



Before

After



A CSR PROPOSAL
**"GREEN ROOTS: BUILDING FORESTS FOR
FUTURE GENERATIONS, F.Y. 25-26"**

SUBMITTED TO: -

Styrenix Performance Materials Limited

SUBMITTED BY: -



1. ABOUT UNITED WAY OF BARODA

United Way of Baroda stands as the pioneering United Way Chapter in India, founded in 1986. Originating from a network established in Denver, Colorado in 1887, it is part of an international network spanning over 1,800 communities across 41 countries and territories. Over 37 years, United Way of Baroda has diligently worked across pillars such as Education, Health, Income Stability, Rural Development, Sustainable Environment, Social Inclusion, and Disaster Relief. With a track record of implementing over 250 projects, it has positively impacted millions, fostering partnerships with 100+ local NGOs/Trusts. United Way of Baroda continues its mission to advance the common good and elevate standards of living for individuals in need.

2. BACKGROUND OF PROJECT

Miyawaki forests, based on a unique and efficient afforestation technique developed by Dr. Akira Miyawaki, are transforming landscapes in rural areas by creating dense, biodiverse forests within a short time frame. This approach involves planting native species close together, enabling the forest to grow up to ten times faster than conventional methods. The significance of Miyawaki forests in rural areas extends beyond environmental rejuvenation. They play a critical role in supporting biodiversity by providing habitats for various species, enhancing the ecosystem's resilience, and contributing to soil and water conservation. These forests also mitigate climate change impacts by absorbing carbon, reducing local temperatures, and improving air quality. By integrating Miyawaki forests into rural settings, we not only enhance the region's ecological balance but also support the livelihood of local communities, making these areas more sustainable, healthy, for future generations.

Importance of Miyawaki Forestry

1. **Environmental Benefits:** Rural trees act as natural air filters, absorbing pollutants such as carbon dioxide, sulfur dioxide, and nitrogen oxides. They also play a critical role in managing rural heat islands by providing shade and cooling the environment, thus reducing energy consumption for air conditioning.
2. **Biodiversity Conservation:** Rural forests serve as habitats for various species of birds. They help maintain ecological balance and support biodiversity within rural environments.
3. **Climate Change Mitigation:** Trees absorb carbon dioxide from the atmosphere, making rural forestry a key strategy in combating climate change. By sequestering carbon, rural forests help in reducing the overall carbon footprint of cities.
4. **Social and Psychological Benefits:** Green spaces have been shown to improve mental health and well-being. They offer recreational opportunities, reduce stress, and enhance the overall quality of life for city dwellers.

Status of Green Cover in Gujarat

Gujarat has made considerable strides in expanding its green cover, but challenges remain in rural areas where rapid development often leads to a reduction in green spaces. According to the **India State of Forest Report (ISFR) 2021**, Gujarat has seen a gradual increase in its forest and tree cover. However, the state's green cover is still below the national average, particularly in rural areas where the pressure of population growth and industrialization is high.

Miyawaki forestry initiatives like the one proposed are crucial for enhancing the green belt in Gujarat's cities. By focusing on the planting of native and fruit-bearing trees, the project aligns with the broader goals of the "Ek Ped Maa Ke Naam" initiative, fostering a sense of environmental stewardship among citizens. The involvement of communities in tree planting and care will not only improve rural greenery but also promote a culture of sustainability and ecological responsibility.

Government of India Initiative: "Ek Ped Maa Ke Naam"

The "Ek Ped Maa Ke Naam" initiative, launched by the Government of India, encourages citizens to plant trees in honor of their mothers. This program promotes the planting of native and fruit-bearing trees, enhancing green cover, and fostering a sense of environmental responsibility among citizens. By aligning with this initiative, the proposed CSR project seeks to amplify its impact through large-scale community involvement and sustainable forestry practices.

The initiative aims to:

- **Enhance Green Cover:** By encouraging the planting of native and fruit-bearing trees, the initiative seeks to improve the overall green cover in rural and rural areas.
- **Promote Environmental Awareness:** Through the symbolic act of planting a tree in honor of one's mother, the initiative fosters a sense of personal connection to environmental conservation.
- **Encourage Community Participation:** The initiative promotes collective action by involving various community groups, schools, and organizations in tree planting activities.
- **Support Biodiversity:** By focusing on native species, the initiative helps preserve local biodiversity and supports the health of local ecosystems.

3. PROPOSED AREA

- Sevasi- Vadodara Green Belt Area

4. THEMATIC AREA

Sector	(Please Tick)
Education	
Health/Hygiene	
Rural Development	
Animal Welfare	
Skill Development	
Others or More than one of the above	
Environment	√
(Please Specify)	

5. OBJECTIVES

- **Enhance Green Cover:** To grow 6,000+ diverse tree species to increase forest cover.
- **Biodiversity Conservation:** Introducing medicinal and biodiversity plants.
- **Climate Action:** To reduce carbon emissions and improving air quality.

6. OUTCOMES

Enhanced Green Cover:

- **Target:** To plant & maintain 6,000 trees under Forestation
- **Outcome:** Increased green cover in rural areas, contributing to ecological balance and improved air quality.

Carbon Sequestration:

- **Target:** Trees are expected to sequester CO₂ annually.
- **Outcome:** Significant reduction in carbon footprint, contributing to climate change mitigation.

Biodiversity Conservation:

- **Target:** Maintenance of Trees
- **Outcome:** Enhanced habitat for birds, insects, and other rural wildlife, promoting biodiversity.

Community Engagement:

- **Target:** Involvement of community members in tree planting and care activities.
- **Outcome:** Strengthened community ties and increased environmental awareness among rural residents.

Health and Well-being:

- **Target:** Development of new green spaces.
- **Outcome:** Improved mental and physical health of residents through access to recreational spaces and nature.

Sustainable Practices:

- **Target:** Adoption of drip water-efficient systems and organic mulching techniques.
- **Outcome:** Sustainable management of rural forests, reducing water usage and promoting healthy tree growth.

Survival Rate

- **Target:** 100 % Survival rates
- **Outcome:** promoting healthy tree growth.

7. SCOPE OF WORK

1. Forest Site Selection and Preparation

- **Land Assessment:** Identify suitable land for afforestation, considering soil type, water availability, and accessibility.
- **Desilting:** Desilt the land to improve water retention and soil quality.
- **Mulching:** Apply mulch to retain soil moisture, regulate temperature, and prevent weed growth.

2. Tree Planting

- **Selection of Species:** Choose a mix of big trees, medicinal plants, and biodiversity trees suited to the local climate and soil conditions.
- **Hole Digging:** Dig holes of appropriate depth and diameter for each type of tree.
- **Planting:** Execute planting with proper spacing and alignment to ensure healthy growth.

3. Bore well Installation

- **Site Assessment for Bore well:** Identify optimal locations for bore well placement.
- **Bore well Drilling and Installation:** Drilling, casing, and installation of bore well pumps.

4. Annual Maintenance Contract (AMC)

- **Watering:** Regular watering schedules, especially during dry seasons.
- **Weeding:** Periodic weeding to prevent competition for nutrients.
- **Pruning and Training:** Maintain tree health and structure.
- **Pest and Disease Management:** Monitor and control pest infestations and diseases.
- **Soil Health Management:** Regular soil testing and amendment application.

5. Community Involvement

- **Training Programs:** Train local volunteers in tree planting and maintenance.
- **Employment Opportunities:** Create jobs for locals in the maintenance and monitoring of the forest.

8. ENHANCING SUSTAINABILITY AND REDUCING CARBON FOOTPRINT

Initiative

- Forest will comprise **6,000+ trees**.
- Each tree will absorb approximately **22 kg of CO₂ annually**.
- **Total annual CO₂ offset:**
 $6,000 \text{ trees} \times 22 \text{ kg} = 132,000 \text{ kg (220 metric tons) of CO}_2 \text{ per year}$

Estimated Benefits

- Equivalent to reducing the CO₂ emissions of 43,800 cars
- Improved air quality, reducing urban pollution levels
- Increased green spaces for recreation and community wellness
- Enhanced biodiversity, supporting local wildlife and ecosystems
- Reduced heat effect, lowering temperatures in surrounding areas

9. FINANCIAL IMPLICATION FOR DEVELOPMENT OF MIYAWAKI FOREST

Sr. No	Particulars	Qty.	Gross Total (Rs.)
1.	Fencing with Branding boards and Gate, Bore well with drip system, Desilting of Land, Mulching & Manure, Manpower for Digging Holes, Cost for 6,000 + Trees, Maintenance for F.Y. 2025-26 (October to March 2026), Miscellaneous Work / Ensure plant survival with a replacement for any dead plants/Any other work based on actual.	1 Miyawaki Urban Forest	22,70,100
2.	Environmental Project Designing + Monitoring & Evaluation		80,000
3.	UWB Admin Cost		1,49,900
	Grand Total – For F.Y. 2025-26 =		Rs. 25,00,000

10. SNAPSHOTS FROM EXISTING PROJECTS







**SUN
PHARMA**

**"GREEN ROOTS: BUILDING FORESTS FOR FUTURE GENERATIONS"
F.Y. 2024-25**

- 10,000+ NATIVE TREES (FRUIT-BEARING, FLOWERING, AND SHRUBS) TO SUPPORT THE ECOSYSTEM & CUT CARBON FOOTPRINT THROUGH MIYAWAKI TECHNIQUE
- 198,000 SQ. FT. GREEN COVER
- LOCATION : RUPAPURA, KANJARI, HALOL

A CSR INITIATIVE OF

SUN PHARMACEUTICAL INDUSTRIES LTD
IMPLEMENTED & MAINTAINED BY-UNITED WAY OF BARODA

11. TREES LIST

Trees



ARJUN



LIMBU



DRUMSTICK



SHETOOR



PARAS PEEPAL



KADAMB



SINDOOR



NAGOD



ROHEDO



KARANJ



PINK CASSIA



VAD



KASHID



PINK KAREN



IMLI



ASOPALAV



SEWAN



JAMUN



FIG



AAMLA



KADAMB



DESI BAVAL



DADAM



BENGALI BAVAL



KACHNAR



GORAD



GARMALO



DESI JASOOD



PALASH



BORSALLI



NEEM



PALPALIYA



SHEESHSAM



MAHUA



ARDUSI



KOTHU