli district.
- ❖ Caitlin Sandra Neil, a 19-year-old Indian-American from Chennai, won the Miss India USA 2024 title.
- ❖ Cai Xuzhe and Song Lingdong, the two astronauts of the Chinese Tiangong space station completed a nine-hour spacewalk and sets a new global record.
- ❖ Karnataka and Haryana have emerged the men's and women's team winners respectively at the 2024 Senior National Badminton Championship.
 - Karnataka got its first men's title in nearly five decades.
- ❖ India has risen to become the 3rd largest smartphone exporter globally, up from 23rd in 2019, with exports surpassing ₹20,000 crore in November 2024.
- ❖ The 1st India Maritime Heritage Conclave (IMHC 2024), a landmark event was organized by the Ministry of Ports, Shipping and Waterways (MoPSW).
- ❖ Biocon Group Chairperson Kiran Mazumdar-Shaw was conferred the prestigious Jamsetji Tata Award by the Indian Society for Quality (ISQ) for pioneering the biosciences movement in India.
- ❖ The Ram temple project in Ayodhya has received the 'Sword of Honour' from the British Safety Council, recognizing the exceptional safety protocols implemented during its construction.

TAMIL NADU

Makkalai Thedi Maruthuvam 2024

- ❖ The Tamilnadu State government's flagship health scheme, Makkalai Thedi Maruthuvam (MTM) crossed a coverage of two crore persons.

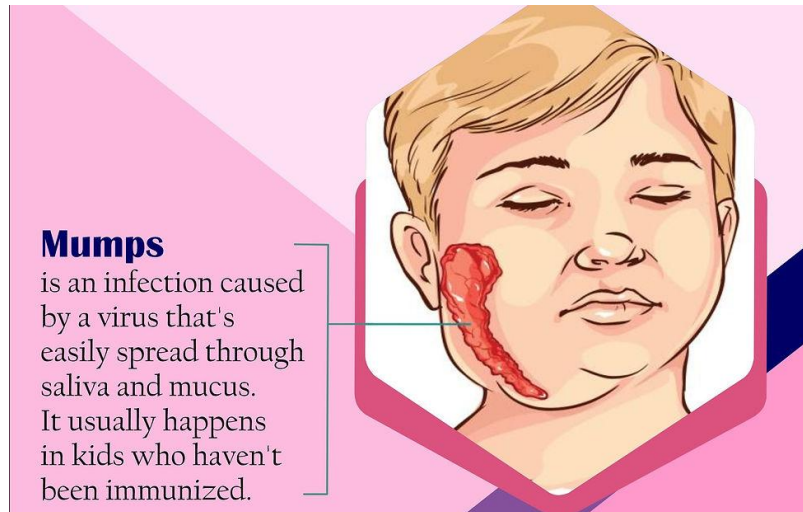
- ❖ The scheme provides the comprehensive home-based healthcare services for the hypertension and diabetes across the State.
- ❖ It was launched by CM in Krishnagiri district on August 5, 2021 and it benefits people aged over 45.
- ❖ Physiotherapy treatment is also provided to patients.
- ❖ The scheme covers 385 rural blocks with 8,713 health sub-centres, and 21 corporations with 460 urban primary health centres in the State.
- ❖ For this scheme, the UN Inter-Agency Task Force award for 2024 was conferred upon the State's Health Department.



Mumps vaccine to UIP

- ❖ Tamil Nadu records at least 150 cases of mumps in a month now.
- ❖ There were 61 cases during 2021-22 and 129 during 2022-23, the cases soared to 1,091 during 2023-24.
- ❖ Nearly 40% of the cases occurred in the age group of six to nine, followed by children aged less than 5 years, which was 33%.
- ❖ The state requested the union Government to consider adding the mumps vaccine to the Universal Immunisation Programme (UIP).

- ❖ Under UIP in Tamil Nadu, 11 vaccines are provided to children and pregnant women against 12 vaccine preventable diseases.
- ❖ The Measles-Rubella (MR) vaccine was included in the UIP from April 2017.



Back-to-back weather systems

Why weather forecasts still go wrong

IMD's forecasts have improved vastly in the last few years due to technological upgradation

- IMD currently operates only around 800 automatic weather stations, 1,500 automatic rain gauges, and 37 doppler weather radars
- Over 300,000 ground stations (either automatic weather stations or automatic rain gauges) and around 70 doppler weather radars are required for reliable weather forecast
- Several State governments and private companies together operate over 20,000 ground stations, many of which are not currently used by IMD
- New ground stations need to be installed by IMD and the available data need to be shared seamlessly with IMD to improve the accuracy of forecasts
- The Ministry of Agriculture & Farmers Welfare has initiated the WINDS system to generate long-term, hyperlocal weather data
- Under the WINDS programme, over 200,000 ground stations will be installed

Slips: Indian forecasts are not accurate especially during winter and summer monsoon

- ❖ Earlier, Back-to-back weather systems have formed in the Bay of Bengal during Northeast monsoon, similar to this year.

- ❖ But these systems had formed mostly in October and November.
- ❖ There have been 15 occurrences of clusters of cyclones between 1961 and 2010.
- ❖ Similar instances have occurred after 2011 as well.
- ❖ This December, a low-pressure area formed in the Bay of Bengal around December 7 in a few days after Cyclone Fengal moved inland.
- ❖ After that, the present well-marked low-pressure area was formed over the Bay of Bengal.
- ❖ There was a break from such incidents between 1999 and 2010.
- ❖ Two cyclones or depressions forming within a gap of eight days are called the clusters.
- ❖ Two separate clusters of tropical cyclones had occurred over the Bay of Bengal in 1966, involving four tropical cyclones.
- ❖ In the 13 years from 2011, there were four incidences of clusters during 2013, 2016, 2020 and 2021 in November.

State Bird Authority 2024



- ❖ The Tamil Nadu government has issued an order reconstituting the State Bird Authority.
- ❖ It is tasked to monitor and improve bird sanctuaries, nesting conditions for birds, and ecotourism facilities.

- ❖ Earlier this year, an amendment was made to include Bombay Natural History Society (BNHS) as a member in the State Bird Authority.

SOP for speedy disposal of cases

- ❖ Madras High Court has formulated a Standard Operating Procedure (SOP) to help ensure the disposal of more cases.
- ❖ It also ensures avoiding the wastage of court time in mentioning matters and preventing unnecessary adjournments.
- ❖ The lawyers could directly obtain motion slips from his Court Officer and present them before the Registry for moving lunch motions and listing fresh cases on the next day.



NATIONAL

Joint Parliament committee 2024 - One Nation One Election

- ❖ The Lok Sabha has adopted a resolution to refer the constitutional amendment bills for holding Lok Sabha and assembly elections simultaneously to a Joint Parliamentary Committee (JPC).
- ❖ This JPC will have a total of 39 members, with 27 from the Lok Sabha and 12 from the Rajya Sabha.
- ❖ It will be headed by the BJP MP PP Chaudhary.
- ❖ A Joint Parliamentary Committee (JPC) is set up by the Parliament for a special purpose, like the detailed scrutiny of a subject or Bill.

- ❖ As the name suggests, it has members from both the Houses and from the ruling parties and the opposition.
- ❖ It is dissolved after its term ends or its task has been completed.
- ❖ The recommendations of a JPC are not binding on the government.
- ❖ The government can choose to launch further investigations based on what the JPC has said, but it can't be forced to do so.

WHAT HAS BEEN SAID ABOUT THE IDEA

NITI AAYOG	STANDING COMMITTEE	LAW COMMISSION
<p>A 2016 paper, co-authored by Bibek Debroy and Kishore Desai, noted....</p> <ul style="list-style-type: none"> • Separate elections lead to massive recurring expenditures as well as prolonged deployment of forces • It suggested holding elections in two cycles with an interregnum of 30 months • It pegged cost of simultaneous polls at ₹4,500 crore, while the cost of 2014 Lok Sabha polls alone was ₹3,870 crore 	<p>In 2015, the House panel on personnel, public grievances, law and justice said...</p> <ul style="list-style-type: none"> • Elections could be held in two phases • Polls to some assemblies can be held in Lok Sabha midterm and remaining assemblies could be held at the end of Lok Sabha term 	<p>In 1999, the Law Commission in its 170th report on Reform of Electoral Laws said...</p> <ul style="list-style-type: none"> • Holding simultaneous polls would be ideal, but a workable formula is required to be in the Constitution • The holding of a separate election to assemblies should be an exception and not the rule • Another law panel report, in 2018, said simultaneous polls don't alter balance of power between Union and the states

Rooftop solar installations 2024

PM - SURYA GHAR MUFT BIJLI YOJANA

Intelligent Solutions For Sustainable Energy!

Why choose this Solar Scheme?

- Long Term Savings
- Environmentally Friendly
- Latest Technology
- Attractive Subsidy

- ❖ Gujarat, Maharashtra, and Uttar Pradesh have emerged as the top three states with the highest number of rooftop solar installations under the PM Surya Ghar Muft Bijli Yojana scheme.

- ❖ Under the scheme, installations are expected to cross 10 lakhs by March 2025, double to 20 lakhs by October 2025, and reach 40 lakhs by March 2026.
- ❖ Six States account for about 88 per cent of the total installations to date.
- ❖ Kerala stands 4th with more than 55,000, Tamil Nadu in 5th place with over 21,000 and followed by Rajasthan with more than 20,000.
- ❖ The scheme is projected to generate 1,000 billion units of electricity and reduce CO2 emissions by 720 million tonnes.

Atrocities against Scheduled Castes 2024

- ❖ A parliamentary panel has raised the concerns over the failure of several States to establish the necessary mechanisms to effectively address cases of atrocities against Scheduled Castes.
- ❖ There are large gaps in implement and strengthen the machinery required under the Protection of Civil Rights Act, 1955, and the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989.
- ❖ States like Madhya Pradesh, Rajasthan, Bihar and Odisha were singled out for consistently lagging in fund utilisation and achieving implementation targets.



ECONOMY

Direct Tax Collection Surges in 2024-25

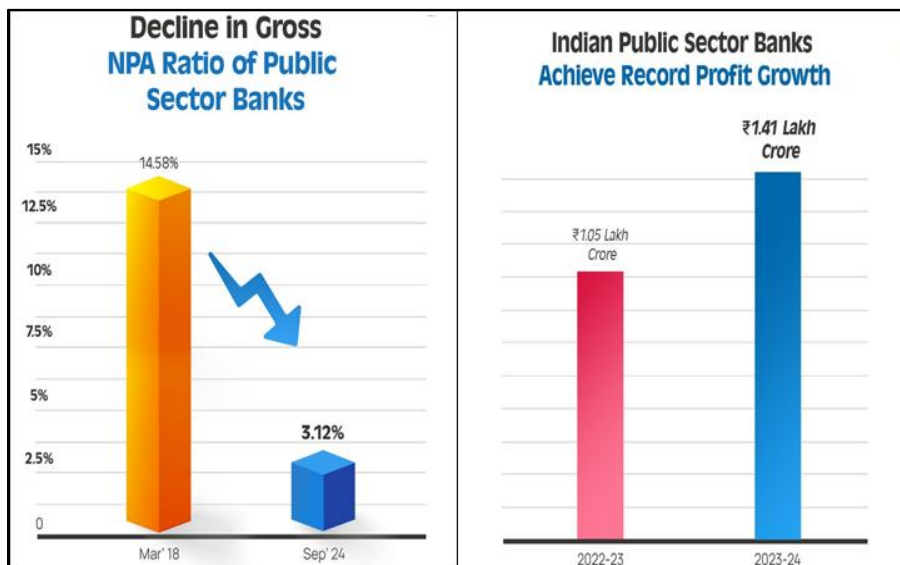
- ❖ India's net direct tax collections were up 16.5%, crossing ₹15.82 lakh crore by December 17, with non-corporate taxes leading the growth.

- ❖ Net corporate tax receipts were up just 8.6% to close to ₹7.43 lakh crore.
- ❖ Net collections from non-corporate taxes rose at almost thrice the pace at 22.5% to ₹7.97 lakh crore.
- ❖ The gross tax receipts had grown 20.3% so far this year to cross ₹19.21 lakh crore, with corporate taxes rising 16.9% and non-corporate receipts up 22%.
- ❖ The receipts from the Securities Transaction Tax (STT) were up a sharp 85.5% to over ₹40,100 crore.

TAX BREAKUP (Figures* in ₹crore)	Gross collection	Refunds	Net collection
Corporation tax	9,24,693	1,82,086	7,42,607
Non-corporation tax	9,53,871	1,56,792	7,97,080
Securities transaction tax	40,114	-	40,114
Others	2,829	46	2,784
Total	19,21,508	3,38,924	15,82,584
Y-o-Y growth in %▶	20.32	42.49	16.45

*as on Dec.17

Public Sector Banks' Profit 2024



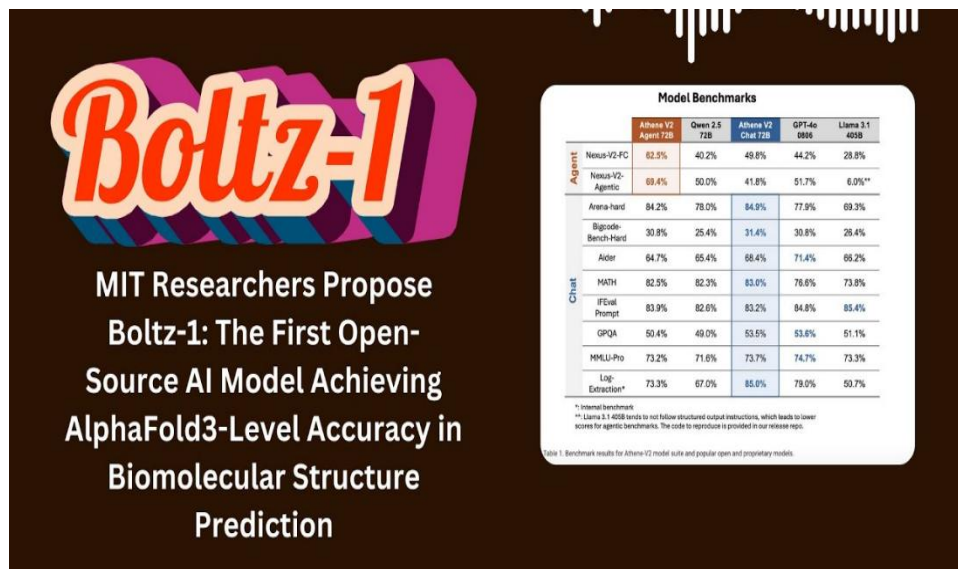
- ❖ Public sector banks (PSBs) including SBI in 2024-25 are building on their record-breaking aggregate net profit of ₹1.46 lakh crore in 2023-24.

- ❖ PSBs have also enhanced the shareholder value, distributing ₹61,964 crore in the dividends over the past three years.
- ❖ Gross non-performing assets (GNPA) have declined significantly to 3.12 per cent in September 2024 from a peak of 14.58 per cent in March 2018.
- ❖ At the current pace, PSBs are expected to exceed last year's profit milestone of ₹1.46 lakh crore.

SCIENCE AND TECHNOLOGY

Boltz-1

- ❖ MIT scientists have released a powerful, open-source AI model, called Boltz-1.
- ❖ This could significantly accelerate biomedical research and drug development.
- ❖ Boltz-1 achieves state-of-the-art performance at the level of AlphaFold3.
- ❖ AlphaFold3 is a proprietary model from Google DeepMind, in predicting protein structures.



ENVIRONMENT

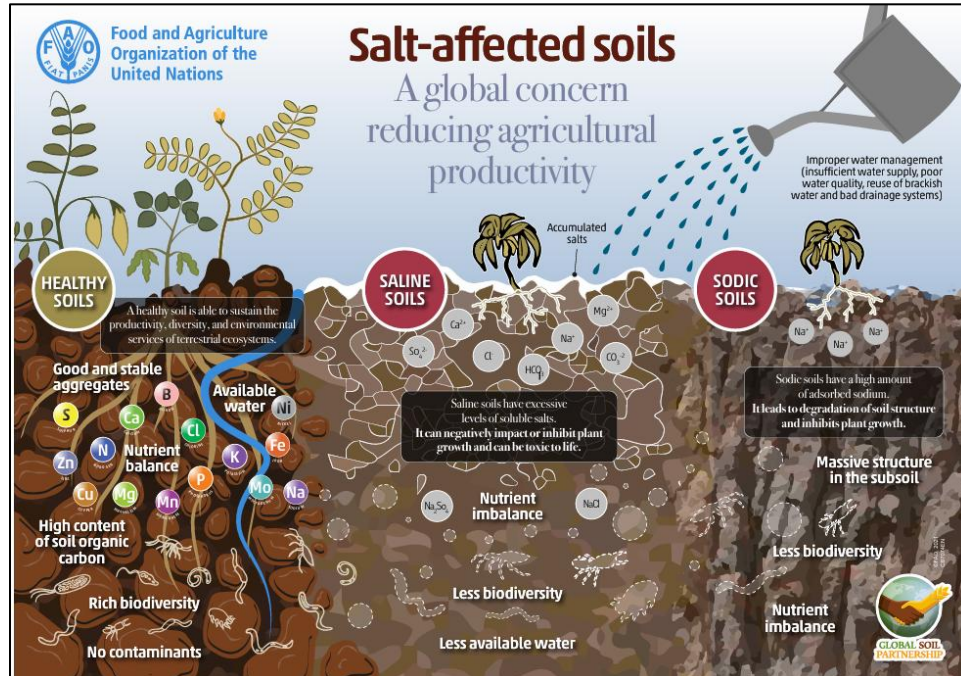
Wroughton's Free-tailed Bat

- ❖ Wroughton's free-tailed bat, a highly rare species of molossus bat, has been spotted at Delhi.
- ❖ This bat species is primarily found in the Western Ghats.

- ❖ Small colonies have also been recorded in Jaintia Hills, Meghalaya, and a single individual was noted in Cambodia.
- ❖ Until 2000, the species was considered critically endangered because of a single known population in the Western Ghats.
- ❖ Later the bat species was placed on the IUCN Red List as data deficient.



Global Status of salt affected soils 2024

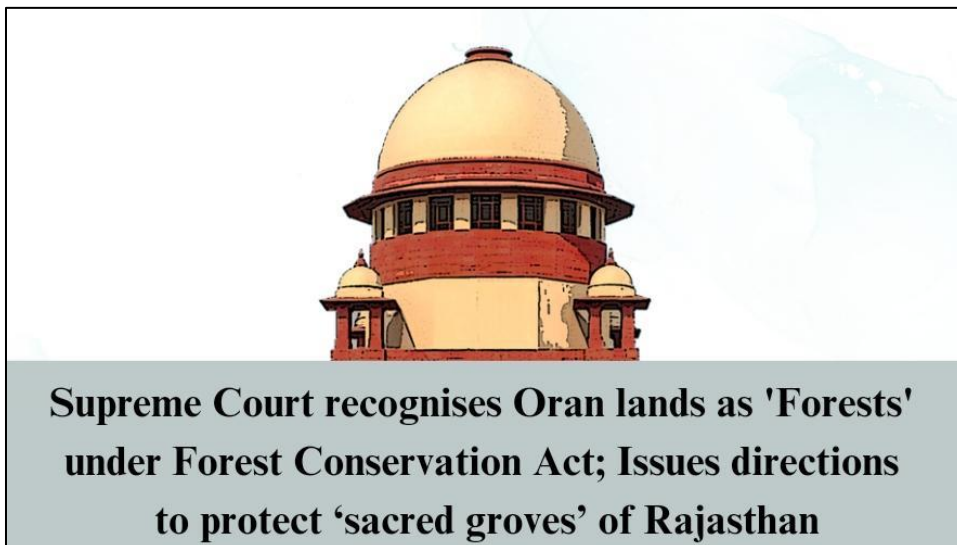


- ❖ The International Soil and Water Forum 2024 was held in Bangkok.
- ❖ The report was titled 'The Global Status of Salt-Affected Soils' by FAO.

- ❖ Nearly 1.4 billion hectares of land, or 10.7 per cent of the global land area, is affected by salinity.
- ❖ Salt-affected soils are a specific group of soils that have elevated amounts of soluble salts (saline soils) that adversely affect the growth of most plants.
- ❖ Currently, ten countries — Afghanistan, Australia, Argentina, China, Kazakhstan, Russia, the United States, Iran, Sudan, and Uzbekistan — account for 70 per cent of the world's salt-affected soils.
- ❖ The 3 largest areas with salt-affected soils were found in Australia (357 million hectares or mha), Argentina (153 mha) and Kazakhstan (94 mha).
- ❖ The 3 countries most affected by salinity and sodicity together were Oman (93.5 per cent of the country land area), Uzbekistan (92.9 per cent) and Jordan (90.6 per cent).
- ❖ India had a salt-affected area of approximately 6.72 million ha, or 2.1 per cent of its total geographic area.
- ❖ Of that, 2.95 million ha were saline and the remaining 3.77 million ha were sodic.
- ❖ Gujarat (2.23 mha), Uttar Pradesh (1.37 mha), Maharashtra (0.61 mha), West Bengal (0.44 mha) and Rajasthan (0.38 mha) made up about 75 per cent of the country's salt-affected soils.

STATES

Legal Protection for Sacred Groves – Rajasthan



- ❖ The Supreme Court directed the state of Rajasthan to complete the survey and notification of sacred groves (orans) in all districts.



- ❖ The forest department of Rajasthan was asked to do the detailed on-ground and satellite mapping of each sacred grove.
- ❖ It includes grooves such as orans, dev-vans, rundhs, or by any other name by which they are known in the respective area.
- ❖ The top court also recommended that Orans be granted the protection under the Wildlife Protection Act, 1972, specifically through Section 36-C.
- ❖ This section allows the declaration of 'community reserves.

Goa Assembly ST Reservation Bill 2024

- ❖ The Bill aims to empower the Census Commissioner to ascertain the ST population in Goa.
- ❖ The Election Commission will use the Census data to adjust Assembly seats and reserve certain seats for STs.
- ❖ Goa's ST population saw a rise from 566 in 2001 to 149,275 in 2011.
- ❖ This increase resulted from the inclusion of the Kunbi, Gawda, and Velip communities in the ST list in 2003.
- ❖ This demographic shift necessitates a revaluation of representation.



PERSONALITIES, AWARDS, AND EVENTS

Tulsi Gowda - Encyclopedia of Forests

- ❖ Padma Shri awardee Tulsi Gowda, an environmentalist from Karnataka, passed away.

- ❖ She is revered as the “tree goddess” by the Halakki tribal community.
- ❖ She is known as the ‘encyclopaedia of forest’.
- ❖ Gowda has been credited with planting and nurturing over 1 lakh trees across Karnataka.
- ❖ Her contributions have strengthened one community reserve, five tiger reserves, 15 conservation reserves, and 30 wildlife sanctuaries.

