

PALLE PRAKRUTHI VANAM / VILLAGE NATURE PARK

In a nutshell: Creating dense mini forests in rural areas using the Yadadri Model of plantation.

Nodal agency: Gram panchayats across Telangana, along with the State Rural Development and Forest Departments

'Telangana ku Haritha Haram' is a flagship programme of the State, with the main objective of increasing the green cover from 24% to 33%. Under this programme, an initiative has been taken up for creation of village nature parks in 19,472 gram panchayats and habitations across 32 districts of the State. These nature parks are based on Miyawaki planting model, which has been suitably adopted in the State as Yadadri model of plantation.

The programme strives to create mini forests with locally available native plant species. It serves as a good example of convergence of rural development department and the forest department. The programme is carried under the ambit of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), with technical help from the forest department.

The principles of Yadadri forest model:

- High density planting i.e., 4,000 seedlings are planted in an area of one acre.
- Planting of native species in the right matrix to ensure creation of different canopies of natural forests in a short time.
- Natural selection process will set in due course and the principle of survival of the fittest operates.

Dense plantation has been taken up with different local native species, which include forest trees, shrubs, medicinal herbs, fruit plants etc. 4000 plants are planted in 1 acre area by following an escapement of 1m x 1m from plant to plant.

With the active participation of the sarpanch, ward members, public representatives and the general public, creation of village nature parks was made possible:

- Soil was ploughed and vermicompost prepared in the village dumping yard. Farmyard manure was added for enriching the soil.
- Leaves of neem, glyricidia and pongamia were added to the soil for decomposition, before planting.
- The soil enrichment inputs were adopted differently based on the locally available material.
- 10% green budget was being utilized from the 15th Finance Commission and State Finance Commission funds.

Impact

Biodiversity improvement

- These village nature parks/Palle Prakruthi Vanam with dense plantations are home to several birds, insects, butterflies etc. An entire ecosystem has been created in a span of one year, improving the gene pool of local flora and fauna.

Climate change mitigation

- There is more carbon fixation per unit area, with an increase in soil carbon storage due to dense plantations at close spacing.

Soil and water conservation

- Rainwater is trapped in the plot, with no scope for run off because of the crown, closer escapement and root network system. There is no rain splash erosion and runoff. This improves moisture regime and ground water in the area. This is a better bio harvesting structure compared to the traditional check dams and percolation tanks.

Way forward

- The Telangana government is also planning for Bruhat Prakruthi Vanam (BPV), which is a dense forest type plantation but in an area of 5-10 acres. It is to be planned in every mandal across the state. It is proposed to take up 2725 BPVs in 545 mandals of Telangana @ 5 BPVs per mandal.



High density plantation



Pitting and planting



Fertilizer application