



ANANDA NAGAR

An integrated Rural & Socio-economic
development project in West Bengal, India

Asthi Pahar Hill Afforestation Proves that Rapid Climate Change is Possible

By Rector Master Dada Narayananda Avadhuta

This year's final report of reforestation in Anandanagar: September 2024

Anandanagar, an area in the Purulia District of Bengala, India

In an effort to enhance the environment, Acarya Kishan Singh Sood initiated a green revolution plan in 2021 at Anandanagar. In July of that year, a massive afforestation drive began on Asthi Pahar (An area with a very old hill). Twenty thousand saplings, compatible with the local climate, were planted that year. Within just three years, this effort transformed the area into a dense forest. However, the rocky terrain at the peak of the hill slowed the growth of the saplings. The key to this success was timely planting, diligent care, and maintenance, including protection from cattle and goats.

This year, in 2024, afforestation has expanded to nearly twenty-five acres adjacent to Asthi Pahar. In addition, another twenty-five acres in Banshgar and Gurudi Mouzas (Revinew village) have been planted with saplings. A total of fifty thousand saplings have been planted. A comparison of photographs taken in 2021 and 2024 clearly shows the remarkable difference.





ANANDA NAGAR

An integrated Rural & Socio-economic
development project in West Bengal, India



The results of afforestation on Asthi hill in 4 years time





ANANDA NAGAR

An integrated Rural & Socio-economic
development project in West Bengal, India

This proves that even in the dry, rocky soil of western Rarh, extensive afforestation can bring about a complete transformation of the local climate within just five years. Readers are invited to visit Anandanagar to witness this natural beauty and experience a refreshing change from the routine of daily life.

Starting with July 2021, with a continued effort for last four years, we have reached a stage, where some visible change is perceptible in those areas where plantation has survived and flourished.

Notable among them are Asthi Pahar - the illustrious hill which became famous after **P.R. Sarkar** discovered the remains of fossil record of dinosaur on 26th December 1986, and the Durlabha Druma (Rare Plants) Sactuary one among the many nearly 73 sactuaries proposed by **Sarkar** to be established here in Anandanagar. It was on this hill that **Sarkar** himself climbed uphill to the top. He took a seat on the flat top rock and from there directed the investigation of the fossil record which was lying in abundance everywhere around the hill. That memorable day **Sarkar** discovered the fossil of dinosaur. A part of the tail of the dinosaur was dug out and has been kept in His museum.

Asthi hill forestation was the first to be started in July 2021. This is the fourth year of reforestation and by Lord's grace Asthi hill has been transformed from a barren hill into a lush green picturesque spot. Similarly Plantation in Durlabha Druma sanctuary was started in August 2023. This place has also turned green with quite a large percentage of surviving plants. Recent pictures demonstrate the reality. A sayar (pond) has also been dug on the plot.



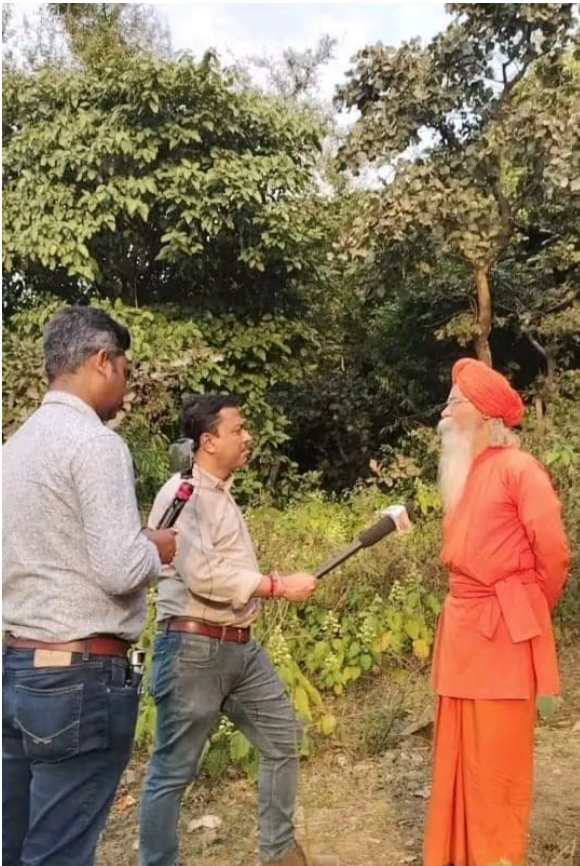


ANANDA NAGAR

An integrated Rural & Socio-economic
development project in West Bengal, India

This year rains have been quite merciful. Following areas were prepared for Plantation this rainy season. For protecting the planted saplings from the grazing cattle, it was thought prudent to dig trenches around the plantation plots. There an extensive trenching has been done around all of our plots identified for the purpose. Total length of the trenches will be a few thousand feet.

From 2021 we began plantation of 20,000 plants on the Asthi hill. The survivability of the plants was >60%. Reason being the terrain of the hill with rocky strata, poor rains and no irrigation facility. Next year in 2022, were added a few thousand seeds during rainy season on the hill and about 5,000 plant saplings of native trees were planted. That year the total plant sapling planted were increased to 25,000. In August - September 2023, 30,000 plants were planted. All these years we had bought the plants from the nurseries. And to protect the plots from cattle bamboo fences were used. They weren't found very cost-effective. Also buying plants was found to be quite expensive. Hence from this year we have adopted digging the trenches as an alternative practice to fencing. This practice is also in vogue and practiced by the state government forest department. This year we have dug total trenches around the plantation sites to the extent of 13,345 feet long.



Ac. Narayananda Avadhuta Rector Master of Ananda Nagar Development Project - Asthi green hill

In view of all these considerations, after the third year it was decided to develop our own forest plant nursery growing saplings with own seeds. A large number of seeds are collected in and around Anandanagar and the remaining seeds are bought from outside nurseries. Establishing own nursery involved one time expenditure in growing plants and setting up our own nursery. This appeared to be cost effective in the long term, since our need being of perennial nature.



ANANDA NAGAR

An integrated Rural & Socio-economic development project in West Bengal, India

Current year following sites have been selected and plantation done there. These sites have been covered with trenches for protection from cattle.

Site-wise details of plantation sites:

1. Land around Asthi hill 25 acres of land - 20000 saplings
2. Durlabh druma 15 acres of land - 15000 saplings
3. Angiras - 2500 saplings
4. North side of Angiras sanctuary -2500 saplings
5. South Side of Angiras sanctuary - 1500 saplings
6. Sayarghatu - 1500 saplings
7. Behind Krsnadvipii sudarshan kanan - 1500 saplings
8. Venkateswarananda dihi 6000 saplings
9. Gurukul compound - 200

Total: 49.700 saplings

Following saplings (with the n. of saplings produced) from the forest plant nursery have been planted in the above sites.

- | | |
|---------------------------------------|----------------------------------|
| 1) Sandalwood (White) - 50 | 29) Gab - 50 |
| 2) Sandalwood (Red) - 100 | 30) Sindur - 500 |
| 3) Mahogany - 6000 | 31) Mad Tree (Pagal Tree) 300 |
| 4) Teak - 2000 | 32) Curry Leaf - 300 |
| 5) Amla (Indian Gooseberry) - 600 | 33) Shishu - 1000 |
| 6) Haritaki - 500 | 34) Banyan 2000 |
| 7) Bahera - 3000 | 35) Peepal 2500 |
| 8) Krishnachura (Flame Tree) - 2000 | 36) Fig 200 |
| 9) Karanja - 300 | 37) Yellow Palash 100 |
| 10) Silk Cotton Tree - 500 | 38) Red Palash - 3000 |
| 11) Simarouba (Lakshmitaru) - 1500 | 39) Red Silk Cotton Tree 500 |
| 12) Gokul - 1500 | 40) White Silk Cotton Tree - 300 |
| 13) Bakul - 500 | 41) Madar (Daow) - 50 |
| 14) Tamarind - 3000 | 42) Neem 5000 |
| 15) Khirish - 1500 | 43) Tabebuia (Basontika) -200 |
| 16) Amaltas (Golden Shower Tree) - 50 | 44) Kusum 100 |
| 17) Glass Fruit - 1500 | 45) Boxwood 50 |
| 18) Nagkesar - 1000 | 46) Chaal Karai -50 |
| 19) Arjuna - 1000 | 47) Pitali 500 |
| 20) Mahua/Moul - 100 | 48) Gamar 1000 |
| 21) Babla (Acacia) - 200 | 49) Udala -300 |
| 22) Chhatim - 500 | 50) changing 50 |
| 23) Kamini - 300 | 51) Kath Badam 2000 |
| 24) Sal (Desi) - 1500 | 52) bael 50 |
| 25) Sal (Malaysian) - 1000 | 53) kanthal 500 |
| 26) Minjiri - 100 | 54) kaju badam 20 |
| 27) Ashoka - 200 | 55) Kadambari 500 |
| 28) Longan - 200 | Total ~ 60.000 |



ANANDA NAGAR

An integrated Rural & Socio-economic
development project in West Bengal, India

There has been a substantial cost advantage by establishing own plant nursery compared to buying plants from outside.

It is seen that the cost of growing 50000 saplings in our own nursery works out to Rs.5 per plant against Rs.25 for bought out plants. Thus establishing cost of own nursery and growing plants of our choice has been Rs.3.65lac. This includes the cost incurred in establishing the

- a. Net shade and the structure to support that*
- b. Cost of buying seeds*
- c. Cost of poly bags*
- d. Maintenance cost of filling soil in the poly bags and growing seeds in the bags*
- e. Nursery maintenance*

Thus this year our total expenses for growing and planting 50000 plants as also digging trenches, and night supervision works out to 10.25lac.

From next year the cost of building nursery will not be burdened.

For next year where we plan to grow 100.000 saplings. Plant growing cost may work out to ~ Rs.3.5 per plant (Rs.3.5lac), thus total budgetary expenditure for planting 100000 plants next rainy season may work out to 14- 15 lacs.



The dinosaur fossils hill near Ashti hill.



ANANDA NAGAR

An integrated Rural & Socio-economic
development project in West Bengal, India

In this effort to plant saplings as apart of reforestation of **Anandanagar** starting from 2021 till date i. e. September 2024 we have received unconditional and inspiring support of many empathetic people without which it wouldn't have been possible to execute this massive project;

This report will remain incomplete without mentioning the names of Shrii Subir Maity our unconditional dedicated technical help for establishing our forest plants and fruit plant nurseries. He spends his time throughout the year like a dedicated hand without any personal expectations. The other person is our dedicated and sincere dada *Devapremananda* without him our reforestation project would not be possible. He is one man army to execute the massive plantation of saplings singlehandedly with his local helping people.

I take this opportunity to approach the global society to come forward to support this gigantic project of reforestation and rain water conservation at **Anandanagar**. We need both dedicated personal and agriculture expertise to support our work.

A'c. Kishan Sood

Anandanagar, Bengal, India

<https://www.anandanagar.org/our-ananda-nagar/about-us/>