

2,504 villages to be developed under 'Anaithu Grama Anna Marumalarchi Thittam-II'

The Rural Development and Panchayat Raj Department recently issued a government order granting administrative sanction for ₹1,148 crore

The Hindu Bureau
CHENNAI

The Tamil Nadu government will implement 'Anaithu Grama Anna Marumalarchi Thittam-II' (AGAMT-II) in 2,504 village panchayats (including over 12,400 habitations) at an estimated cost of over ₹1,148 crore in the third year since the scheme was revived in 2021.

The Rural Development and Panchayat Raj Department recently issued a government order granting administrative sanction for ₹1,148 crore, including



The scheme is being implemented to meet the critical infrastructure needs of all rural habitations and ensure their holistic development. FILE PHOTO

₹250 crore from the State Fund, besides financial sanction for releasing ₹250 crore. It also laid down guidelines for the implementation of the scheme, which was first implemented during 2006-2011 for

the comprehensive development of all village panchayats by improving their basic infrastructure.

Returning to power in May 2021, the DMK revived the scheme and said it would be implemented in phases between 2021-22 and 2025-26 to meet the critical infrastructure needs of all habitations in rural areas and ensure their holistic development. It would cover about 20% of the village panchayats every year.

The government implemented the scheme in 2,657 village panchayats at a cost of ₹1,455 crore during 2021-22. During 2022-23, it implemented the scheme in 2,544 village panchayats at a cost of

₹1,155 crore. There are 79,395 habitations in 12,525 villages across the State. On an average, there are six habitations in a village panchayat.

While the fund allocation for rejuvenation of waterbodies is 30%, creation and upgrade of streets and lanes in a habitation will get 25%. Infrastructure development at schools and creation of public utilities will get 15%. Creation of infrastructure at the Samathuva burial grounds, the drive for clean and green villages, and livelihood support are to be taken up at 10% each.

LVM-3: the other ISRO rocket

Vasudevan Mukunth

The Indian Space Research Organisation (ISRO) has three classes of launch vehicles: the Polar Satellite Launch Vehicle (PSLV), the Geosynchronous Satellite Launch Vehicle (GSLV), and the new Small Satellite Launch Vehicle (SSLV). Of these, ISRO has launched the PSLV the most. It has a famous reputation as a "workhorse", with a very low failure rate. The PSLV can lift up to 3.8 tonnes to low-earth orbit.

ISRO developed and uses the GSLV to launch heavier payloads, and if required into higher orbits. Like the PSLV, the GSLV also has multiple configurations. The most powerful configuration is LVM-3, short for 'Launch Vehicle Mark 3'; it can lift up to 10 tonnes to low-earth orbit.

The LVM-3 has three stages. The first (or bottom-most) stage is in the form of two S200 boosters strapped to the sides of the rocket body. They combust a solid fuel called hydroxyl-terminated polybutadiene. The second stage is powered by two Vikas engines, which combust a liquid fuel – either nitrogen tetroxide or unsymmetrical dimethylhydrazine.

The uppermost final stage is powered by a cryogenic engine. It combusts liquefied hydrogen with liquefied oxygen.

Hydrogen has a very high specific impulse as rocket fuels go, but using it in an engine requires it to be liquefied first, which in turn means it must be stored at very low temperature, and with special pumping and transport systems.

ISRO will launch its Chandrayaan 3 mission on July 14 onboard an LVM-3.



The LVM-3 launch vehicle for the Chandrayaan 3 mission being moved to the launch pad. ISRO

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Objections overruled, Forest Bill goes to House unchanged

Parliamentary committee endorses proposed amendments to Forest (Conservation) Act, 1980 in its entirety; Environment Ministry denies charge that changes dilute various protections in the law

Jacob Koshy
Sobhana K. Nair
NEW DELHI

A parliamentary committee, set up to examine the controversial proposed amendments to the Forest (Conservation) Act, 1980, has endorsed the amendment Bill in its entirety.

The Hindu has viewed a draft copy of the report prepared by the 31-member joint committee on the Forest (Conservation) Amendment Bill, 2023, which is expected to be tabled in Parliament during the Monsoon Session starting on July 20.

The Bill seeks to amend the pivotal 1980 law which was enacted to ensure that India's forest land is not wantonly usurped for non-forestry purposes.

Touching a raw nerve

The proposed amendments to the Forest (Conservation) Act, 1980 have attracted objections on various grounds:

- 'Dilution' of the Supreme Court's 1996 judgment in the Godavarman case that extended protection to wide tracts of forests, even if they were not recorded as forests

- In geographically sensitive areas within 100 km of the International Borders or the Line of Control, no forest

clearance required to construct highways, hydel power projects and so on

- No Central protection for vast tracts of so-called 'deemed forest' (forests not officially recorded as forests) and permitting activities such as tourism, compromising their integrity



The Act empowers the Centre to require that any forest land diverted for non-forestry purposes be duly compensated. It also

extends its remit to land which is not officially classified as "forest" in State or Union government records.

The report states that the joint committee, chaired by BJP MP Rajendra Agrawal, analysed the Bill "clause by clause" and invited representations from 10 Union Ministries and views from Chhattisgarh, Maharashtra and Telangana governments and from experts, individuals and representatives of public sector units.

It notes that objections were raised to various aspects of the Bill, including complaints that the proposed amendments "diluted" the Supreme Court's 1996 judgment in the Godavarman case that extended protection to wide tracts of forests, even if they were not recorded as forests.

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Forest Bill goes to Parliament unchanged

The Environment Ministry denied this point, and argued that provisions in the Bill guarded against such situations. Construction of highways, hydel power projects and other such projects in geographically sensitive areas within 100 km of International Borders or the Line of Control will no longer require a forest clearance, an amendment that was "deeply problematic", a member noted. The Environment Ministry responded that such exemptions were not "generic" and were unavailable to private entities.

There were even objection to the proposal to change the name of the 1980 law from the Forest (Conservation) Act to the Van (Sanrakshan Evam Samvardhan) Adhiniyam, which translates to Forest (Conservation and Augmentation) Act. The objections were on the grounds that it was "non-inclusive" and left out "vast tracks of population both in South India and also in the Northeast." Environment Ministry officials defended the name change, saying that it stressed the need to not only conserve but also "augment" forests, and that forest conservation involved much more than according "clearances."

'Removing ambiguities'

While the Act has been amended several times in the past few decades – mostly in the spirit of bringing larger tracts of forest-like land under State protection – the latest set of amendments are different. According to the Centre, these amendments are necessary to "...remove ambiguities and bring clarity about the applicability of the Act in various lands".

Some of the proposed amendments specify where the Act does not apply. Other amendments specifically encourage the practice of cultivating plantations on non-forest land that could, over time, increase tree cover, act as a carbon sink, and aid India's ambition of being 'net zero' in terms of emissions by 2070. The amendments would also remove the 1980 Act's restrictions on creating infrastructure that would aid national security and create livelihood opportunities for those living on the periphery of forests.

The amendments were only introduced in the Lok Sabha in March, but a draft copy has been in the public domain, for comment, since June 2022. This has invited opposition from multiple quarters, including some north-eastern States who objected that vast tracts of forest land would be unilaterally taken away for defence purposes. There was also opposition from several environmental groups who said that the amendments removed Central protection from vast tracts of so-called 'deemed forest' and would permit activities such as tourism in these areas, compromising their integrity.

The Lok Sabha moved a motion to refer the Bill to a Joint Committee, which was seconded by the Rajya Sabha. Jairam Ramesh, Congress spokesperson and chair of the Standing Committee on Science, Environment and Forests, had objected to the Bill being moved to a Joint Committee instead of the Standing Committee.

Report highlights impact of pandemic on education

Maitri Porecha
NEW DELHI

The pandemic led to a decline in educational performance of many districts in the country, reveals a report from the Education Ministry.

The Performance Grading Index for Districts (PGI-D) released by the Ministry on Sunday as a combined report for 2020-21 and 2021-22 assesses the performance of school education system at the district level.

Much like the PGI for States released earlier, this report too has 10 grades under which districts are categorised, with Daksh being the highest grade (above 90%), followed by Utkarsh (81%-90%); Ati-Uttam (71%-80%); Uttam (61%-70%); Prachesta-1 (51%-60%); Prachesta-2 (41%-50%); Prachesta-3 (31%-40%); Akanshi-1 (21% to 30%); and Akanshi-2

Learning outcomes in districts

None of the districts attained the top two grades according to the Performance Grading Index for Districts (PGI-D) combined report for 2020-21 & 2021-22. The table summarises the scores achieved by districts in the two years



Score range (%)	Number of districts in 2020-21	Number of districts in 2021-22
>90	0	0
81 to 90	0	0
71 to 80	124	51
61 to 70	277	271
51 to 60	229	290
41 to 50	86	117
31 to 40	24	18
21 to 30	0	1
11 to 20	2	0
upto 10	0	0

(11% to 20%). The lowest grade is Akanshi-3, for districts that score less than 10%.

While none of the districts were able to earn Daksh and Utkarsh, in the latest report, 121 districts were graded as Ati-Uttam for 2020-21, though this

number fell by more than half in 2021-22, with just 51 districts making the grade. Further attesting to the pandemic effect, while 2020-21 had 86 districts under Prachesta-2 (sixth-highest grade), this number rose to 117 in 2021-22.

In 2021-22, Chandigarh

retained its Ati-Uttam status, as well as some districts of Delhi and Gujarat. In Maharashtra, Satara, Kolhapur, Nashik and Mumbai achieved this status as did Kolkata.

Tamil Nadu has several districts in the fourth-best grade (Uttam) and three –

Ramanathapuram, Pudukkottai and Theni – in Prachesta-1. Uttar Pradesh has several districts under Uttam and Prachesta-1, and four under Prachesta-2. Most of the districts of Jammu and Kashmir fall under the Prachesta 1 and 2 grades. South Salmara-Mankachar district was the only district in Assam under Akanshi-1 for 2021-22, grade) while the two grades at the bottom had no districts.

The PGI-D report is expected to help State education departments identify gaps at the district level and improve their performance in a decentralised manner. There are indicator-wise PGI scores that show the areas where a district needs to improve. The PGI-D structure has a total weightage of 600 points comprising 83 indicators under six categories: outcomes; effective classroom

transaction; infrastructure and student entitlements; school safety and child protection; digital learning; and governance process.

These categories are further divided into 12 domains: learning outcomes and quality; access outcome, teacher availability and professional development outcomes; learning management; learning enrichment activities; infrastructure; facilities; student entitlement; school safety and child protection; digital learning; funds convergence and utilisation; attendance monitoring systems; and school leadership development. "The ultimate objective of PGI-D is to help the districts to prioritise areas for intervention in school education and thus improve to reach the highest grade," a Ministry spokesperson said.

Global tropical primary forest cover continued to decline unabated in 2022

Primary forests are mature, natural forests that have remained undisturbed in recent history. They often store more carbon than other forests and are rich sources of biodiversity. Primary forest loss is almost irreversible in nature. A secondary forest is unlikely to match its carbon sequestering capabilities

Privali Prakash

Tropical areas lost 4.1 million hectares of forest cover - equivalent to losing an area of 11 football fields per minute - in 2022, new research quoted by the World Resources Institute's (WRI) Global Forest Watch has said. This forest loss produced 2.7 billion tonnes of carbon dioxide emissions, which is around the same as India's annual emissions due to the combustion of fossil fuels.

According to the University of Maryland, primary forest cover loss in tropical areas in 2022 was 10% more than in 2021.

Primary forests are mature, natural forests that have remained undisturbed in recent history. They often store more carbon than other forests and are rich sources of biodiversity. Primary forest loss is almost irreversible in nature: even if the green cover regrows, a secondary forest is unlikely to match the extent of biodiversity and carbon sequestering capabilities of a primary forest.

Global Forest Watch findings

The world is not on track to meet most of its forest-related commitments. WRI measures progress on two goals - ending deforestation by 2030, and restoring 350 million hectares (mha) of lost and degraded forests by 2030 - that represent multiple global forest pledges.

We need to reduce global deforestation by at least 10% every year to meet the 2030 target. In 2022, although the global deforestation rate was 3.1% lower than the baseline from 2018-2020, it was still over one million hectares above the level needed. This puts the world off track to meet the 2030 goal.

To meet the target of restoring 350 mha of forests globally by 2030, the world needs to increase tree cover by 22 mha per year, between 2021 and 2030.

Despite registering some gains, the overall change in tree cover in the past 20 years was a net loss of 100 mha. This means that we are still losing forests and not restoring them at the required rate.

Brazil and the Democratic Republic of Congo are the two countries with the most tropical forest cover, and both registered losses of this resource in 2022. Ghana and Bolivia also rapidly lost their primary forest cover.

On the other hand, Indonesia and Malaysia managed to keep their primary forest cover loss to record-low levels in 2022.

Brazil's high rate of primary forest cover loss occurred in the last year of Jair Bolsonaro's presidency, WRI noted. In his term, Bolsonaro faced international criticism for presiding over a surge of



A deforested area in Brazil which saw a surge in forest destruction during the previous presidency, Reuters

destruction in the world's biggest rainforest, along the Amazon river.

The rate of primary forest cover loss in the country increased by 15% from 2021 to 2022. Non-fire-related losses in 2022 also reached the highest rate since 2005.

Forest loss in the Amazon basin not only affects carbon but also regional rainfall. If deforestation continues at the current rate, it may eventually lead to a tipping point that, if crossed, could convert most of the ecosystem into a savanna.

The Democratic Republic of Congo lost more than half a million hectares of primary forest cover in 2022.

This rate of loss has continued to increase in recent years. As the population of the country grows, there is more demand for food, which in turn is leading to an expansion of area under agriculture and encroachment of land hosting primary forests.



Primary forests are burned for short-term cultivation and then left fallow for regeneration of soil nutrients.

Primary forests are burned for short-term cultivation and then left fallow for regeneration of soil nutrients. However, increased demand for food has shortened the fallow periods, destroying more forests.

A \$500 million agreement was signed at the United Nations Climate Change Conference in 2021, in Glasgow, to protect the Democratic Republic of Congo's forests, but it is yet to have an impact on the deforestation rate in the country.

Indonesia, on the other hand, reduced

its primary forest loss rate more than any other country has in recent years. Malaysia also managed to keep its primary forest loss level low in 2022, alongside Costa Rica, China, Cote d'Ivoire, Vietnam, Gabon, Madagascar, Nicaragua, and Equatorial Guinea.

According to Global Forest Watch, India lost 43.9 thousand hectares of humid primary forest between 2021 and 2022, which accounts for 17% of the country's total tree cover loss in the period. The total tree cover loss in India between 2021 and 2022 was 255,000 hectares.

The total global tree cover loss in 2022 declined by 10%. This includes primary, secondary, and planted forests.

This decrease, according to Global Forest Watch, is a direct result of a decrease in fire-related forest losses which decreased 28% from 2021. Non-fire losses in 2022 increased by slightly less than 1%.