

April - 13

TNPSC BITS

- ❖ Tamil Nadu is going to introduce AI, coding basics for classes 6-9 starting from 2025-2026, thus making it as the first state in India.
- ❖ The Genova Biopharmaceuticals, has announced a collaboration to advance the development of a self-amplifying messenger ribonucleic acid (saRNA) vaccine for the Nipah virus.
- ❖ The Google has unveiled its seventh-generation artificial intelligence chip, named Ironwood, which is designed to speed the performance of AI applications.
- ❖ The Indian Institute of Management (IIM)-Ahmedabad is going to establish its first oversea campus in Dubai, UAE.
- ❖ Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai, Deputy Prime Minister, and Minister of Defence of the UAE, made his 1st official visit to India recently.

TAMIL NADU NEWS

Virudhunagar Samba Vathal

வேளாண்மை - உழவர் நலத்துறை

வேளாண் விளைபொருட்களுக்கு புவிசார் குறியீடு

விருதுநகர் சம்பா வத்தல்

புவியியல் பகுதி:
விருதுநகர் மாவட்டம்

சிறப்பு யண்புகள்:
★ அதிக தரம் உடையது.
★ அதிக காரம் உடையது.
★ சமையலுக்கு மிகவும் ஏற்றது.
★ மதிப்பு கூட்டுகலுக்கு உகந்தது.


@agrdept_tn @agrdepttn Department of Agriculture, Tamilnadu

- ❖ Tamil Nadu's Virudhunagar Samba Vathal (Chilli) has got geographical indication tag.

- ❖ It is grown in Virudhunagar district and is known for its unique flavour, moderate heat and vibrant red colour.
- ❖ The Samba Chilli is grown in Virudhunagar, Ramanathapuram, Sivagangai and Thoothukudi districts with the major markets located in Virudhunagar, Sattur, Thoothukudi and Ramanathapuram.
- ❖ The Gazetteer of India, published by Government of Tamil Nadu, in 1972, has highlighted Sattur Samba Chilly cultivation in the areas of Sattur, Rajapalayam, Virudhunagar.
- ❖ The variety popularly known as Sattur Samba (Sannam/Slender) is exported to Ceylon via Thoothukudi.

Foodgrains in 2024-25

Crop cover
Coverage of foodgrains in Tamil Nadu during 2024-25*



Crop	Area coverage 2023-2024	2024-25*				
		Target (L. Ha)	Area coverage (L. Ha)	Increase/ decrease over last year (ha)	% of increase/ decrease over last year	Achievement against target (in %)
Paddy	20.936	20.2	21.317	38,154	1.8	105.5
Millets	9.554	9.95	9.777	22,312	2.3	98.3
Pulses	7.491	10	7.517	2,646	0.3	75.2
Total	37.981	40.15	38.611	63,112	1.67	96.3

L. Ha - Lakh Hectares | *As on March 31, 2025

- ❖ During the just-concluded financial year of 2024-25, Tamil Nadu recorded a marginally higher coverage of foodgrains when compared to the previous year.
- ❖ Its achievement in 2024-25 was about 38.6 lakh hectares as against 37.98 lakh hectares in 2023-24.
- ❖ However, it fell short of the target of 40.15 lakh hectares by about 1.5 lakh hectares.
- ❖ 9.1 lakh acres, or 3.68 lakh hectares, had suffered the crop damage due to events such as Cyclone Fengal in November-December 2024 and unseasonal heavy rain in January 2025.
- ❖ As a result, the government had sanctioned about ₹546 crore in the form of input subsidy to 6.16 lakh farmers under the State Disaster Response Fund (SDRF).

- ❖ For 2025-26, the government has fixed targets totalling 40.3 lakh hectares, of which paddy's share is 20.3 lakh hectares; and millets and pulses 10 lakh hectares each.

Miocene-age canyon in Villupuram

Neogene Period

Eonothem/ Eon	Erathem/ Era	System/ Period	Series/ Epoch	Stage/ Age	millions of years ago
Phanerozoic	Cenozoic	Neogene	Pliocene	Piacenzian	2.58
				Zanclean	3.6
			Miocene	Messinian	5.333
				Tortonian	7.246
				Serravallian	11.63
				Langhian	13.82
				Burdigalian	15.98
				Aquitainian	20.44
					23.03

Published with permission from the International Commission on Stratigraphy (ICS). International chronostratigraphic units, ranks, names, and formal status are approved by the ICS and ratified by the International Union of Geological Sciences (IUGS).

Source: 2023 International Chronostratigraphic Chart produced by the ICS.

- ❖ The Bommayapalayam Canyon is part of a range of ravines skirting the Auroville bio-region.
- ❖ They were formed over the centuries of downcutting by the water currents of the monsoon rain ferrying topsoil and rock fragments to the Bay of Bengal.
- ❖ The Tamil Nadu government plans to protect the canyon, declaring it a geo-heritage site.
- ❖ The ravine, a narrow, deep valley with steep sides, has an average height of 7 metres, a width of 30 metres.

- ❖ It dates back to the Miocene age estimated to be in the range of 23.03 to 5.33 million years ago.
- ❖ The canyons are the cumulative outcome of years of soil erosion, rather than any tectonic activity.

Vembur sheep status



VEMBUR SHEEP

- ❖ Thoothukudi and Virudhunagar districts hosts the Vembur sheep ('Pottu aadu').
- ❖ The name comes from its unique coat pattern, featuring white fur adorned with irregular reddish-brown patches, and in rare cases black fawn patches.
- ❖ These distinct markings set them apart from other sheep breeds in India.
- ❖ The Vembur sheep is also one of Tamil Nadu's five indigenous hair sheep breeds, alongside Madras Red, Macheri, Chevadu, and Kilakarasal.
- ❖ Its medium-sized drooping ears, short thin tails, and tall lean bodies make them easily recognisable.
- ❖ The breed's natural resilience and adaptability to dry climate makes it ideal for the rain-fed agricultural regions.
- ❖ Recognising its uniqueness, the National Bureau of Animal Genetic Resources officially registered the breed in 2007.

TANUVAS Grand supplement for cows

- ❖ Tamil Nadu Irrigated Agriculture Modernisation Project (TNIAMP) provided it free of cost to over 19,000 farmers.

- ❖ TANUVAS Grand helps reduce methane emissions from cattle and improve their digestion.
- ❖ It reduces the methane emissions by 25-30 litres per day per cow by helping the microorganisms grow in the cow's first stomach.
- ❖ As a result, farmers see increase in milk production and dung output.



NATIONAL NEWS

Panchayat Advancement Index (PAI)

- ❖ This 1st edition ranking over 2.16 lakh panchayats is based on their performance and progress towards achieving Sustainable Development Goals (SDGs).
- ❖ The PAI uses over 435 unique local Indicators (331 mandatory & 104 optional) consisting of 566 unique data points across 9 themes.
- ❖ The panchayats were then scored on a scale of 0-100 based on these indicators and ranked in one of the five categories: Achiever (90-100), Front Runner (75-90), Performer (60-75), Aspirant (40-60) and Beginner (below 40).
- ❖ There are over 2.55 lakh panchayats in India, but data was received from only 2.16 lakh gram panchayats in 29 states/UTs after due validation by the states and UTs.
- ❖ Of the 2.16 lakh panchayats, 699 have been ranked as Front Runners, 77,298 as Performers, 1,32,392 as Aspirants, and 5,896 as Beginners.

- ❖ Of the 699 panchayats ranked as Front Runners, 346 are from Gujarat, followed by Telangana (270) and Tripura (42).
- ❖ None of the panchayats has been ranked in the Achievers (90-100) category.

Table: State wise number of Gram Panchayats in each Grade								
Sl. No.	State/UT	Total No of GPs	No of GPs Submitted Data*	Grade				
				A+	A	B	C	D
1	Andaman and Nicobar Islands	70	70			14	55	1
2	Andhra Pradesh	13310	13310	4	5372	7830	104	
3	Arunachal Pradesh	2108	2108		63	1968	77	
4	Assam	2194	2183	1	1084	1097	1	
5	Bihar	8053	8053		810	7148	95	
6	Chhattisgarh	11643	11643		1239	8955	1449	
7	Gujarat	14618	14618	346	13781	491		
8	Haryana	6223	6223		339	5071	813	
9	Himachal Pradesh	3468	3328	1	673	2647	7	
10	Jammu & Kashmir	4291	4291	2	1520	2746	23	
11	Jharkhand	4297	4281		375	3229	677	
12	Karnataka	5921	5907		1644	4245	18	
13	Kerala	941	941	8	902	31		
14	Ladakh	193	193		82	111		
15	Lakshadweep	10	10		4	6		
16	Madhya Pradesh	23011	23011		7912	14942	157	
17	Maharashtra	27849	27655	8	12242	14944	461	
18	Manipur	3222	1976		11	1741	224	
19	Mizoram	834	834		86	731	17	
20	Odisha	6794	6794	1	2865	3882	46	
21	Punjab	13239	10514		548	9784	182	
22	Rajasthan	11207	10634		1580	8876	178	
23	Sikkim	199	199		145	54		
24	Tamil Nadu	12525	12525		5557	6880	88	
25	Telangana	12768	12768	270	10099	2390	9	
26	Dadra & Nagar Haveli & Daman & Diu	38	38	12	8	18		
27	Tripura	1176	1176	42	728	406		
28	Uttar Pradesh	57702	23207	4	6593	15373	1237	
29	Uttarakhand	7795	7795		1022	6741	32	
	Total	255699	216285	699	77298	132392	5896	

No of GPs whose Data has been submitted on PAI portal after validation by State*

"NITI NCAER States Economic Forum" portal



- ❖ The Union Finance Minister launched the “NITI NCAER States Economic Forum” portal in New Delhi.
- ❖ The portal has been developed by NITI Aayog, in collaboration with the National Council of Applied Economic Research (NCAER).

- ❖ It is a comprehensive repository of data on the social, economic and fiscal parameters, research reports, papers, and expert commentary on State Finances for a period of about 30 years (i.e. 1990-91 to 2022-23).

INTERNATIONAL NEWS

FAO's New Initiatives 2025



- ❖ The Food and Agriculture Organization (FAO) has launched two major global initiatives to address pressing challenges in the agrifood sector.
 - The “Four Betters Courses” Initiative and
 - The “Commit to Grow Equality (CGE)” Initiative.
- ❖ They aim to strengthen the educational integration and close the gender gap in agrifood systems worldwide.
- ❖ The “Four Betters” vision includes Better Production, Better Nutrition, Better Environment and Better Life.

ENVIRONMENT NEWS

Blackbuck population in Guindy National Park

- ❖ The Census data shows the blackbuck population rising from 61 in 2020-21 to 100 in 2023-24.

- ❖ The spotted deer population is also increasing, signalling a broader ecological revival within the park.
- ❖ The Guindy National Park is one of the few protected areas in the heart of the Chennai city and provides a refuge for both spotted deer and blackbucks.
- ❖ Blackbucks, in particular, depend on open grasslands to survive.
- ❖ A long-neglected parcel of land within Guindy National Park is set to be restored.
- ❖ It is known as the Polo Ground; the area has since become overrun with invasive plant species.
- ❖ Despite its condition, it remains an important habitat for blackbucks.

LIFESPAN	WEIGHT	SHOULDER HEIGHT	LENGTH	GEOGRAPHIC RANGE	PREFERRED HABITAT	PROTECTION STATUS
12-16 years	31-45 kg	74-85 cm	100-150 cm	India, Nepal, Pakistan (Introduced populations exist in the USA and Argentina)	Short grasslands, thinly forested areas. But also thrives in semi-arid or semi-desert areas	• Schedule I on the Wildlife Protection Act of 1972 • Least Concern on the IUCN Red List

Antelope cervicapra
Blackbuck The Indian antelope is found only on the subcontinent

AKA
Hindi - *Kala Hiran*
Telugu - *Krishna Jinka*
Tamil - *Jirali Maan*

Black colour of the male fades, turns almost brown by the summer

Sharp eyesight; white ring around eyes

Eat grasses, herbs, shrubs, and crops

SUB-SPECIES IN INDIA

- Antelope cervicapra rajputanae* (northwestern India)
- Antelope cervicapra cervicapra* (eastern and southern India)

SOCIAL HERDS
May have 5 to 50 animals.
Herds usually consist of females and young, with or without a single male

HORNS
• Males have magnificent twisted, corkscrew-shaped horns in a V-formation
• Can grow up to 2 feet in length

SPEED
• Known for their speed and endurance
• Can clock 90 kmph
• Can sustain a top speed of 64 kmph for 20 m

COLOUR
Adult Males - Blackish-brown back coat
Adult females and young males - Reddish-brown back
All have white fur around the eyes, inner legs, mouth, underbody, and rump

THREATS

- Predators - free-ranging stray dogs, golden jackals, Indian wolves, and (sometimes) leopards
- Hunting and poaching for horns, meat, skin
- Expansion of agricultural lands causing habitat loss
- Human-wildlife conflict when they graze in crop fields

Orange-Fleshed Sweet Potato

- ❖ A new orange-fleshed sweet potato variety is developed by the ICAR-Central Tuber Crops Research Institute (ICAR-CTCRI).
- ❖ The biofortified orange-fleshed sweet potato, designated SP-95/4, has undergone final trials successfully in the multiple States, including Odisha, West Bengal, Karnataka and Kerala.
- ❖ The orange colour due to the presence of 8 mg/100g Beta-carotene is a major feature as vitamin A source.

- ❖ The CTCRI had also launched the tuber crop-based 'rainbow diet' programme at Attappady in 2023 as the part of promoting the biofortified tubers among tribal communities for battling malnutrition and ensuring a balanced diet.
- ❖ In 2024, it was scaled up under the 'Punarjeevanam' programme.



PERSONALITIES, AWARDS, AND EVENTS

2025 Breakthrough Prize in Fundamental Physics

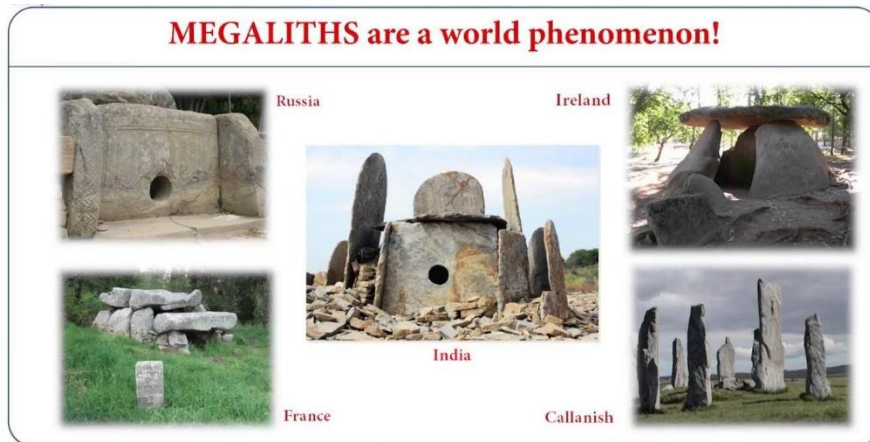


- ❖ The 2025 Breakthrough Prize in Fundamental Physics was awarded to 13,508 physicists across four collaborative projects at CERN.
- ❖ It is dubbed as the "Oscars of Science".
- ❖ Six prizes worth \$3 million each were announced in Life Sciences, Mathematics and Fundamental Physics.
- ❖ The award in Life Sciences category was given to three groups of scientists- Weight-loss drugs, Multiple Sclerosis treatment and Gene-editing technologies

- ❖ The Breakthrough Prize in Fundamental Physics was awarded to the four collaborations at the Large Hadron Collider (LHC) in CERN.
- ❖ The Mathematics Breakthrough Prize was awarded to Dennis Gaitsgory for “his central role in the proof of the geometric Langlands conjecture.”

MISCELLANEOUS NEWS

2,000 years old Megaliths



- ❖ Recently, a rock-cut chamber and artefacts were unearthed at Manimoola village in Bandadukka, Kerala.
- ❖ They are nearly 2,000 years old and maybe used in megalithic period.
- ❖ A nearby stone structure ‘Pathaya Kallu’ is also believed to be a megalithic-era monument.

Antar Drishti and Enable Inclusion App



- ❖ The National Institute for the Empowerment of Persons with Visual Disabilities (Divyangjan), Dehradun, in collaboration with the National Association for the

Blind (NAB), New Delhi, inaugurated 'Antar Drishti' – a unique sensory dark room.

- ❖ 'Antar Drishti' is a specially designed sensory experience space aimed at raising awareness and sensitizing society towards the challenges faced by persons with visual impairments.
- ❖ The NIEPVD will be going to implement the 'Enable Inclusion' App.
- ❖ It is a digital platform developed by Amar Seva Sangam for the early identification, intervention, and tracking of children with developmental disabilities.

