

Social forestry-Conserving the Biodiversity through Tree Planting Sirsi, Western Ghats



Annual report

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Prepared By –

Snehakunja Trust, Kasarkod

Honnavar – 581342

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Executive summary

The “Biodiversity Conservation and Tree Plantation” project implemented by Snehakunja, with support from Himalaya Wellness, is a comprehensive, community-driven ecological restoration initiative in the Western Ghats. The project integrates biodiversity conservation, climate change mitigation, and livelihood enhancement through restoration of degraded community forests. Focus of this large-scale planting of native species is habitat restoration, species recovery, livelihoods promotion and conserving the bee flora for which bees visit for pollen and nectar. Thus, addressing the pollinator decline under the climate change scenario.

During the period 2025–2026 a total of 170,490 saplings were planted. In the previous year (2024-2025), 1,72,000 saplings from 130 species were planted. These native species are endemic, medicinal, and Non-Timber Forest Product (NTFP) plants. This diversity reflects a deliberate effort to align ecological restoration with local livelihood needs, while also contributing to long-term ecosystem stability and resilience.

The project focused on restoring degraded betta lands and associated forest patches, which are critical community-managed landscapes in the Western Ghats. These areas, historically used for leaf manure, fuelwood, and NTFPs, have faced increasing degradation due to changing land-use patterns and environmental pressures.

A key feature of the project is its contribution to species recovery, particularly through the inclusion of rare, endangered, threatened (RET), and endemic species such as *Dipterocarpus indicus*, *Syzygium travancoricum*, *Myristica fatua*, *Gymnacranthera canarica* and *Vateria indica*. By incorporating these species into plantation models, the project goes beyond conventional tree planting and actively contributes to conservation of threatened species of the Western Ghats. This will help to retain microclimate requirements of important wetland forest habitats, and provide food for wildlife in near future, thus helping mitigate the human wildlife conflict.

The project has achieved a commendable survival rate of 85–90%, reflecting effective planning and timely post-plantation care. Several measures were undertaken to ensure healthy growth and increased survival, including gap filling through replanting, application of organic and inorganic fertilizers, earthing-up to strengthen root systems, and mulching to conserve soil moisture. Site-specific interventions were implemented based on terrain and soil conditions. Moving forward, the project aims to further

strengthen survival rates through continuous monitoring, adaptive management, and enhanced community-led protection measures.

A total of 26 permanent sampling plots (20 m × 20 m) in Sirsi and 10 in Sagara has been established across plantation sites. Growth parameters such as height and diameter are being systematically recorded using digital tools, enabling accurate estimation of biomass and carbon sequestration through allometric equations. This ensures reliable, long-term ecological assessment and provides a robust baseline for future monitoring.

Sirsi plots demonstrate higher biomass accumulation and carbon sequestration per plot, indicating comparatively better growth performance or more favourable ecological conditions. Meanwhile, Sagara plots, although similar in planting density, show lower biomass values. Sirsi plantations demonstrate significantly higher carbon storage (261.17 tons) and CO₂ sequestration (958.48 tons) due to both larger area and higher per-hectare productivity. Sagara, though smaller in extent, contributes 25.33 tons of carbon and 92.97 tons of CO₂, reflecting moderate but meaningful ecological gains. Overall, combined sequestration exceeds 1,051 tons of CO₂, indicating strong climate mitigation potential across both landscapes.

Community participation through Local stakeholders, including betta land users, Village Forest Committees (VFCs), and community institutions, have been actively involved in planning, species selection, and implementation. A total of six major stakeholder meetings and outreach events were conducted.

The project outreach activities included exposure visits and awareness programs. We have organized such programs for students of MES College Sirsi, the College of Horticulture Sirsi, local Vanalli and Jaddigadde primary and middle schools and Azim Premji University. These visits provided hands-on learning experiences in biodiversity conservation, ecological restoration, and sustainable livelihood practices, helping bridge the gap between academic knowledge and field-level realities.

One of the major highlights of the project was the National Symposium on Carbon Neutral Villages held in February 2026, which brought together over 380 participants, including policymakers, researchers, and community representatives. The event was inaugurated by Vishweshwara Hegde Kageri, who appreciated the initiative, particularly noting the high survival rates and community-driven approach. The unveiling of a project information and branding board at the site further strengthened outreach and visibility.

The project also received positive media coverage, enhancing its recognition at regional levels.

The project has generated significant ecological, social, and institutional outcomes. It has contributed to restoration of degraded landscapes, enhanced biodiversity, and improved carbon sequestration potential. At the same time, it has strengthened NTFP-based livelihoods, built community capacity, and fostered partnerships between local communities, civil society organizations, and the private sector. The initiative demonstrates a successful model where ecological restoration and livelihood security are mutually reinforcing, offering a scalable approach for sustainable development in the Western Ghats.

Chapter 1: Introduction

The Western Ghats, globally recognized as one of the eight major biodiversity hotspots, support an extraordinary range of flora and fauna, with a high degree of endemism and ecological significance. Despite their importance, these landscapes have been increasingly exposed to pressures such as land-use change, habitat fragmentation, unsustainable extraction of forest resources, and the growing impacts of climate variability. Among the most affected are community-managed forest systems such as *betta lands*, which are vital for maintaining ecological balance while supporting local livelihoods.

Snehakunja, with over five decades of experience in environmental conservation and community-based initiatives, has consistently worked towards addressing these interconnected challenges. Building on its long-standing engagement in the Western Ghats, the organization has undertaken the project titled “Biodiversity Conservation and Tree Plantation”, with support from Himalaya Wellness, India. The project reflects an integrated approach that combines ecological restoration with livelihood enhancement, ensuring that conservation efforts remain both sustainable and community-centric.

The project primarily focuses on the restoration of degraded *betta lands* and associated forest areas through the planting of native, endemic, and multifunctional species. Particular emphasis has been placed on Non-Timber Forest Product (NTFP) species and medicinal plants, recognizing their ecological importance as well as their role in sustaining local economies. By aligning species selection with traditional knowledge and local dependency patterns, the project seeks to create long-term ecological and socio-economic value.

Geographically, the project is being implemented across the Sirsi and Sagara regions of Uttara Kannada and Shivamogga districts in Karnataka. These regions form part of the central Western Ghats and are characterized by tropical evergreen and semi-evergreen forests, high rainfall, and rich biological diversity. The landscape is a mosaic of natural forests, community-managed lands, and agricultural systems, offering a suitable context for demonstrating integrated restoration models.

The project area is also socially significant, as it supports communities that continue to rely on forest resources for subsistence and income. Traditional practices related to forest use, wild food systems, and NTFP harvesting remain relevant, although they are increasingly challenged by ecological degradation and changing socio-economic dynamics. This underscores the need for interventions that not only restore ecosystems but also strengthen livelihood resilience.

Through a combination of plantation activities, stakeholder engagement, capacity building, and market linkage development, the project aims to enhance biodiversity, improve carbon sequestration potential, and promote sustainable use of forest resources. At its core, the initiative seeks to establish a community-driven model of conservation, where ecological restoration and livelihood security are mutually reinforcing.

Apart from the planting interventions, several stakeholder consultations were conducted to facilitate participatory planning, gather local insights, and strengthen collaboration with community members, institutions, and government departments. Furthermore, student exposure visits were organized as part of the project's outreach and awareness components. These visits provided students with hands-on learning opportunities on ecological restoration, biodiversity conservation, and sustainable resource management practices being demonstrated at the project sites.

The current report provides a detailed account of the activities undertaken as part of the ongoing project during the reporting period. The major focus of this phase was on field-level interventions aimed at strengthening plantation establishment and improving overall plant survival. Key activities included planting in newly identified sites, earthing up, and application of organic and inorganic manure to enhance soil health and support vigorous plant growth.

In addition, replanting efforts were carried out in previously established sites to ensure optimum survival rates and maintain uniform planting density across all locations. These activities were guided by field assessments that helped identify gaps, mortality patches, and soil-related constraints. The interventions collectively aimed to consolidate earlier plantation efforts while expanding the project's ecological footprint through the inclusion of new planting areas.

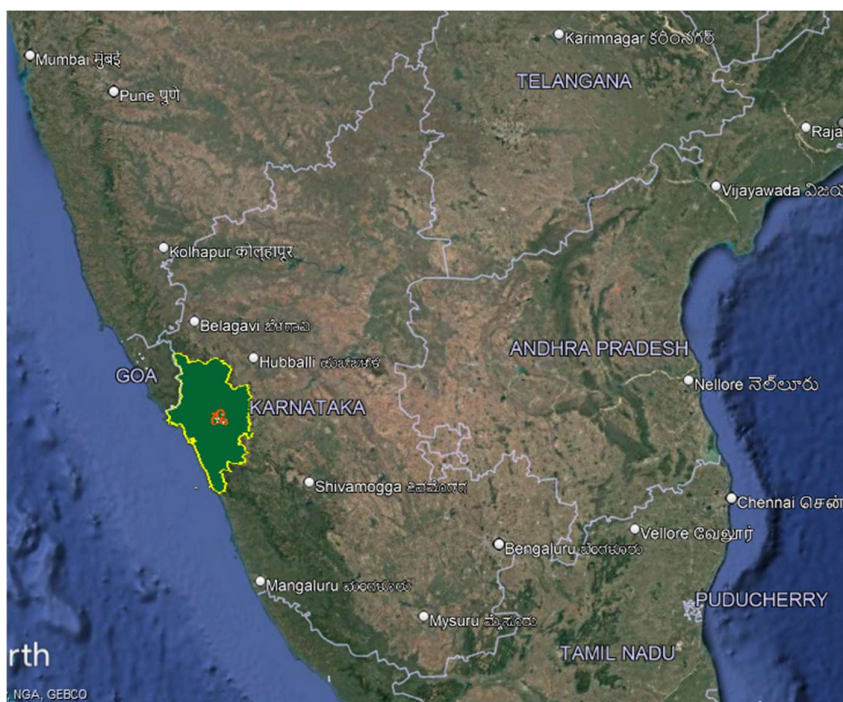


Fig 1. Project site in Uttara Kannada, Karnataka

Project site

The Western Ghats Mountain ranges, running parallel along the west coast of India, constitute one of the eighteen ‘hottest global biodiversity hotspots’ of the world, because of their large number of endemic biota and the scale and speed of their current habitat loss (Myers et al. 2000). The mountain ranges support - together with Sri Lanka - about 4780 vascular plant and 1073 vertebrate species, of which, respectively, 2180 (i.e., 0.7 % of the world’s plant species) and 355 species (i.e., 1.3% of the global vertebrate species) are endemic. At the same time, the region has lost most of its primary vegetation, with only 6.8 % of the original vegetation remaining (Myers et al. 2000). Uttara Kannada (13.85 ° – 15.7166° N, 74.166° – 75.2833° E) is one of the most densely vegetated (81% of geographic area under forests cover, but not the original vegetation) districts within the Western Ghats and is endowed with rich natural resources.

Vanalli and Kodnagadde village panchayats in Sirsi taluk were selected for planting, which includes villages Vanalli, Gonsar, Kodnagadde, Kalgadde–Kanchigadde, Mensi, Balekayimane, Songinmane, and Guruvalli.

Project landscape and land tenure:

Betta land, or Soppina Betta, is a revenue land adjacent to the commercial orchards of pepper, cardamom, and arecanut. Soppina bettas—literally “hillock forests stocked with leaf manure trees”—are disjunct forest patches seen intermittently along the slopes of undulating hillocks adjoining the densely vegetated Areca nut orchards (Betel nut palm, botanically *Areca catechu* L.), in the narrow valleys of the forest-covered Uttara Kannada district, in the central Western Ghats of Karnataka, India. To an outsider, these Soppina bettas would be readily regarded as nothing more than the extended portions of the adjoining forest area, while the local farming community recognizes them as extraordinary landscapes. These are typically associated with betel nut orchards and spice gardens, the two predominant land use forms in this region. They also mark a unique forest management system, which takes its roots in the days of British administration of the 19th century AD.

For centuries, the farmers have been gathering inputs for their gardens, cattle, and household needs. This includes green leaf, dry leaf, firewood, small timber, fruits, uncultivated foods, medicine, fodder, bamboo, and so on. Francis Buchanan, a Scottish, appointed by the East India Company to gather information on natural resources in South India (in the year 1801), writes that the Soppina betta, found adjacent to the pepper orchards and in the midst of the forests, was well maintained by the farmers in the Uttara Kannada district. Later during the colonial period, special user rights were provided for such extraction under the Canara Privilege Act (1924), which exists even today.

Now as part of the ongoing project, several key activities have been implemented in the field to ensure the success and sustainability of our efforts. The planting phase was successfully completed prior to September 2024.

Post-planting activities for the maintenance of saplings planted, such as manure application and earthing up, have been taken at the proper time.

Within these reporting periods our actions were focused on monitoring plantations. Proper monitoring actions have been undertaken to track the growth and health of the saplings. This involves periodic assessments of survival rates, growth parameters, and any signs of disease or pest infestations. The current document summarizes the set of activities and outputs of the activities undertaken during January 2025 to March 2025.

Chapter 2: Stakeholder Consultations, Outreach and Capacity

Building Activities

Project outreach under the “Biodiversity Conservation and Tree Plantation” initiative has been carried out through a series of structured engagements, including stakeholder meetings, technical workshops, awareness programs, and a national-level symposium. These activities were designed to strengthen community participation, enhance ecological understanding, and promote sustainable management of natural resources.

A significant milestone during this period was the organization of a National Symposium marking the 50th anniversary of Snehakunja’s environmental and social journey, reflecting its long-standing commitment to conservation and community development.

The details of the stakeholder consultation and project outreach activities are as follows:

Sl. No.	Place	Date	Participants
1.	Kodnagadde	05-06-2025	80
2.	Vanalli	15-06-2025	12
3.	Students’ exposure visit	24-09-2025	25
4.	Meeting with Betta Land Committees and VFC Members	12-01-2026	15
5.	National Symposium on Carbon Neutral Villages	16 th and 17 th February 2026	Over 300
6.	Students’ Awareness Workshop	21-03-2026	63

2.1 Stakeholder Workshop at Kodnagadde – 05 June 2025

The first stakeholder workshop was organized at Kodnagadde on the occasion of World Environment Day, marking the official inauguration of the plantation activities for the year. The event witnessed the participation of Forest Department officials, village elders,

Gram Panchayat members, cooperative society representatives, and students from Kodnagadde and Vanalli high schools and primary schools.

Although the plantation work had already begun in late May due to the early onset of monsoon, the event on June 5 served as a symbolic and community-focused launch to mark the project's outreach and awareness efforts.

Highlights of the event:

Opening remarks:

Mr. Goureesh introduced the objectives and purpose of the project, emphasizing the importance of community participation in restoration efforts.

Keynote talk: Dr. Narasimha delivered a detailed talk on climate change, resource depletion, biodiversity loss, and the growing pressure on natural resources. He stressed the need for restoring local ecosystems to ensure long-term benefits such as:

- Improved resource availability
- Enhanced biodiversity conservation
- Climate mitigation through biomass accumulation and carbon sequestration
- He also shared insights on future plans to develop sustainable value chains and bio-economy models for forest and NTFP-based products, highlighting responsible harvesting and climate adaptation strategies for local communities.

Plantation ceremony:

The plantation activity was officially inaugurated by planting tree saplings and carrying out earthing-up operations with community participation.

School interaction:

Following the plantation, participants visited Jaddigadde Primary School, where students presented on *medicinally important plant species*, their *traditional uses*, and *value-added products* derived from local biodiversity.

Concluding session:

The workshop concluded with the distribution of saplings (Clove – *Syzygium aromaticum*, Sandalwood – *Santalum album*, and Red Sanders – *Pterocarpus santalinus*) to students and villagers to encourage further plantation efforts at the household and community level.

Mr. Anand Hegde proposed a vote of thanks, expressing gratitude to all the participants, organizers, and supporting institutions.

2.2 Stakeholder Workshop at Vanalli – 15 June 2025

A follow-up workshop was held at Vanalli with Bettaland users from the Vanalli and Jaddigadde regions. The focus was on gathering insights from local betta land users regarding:

- Their species preferences for plantation,
- Identification of potential betta lands suitable for restoration, and
- Selection of ecologically appropriate species based on existing site conditions (shade, canopy cover, soil type, and moisture-holding capacity).

Key discussions and outcomes:

- Participants collectively assessed factors influencing plantation success, including threats such as cattle grazing and wild animal browsing.
- It was agreed that protective measures such as fencing and trenching should be prioritized to ensure sapling survival.
- Mr. S. V. B. Handimane emphasized planting medicinally valuable species, while Mr. Seetaram Umbalagadde recommended increasing the number of *Pterocarpus santalinus* saplings for future distributions.

2.3 Students' Exposure Visit – 24 September 2025

To promote environmental awareness and conservation education among youth, a students' exposure visit was organized to the plantation sites. Over 25 undergraduate students from the Life Sciences Department, MES College, Sirsi, participated in the visit.

Objectives and activities:

- To familiarize students with restoration practices, species diversity, and plantation techniques adopted under the project.
- To introduce them to the medicinal properties and NTFP values of the planted species.
- The session was facilitated by Dr. Narasimha and Mr. Goureesh, who served as resource persons and engaged students through interactive discussions on ecosystem restoration, biodiversity conservation, and sustainable resource use. Vinayak and Ravi facilitated other activities during the visit.

Apart from this number of stakeholders, consultations were done in small groups or in individual households to gather their insights on betta lands and preferences of the community.



Fig 2. Event on the World Environment Day- 5th June 2025



Fig. 3. Stakeholder consultation Meeting at Vanalli



Fig.4. Meeting with Kodnagadde Panchayat President

Field Exposure Visit for M. M Arts and Science College Biotechnology Students, Sirsi

Date: 28 September 2025

Location: Vanalli and Jaddigadde region, Uttara Kannada, Karnataka

A field exposure visit to PARNA and project intervention sites was organized on 24 September 2025 for graduate students of M. M. Arts and Science College, Sirsi. The visit aimed to provide practical exposure to Western Ghats biodiversity, conservation practices, and forest-based livelihood initiatives supported through the project.

As part of the programme, students were introduced to key biodiversity conservation interventions implemented under the project. These included habitat restoration, species

recovery efforts, and large-scale planting of native species that provide pollen and nectar for honey bees, thereby supporting pollinator conservation. The project also emphasizes the conservation and propagation of locally endangered medicinal plant species, identified through traditional herbal knowledge systems, and the planting of NTFP and forest fruit species to strengthen livelihood linkages.

Agenda

- To create awareness among youth about the biodiversity of the Western Ghats and enable them to identify native plant species
- To provide field-based learning on threatened species of the Western Ghats, including endemic, endangered, vulnerable, and critically endangered species
- To inculcate a sense of conservation ethics and appreciation for nature among students

Minutes

- The field exposure visit commenced at 9:00 AM with an introduction to biodiversity conservation interventions implemented under the project.
- Students were oriented on habitat restoration, species recovery, and the importance of planting native, pollinator-friendly species.
- Discussions included the conservation of locally endangered medicinal plants and the role of NTFP and forest fruit species in sustaining livelihoods.
- Students actively participated by sharing their knowledge of traditional plant uses and local biodiversity practices.
- By 12:30 PM, students had gained exposure to a wide range of native plant species and their ecological and livelihood significance.
- After 2:00 PM, the group visited PARNA FPO at Vanalli, where they gained insights into:
 - A range of forest- and NTFP-based products produced by indigenous communities
 - Local processing methods and value addition practices

- Support provided by PARNA for basic processing infrastructure, including choppers, oil extractors, dryers, packaging machines, and materials such as bottles, filters, and honey harvesters
- Procurement of machinery through government schemes and subsidies, facilitated with support from the IPAF project team
- Market linkage strategies adopted by PARNA and the project team to connect community products with various marketing channels
- The visit concluded with a feedback session, where students shared their learnings and experiences.
- Ms. Priya Joshi and Ms. Varsha Rachoti noted that the field visit significantly enhanced students' understanding and provided valuable exposure, which is otherwise rarely accessible through conventional classroom learning.

2.4 Stakeholder Meetings: Betta Land Committees and VFC Members

A series of meetings were convened with key members of Village Forest Committees (VFCs) and Betta Land Management Committees across the project region. These stakeholders are not only active decision-makers but also traditional custodians and users of *Betta lands*—unique community-managed forest landscapes that play a critical role in local livelihoods and biodiversity conservation.

These meetings provided a platform for participatory planning and knowledge exchange, ensuring that restoration efforts align with both ecological needs and community priorities.

Key Discussion Points

- **Species Selection:** Emphasis was placed on selecting native, ecologically suitable, and climate-resilient species, particularly those with livelihood value such as Non-Timber Forest Products (NTFPs) and medicinal plants.
- **Identification of Replanting Areas:** Participants identified degraded or poorly performing plantation sites that require gap filling or replanting interventions.

- **Mapping Restoration Potential:** Preliminary mapping exercises were undertaken to identify Betta land areas with high potential for ecological restoration, considering factors such as soil condition, existing vegetation, and community accessibility.



Fig 5. Sample QR code prepared by students containing detailed information on Red Sandalwood (*Pterocarpus santalinus*) – (November 2025)- Vanalli, Sirsi, India.

Botany and biotechnology students from M.M. Arts and Science College, Sirsi, involved in the project activities by preparing the QR code for the planted species. As of now details include local name, botanical name, uses (as available from the secondary data) and conservation status. They were given the certificate of appreciation during the national symposium, which is signed by the honourable member of parliament and organising secretary.

2.5 National Symposium on Carbon Neutral Villages

A two-day National Symposium on “Carbon Neutral Villages” was organized on 16th and 17th February 2026 at the project sites. The symposium brought together policymakers, conservation practitioners, researchers, and community representatives to deliberate on pathways toward climate-resilient and carbon-neutral rural landscapes. Over 390 people attended the symposium, where the Himalaya Wellness-supported biodiversity conservation project in both Sirsi-Sagara and Kumta was highlighted. He said he would be pleased to be part of the initiative of carbon finance to local communities by tree planting, nature conservation, and any other payment for an ecosystem services mechanism. He requested the organizers to come with a specific plan of actions after the symposium so that he could follow it up with concerned central ministries and departments.

- The event was inaugurated by Shree Vishweshwara Hegde Kageri, Honourable Member of Parliament, who emphasized the importance of integrating traditional ecological knowledge with modern sustainability frameworks.
- During the inauguration ceremony, Vishweshwara Hegde Kageri, Honourable Member of Parliament, formally unveiled a project information board installed at the plantation sites. The board provided comprehensive details about the project, including the diversity of species planted across different locations, their ecological importance in ecosystem restoration and their conservation status as per the IUCN Red List. This initiative served as an important knowledge dissemination tool for visitors, students, and community members, enhancing awareness about biodiversity conservation and the significance of protecting threatened species. During his opening remarks, Shree Vishweshwara Hegde said, *“I am really pleased to know that the planted seedlings have the survival percentage of over 80 to 90, with healthy growth, which is really good. I would like to congratulate both Himalaya Wellness Company and the implementing organization Snehakunja for their effort”* (this statement appeared in the state-level newspapers).
- The symposium was also graced by Varkey Jacob from Himalaya Wellness, who observed the project activities firsthand and appreciated the level of community engagement and ecological outcomes achieved under the initiative. Other dignitaries in the dais included Mr Santhosh Hegde (IRTS) Deputy Chief vigilance

officer, Indian Railways, Gopalakrishna Vaidya, president of TSS cooperative society; Prof. Dr. Ramachandra Bhat, president of Snehakunja; and others.

During various technical sessions of the symposium, several important discussions and presentations were conducted focusing on the ongoing project and its impact.

- In one of the sessions, Nandan presented his research findings, demonstrating how the current project supported by Himalaya Wellness has significantly enhanced carbon sequestration potential. His study involved a comparative analysis of restored and non-restored Betta lands, clearly indicating that ecological restoration interventions have led to improved biomass accumulation and increased carbon storage capacity in restored sites. He has chosen this study for the master's thesis at the Asian Institute of Technology, Bangkok, Thailand.
- After this presentation further discussion was held between betta landowners, VFCs and Betta land management committees on further possibilities, species selection based on soil conditions, actions needed to restore soils to get optimum species recovery, etc.
- Further presentations were delivered by Goureesh, Amith, and Shridhar, highlighting mangrove restoration initiatives implemented by Snehakunja with support from Himalaya Wellness. The presentations covered restoration processes, survival rates, species distribution and diversity, as well as carbon sequestration outcomes of the projects.
- Further discussions emphasized the critical role of the project in contributing to carbon sequestration through the restoration of community-managed forests, particularly Betta lands. These landscapes, when effectively restored with native species, act as important carbon sinks while simultaneously supporting biodiversity and local livelihoods.
- The sessions also highlighted how the project has strengthened partnerships among local communities, non-governmental organizations, and private sector stakeholders. This collaborative approach has been instrumental in ensuring effective implementation, knowledge sharing, and long-term sustainability of project outcomes.
- Additionally, the symposium contributed to enhancing the understanding of carbon neutrality concepts at the village level. Through practical demonstrations and field-based evidence, participants were able to appreciate how localized conservation

efforts, such as tree planting and sustainable forest management, can collectively contribute to broader climate change mitigation goals.



Fig 7. Shri Vishweshwara Hegde Kageri, Hon'ble Member of Parliament inaugurating the board of Himalaya wellness company supported planting details



Fig 8. Shri Vishweshwara Hegde Kageri, Hon'ble Member of Parliament inaugurating the National symposium



Fig 9. Shri Vishweshwara Hegde Kageri, Hon'ble Member of Parliament addressing during the National symposium



Fig 10. Glimpse of Shri Vishweshwara Hegde Kageri, Hon'ble Member of Parliament and National symposium



Fig 11. Glimpse of Shri Vishweshwara Hegde Kageri, Hon'ble Member of Parliament, visiting the planting site and appreciated the initiatives

ಮಲೆನಾಡು ಪ್ರಾಂತ್ಯದ ರೈತರಿಗೆ ಕಾರ್ಬನ್ ಕ್ರೆಡಿಟ್ ದೊರೆಯಲಿ: ಸಂಸದ ಕಾಗೇರಿ

»ಜನಮಾಧ್ಯಮ, ಶಿರಸಿ: ರೈತರ ಹೊಲದಲ್ಲಿ ಮತ್ತು ಬೆಟ್ಟಭೂಮಿಯಲ್ಲಿ ನೆಟ್ಟು ಬೆಳೆಸಿದ ಗಿಡ ಮರಗಳಿಗೆ, ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ಮತ್ತು ಇಂಗಾಲ ಶೇಖರಣೆಯ ಹಾಗೂ ಹೊರಸೂಸುವಿಕೆ ಕಡಿಮೆ ಮಾಡುವ ವಿಧಾನಗಳಿಗೆ ಕಾರ್ಬನ್ ಕ್ರೆಡಿಟ್ ದೊರೆಯಲಿ ಎಂದು ಸಂಸದ ವಿಶ್ವೇಶ್ವರ ಹೆಗಡೆ ಕಾಗೇರಿ ಹೇಳಿದರು.

ಅವರು ವಾನಳ್ಳಿಯಲ್ಲಿ ನಡೆದ ಸ್ನೇಹಕುಂಜ ಸಂವೈಯ ಸ್ವರ್ಣ ಮಹೋತ್ಸವ ಸಂದರ್ಭದ 'ಇಂಗಾಲ ತಟಸ್ಥ ಗ್ರಾಮಗಳು: ಹವಾಮಾನ ವೈಪರೀತ್ಯ ತಡೆ ಮತ್ತು ಜೀವನಾಭಿವೃದ್ಧಿ ಕ್ರಮಕ್ಕೆ ನಿಸರ್ಗಾಧಾರಿತ ಕ್ರಮಗಳು' ರಾಷ್ಟ್ರೀಯ ವಿಚಾರ ಸಂಕಿರಣವನ್ನು ಉದ್ಘಾಟಿಸಿ ಮಾತನಾಡಿ, ತಾವು ಈಗಾಗಲೇ ಕೇಂದ್ರ ಸರ್ಕಾರದ ಸಚಿವರೊಂದಿಗೆ ಈ ಕುರಿತು ಚರ್ಚೆ ನಡೆಸಿದ್ದಾಗಿ ತಿಳಿಸಿದರು.

ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿಗಳ ಸ್ವ ಸಂಘಟಿತ ಮಾರಾಟ ಮತ್ತು ಬಲವರ್ಧನೆ, ಬೆಟ್ಟದಲ್ಲಿನ



ಮರ ಮಟ್ಟನ್ನು ಮಾರಿದ ಲಾಭದಲ್ಲಿ ಶೇಕಡಾ 75 ರಷ್ಟು ಪಾಲನ್ನು ತಮ್ಮ ಪ್ರಯತ್ನದ ಮೂಲಕ ಸರ್ಕಾರದ ಆದೇಶ 2016 ರಲ್ಲಿಯೇ ಆಗಿದ್ದು ಬೆಟ್ಟ ಬಳಕೆದಾರರು ಇದರ ಪ್ರಯೋಜನ ಪಡೆದುಕೊಳ್ಳಬೇಕೆಂದರು. ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿಗಳ ಬಲವರ್ಧನೆ ಮತ್ತು ಸ್ವಯಂ ಮಾರಾಟ, ಸ್ವಚ್ಛ ಭಾರತದ ಯಶಸ್ವೀ ಅನುಷ್ಠಾನದ ಕುರಿತು ಸಹ ಅವರು ಮಾತನಾಡಿದರು. ನಾಮ ಫಲಕವನ್ನು ಅನಾವರಣಗೊಳಿಸಿ ಹಿಮಾಲಯ ವೆಲ್ಫೇರ್

ನರವಿನೊಂದಿಗೆ ಬೆಟ್ಟದಲ್ಲಿ 150 ಪ್ರಭೇದಗಳ 4 ಲಕ್ಷಕ್ಕೂ ಅಧಿಕ ಸಸ್ಯಗಳನ್ನು ಬೆಳೆಸಿದ್ದು ಮತ್ತು ಅವುಗಳಲ್ಲಿ ಶೇಕಡಾ 90 ರಷ್ಟು ಬದುಕಿಸಿರುವ ಕಾರ್ಯವನ್ನು ಶ್ಲಾಘಿಸಿದರು.

ಸಂಘಟನಾ ಕಾರ್ಯದರ್ಶಿ ಡಾ. ನರಸಿಂಹ ಹೆಗಡೆ ಪ್ರಾಸ್ತಾವಿಕವಾಗಿ ಮಾತನಾಡಿ, ಸ್ನೇಹಕುಂಜ ನಡೆದು ಬಂದ ದಾರಿ, ವಿಚಾರ ಸಂಕಿರಣದ ಧ್ಯೇಯೋದ್ದೇಶ, ಮುಂದಿನ ದಿನಗಳಲ್ಲಿ ಸ್ಥಳೀಯರ ಜೊತೆ ಬೆಟ್ಟ ಅಭಿವೃದ್ಧಿ, ಕಾಡಿನ ಪಾರಿಸಾರಿಕ

ಒಂದನೇ ಪುಟದಿಂದ...

ಕ್ರೆಡಿಟ್ ದೊರೆಯಲಿ: ಸಂಸದ ಕಾಗೇರಿ

ಪುನಶ್ಚೇತನ, ಜೇನು ಕಾಡು ನಿರ್ಮಾಣ, ಉಪವನ ಉತ್ಪನ್ನಗಳ ಮೌಲ್ಯವರ್ಧನೆ ಮತ್ತು ಮಾದರಿಯಾಗಿ ಇಂಗಾಲ ತಟಸ್ಥ ಗ್ರಾಮಗಳನ್ನಾಗಿ ಪರಿವರ್ತಿಸುವ ಮಾರ್ಗಗಳ ಕುರಿತು ಮಾತನಾಡಿದರು. ನೈಋತ್ಯ ರೇಲ್ವೆ ಹಿರಿಯ ಅಧಿಕಾರಿ ಸಂತೋಷ ಹೆಗಡೆ, ಟಿಎಸ್‌ಎಸ್ ಅಧ್ಯಕ್ಷ ಗೋಪಾಲಕೃಷ್ಣ ವೈದ್ಯ ಸಭೆಯನ್ನು ಉದ್ದೇಶಿಸಿ ಮಾತನಾಡಿದರು. ಮೊದಲ ದಿನದ ಗೋಷ್ಠಿಗಳಲ್ಲಿ ಡಾ. ಪ್ರಕಾಶ ಭಟ್ ಕೃಷಿ ಅರಣ್ಯಗಳ ಕುರಿತು ಡಾ. ಎಂ.ಡಿ. ಸುಭಾಶ್ಚಂದ್ರನ್ ಭೂದತ್ತಗಳ ಪಾರಿಸಾರಿಕ ಪುನಶ್ಚೇತನ, ಡಾ. ಪ್ರಕಾಶ ಮೇಸ್ತಾ ಕಡಲಿನ ಕುರಿತು, ಡಾ. ವಿನಾಯಕ ಹೆಬ್ಬಾರ್ ಆಯುರ್ವೇದ, ಡಾ. ಪ್ರಸನ್ನ ಸುರೇಶ್ ಕಾಂಡ್ಲಾ ಕಾಡುಗಳು, ಡಾ. ಮೋಹನ್ ತಲಕಾಲುಕೊಪ್ಪ ಗೇರು ಸಂಸ್ಕರಣೆ, ಪ್ರಿಯಾ ಜೋಶಿ ವರ್ಷಾ ರಾಚೋಟಿ ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಮತ್ತು ಹವಾಗುಣ ವೈಪರೀತ್ಯ ತಡೆ, ಬಾಹ್ಯಾಕಾಶ ವಿಜ್ಞಾನ ನಿಸರ್ಗಾಧಾರಿತ ಜೀವನ ಕ್ರಮಗಳು ಮತ್ತು ಹವಾಗುಣ ವೈಪರೀತ್ಯ ತಡೆಗೆ ದೂರಸಂವೇದಿ ಮತ್ತು ಉಪಗ್ರಹಗಳ ಬಳಕೆ ಕುರಿತು ವಿಷಯ ಮಂಡನೆ ಮಾಡಿದರು. ಕೊನೆಯಲ್ಲಿ ವಿಮುಖ ಸುತ್ತಿಯಾ ಹರಿಪ್ರಸಾದ ತಂಡದಿಂದ 'ದೋಣಿ ಗಣಪ' ನೃತ್ಯ ರೂಪಕ ಪ್ರದರ್ಶನಗೊಂಡಿತು. ಎನ್ ಎಸ್ ಹೆಗಡೆ ಕೋಟಿಕೊಪ್ಪ ಸ್ಥಾಗತಿಸಿದರು, ಮಂಜುನಾಥ ಭಟ್ಟ ಆರೇಕಟ್ಟಾ ವಂದಿಸಿದರು. ಕವಿತಾಭಟ್ ಕಾರ್ಯಕ್ರಮ ನಿರ್ವಹಿಸಿದರು. ಟಿ ಎಸ್ ಎಸ್ ಉಪಾಧ್ಯಕ್ಷ ಮಹಾಬಲೇಶ್ವರ ಭಟ್, ಸೇಹಕುಂಜ ಅಧ್ಯಕ್ಷ ಪ್ರೊ. ಡಾ. ರಾಮಚಂದ್ರ ಭಟ್ಟ ಉಪಸ್ಥಿತರಿದ್ದರು. ಸಮಾವೇಶಕ್ಕೇದೇ ವಿಶೇಷವಾಗಿ ಹ್ಯಾಂಡ್ ಕೊಳೆಲುಪಾದಕ ಪಂಡಿತ್ ಪ್ರವೀಣ ಗೋಡ್ಡಿಂಡಿಯವರ ಧರ್ಮ ಪತ್ತಿ ಸಾರಿಕಾ ಗೋಡ್ಡಿಂಡಿಯವರು ವಿದ್ಯಾಸಗೊಳಿಸಿದ ಆಡುಮೆ ಜೇನಿನ ಕುರಿತ 'ಬೈಮರಿ' ಕ್ಯಾಲೆಂಡರ್ ಬಿಡುಗಡೆಗೊಂಡಿತು. ದೇಶಿಕಾ ಪರಿವಾರ ಟ್ರಸ್ಟ್ ಕಾಗೇರಿ, ಪರ್ಣಿ ಪತ್ತಿಮ ಘಟ್ಟ ರೈತೋತ್ಸಾದಕ ಕಂಪನಿ, ಲೈಫ್ ಶಿರಸಿ, ಮೇಣಸಿ ಸೀಮಾ ಸೇವಾ ಸಹಕಾರಿ ಸಂಘ, ಕಲಾ ಮತ್ತು ವಿಜ್ಞಾನ ಮಹಾ ವಿದ್ಯಾಲಯ ಶಿರಸಿ, ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿಗಳು, ಮಹಿಳಾ ಸಂಘಗಳ ನೆರವಿನೊಂದಿಗೆ ವಿಚಾರ ಸಂಕಿರಣ ಆಯೋಜನೆಗೊಂಡಿತ್ತು.

Press outreach on National symposium

ಮಲೆನಾಡು ಪ್ರಾಂತ್ಯದ ರೈತರಿಗೆ ಕಾರ್ಬನ್ ಕ್ರೆಡಿಟ್ ದೊರೆಯಲಿ: ಸಂಸದ ವಿಶ್ವೇಶ್ವರ ಹೆಗಡೆ ಕಾಗೇರಿ



ಶಿರಸಿ ಸಮಾಚಾರ ೫ ಶಿರಸಿ: ರೈತರ ಹೊಲದಲ್ಲಿ ಮತ್ತು ಬೆಟ್ಟಭೂಮಿಯಲ್ಲಿ ನೆಟ್ಟು ಬೆಳೆಸಿದ ಗಿಡ ಮರಗಳಿಗೆ, ನವೀಕರಿಸಬಹುದಾದ ಇಂಧನ ಮತ್ತು ಇಂಗಾಲ ಶೇಖರಣೆಯ ಮತ್ತು ಹೊರಸೂಸುವಿಕೆ ಕಡಿಮೆಮಾಡುವ ವಿಧಾನಗಳಿಗೆ ಕಾರ್ಬನ್ ಕ್ರೆಡಿಟ್ ದೊರೆಯಲಿ ಎಂದು ಮಾನ್ಯ ಸಂಸದ ವಿಶ್ವೇಶ್ವರ ಹೆಗಡೆ ಕಾಗೇರಿ ತಿಳಿಸಿದರು. ಅವರು ವಾನಳ್ಕೆಯಲ್ಲಿ ನಡೆದ ಸ್ನೇಹಕುಂಜ ಸಂಸ್ಥೆಯ ಸ್ವರ್ಣ ಮಹೋತ್ಸವ ಸಂದರ್ಭದ ಇಂಗಾಲ ತಟಸ್ಥ ಗ್ರಾಮಗಳು: ಹವಾಮಾನ ವೈಪರೀತ್ಯ ತಡೆ ಮತ್ತು ಜೀವನಾಭಿವೃದ್ಧಿ ಕ್ರಮಕ್ಕೆ ನಿಸರ್ಗಾಧಾರಿತ ಕ್ರಮಗಳು ರಾಷ್ಟ್ರೀಯ ವಿಚಾರ ಸಂಕಿರಣವನ್ನು ಉದ್ಘಾಟಿಸಿ ಮಾತನಾಡಿದರು. ನಾನು ಈಗಾಗಲೇ ಕೇಂದ್ರ ಸರ್ಕಾರದ ಸಚಿವರೊಂದಿಗೆ ಈ ಕುರಿತು ಚರ್ಚೆ ನಡೆಸಿದ್ದಾಗಿ ತಿಳಿಸಿದರು.

ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿಗಳ ಸ್ವ ಸಂಘಟಿತ ಮಾರಾಟ ಮತ್ತು ಬಲವರ್ಧನೆ, ಬೆಟ್ಟದಲ್ಲಿನ ಮರ ಮಟ್ಟನ್ನು ಮಾರಿದ ಲಾಭದಲ್ಲಿ ಶೇಕಡಾ 75 ರಷ್ಟು ಪಾಲನ್ನು ತಮ್ಮ ಪ್ರಯತ್ನದ ಮೂಲಕ ಸರ್ಕಾರದ ಆದೇಶ 2016 ರಲ್ಲಿಯೇ ಆಗಿದ್ದು ಬೆಟ್ಟ ಬಳಕೆದಾರರು ಇದರ ಪ್ರಯೋಜನ ಪಡೆದುಕೊಳ್ಳಬೇಕೆಂದರು. ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿಗಳ ಬಲವರ್ಧನೆ ಮತ್ತು ಸ್ವಯಂ ಮಾರಾಟ, ಸ್ವಚ್ಛ ಭಾರತದ ಯಶಸ್ವೀ ಅನುಷ್ಠಾನದ ಕುರಿತು ಸಹ ಅವರು

ಮಾತನಾಡಿದರು. ನಾಮ ಫಲಕವನ್ನು ಅನಾವರಣಗೊಳಿಸಿ ಹಿಮಾಲಯ ವೆಲ್ವೆಸ್ ನೆರವಿನೊಂದಿಗೆ ಬೆಟ್ಟದಲ್ಲಿ 150 ಪ್ರಬೇಧಗಳ 4 ಲಕ್ಷಕ್ಕೂ ಅಧಿಕ ಸಸ್ಯಗಳನ್ನು ಬೆಳೆಸಿದ್ದು ಮತ್ತು ಅವುಗಳಲ್ಲಿ ಶೇಕಡಾ 90 ರಷ್ಟು ಬದುಕಿಸಿರುವ ಕೆಲವನ್ನು ಶ್ಲಾಘಿಸಿದರು.

ಸಂಘಟನಾ ಕಾರ್ಯದರ್ಶಿ ಡಾ. ನರಸಿಂಹ ಹೆಗಡೆ ಪ್ರಾಸ್ತಾವಿಕವಾಗಿ ಸ್ನೇಹಕುಂಜ ನಡೆದು ಬಂದ ದಾರಿ, ವಿಚಾರ ಸಂಕಿರಣದ ಧೈರ್ಯೋದ್ದೇಶ ಮುಂದಿನ ದಿನಗಳಲ್ಲಿ ಸ್ಥಳೀಯರ ಜೊತೆ ಬೆಟ್ಟ ಅಭಿವೃದ್ಧಿ, ಕಾಡಿನ ಪಾರಿಸಾರಿಕ ಪುನಶ್ಚೇತನ, ಜೇನು ಕಾಡು ನಿರ್ಮಾಣ, ಉಪವನ ಉತ್ಪನ್ನಗಳ ಡಿಲ್ವಿವರ್ಷನೆ ಮತ್ತು ಮಾದರಿಯಾಗಿ ಇಂಗಾಲ ತಟಸ್ಥ ಗ್ರಾಮಗಳನ್ನಾಗಿ ಪರಿವರ್ತಿಸುವ ಮಾರ್ಗಗಳ ಕುರಿತು ಮಾತನಾಡಿದರು. ನೈರುತ್ಯ ರೈಲ್ವೆ ಹಿರಿಯ ಅಧಿಕಾರಿ ಸಂತೋಷ ಹೆಗಡೆ, ಟಿಎಸ್‌ಎಸ್ ಅಧ್ಯಕ್ಷ ಗೋಪಾಲಕೃಷ್ಣ ವೈದ್ಯ ಸಭೆಯನ್ನು ಉದ್ದೇಶಿಸಿ ಮಾತನಾಡಿದರು.

ಮೊದಲ ದಿನದ ಗೋಷ್ಠಿಗಳಲ್ಲಿ ಡಾ. ಪ್ರಕಾಶ ಭಟ್ ಕೃಷಿ ಅರಣ್ಯಗಳ ಕುರಿತು ಡಾ. ಎಂ.ಡಿ. ಸುಭಾಶ್ಚಂದ್ರನ್ ಭೂದೃಶ್ಯಗಳ ಪಾರಿಸಾರಿಕ ಪುನಶ್ಚೇತನ, ಡಾ. ಪ್ರಕಾಶ ಮೇಸ್ತಾ ಕಡಲಿನ ಕುರಿತು, ಡಾ. ವಿನಾಯಕ ಹೆಬ್ಬಾರ್ ಅಯುರ್ವೇದ, ಡಾ. ಪ್ರಸನ್ನ ಸುರತ್ಕಲ್ ಕಾಂಡ್ಲಾ ಕಾಡುಗಳು, ಡಾ. ಮೋಹನ್ ತಲಕಾಲುಕೊಪ್ಪ ಗೇರು

ಸಂಸ್ಕರಣೆ, ಪ್ರಿಯಾ ಜೋಶಿ ವರ್ಷಾ ರಾಜೋಟಿ ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ ಮತ್ತು ಹವಾಗುಣ ವೈಪರೀತ್ಯ ತಡೆ, ಬಾಹ್ಯಾಕಾಶ ವಿಜ್ಞಾನ ನಿಸರ್ಗಾಧಾರಿತ ಜೀವನ ಕ್ರಮಗಳು ಮತ್ತು ಹವಾಗುಣ ವೈಪರೀತ್ಯ ತಡೆಗೆ ದೂರಸಂವೇದಿ ಮತ್ತು ಉಪಗ್ರಹಗಳ ಬಳಕೆ ಈ ಕುರಿತು ವಿಷಯ ಮಂಡನೆ ಮಾಡಿದರು. ಕೊನೆಯಲ್ಲಿ ವಿರುತಿ ಸುಪ್ರಿಯಾ ಹರಿಪ್ರಸಾದ ತಂಡದಿಂದ 'ದೋಣಿ ಗಣಪ' ನೃತ್ಯ ರೂಪಕ ಪ್ರದರ್ಶನಗೊಂಡಿತು.

ಎನ್ ಎಸ್ ಹೆಗಡೆ ಕೋಟಿಕೊಪ್ಪ ಸ್ವಾಗತಿಸಿದರು, ಮಂಜುನಾಥ ಭಟ್ಟ ಆರೇಕಟ್ಟಾ ವಂದಿಸಿದರು. ಕವಿತಾಭಟ್ ಕಾರ್ಯಕ್ರಮ ನಿರ್ವಹಿಸಿದರು. ಟಿ ಎಸ್ ಎಸ್ ಉಪಾಧ್ಯಕ್ಷ ಮಹಾಬಲೇಶ್ವರ ಭಟ್, ಸೇಹಕುಂಜ ಅಧ್ಯಕ್ಷ ಪ್ರೊ. ಡಾ. ರಾಮಚಂದ್ರ ಭಟ್ಟ ಉಪಸ್ಥಿತರಿದ್ದರು. ಸಮಾವೇಶಕ್ಕೇದೇ ವಿಶೇಷವಾಗಿ ಖ್ಯಾತ ಕೊಳಲುವಾದಕ ಪಂಡಿತ್ ಪ್ರವೀಣ ಗೋಡ್ವಿಂದಿಯವರ ಪತ್ನಿ ಸಾರಿಕಾ ಗೋಡ್ವಿಂದಿ ವಿನಾಸಗೊಳಿಸಿದ ಅಡವಿ ಜೇನಿನ ಕುರಿತ 'ಭೈಮರಿ' ಕ್ಯಾಲೆಂಡರ್ ಬಿಡುಗಡೆಗೊಂಡಿತು. ದೇಶಿಕಾ ಪರಿವಾರ ಟ್ರಸ್ಟ್ ಕಾಗೇರಿ, ಪರ್ಣಿ ಪತ್ರಿಮ ಘಟ್ಟ ರೈತೋತ್ಸಾದಕ ಕಂಪನಿ, ಲೈಫ್ ಶಿರಸಿ, ಮೆಣಸಿ ಸೀಮಾ ಸೇವಾ ಸಹಕಾರಿ ಸಂಘ, ಕಲಾ ಮತ್ತು ವಿಜ್ಞಾನ ಮಹಾ ವಿದ್ಯಾಲಯ ಶಿರಸಿ, ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿಗಳು, ಮಹಿಳಾ ಸಂಘಗಳ ನೆರವಿನೊಂದಿಗೆ ವಿಚಾರ ಸಂಕಿರಣ ಆಯೋಜನೆಗೊಂಡಿತ್ತು.

Press outreach on National symposium

ರಾಷ್ಟ್ರೀಯ ವಿಚಾರ ಸಂಕಿರಣ, ಇಂಗಾಲ ತಟಸ್ಥ ಗ್ರಾಮಗಳು: ಹವಾಮಾನ ವೈಪರೀತ್ಯ ತಡೆ, ಜೀವನಾಭಿವೃದ್ಧಿಗೆ ಕ್ರಮಗಳು

»ಜನಮಾಧ್ಯಮ, ಶಿರಸಿ: ಸ್ನೇಹಕುಂಜ ಸಂಸ್ಥೆಯು ಸುವರ್ಣ ಮಹೋತ್ಸವ ಅಂಗವಾಗಿ ರೈತರು, ವಿಜ್ಞಾನಿಗಳು, ಅಧ್ಯಯನಕಾರರು, ನೀತಿ ನಿರೂಪಕರು, ಹಿರಿಯ ಅಧಿಕಾರಿಗಳು, ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿ, ಸಹಕಾರಿ ಸಂಘ ಸಂಸ್ಥೆಗಳು ಮತ್ತು ಮಹಿಳಾ ಗುಂಪಿನವರ ಜೊತೆ ಪರಸ್ಪರ ಚರ್ಚೆ ಮತ್ತು ಸಂವಹನಕ್ಕೆ ಅನುಕೂಲವಾಗಲು, ಇಂಗಾಲ ತಟಸ್ಥ ಗ್ರಾಮಗಳು, ಹವಾಮಾನ ವೈಪರೀತ್ಯ ತಡೆ ಮತ್ತು ಜೀವನಾಭಿವೃದ್ಧಿ ಕ್ರಮಕ್ಕೆ ನಿಸರ್ಗಾಧಾರಿತ ಕ್ರಮಗಳು, ವಿಚಾರವಾಗಿ ರಾಷ್ಟ್ರೀಯ ವಿಚಾರ ಸಂಕಿರಣವನ್ನು ಫೆ.16, 17 ರಂದು ಮೆಣಸಿ ಸಹಕಾರಿ ಸಂಘ ವಾನ್‌ಳ್, ಶಿರಸಿಯಲ್ಲಿ ಏರ್ಪಡಿಸಿದೆ.

ಹವಾಗುಣ ವೈಪರೀತ್ಯ ಮತ್ತು ಜಾಗತಿಕ ತಾಪಮಾನ ಏರಿಕೆಯ ಕಾರಣದಿಂದ ಕೃಷಿ ಬೆಳೆ ಮತ್ತು ಅರಣ್ಯ ಉಪವನ ಉತ್ಪನ್ನಗಳ ಲಭ್ಯತೆಯಲ್ಲಿ ಕುಂಠಿತ, ಹಿಂದೆ ಕಂಡರಿಯದ ರೋಗ ಮತ್ತು ಕೀಟ ಬಾಧೆಯಿಂದ ಗ್ರಾಮೀಣ ಬದುಕು ದುಸ್ಥಿರವಾಗಿರುವ ಸಂದರ್ಭದಲ್ಲಿ ಹವಾಮಾನ ವೈಪರೀತ್ಯ ತಡೆಗೆ ಪರಿಣಾಮಕಾರಿ ಮಾರ್ಗಗಳು, ಸ್ಥಳೀಯ ಕೃಷಿ, ಅರಣ್ಯ ಉತ್ಪನ್ನಗಳು, ಕಾಡಿನ ಪಾರಿಸಾರಿಕ ಪುನಶ್ಚೇತನ, ಸುಸ್ಥಿರ ಅಭಿವೃದ್ಧಿ, ನೀರಿ ಇಂಗಾಲದ ವ್ಯವಸ್ಥೆ ಜಾಗತಿಕ ಮಹತ್ವ, ಸಂರಕ್ಷಣೆ, ಪಾರಿಸಾರಿಕ ಸೇವೆಗೆ ಧನ ಸಹಾಯವು ಪಶ್ಚಿಮ ಘಟ್ಟದ ಅಪರೂಪದ ಕಾಡಿನ ಸಂರಕ್ಷಣೆಯನ್ನು ಸ್ಥಾನಿಕ ಜನರಿಗೆ ಕೊಡುವ ಸಾಧ್ಯತೆ, ಇಂಗಾಲದ ಧನಸಹಾಯ, ಮಣ್ಣು ಮತ್ತು ನೀರಿನ ಸಂರಕ್ಷಣೆ, ಆಡಮಿ ಜೇನು, ಬೆಟ್ಟ ಅಭಿವೃದ್ಧಿ, ಅಪರೂಪದ ಕಾಡಿನ ಪ್ರದೇಶಗಳು ಮತ್ತು ಉತ್ತರ ಕನ್ನಡದಲ್ಲಿನ ಅರಣ್ಯ ವ್ಯಾಪ್ತಿಯಲ್ಲಿ ಐತಿಹಾಸಿಕ ಬದಲಾವಣೆ ಇವುಗಳ ಕುರಿತು 45 ಕ್ಕೂ ಹೆಚ್ಚು ತಜ್ಞರು ವಿಚಾರ ಮಂಡನೆ ಮಾಡಲಿದ್ದಾರೆ. ಮುಂದಿನ ದಿನಗಳಲ್ಲಿ ಅವುಗಳ

ಅನುಷ್ಠಾನದ ಕುರಿತ ಗಂಭೀರ ಚರ್ಚೆಗಳು ನಡೆಯಲಿವೆ.

ವಿಚಾರ ಸಂಕಿರಣವನ್ನು ದೇಶಿಕಾ ಪರಿವಾರ ಟ್ರಸ್ಟ್ ಕಾಗೇರಿ, ಪರ್ಣಿ ಪಶ್ಚಿಮ ಘಟ್ಟ ರೈತೋತ್ಪಾದಕ ಕಂಪನಿ, ಲೈಫ್ ಶಿರಸಿ, ಮೆಣಸಿ ಸೀಮಾ ಸೇವಾ ಸಹಕಾರಿ ಸಂಘ, ಕಲಾ ಮತ್ತು ವಿಜ್ಞಾನ ಮಹಾ ವಿದ್ಯಾಲಯ ಶಿರಸಿ, ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿಗಳು, ಮಹಿಳಾ ಸಂಘಗಳು, ಧರ್ಮಸ್ಥಳ ಗ್ರಾಮೀಣಾಭಿವೃದ್ಧಿ ಸಂಘ ಇವುಗಳ ಸಹಯೋಗದೊಂದಿಗೆ ಸಂಘಟಿಸಲಾಗಿದೆ.

ಸಂಸದ ವಿಶ್ವೇಶ್ವರ ಹೆಗಡೆ ಕಾಗೇರಿ ಉದ್ಘಾಟಿಸಲಿದ್ದು, ಮುಖ್ಯ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ ಟಿ ಹೀರಾಲಾಲ್, ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ ಸಂದೀಪ ಸೂರ್ಯವಂಶಿ, ನೈರುತ್ಯ ರೇಲ್ವೆ ಹಿರಿಯ ಅಧಿಕಾರಿ ಸಂತೋಷ ಹೆಗಡೆ, ತೋಟಗಾರಿಕಾ ಜಂಟಿ ಆಯುಕ್ತ ಸತೀಶ ಬಿ ಪಿ, ಸಹಾಯಕ ಆಯುಕ್ತ ಚಂದ್ರಶೇಖರ್ ಆರ್ ಜಿ, ಇಸ್ರೋದ ಹಿರಿಯ ವಿಜ್ಞಾನಿ ಡಾ. ಗಿರೀಶ್ ಪೂಜಾರ್, ಟಿಎಸ್‌ಎಸ್ ಅಧ್ಯಕ್ಷ ಗೋಪಾಲಕೃಷ್ಣ ವೈದ್ಯ, ಉಪಾಧ್ಯಕ್ಷ ಮಹಾಲೇಶ್ವರ ಭಟ್, ತೋಟಗಾರಿಕಾ ಅಧಿಕಾರಿ ಸತೀಶ ಹೆಗಡೆ ಮುಖ್ಯ ಅತಿಥಿಗಳಾಗಿ ಭಾಗವಹಿಸಲಿದ್ದಾರೆ.

ಅರಣ್ಯ ಸರ್ವೇಕ್ಷಣಾ ಸಂಸ್ಥೆಯ ಮಹಾ ನಿರ್ದೇಶಕ ಹಾಗೂ ಪ್ರಧಾನ ಮುಖ್ಯ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ ಅನೂಪ್ ಸಿಂಗ್ ದಿಕ್ಸೂಚಿ ಭಾಷಣ ಮಾಡಲಿದ್ದಾರೆ.

ಸ್ನೇಹಕುಂಜ ಸಂಸ್ಥೆಯ ಅಧ್ಯಕ್ಷ ಪ್ರೊ. ಡಾ. ರಾಮಚಂದ್ರ ಭಟ್ಟ, ಹಿರಿಯ ವಿಜ್ಞಾನಿ ಡಾ. ಸುಭಾಷಚಂದ್ರನ್, ಧಾರವಾಡದ ಡಾ. ಪ್ರಕಾಶ ಭಟ್, ಗುಜರಾತ್ ನವಸಾರಿಯ ಪ್ರೊ. ಡಾ. ರಾಜೇಶ್ ಗುನಗಾ, ಶಿವಮೊಗ್ಗದ ಪ್ರೊ. ಡಾ. ರಾಮಕೃಷ್ಣ ಹೆಗಡೆ, ಡಾ. ಪ್ರಕಾಶ ಮೇಸ್ತಾ, ಡಾ. ಕೇಶವ ಕುರ್ಸೆ, ಥಾಯ್‌ಲೆಂಡ್ ವಿಶ್ವ ವಿದ್ಯಾಲಯದ ನಂದನ ಹೆಗಡೆ, ಕೆನಡಾ

ವಿನಿಪೆಗ ವಿಶ್ವ ವಿದ್ಯಾಲಯದ ಡಾ. ಮಹಾಬಲೇಶ್ವರ, ಸಿಎಸ್‌ಟಿಪಿಯ ಸಂಶೋಧಕ ಪ್ರದೀಪ. ಕೋಶಲ್ ಕ್ಲೈಮೇಟ್ ಸಂಸ್ಥೆಯ ವಿವೇಕ್, ಕಡಲ ಜೀವ ಶಾಸ್ತ್ರಜ್ಞರಾದ ಅಮಿತ, ಶ್ರೀಧರ್ ಪಟಗಾರ, ಸ್ನೇಹ ಕುಂಜದ ಅರುಣ್ ನಾಯ್ಕ, ಗೌರಿಶ ಭಟ್, ಅನಂದ ಹೆಗಡೆ, ಅಜೀಂ ಪ್ರೇಂ ಜಿ ಫೌಂಡೇಶನ್‌ನ ವಿಜ್ಞಾನಿ ಪ್ರಸನ್ನ ಸುರತ್ತಲ್, ಕಲಾ ಮತ್ತು ವಿಜ್ಞಾನ ಮಹಾ ವಿದ್ಯಾಲಯ ಶಿರಸಿಯ ಡಾ. ಅನಿಲ್ ಹೆಗಡೆ, ಪ್ರಿಯಾ ಜೋಶಿ ಮತ್ತು ವರ್ಷಾ ರಾಜೋಟಿ, ಆಯುರ್ವೇದ ವೈದ್ಯರುಗಳಾದ ಜಗದೀಶ ಯಾಜಿ, ವಿನಾಯಕ ಹೆಬ್ಬಾರ್, ನಿವೃತ್ತ ಅರಣ್ಯಾಧಿಕಾರಿಗಳಾದ ಅಶೋಕ ಭಟ್ ಮತ್ತು ಉಮೇಶ ಶಾಸ್ತ್ರಿ, ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿಯ ಅಧ್ಯಕ್ಷರುಗಳಾದ ವಿಶ್ವನಾಥ ಶೀಗೇಹಳ್ಳಿ, ಗಣಪತಿ ಮುರೇಗಾರ, ಶ್ರೀಪಾದ ಯಡಳ್ಳಿ, ಮಹಾಭೇಷ್ವರ ಮೆಣಸಿ ಮನೆ, ದತ್ತಾತ್ರೇಯ ವೈದ್ಯ, ಅನಂತ ಗದ್ದೇಹಳ್ಳಿ, ಸ್ಕೋಡವೆನ್ ವೆಂಕಟೇಶ ನಾಯಕ, ಮನು ಏಕಾಸದ ಗಣಪತಿ ಭಟ್ ವಿಚಾರ ಮಂಡಿಸಲಿದ್ದಾರೆ.

ಸ್ಥಳೀಯ ಸಂಘಟನೆಯನ್ನು ಎನ್ ಎಸ್ ಹೆಗಡೆ ಕೋಟಿಕೊಪ್ಪ, ಎಂ ಎ ಹೆಗಡೆ, ಗಜಾನನ ಭಟ್ ಬೆಣ್ಣೆಗದ್ದೆ, ಎ ಆರ್ ಹೆಗಡೆ ಮತ್ತೀಘಟ್ಟ, ಮಂಜುನಾಥ ಭಟ್ ಅರೇಕಟ್ಟ, ಎ ಸಿ ಹೆಗಡೆ ಹೊನ್ನನೆ, ಸುಬ್ರಾಯ ನಲ್ಲಳ್ಳಿಮಠ, ವಿನಾಯಕ ವೈದ್ಯ ನಿರ್ವಹಿಸಲಿದ್ದಾರೆ. ವಿ. ಸುಪ್ರಿಯಾ ಹರಿಪ್ರಸಾದ ನೇತೃತ್ವದ ಬೆಂಗಳೂರು ಕಲಾಂಶು ನೃತ್ಯ ತಂಡದಿಂದ 'ದೋಣಿ ಗಣಪ' ಮತ್ತು 'ಭ್ರಮರ' ನೃತ್ಯ ರೂಪಕ ಪ್ರದರ್ಶನಗೊಳ್ಳಲಿದೆ. ಪ್ಯಾತ ಕೊಳಲುವಾದಕ ಪಂ. ಪ್ರವೀಣ ಗೋಡ್ಡಿಂಡಿ ಧರ್ಮ ಪತಿ ಸಾರಿಕಾ ಗೋಡ್ಡಿಂಡಿ ವಿನಾಸಗೊಳಿಸಿದ ಆಡಮಿ ಜೇನಿನ ಕುರಿತ 'ಭ್ರಮರ' ಕ್ಯಾಲೆಂಡರ್ ಬಿಡುಗಡೆಯಾಗಲಿದೆ.

Press outreach on National symposium

ಉದ್ಘಾಟನೆ:
16.02.2026, ಸೋಮವಾರ, 10.00-11.30

ಶ್ರೀ ವಿಶ್ವೇಶ್ವರ ಹೆಗಡೆ ಕಾಂಗ್ರೆಸ್
ಮಾನ್ಯ ಸಂಸದರು, ಉತ್ತರ ಕನ್ನಡ

ಶ್ರೀ ಟಿ.ಹೀರಾಬಾಯ್ (IFS)
ಮುಖ್ಯ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ, ಕೆನರಾ ವೃತ್ತ, ಶಿರಸಿ

ಶ್ರೀ ಸಂಕೋಪ್ ಹೆಗಡೆ (IRTS)
ಉಪ ಮುಖ್ಯ ವಿಜ್ಞಾನ ಅಧಿಕಾರಿ, ಸೈರುತ್ಯ ರೈಲ್ವೆ, ಹುಬ್ಬಳ್ಳಿ

ಶ್ರೀ ಸಂಧೀಪ್ ಎಚ್ ಸೂರ್ಯವಂಶಿ (IFS)
ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿ, ಶಿರಸಿ ಅರಣ್ಯ ವಿಭಾಗ

ಡಾ. ಸತೀಶ್ ವಿ ಪಿ
ಜಂಟಿ ನಿರ್ದೇಶಕರು, ತೋಟಗಾರಿಕೆ ಇಲಾಖೆ, ಶಿರಸಿ

ಶ್ರೀ ಗೋಪಾಲಕೃಷ್ಣ ವೈದ್ಯ
ಅಧ್ಯಕ್ಷರು, ತೋಟಗಾರಿಕೆ ಸಹಕಾರಿ ಮಾರಾಟ ಸಂಘ (TSS), ಶಿರಸಿ

ಶ್ರೀ ಮಹಾಲೀಶ್ವರ ಎಸ್.ಭಟ್
ಉಪಾಧ್ಯಕ್ಷರು ತೋಟಗಾರಿಕೆ ಸಹಕಾರಿ ಮಾರಾಟ ಸಂಘ (TSS), ಶಿರಸಿ

ಪ್ರೊ. ಡಾ. ರಾಮಕಂಠ ಭಟ್ಟ
ಅಧ್ಯಕ್ಷರು, ಸ್ನೇಹಕುಂಜ

ಸಹ-ಸಂಘಟಕರು:
ರೇಶಿಮಾ ಪರಿವಾರ ಟ್ರಸ್ಟ್, ಕಾಂಗ್ರೆಸ್ ಪರ್ಲಮೆಂಟರಿ ಘಟಕ ರೈತ ಉತ್ಪಾದಕ ಕಂಪನಿ, ವಾನಳ್ಳಿ ಸಿಮಲಯ ಬೆಲ್‌ನೇಸ್, ಭಾರತ ರೈಫ್, ಶಿರಸಿ ಮೆಟ್ರಾ ಸೇವಾ ಸಹಕಾರ ಸಂಘ, ವಾನಳ್ಳಿ ಎಂ.ಎಂ. ಕಲಾ ಮತ್ತು ವಿಜ್ಞಾನ ಕಾಲೇಜು, ಶಿರಸಿ ಗ್ರಾಮ ಅರಣ್ಯ ಸಮಿತಿಗಳು (VFCs) ಮತ್ತು ಸ್ಥಳೀಯ ಸಂಸ್ಥೆಗಳು ಮಹಿಳಾ ಗುಂಪುಗಳು ಮತ್ತು ಸ್ವಸಹಾಯ ಸಂಘಗಳು, ಒಡ್ಡುಗಳು- ಶ್ರೀ ಕ್ಷೇತ್ರ ಧರ್ಮಸ್ಥಳ, ವಾನಳ್ಳಿ

ಸಂಘಟಕರ ಪರವಾಗಿ
ಎನ್ ಎಸ್ ಹೆಗಡೆ ಕೋಟಕೊಪ್ಪ ಎಂ ಎ ಹೆಗಡೆ ಕಾನ್ಸ್ಟ್ರಿ ಗಜಾನನ್ ಭಟ್ ಬೆಣ್ಣೆಗಡ್ಡೆ ವಿ ಆರ್ ಹೆಗಡೆ, ಮತ್ತಿಘಟ್ಟ ಮಂಜುನಾಥ ಭಟ್, ಅರೇಟ್ಕಾ ವಿ ಸಿ ಹೆಗಡೆ, ಹೊನ್ನೆ ಸುಬ್ರಾಯ ಹೆಗಡೆ, ನೆಲ್ಲೂಮರ

ನೋಂದಣಿಗಾಗಿ ಸಂಪರ್ಕಿಸಿ:
ಆನಂದ - 8762376679
ಗೌರಿಶ - 9449971922
ಕೊನೆಯ ದಿನಾಂಕ: 10-02-2026

ದಿಕ್ಷುಪತಿ ಭಾಷಣ:
ಶ್ರೀ ಅನೂಪ್ ಸಿಂಗ್ (IFS), ಪಿಸಿನಿಎಫ್ ಮತ್ತು ಭಾರತೀಯ ಅರಣ್ಯ ಸರ್ವೇಕ್ಷಣಾ ಇಲಾಖೆ ಮಹಾನಿರ್ದೇಶಕ (ನಿವೃತ್ತ)
"ಉತ್ತರ ಕನ್ನಡದಲ್ಲಿ ಎತಿಕಾನಿಕ ಅರಣ್ಯ ಆವರಣ ಬದಲಾವಣೆ: ದೂರ ಸಂವೇದಿ ತಂತ್ರಜ್ಞಾನ (Remote Sensing) ಮೂಲಕ ಮಾದರಿಕರಣ"

ಪ್ರಕೃತಿಯೊಂದಿಗಿನ ಪಯಣಕ್ಕೆ ಅರ್ಥ ಶತಮಾನ
ಸ್ನೇಹಕುಂಜ ಟ್ರಸ್ಟ್, ಕಾಸರಕೋಡ
ಆತ್ಮೀಯ ಸ್ವಾಗತ
ರಾಷ್ಟ್ರೀಯ ವಿಚಾರ ಸಂಕಿರಣ
ಇಂಗಾಲ ತಟಸ್ಥ ಗ್ರಾಮಗಳು - ಹವಾಮಾನ ಬದಲಾವಣೆಯ ತಗ್ಗಿಸುವಿಕೆ, ಹೊಂದಿಕೊಳ್ಳುವಿಕೆ ಮತ್ತು ಜೀವನೋಪಾಯವನ್ನು ಬಲಪಡಿಸಲು ನಿಸರ್ಗ ಆಧಾರಿತ ಪರಿಹಾರಗಳು

16 - 17 ಫೆಬ್ರವರಿ 2026
ಸ್ಥಳ: ಮೆಟ್ರಾ ಸಹಕಾರಿ ಸಂಘ, ವಾನಳ್ಳಿ, ಶಿರಸಿ

Invitation of symposium

2.6 Minutes of the Students' Awareness Workshop and NTFP Livelihood Discussions

Date: 21st March 2026

Location: Vanalli, Sirsi

Participants:

63 students from the College of Horticulture, Sirsi, University of Horticultural Sciences, Bagalkot, along with faculty members and the project team.

Objective of the Visit

The educational exposure visit was organized with the objective of bridging the gap between academic learning and field-level conservation practices. The program aimed to provide students with practical insights into biodiversity conservation, ecological restoration, and sustainable livelihood approaches integrated within the ongoing project.

Minutes

- Mr. Goureesh Bhat provided a comprehensive overview of Snehakunja's 50-year journey in environmental conservation and social development. He elaborated on the organization's long-standing commitment to ecological stewardship and community engagement.
- He further presented details of the ongoing project titled "Biodiversity Conservation and Tree Plantation," which has been supported by Himalaya Wellness, India, over the past two years. The presentation highlighted the project's integrated approach, combining ecological restoration with livelihood enhancement.
- Dr. Narasimha Hegde delivered an in-depth session on the scientific principles guiding the project.
- He explained the criteria and methodologies used in species selection, emphasizing the importance of choosing native, site-specific, and climate-resilient species. He also highlighted the ecological and economic advantages of promoting multifunctional species, particularly those that provide Non-Timber Forest Products (NTFPs).
- Further, he elaborated on the project's long-term vision of developing a sustainable circular bio-economy model, wherein conservation efforts are directly linked with livelihood opportunities, ensuring both ecological sustainability and economic resilience for local communities.
- He emphasized that NTFPs serve as an important bridge between conservation and livelihoods, especially for forest-dependent communities. The project adopts a targeted approach by prioritizing the plantation of medicinal and NTFP species that are traditionally used and harvested by local populations. This ensures that restoration efforts are not only ecologically meaningful but also economically beneficial.
- Further, he explained how Snehakunja, through the PARNA Farmer Producer Organization (FPO), has been facilitating structured market linkages for NTFP products. This includes support for sustainable procurement practices, primary processing, value addition, packaging, and improved market access.



Fig 12. Students from College of Horticulture, Sirsi visited the plantation sites

Outcomes: As a result of the visits and detailed discussions, students from the horticulture college have further decided to visit planting sites under the Himalaya Wellness Project. They want to learn more about activities of Snehakunja and Parna Western Ghats Farmer Producer Companies in the region. The visits will be once in a week for the next two months.



Fig 13. Dr. Narasimha explaining the whole concept and long-term vision of project



**Fig 14. Mrs. Praveen (Sarika) Godkhindi and team has visited the plantation sites.
(Pandit Pravin Godkhindi is a great flutist)**

Chapter 3: Planting and monitoring activities

Under the *Biodiversity Conservation and Tree Plantation Project*, large-scale plantation activities have been successfully implemented across the **Sirsi and Sagara landscapes** of the Western Ghats. These efforts followed a standard ecological restoration principle, with a strong emphasis on native biodiversity, community participation, and sustainable livelihood enhancement.

Across both regions, the project has cumulatively planted **over 170,000 saplings**, covering a wide diversity of native, medicinal, and Non-Timber Forest Product (NTFP) species. While **Sirsi accounted for 120,450 saplings**, an additional **50,040 saplings were planted in the Sagara region**, significantly expanding the geographical and ecological impact of the initiative.

The project also ensured **site-specific planting**, with species selected based on microhabitat/site conditions, soil type, and traditional ecological knowledge of local communities. This has improved survival rates and ecological suitability of plantations.

Plantation in Sirsi

In Sirsi, plantation activities focused on restoring *betta lands* and other degraded forest patches through a highly diverse mix of over 120 species. The strategy prioritized native and endemic species, along with NTFP and medicinal plants that support local livelihoods.

Key species planted in large numbers included *Terminalia arjuna*, *Syzygium cumini*, *Pongamia pinnata*, *Dalbergia latifolia*, *Emblica officinalis*, and *Cinnamomum zeylanicum*. The inclusion of rare and conservation-priority species such as *Dipterocarpus indicus*, *Syzygium travancoricum*, and *Vateria indica* highlights the project's commitment to biodiversity conservation beyond conventional plantation approaches.

A major focus of the plantation strategy has been on **native and endemic species**, many of which are characteristic of the Western Ghats ecosystem. Species such as *Terminalia arjuna*, *Syzygium cumini*, *Pongamia pinnata*, *Dalbergia latifolia*, and *Calophyllum apetalum* were planted in significant numbers, contributing to long-term forest structure, carbon sequestration, and habitat restoration.

In addition, the project has emphasized Non-Timber Forest Products (NTFP) and medicinal species, aligning with the livelihood needs of forest-dependent communities. High numbers of species such as *Emblica officinalis* (Nelli), *Artocarpus heterophyllus* (Halasu), *Madhuca longifolia* (Hippe), *Myristica fragrans* (Jayikayi), *Cinnamomum zeylanicum* (Dalchini), and *Vitex negundo* (Lakki) were planted. These species provide fruits, seeds, leaves, resins, and medicinal products, thereby strengthening the foundation for a sustainable circular bio-economy.

The plantation also includes ecologically significant and conservation-priority species, including red-listed and rare taxa such as *Dipterocarpus indicus*, *Syzygium travancoricum*, *Gymnacranthera canarica*, and *Vateria indica*. The inclusion of such species demonstrates the project's commitment to conservation beyond mere tree planting, focusing on restoring threatened components of forest ecosystems.

Plantation in Sagara

In the Sagara region, plantation activities covered a total of 50,040 saplings, focusing on a carefully selected mix of ecologically and economically important species. A significant proportion of planting was contributed by *Terminalia arjuna* (15,095 saplings), reinforcing riparian and moisture-rich ecosystems, followed by species such as *Vitex negundo* (5,853), *Pongamia pinnata* (3,167), *Syzygium cumini* (2,902), *Pterocarpus marsupium* (2,866), *Terminalia bellirica* (2,558), and *Tamarindus indica* (2,560).

The plantation also included high numbers of NTFP and medicinal species, such as:

- *Emblica officinalis*
- *Cinnamomum zeylanicum*
- *Garcinia indica*
- *Myristica malabarica*
- *Madhuca longifolia*

Additionally, species like *Saraca asoca*, *Putranjiva roxburghii*, and *Vateria indica* were included to support conservation of ecologically sensitive and culturally important flora.

Following the successful plantation drives of 1,20,450 saplings in Sirsi and 50,040 saplings in Sagara, continuous efforts have been made to ensure high survival rates and healthy establishment of planted saplings. Post-plantation monitoring, replanting, and

site-specific maintenance activities have been systematically carried out. The work has been conducted in two phases:

- Phase 1 (2024–25): Replanting and aftercare at previously planted sites.
- Phase 2 (2025–26): Maintenance of newly planted areas as the monsoon season comes to an end.

Species selection

The plantation component of the project demonstrates a strong commitment to biodiversity conservation by incorporating a wide range of Rare, Endangered, and Threatened (RET) species, along with IUCN Red Listed taxa and ecologically significant native flora of the Western Ghats. The deliberate inclusion of such species ensures that the initiative goes beyond conventional plantation approaches and contributes meaningfully to species recovery, habitat restoration, and long-term ecosystem resilience.

Approximately 2 species fall under Critically Endangered (CR), 3 species under Endangered (EN), 6 species under Vulnerable (VU), and 8 species under Near Threatened (NT) categories. Overall, the inclusion of around 19 species in threatened and near-threatened categories, remaining ~110 species fall under Least Concern or are Not Evaluated. In terms of endemism, the plantation includes approximately 20 endemic species while 45 species are included under Non-Timber Forest Product (NTFP) and medicinal species category.

A number of planted species fall under globally or regionally threatened categories as per the IUCN Red List. Notably, species such as *Dipterocarpus indicus* (Critically Endangered), *Syzygium travancoricum* (Critically Endangered), and *Vateria indica* (Endangered) are among the most conservation-priority taxa included in the plantation. These species are endemic to the Western Ghats and are highly sensitive to habitat loss, making their restoration in degraded betta lands particularly significant. Similarly, *Gymnacranthera canarica* (Endangered), a *Myristica* swamp-associated species, represents a unique and highly threatened ecosystem type, further strengthening the conservation value of the intervention.

In addition to these, several Near Threatened and Vulnerable species have been incorporated, including *Pterocarpus marsupium*, *Myristica malabarica*, *Holarrhena antidysenterica*, and *Saraca asoca*. These species are under increasing pressure due to

overexploitation for medicinal and commercial purposes. Their inclusion in large-scale plantation efforts contributes to reducing extraction pressure on natural forests while simultaneously promoting ex-situ conservation within community-managed landscapes.

The project also places significant emphasis on endemic species of the Western Ghats, such as *Calophyllum apetalum*, *Knema attenuata*, *Mastixia arborea*, *Persea macrantha*, and *Lophopetalum wightianum*. These species play critical roles in maintaining forest structure, ecological interactions, and habitat specialization, particularly for pollinators, seed dispersers, and other forest-dependent fauna. Restoration of such endemic species enhances ecosystem integrity and functional diversity.

Species such as *Santalum album* (Sandalwood), *Pterocarpus santalinus* (Red Sanders), and *Cinnamomum zeylanicum* (Cinnamon) are not only valuable from a livelihood perspective but are also subject to overharvesting and regulatory protection. So, they are included for livelihood security with conservation priorities, promoting sustainable utilization through controlled and community-based management systems.

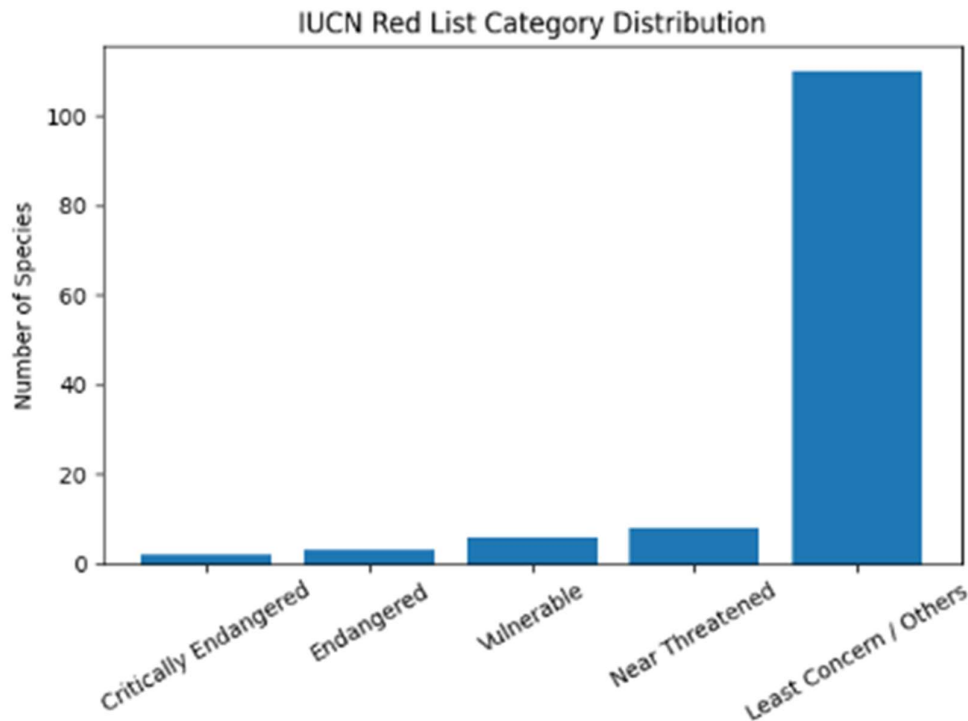


Fig. Graph showing IUCN conservation categories of planted tree species

Another important dimension is the inclusion of medicinal and Non-Timber Forest Product (NTFP) species. Many of these species are under pressure in the wild due to unsustainable harvesting. By promoting their cultivation in betta lands, the project supports in-situ conservation, reduces pressure on wild populations, and strengthens traditional healthcare systems and local economies.

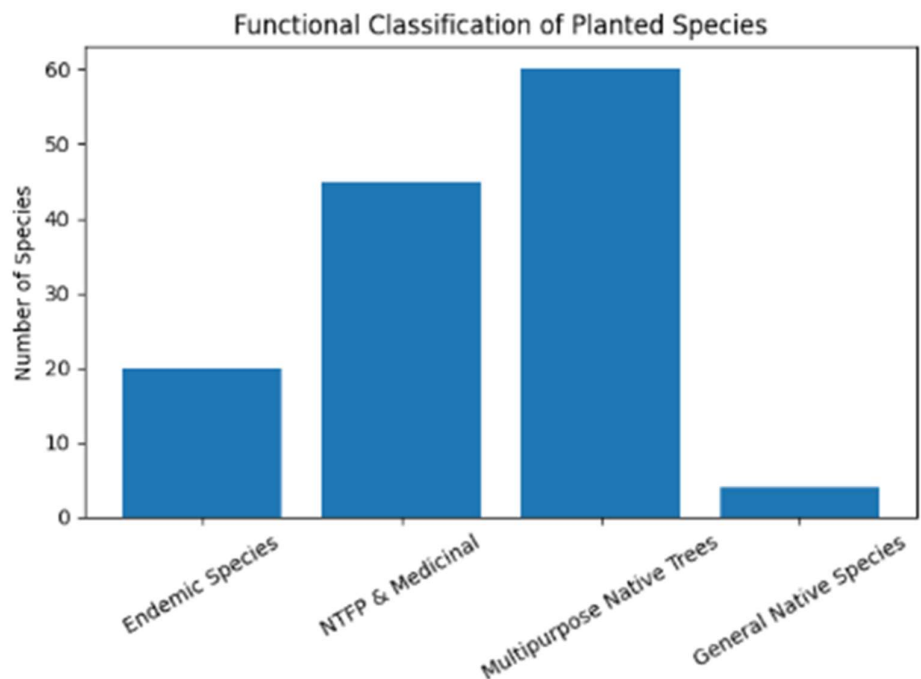


Fig. Graph showing functional ecological categories of planted tree species

Monitoring and aftercare measures

Monitoring was carried out across both the previous year’s plantation sites and the newly established sites of 2025–26. The activities included assessment of sapling survival, health, and growth, along with identification of gaps where replanting was required. Based on need, replanting has been carried out. However, fertilizer application and earthing-up operations have been carried out in all the places, including previous-year sites, and the process continues until all the newly planted sites (i.e., Phase II sites).

Replanting, fertilizer application and earthing up operations in Phase I plantations

During Phase 1 (2024–25), replanting was conducted in areas where the survival rate had fallen below the optimum level. This helped maintain an overall survival rate of around 85–90%, which is considered satisfactory for ecological restoration in dry–moist

deciduous landscapes. After planting, a round of fertilizer application was undertaken to boost nutrient availability. This was followed by earthing-up operations across sites to strengthen root systems, reduce soil erosion, and retain moisture. In sites such as Banagere and Sampegadde, multiple earthing-up operations were carried out due to their sloping terrain and higher susceptibility to runoff. Additionally, mulching with dry leaf litter was done in open canopy and erosion-prone areas, particularly where slope-induced soil erosion was likely, to improve soil moisture retention and organic enrichment.

Species planted across sites included ecologically important natives such as *Terminalia arjuna*, *Dalbergia latifolia*, *Cinnamomum malabattrum*, *Artocarpus heterophyllus*, *Thespesia populnea*, *Ficus glomerata*, *Lagerstroemia speciosa*, and *Flacourtia montana*, along with selected multipurpose and soil-binding trees. The diversity of species ensured representation of canopy, mid-story, and understory species, thereby strengthening ecological balance. Some sites also received valuable NTFP (Non-Timber Forest Product) species like *Emblica officinalis*, *Madhuca longifolia*, *Diospyros microphylla*, and *Pongamia pinnata*, which in the long term will provide livelihood linkages for local communities.

The site-specific monitoring revealed encouraging progress. For instance, in Mandemane (Shripad, GRH, and PRH sites), replanting focused heavily on *Terminalia arjuna*, *Artocarpus heterophyllus*, and *Thespesia populnea*, which were established in good numbers. At Vanalli Bailu, a total of 343 saplings were replanted, dominated by *Artocarpus heterophyllus*. Similarly, at Nelli Bailu, 270 saplings were planted, with a good mix of *Ficus* species and *Lagerstroemia speciosa*. In sites such as Koppada Betta and Bekemata (Sampegodlu), we prioritized both timber and fruit-yielding species to strengthen ecological and economic resilience. In Sampegadde, hardy species such as *Madhuca longifolia*, *Butea monosperma*, and *Diospyros microphylla* were planted, alongside the replanting of *Terminalia arjuna* and *Thespesia populnea*.

Name of site: Mandemane (Shripad)

<i>Scientific name</i>	Numbers
<i>Calamus thwaitessi</i>	9
<i>Terminalia arjuna</i>	41

<i>Cinnamomum malabattrum</i>	21
<i>Artocarpus heterophyllus</i>	19
<i>Thespesia populnea</i>	53
<i>Emblca officinalis</i>	14
<i>Putranjiva roxburghii</i>	2
Total	159

Name of site: Mandemane (GRH)

<i>Scientific name</i>	Numbers
<i>Dalbergia latifolia</i>	6
<i>Calamus thwaitessi</i>	6
<i>Terminalia arjuna</i>	36
<i>Cinnamomum malabattrum</i>	23
<i>Artocarpus heterophyllus</i>	21
<i>Thespesia populnea</i>	40
Total	132

Name of site: Mandeane (PRH)

<i>Scientific name</i>	Numbers
<i>Ficus glomerata</i>	21
<i>Calamus thwaitessi</i>	5
<i>Terminalia arjuna</i>	40
<i>Cinnamomum malabattrum</i>	14
<i>Artocarpus heterophyllus</i>	18
<i>Thespesia populnea</i>	44
Total	142

Name of site: Vanalli bailu

<i>Scientific name</i>	Numbers
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<i>Ficus glomerata</i>	10
<i>Dalbergia latifolia</i>	36
<i>Terminalia arjuna</i>	45
<i>Cinnamomum malabatrums</i>	25
<i>Artocarpus heterophyllus</i>	160
<i>Flacourtia montana</i>	5
<i>Lagerstroemia speciosa</i>	23
<i>Thespesia populnea</i>	35
<i>Putranjiva roxburghii</i>	4
Total	343

Name of site: Nelli bailu

<i>Scientific name</i>	Numbers
<i>Ficus benghalensis</i>	21
<i>Ficus glomerata</i>	46
<i>Dalbergia latifolia</i>	16
<i>Terminalia arjuna</i>	30
<i>Cinnamomum malabatrums</i>	29
<i>Artocarpus heterophyllus</i>	41
<i>Flacourtia montana</i>	16
<i>Lagerstroemia speciosa</i>	36
<i>Thespesia populnea</i>	35
Total	270

Name of site: Koppada betta

<i>Scientific name</i>	Numbers
<i>Ficus glomerata</i>	14
<i>Terminalia arjuna</i>	31
<i>Cinnamomum malabatrums</i>	36
<i>Flacourtia montana</i>	6
<i>Thespesia populnea</i>	41

<i>Beilschmiedia dalzellii</i>	16
Total	144

Name of site: Bekemata (Sampgekodlu)

Scientific name	Numbers
<i>Calophyllum apetalum</i>	21
<i>Vitex altissima</i>	2
<i>Terminalia arjuna</i>	10
<i>Cinnamomum malabattrum</i>	31
<i>Persea macrantha</i>	8
<i>Artocarpus heterophyllus</i>	21
<i>Flacourtia montana</i>	5
<i>Artocarpus hirsutus</i>	4
<i>Lagerstroemia speciosa</i>	9
<i>Pongamia pinnata</i>	16
<i>Beilschmiedia dalzellii</i>	5
<i>Diospyros microphylla</i>	11
<i>Butea monosperma</i>	3
<i>Gmelina arborea</i>	5
<i>Terminalia bellirica</i>	2
<i>Bahunia sp.</i>	2
Total	155

Name of site: Sampegadde

Scientific name	Numbers
<i>Terminalia arjuna</i>	19
<i>Cinnamomum malabattrum</i>	15
<i>Persea macrantha</i>	13
<i>Madhuca longifolia</i>	11
<i>Thespesia populnea</i>	25
<i>Diospyros microphylla</i>	9

<i>Butea monosperma</i>	5
Total	97

Replanting, fertilizer application and earthing up operations in Phase II Plantations

In Phase 2 (2025–26), while plantation work was nearing completion, a separate field team began fertilizer application and earthing-up operations across newly planted sites as the intensity of rainfall declined. However, during the peak monsoon period, heavy and continuous rains caused significant mortality in *Eucalyptus globulus* plantations, highlighting the species' vulnerability to waterlogging and excessive moisture stress. To counter this setback, immediate measures were taken for replanting with hardier native and adapted species, and an additional 6,000 saplings were planted across different sites to maintain stocking density and ensure the desired optimum survival percentage.

Overall, the combined measures of replanting, fertilizer application, earthing-up, and mulching have significantly improved the resilience and survival of plantations across both phases.

Establishing sampling plots for regular monitoring

The vectorized maps (plantation boundaries) of the plantation will be used for the establishment of sampling plots. Random sampling plots will be generated using the "Random Points in Polygon" tool in QGIS. After deriving random plot fields, inventories will be done to establish sampling plots where randomly generated points (in QGIS) are used as the center of the plot. This randomization of the plot avoids biased selection of sampling plots.

Standardized 10 m x 10 m plots were established within the grid. These plots were permanently marked with stone pillars, and their geographic coordinates were recorded for future reference.

These plots will be used for long-term monitoring purposes, and regularly the following data will be collected from this plot.

Survival assessments

Growth measurements: Tracking height, girth, and canopy development of individual plants over time.

Chapter 4: Carbon sequestration calculations:

Sampling plots

20m * 20m quadrants randomly laid out manually. Minimum one sampling plot was laid out in each plot. Totally 48 sampling plots have been laid out. All four corners of the sampling plots are fixed with cornerstones so that the monitoring sampling plot is fixed for every year. And the data will be consistent. Geocoordinates of all the corners, along with the center of the sampling plot, were recorded using a handheld Garmin eTrex GPS instrument for high accuracy. Similarly, the altitude of each sampling plot at the center was also recorded.

The growth data was taken between March and April 2025. Growth data of all the saplings/plants within the sampling plot was recorded. The data on height (in cm) and diameter data (in mm) were taken. Diameter data was taken using digital Vernier calipers, which directly provide the diameter of the stem. This will help in calculating biomass and carbon sequestration, and conversion from girth to diameter is not required.

Sampling design and data collection methodology

Systematic and standardized data collection protocols were adopted for sampling and data collection to ensure that the data gathered is accurate, replicable, and suitable for long-term ecological assessments. The set of activities followed for designing the sampling plots and data collection is as follows:

1. Sampling plot layout and fixation

To facilitate long-term monitoring and ensure data consistency, a total of 48 sampling plots were systematically established across all the plantation sites of the project area. Each sampling plot was laid out manually within a 20 m × 20 m quadrant, resulting in an area of 400 m² per plot. The quadrants were randomly distributed to ensure unbiased representation of the vegetation and species distribution characteristics of the sampling plots

In each site, a single sampling plot was delineated. To maintain consistency of the sampling plots for annual monitoring. Corner/marketing stones were permanently fixed at

all four corners. This practice ensures that the same plot can be revisited year after year, facilitating accurate and reliable long-term data collection.

The geocoordinates of the four corner points and the center of each sampling plot were recorded using a Garmin eTrex handheld GPS device. This device was chosen for its high accuracy in field conditions, enabling precise georeferencing of the plots.

- The geocoordinates were logged in latitude and longitude format with an accuracy of approximately ± 3 meters, ensuring consistent relocation of the plots during subsequent monitoring efforts.
- In addition to spatial coordinates, the altitude at the centre of each sampling plot was recorded in meters above sea level. This data provides valuable information on the elevation gradient, which can be used to assess the influence of altitude on vegetation growth patterns and biomass accumulation.

3. Growth data collection

The growth data collection was conducted in March 2025 to capture the seasonal growth status of the saplings and plants within the sampling plots. All individual plants or the saplings present within each plot were measured.

The following parameters were recorded for each plant:

- **Height (in centimetres):** Measured from the base of the stem (ground level) to the highest living tip of the plant. This measurement provides a direct indicator of vertical growth and overall plant vigour.
- **Diameter (in millimetres):** The stem diameter was recorded using a digital Vernier caliper. The use of a digital calliper offers precise and accurate measurements, eliminating the need for manual conversion from girth to diameter. This method ensures direct diameter readings, streamlining the process for biomass and carbon stock calculations.

Traditionally, biomass and carbon sequestration studies rely on stem girth measurements, which are later converted to diameter values. However, by using digital Vernier calipers, the diameter is measured directly, reducing the potential for calculation errors and improving the accuracy of the biomass and carbon stock estimates. This method is

particularly effective for young saplings and small-diameter plants, where even minor measurement discrepancies can significantly impact biomass calculations.

The permanent marking of the plots with corner stones and the accurate georeferencing ensures that future monitoring activities will be conducted in the exact same locations. This consistency enhances the reliability of the data, allowing for precise tracking of plant growth rates, biomass accumulation, and carbon sequestration over time. By collecting detailed geospatial data and accurate growth parameters, this study provides a robust foundation for long-term ecological monitoring and analysis. The

The recorded growth data will be used to:

- Estimate biomass accumulation in the sampling plots.
- Calculate carbon sequestration potential, which is critical for understanding the role of vegetation in mitigating climate change.
- Identify growth patterns influenced by altitude variations and other environmental factors.
- Support future comparisons by providing a baseline dataset for subsequent years of monitoring.

Biomass accumulation and Carbon sequestration assessment

After getting height and diameter data, biomass was estimated for the identified tree species by application of biostatistics-based allometric equations. Allometric equations for biomass, in general, comprise tree Diameter at Breast Height (DBH in cm), total tree Height (H in m), and Wood Density (WD in gm/cm^3) (Tripathi, 2015). However, a standard average value of 0.6 gm/cm^3 was used whenever the wood density of a specific plant species was not available (Patwardhan et al., 2003). Aboveground Biomass (AGB) was assessed by multiplying the bio-volume with the wood density of tree species (Brown, Gillespie, & Lugo, 1989; Khan, 2013; MacDicken, 1997; Sundarapandian et al., 2014). Tree bio-volume (TBV) value was established by multiplying diameter and height of tree species by a factor of 0.4, as has been used in the previous studies (Das & Mukherjee, 2015). Total biomass is calculated by summing up the above- and below-ground biomass (Pandya, Salvi, Chahar, & Vaghela, 2013; Sheikh & Tiwari, 2013). Above Ground Biomass (AGB), Below Ground Biomass (BGB), and Total Biomass (TB)

of the different tree species were calculated using allometric equations from a non-destructive method of tree estimation.

The wood density of different species was obtained from the various sources as provided in the table. The average value of the summation of aboveground biomass and belowground biomass of all the plots was used to extrapolate the mean total biomass (tons/hectare). The carbon content will be calculated by multiplying the individual tree biomass with the conversion factor 0.5 (IPCC 2006). Since understory vegetation (seedlings and herbs) is negligible in mangrove systems, they will not be considered for ecosystem carbon stock estimations (Kauffman and Donato 2012; Vinod et al. 2018).

Table . Parameters and formula used in the current study

Parameters under Study	Formula applied	References
Bio-volume (TBV)	$(T) = 0.4 \times (\text{Diameter})^2 \times \text{Height}$	Tripathi (2015), Das & Mukherjee (2015)
AGB (ton)	Wood Density x T(BV)	Sundarapandian et al., 2014
BGB (ton)	AGB x 0.26	Das & Mukherjee, 2015
Total Biomass (TB)	Above Ground Biomass + Below Ground Biomass	Sheikh & Tiwari, 2013
Carbon Storage	Biomass x 50% (i.e., Biomass/2)	IPCC 2006).

The table below presents a comparative analysis of tree biomass, carbon stock, and CO₂ sequestration across multiple plantation plots, with values arranged in ascending order of Tree Biomass Volume (TBV).

Sl. No.	Name of the sites	Number of plants in the plots	Bio-volume (TBV) (in cubic m)	AGB (ton)	BGB (ton)	Total biomass (TB)	Carbon storage (ton)	CO2 sequestered
1	Kagundi 1 malanagadde	35	0.049	0.030	0.008	0.037	0.019	0.068
2	Keregadde A	41	0.093	0.056	0.015	0.071	0.035	0.130
3	Keregadde B	70	0.243	0.146	0.038	0.184	0.092	0.337
4	Kerejaddi A	49	0.137	0.082	0.021	0.104	0.052	0.190
5	Kerejaddi C	55	0.145	0.087	0.023	0.110	0.055	0.202
6	Kerejaddi B	42	0.067	0.040	0.010	0.050	0.025	0.092
7	Manmane A	53	0.196	0.118	0.031	0.148	0.074	0.272
8	Manmane B	41	0.111	0.067	0.017	0.084	0.042	0.155
9	Handimane D	53	0.102	0.061	0.016	0.077	0.039	0.142
10	Handimane A	58	0.141	0.085	0.022	0.107	0.053	0.196
11	Handimane G	56	0.071	0.043	0.011	0.054	0.027	0.099
12	Umbalagadde E	74	0.260	0.156	0.040	0.196	0.098	0.360
13	Handimane B	64	0.200	0.120	0.031	0.152	0.076	0.278
14	Handimane C	53	0.139	0.083	0.022	0.105	0.053	0.193
15	Handimane H	55	0.107	0.064	0.017	0.081	0.040	0.148
16	Handimane K (kattinahak)	124	0.593	0.356	0.092	0.448	0.224	0.822
17	Umbalagadde A	63	0.317	0.190	0.049	0.240	0.120	0.440
18	Handimane E (elemane)	71	0.274	0.164	0.043	0.207	0.103	0.380
19	Handimane F (elemane 2)	51	0.179	0.107	0.028	0.135	0.068	0.248
20	Chapparamane	53	0.161	0.096	0.025	0.122	0.061	0.223
21	Bakematha A	76	0.363	0.218	0.057	0.274	0.137	0.504
22	Bakematha B	66	0.127	0.076	0.020	0.096	0.048	0.176
23	Umbalagadde D	88	0.176	0.106	0.027	0.133	0.067	0.244
24	Umbalagadde C	83	0.190	0.114	0.030	0.144	0.072	0.264
25	Umbalagadde B	85	0.211	0.127	0.033	0.160	0.080	0.293
26	Hanmavu	81	0.407	0.244	0.064	0.308	0.154	0.565
Average		63.077	0.195	0.117	0.030	0.147	0.074	0.270
Total		1640	5.061	3.036	0.789	3.826	1.913	7.020

Fig 15a. Data on plots of Sirsi

Name of the sites	Number of plants in the plots	Bio-volume (TBV) (in cubic m)	AGB (ton)	BGB (ton)	Total biomass (TB)	Carbon storage (ton)	CO2 sequestered
Devusa A	60	0.032	0.019	0.005	0.024	0.012	0.044
Devusa B	86	0.074	0.044	0.011	0.056	0.028	0.102
Devusa C	100	0.036	0.022	0.006	0.027	0.014	0.050
Aneguli	58	0.079	0.047	0.012	0.060	0.030	0.109
Kesuvnamane	72	0.038	0.023	0.006	0.029	0.014	0.053
Pura A	54	0.038	0.023	0.006	0.029	0.015	0.053
Pura B	44	0.040	0.024	0.006	0.031	0.015	0.056
Pura C	73	0.059	0.035	0.009	0.044	0.022	0.082
Pura D	56	0.085	0.051	0.013	0.064	0.032	0.118
Pura E	49	0.025	0.015	0.004	0.019	0.009	0.034
Average	65.20	0.05	0.03	0.01	0.04	0.02	0.07
Total	652	0.506	0.303	0.079	0.382	0.191	0.702

Fig 15b. Data on plots of Sagara

Fig 15a & b. The above graph tables reflect the biomass, carbon storage, and CO₂ sequestered within the sample plots of 20m*20m. Columns include:

- TBV (Tree Biomass Volume indicator)
- AGB (Above Ground Biomass)
- BGB (Below Ground Biomass)
- Total Biomass

- Carbon (Tn)
- CO₂ (Tn)

The table presents a comparative analysis of tree biomass, carbon stock, and CO₂ sequestration across multiple plantation plots, with values arranged in ascending order of Tree Biomass Volume (TBV). A clear gradient is observed, where increases in TBV correspond consistently with higher above-ground biomass (AGB), below-ground biomass (BGB), total biomass, carbon stock, and CO₂ equivalents.

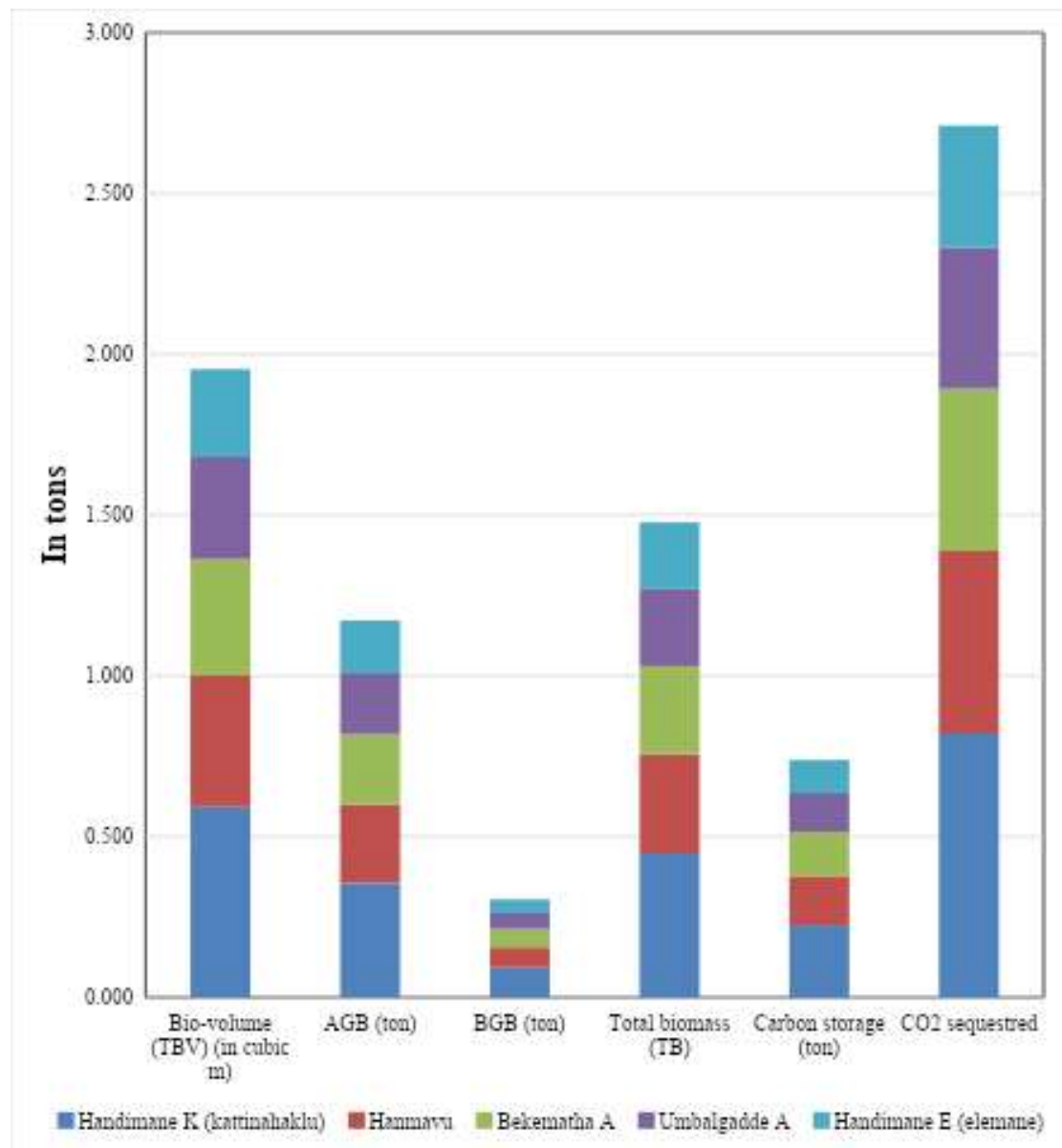


Fig. 16. Site wise data on top 5 performing sites

The Sirsi dataset covers 26 sample plots, with a total of 1,640 plants and an average of approximately 63 plants per plot, indicating a fairly uniform planting density across sites. The total bio-volume recorded is 5.061 m³, which translates to 3.036 tons of above-ground biomass (AGB) and 0.789 tons of below-ground biomass (BGB), resulting in a total biomass of 3.826 tons. From this, carbon storage is estimated at 1.913 tons, corresponding to 7.020 tons of CO₂ sequestered.

On a per-plot basis, Sirsi shows an average bio-volume of 0.195 m³, with 0.117 tons AGB, 0.030 tons BGB, and 0.147 tons total biomass. The average carbon storage per plot is 0.074 tons, with CO₂ sequestration of 0.270 tons. Variation across plots suggests differences in site conditions, species composition, or management practices,

The Sagara dataset includes 10 sample plots, with a total of 652 plants and an average of about 65 plants per plot, which is comparable to Sirsi in terms of planting density. The total bio-volume is 0.506 m³, yielding 0.303 tons of AGB and 0.079 tons of BGB, and a combined total biomass of 0.382 tons. The estimated carbon storage is 0.191 tons, equivalent to 0.702 tons of CO₂ sequestered.

At the plot level, Sagara records an average bio-volume of 0.05 m³, with 0.03 tons AGB, 0.01 tons BGB, and 0.04 tons total biomass. The average carbon storage and CO₂ sequestration per plot are 0.02 tons and 0.07 tons respectively. Compared to Sirsi, Sagara exhibits lower biomass and carbon values per plot, which may reflect differences in growth stage, environmental conditions, or species performance.

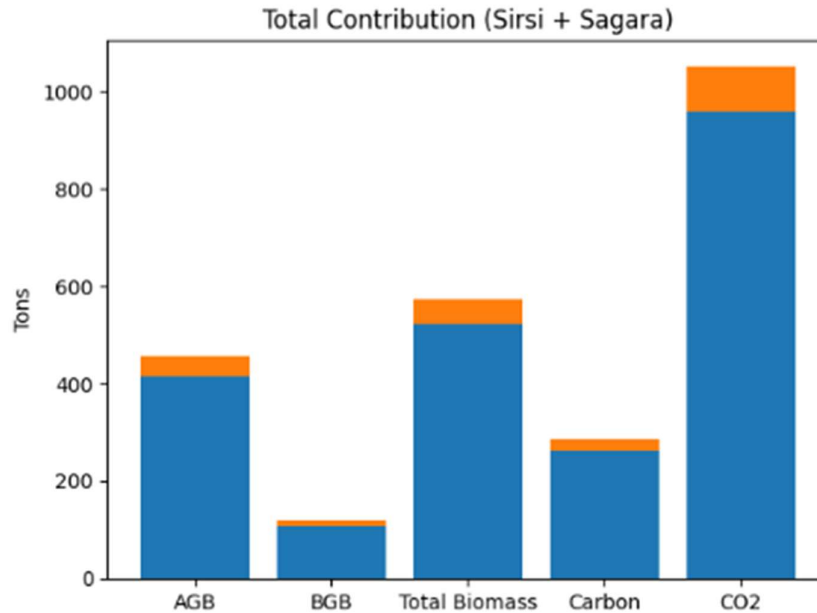


Fig 17. Graph representing site wise Above-Ground Biomass (AGB), Below-Ground Biomass (BGB), Total Biomass, carbon stored and CO2 sequestered in tons

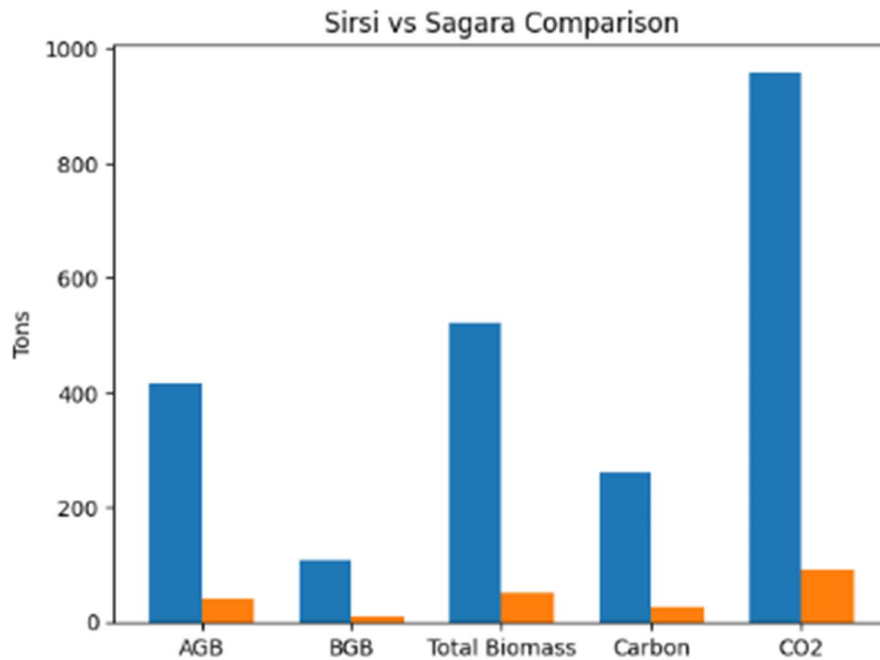


Fig 18. Site-wise carbon storage and CO₂ sequestered

The analysed dataset presents a scaled interpretation of biomass and carbon sequestration by extrapolating 20 m × 20 m sample plot data to per hectare values and further to the

total plantation area for both Sirsi and Sagara landscapes. This provides a more realistic estimate of landscape-level ecological impact.

For Sirsi, which covers a substantially larger plantation area of 142 hectares, the total above-ground biomass (AGB) is estimated at 414.551 tons, while below-ground biomass (BGB) contributes an additional 107.783 tons, resulting in a total biomass of 522.334 tons. This biomass supports a carbon storage of 261.167 tons, equivalent to 958.483 tons of CO₂ sequestered. On a per-hectare basis, Sirsi shows strong productivity, with 2.919 tons AGB, 0.759 tons BGB, and 3.678 tons total biomass per hectare, indicating relatively high biomass accumulation efficiency across the landscape.

In contrast, Sagara, with a smaller plantation extent of 53 hectares, contributes 40.21 tons of AGB and 10.45 tons of BGB, totalling 50.67 tons of biomass. This corresponds to 25.33 tons of carbon storage and 92.97 tons of CO₂ sequestration. On a per-hectare basis, Sagara records 0.759 tons AGB, 0.197 tons BGB, and 0.956 tons total biomass, which is significantly lower than Sirsi, suggesting either younger plantations, slower growth rates, or differing ecological conditions.

When combined, the total biomass across both regions reaches 573 tons, with 286.5 tons of carbon stored, translating to 1,051.455 tons of CO₂ sequestered. The graphical representations clearly illustrate that Sirsi dominates the overall contribution due to both its larger area and higher per-hectare productivity. Sagara, while smaller in magnitude, still contributes meaningfully and provides important comparative insights into spatial variation in plantation performance.

Chapter 5: Annexures

Annexure I - List of species and number of seedlings planted during the year 2025 in Sirsi

S. No	Scientific name	Kannada Name	Numbers planted
1	<i>Adhatoda vasica</i>	Aadusoge	7148
2	<i>Adina cordifolia</i>	Heddi	473
3	<i>Aegle marmelos</i>	Bilvapatre	21
4	<i>Ailanthus excelsa</i>	Halmaddi	300
5	<i>Ailanthus triphysa</i>	halmaddi 2	295
6	<i>Albizia lebbeck</i>	Godha hunase	705
7	<i>Albizia sp</i>	Bilkambi	140
8	<i>Alstonia scholaris</i>	Maddale	154
9	<i>Annona squamosa</i>	seetaphala	16
10	<i>Anthocephalus cadamba</i>	Aapattina gida	270
11	<i>Apama siliquosa</i>	Chakrani	24
12	<i>Aporosa lyndelyana</i>	Salle	50
13	<i>Artocarpus heterophyllus</i>	Halasu	1236
14	<i>Artocarpus hirsutus</i>	Hebbalasu	375
15	<i>Artocarpus lakoocha</i>	Vate	1016
16	<i>Asparagus racemosus</i>	Shatavari	12
17	<i>Azadirachta indica</i>	Kahibevu	26
18	<i>Bambusa arundinacea</i>	Bidiru	12
19	<i>Beilschmiedia dalzellii</i>	Kamatti	53
20	<i>Bombax ceiba</i>	buralu	204
21	<i>Buchanania longiflora</i>	Nurukalu	24
22	<i>Butea monosperma</i>	Muttuga	50
23	<i>Calamus thwaitessi</i>	Betta	46
24	<i>Calophyllum apetalum</i>	Babbi	1220
25	<i>Calophyllum inophyllum</i>	Kayi honne	162
26	<i>Calotropis gigantea</i>	Ekke	1283
27	<i>Canarium strictum</i>	Raladhoopa	56

28	<i>Carallia integerrima</i>	Andi	15
29	<i>Careya arborea</i>	Kavalu	174
30	<i>Caryota urens</i>	Baine	32
31	<i>Cassia fistula</i>	Kakkayi	36
32	<i>Ceiba pentandra</i>	Booralu Hatti	135
33	<i>Chukrasia tubularis</i>	Kayi garige	778
34	<i>Cinnamomum malabattrum</i>	Dalchinni	160
35	<i>Cinnamomum zeylanicum</i>	Dalchini	6807
36	<i>Citrus limon</i>	Limbu	4
37	<i>Citrus medica</i>	Madalu kanchi	5
38	<i>Coscinium fenestratum</i>	daru haridra	4
39	<i>Couroupita guianensis</i>	Nagalinga pushpa	31
40	<i>Dalbergia latifolia</i>	Beete	5242
41	<i>Diospyros candolleana</i>	Kantupri	16
42	<i>Diospyros microphylla</i>	Kari kunchalu	325
43	<i>Dipterocarpus indicus</i>	Gharjan	7
44	<i>Dombeya spectabilis</i>	Hasige mara	38
45	<i>Dysoxylum binectariferum</i>	Devadaru	83
46	<i>Emblica officinalis</i>	Nelli	8237
47	<i>Eucalyptus globulus</i>	Nilgiri	21300
48	<i>Ficus benghalensis</i>	Ala	193
49	<i>Ficus carica</i>	Anjura	1060
50	<i>Ficus glomerata</i>	Atti	143
51	<i>Ficus mysorensis</i>	Goli	35
52	<i>Ficus religiosa</i>	Arali	311
54	<i>Ficus virens</i>	Basri	218
55	<i>Flacourtia montana</i>	Hannu sampige	77
56	<i>Garcinia gummi-gutta</i>	Uppage	6
57	<i>Garcinia indica</i>	Murugalu	359
58	<i>Garcinia morella</i>	Jirigehuli	54
59	<i>Garcinia xanthochymus</i>	Devanige	5
60	<i>Gardenia gummifera</i>	Bikke	52

61	<i>Gmelina arborea</i>	Shivane	811
62	<i>Gymnacranthera canarica</i>	Ondanki mara	2
63	<i>Holarrhena antidysenterica</i>	Kodasa	136
64	<i>Holoptelea integrifolia</i>	Tapasi	402
65	<i>Knema attenuata</i>	Kadu Jayikayi	60
66	<i>Lagerstroemia lanceolata</i>	Nandi	159
67	<i>Lagerstroemia speciosa</i>	Hole dasvala	302
68	<i>Lannea coromandelica</i>	Sopgojjala	6
69	<i>Limonia acidissima</i>	Beela	222
70	<i>Lophopetalum wightianum</i>	Banate	29
71	<i>Madhuca longifolia</i>	Hippe	1470
72	<i>Magnolia champaca</i>	Sampige	7
73	<i>Mammea suriga</i>	Suragi	226
74	<i>Mangifera indica</i>	Mavu	469
75	<i>Mastixia arborea</i>	Neeratti	132
76	<i>Mesua ferrea</i>	Nagasampige	101
77	<i>Mimusops elengi</i>	Ranjalu	260
78	<i>Moringa oleifera</i>	Nugge	2121
79	<i>Myristica fragrans</i>	Jayikayi	425
80	<i>Myristica malabarica</i>	Rampatre	227
82	<i>Nyctanthes arbor-tristis</i>	Parijata	1366
83	<i>Nothopegia racemosa</i>	Hetari	3
84	<i>Oroxylum indicum</i>	Anangi	3
85	<i>Persea americana</i>	Benne hannu	1
86	<i>Persea macrantha</i>	Gulamavu	838
87	<i>Phoenix dactylifera</i>	Eechalu	3
88	<i>Plumeria sp.</i>	Devakanagilu	4
89	<i>Polyalthia fragrans</i>	Gowrimara/Maragouri	106
90	<i>Polyalthia longifolia</i>	Hybrid ashok	35
91	<i>Pongamia pinnata</i>	Honge	5352
92	<i>Psidium guajava</i>	Perale	64
93	<i>Psychotria dalzellii</i>	Vatta Madake	34

94	<i>Pterocarpus marsupium</i>	Honne	4155
95	<i>Pterocarpus santalinus</i>	Rakta chandana	2820
96	<i>Putranjiva roxburghii</i>	Putranjivi	64
97	<i>Rauvolfia serpentina</i>	Sarpagandha	9
98	<i>Salacia chinensis</i>	Ekanayaka	197
99	<i>Santalum album</i>	Shreegandha	1200
100	<i>Sapindus trifoliatus</i>	Antuvala	330
101	<i>Saraca asoca</i>	Seeta ashoka	245
102	<i>Simarouba glauca</i>	Simarooba	57
103	<i>Sterculia guttata</i>	Huli toradu	135
104	<i>Strychnos nux-vomica</i>	Kasaraka	64
105	<i>Swietenia mahagoni</i>	Mahagoni	136
106	<i>Syzygium aromaticum</i>	Lavanga	281
107	<i>Syzygium caryophyllatum</i>	Kuntu Nerale	220
108	<i>Syzygium cumini</i>	Nerale	4904
110	<i>Syzygium samarangense</i>	Neeru sebu	1
111	<i>Syzygium travancoricum</i>	Kempuneral	84
112	<i>Tabernaemontana heyneana</i>	Maddarasa	110
113	<i>Tamarindus indica</i>	Hunase	3166
114	<i>Tecoma stans</i>	Kolsampige	82
115	<i>Tectona grandis</i>	Sagavani	1202
116	<i>Terminalia arjuna</i>	Bilimatti	13230
117	<i>Terminalia bellirica</i>	Tari	200
118	<i>Terminalia chebula</i>	Anale	133
119	<i>Terminalia paniculata</i>	Honagalu	348
120	<i>Terminalia tomentosa</i>	Matti	941
121	<i>Thespesia populnea</i>	Huvarasi	2256
122	<i>Tinospora cordifolia</i>	Amrutaballi	10
123	<i>Toona ciliata</i>	Gandhagarige	225
124	<i>Vateria indica</i>	Saladhoopa	270
125	<i>Vitex altissima</i>	Baranige	793
126	<i>Vitex negundo</i>	Lakki	5774

127	<i>Wrightia antidysenterica</i>	Kodamurki,	20
128	<i>Xylia xylocarpa</i>	Jambe	63
129	<i>Zanthoxylum rhetsa</i>	Jumma	36
Total			120450

Annexure II: List of species and numbers planted during the year 2025 in Sagara

S. No.	Scientific name	Kannada Name	Numbers Planted
1	<i>Adhatoda vasica</i>	Aadusoge	640
3	<i>Albizia lebbeck</i>	Godha hunase	20
4	<i>Albizia sp</i>	Bilkambi	5
5	<i>Artocarpus heterophyllus</i>	Halasu	356
6	<i>Artocarpus lakoocha</i>	Vate	31
8	<i>Calotropis gigantea</i>	Ekke	170
9	<i>Cinnamomum zylanicum</i>	Dalchinni	1305
10	<i>Emblica officinalis</i>	Nelli	2705
11	<i>Eucalyptus globulus</i>	Nilgiri	7200
12	<i>Garcinia gummi-gutta</i>	Uppage	305
13	<i>Garcinia indica</i>	Murugalu	780
14	<i>Gmelina arborea</i>	Shivane	20
15	<i>Madhuca longifolia</i>	Hippe	200
16	<i>Magnolia champaca</i>	Sampige	75
17	<i>Mangifera indica</i>	Mavu	45
18	<i>Mimusops elengi</i>	Ranjalu	45
19	<i>Myristica malabarica</i>	Ramapatre	400
20	<i>Nyctanthes arbor-tristis</i>	Parijata	203
21	<i>Pongamia pinnata</i>	Honge	3167
22	<i>Pterocarpus marsupium</i>	Honne	2866
23	<i>Pterocarpus santalinus</i>	Rakta chandana	282
24	<i>Putranjiva roxburghii</i>	Putranjivi	12
25	<i>Saraca asoca</i>	Seeta ashoka	175
26	<i>Syzygium cumini</i>	Nerale	2902
27	<i>Tamarindus indica</i>	Hunase	2560
28	<i>Terminalia arjuna</i>	Bilimatti	15095
29	<i>Terminalia bellirica</i>	Tari	2558
30	<i>Vateria indica</i>	Saladhoopa	65
31	<i>Vitex negundo</i>	Lakki	5853
Total			50040

Annexure III. Ecological status of the planted species- IUCN threatened category and endemic to the Western Ghats.

Sl. No.	Name of the species	IUCN Status (As on Dec 2024)	Endemism
1.	<i>Ailanthus excelsa</i>	Data Deficient	WG
2.	<i>Apama siliquosa</i>	Not Assessed/Not Evaluated	WG
3.	<i>Arenga wightii</i>	Vulnerable	WG
4.	<i>Artocarpus hirsutus</i>	Not Assessed/Not Evaluated	WG
5.	<i>Calophyllum apetalum</i>	Vulnerable	WG
6.	<i>Calophyllum wightianum</i>	Not Assessed/Not Evaluated	WG
7.	<i>Canarium strictum</i>	Endangered	WG
8.	<i>Cinnamomum malabattrum</i>	Not Assessed/Not Evaluated	WG
9.	<i>Dipterocarpus indicus</i>	Endangered	WG
10.	<i>Dysoxylum binectariferum</i>	Not Assessed/Not Evaluated	WG
11.	<i>Ficus mysorensis</i>	Not Assessed/Not Evaluated	WG
12.	<i>Flacourtia montana</i>	Not Assessed/Not Evaluated	WG
13.	<i>Garcinia gummi-gutta</i>	Not Assessed/Not Evaluated	WG
14.	<i>Garcinia indica</i>	Vulnerable	WG
15.	<i>Garcinia morella</i>	Not Assessed/Not Evaluated	WG
16.	<i>Garcinia xanthochymus</i>	Not Assessed/Not Evaluated	WG
17.	<i>Gymnacranthera canarica</i>	Vulnerable	WG
18.	<i>Lagerstroemia lanceolata</i>	Not Assessed/Not Evaluated	WG
19.	<i>Mammea suriga</i>	Not Assessed/Not Evaluated	WG
20.	<i>Mangifera indica</i>	Least Concern	WG
21.	<i>Mastixia arborea</i>	Not Assessed/Not Evaluated	WG

22.	<i>Mesua ferrea</i>	Vulnerable	WG
23.	<i>Michelia champaca</i>	Least Concern	WG
24.	<i>Myristica fatua</i>	Not Assessed/Not Evaluated	WG
25.	<i>Myristica malabarica</i>	Vulnerable	WG
26.	<i>Nothopogia racemosa</i>	Not Assessed/Not Evaluated	WG
27.	<i>Syzygium caryophyllatum</i>	Not Assessed/Not Evaluated	WG
28.	<i>Syzygium spp.</i>	Least Concern	WG
29.	<i>Syzygium travancoricum</i>	Critically Endangered	WG
30.	<i>Tabernaemontana heyneana</i>	Not Assessed/Not Evaluated	WG
31.	<i>Terminalia paniculata</i>	Not Assessed/Not Evaluated	WG
32.	<i>Vateria indica</i>	Vulnerable	WG
33.	<i>Aegle marmelos</i>	Near Threatened	-
34.	<i>Cinnamomum zeylanicum</i>	Endangered	-
35.	<i>Dalbergia latifolia</i>	Vulnerable	-
36.	<i>Pterocarpus marsupium</i>	Near Threatened	-
37.	<i>Pterocarpus santalinus</i>	Endangered	-
38.	<i>Santalum album</i>	Vulnerable	-
39.	<i>Saraca asoca</i>	Vulnerable	-
40.	<i>Swietenia mahagoni</i>	Near Threatened	-
41.	<i>Tectona grandis</i>	Endangered	-

Chapter 6: Status of plants (planted during June, July and August 2025)



Adathoda vasica



Albizia lebbbeck



Alstonia scholaris



Anthocephalus cadamba



Artocarpus hirsutus



Azadiracta indica



Bambosa sp.



Ficus virens



Buchanania longiflora



Calophyllum inophyllum



Calotropis gigantea



Canarium strictum



Cinnamomum malabattrum



Cinnamomum zylanicum



Citrus arnotiana



Citrus medica



Coscinium fenestratum



Legestroemea speciosa



Diospyros microphylla



Dombeya spectabilis



Emblica officinalis



Eucalyptus globulus



Nyctanthus arbostris



Ficus religiosa



Ficus mysorens



Flacourtia montana



Garcinia indica



Garcinia xathichymus



Gmelina arborea



Holoptela intigriolia



Ficus sp.



Polyalthia fragarans



Syzygium samarangense



Holigarna arnottiana



Lagestroemia lanceolata



Lagestroemia speciosa



Macaranga gigantea



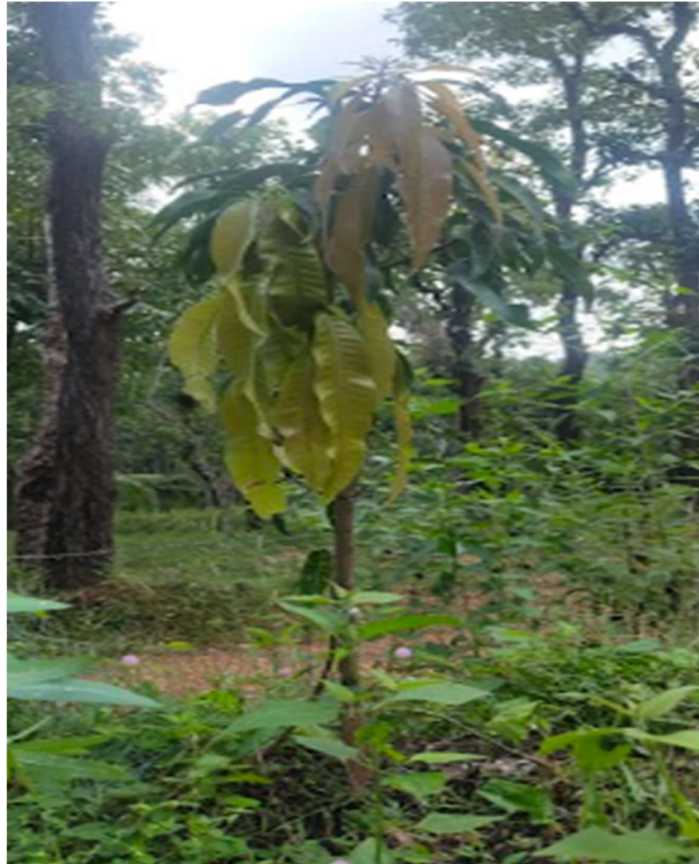
Madhuca indica



Magnolia champaka



Mammea suriga



Mangifera indica



Mesua ferea



Mimusops elengi



Morinda citrifolia



Myristica malabarica



Couroupita guianensis



Persea macrantha



Pithecellobium dulce



Polyalthia longifolia



Psidium guajava



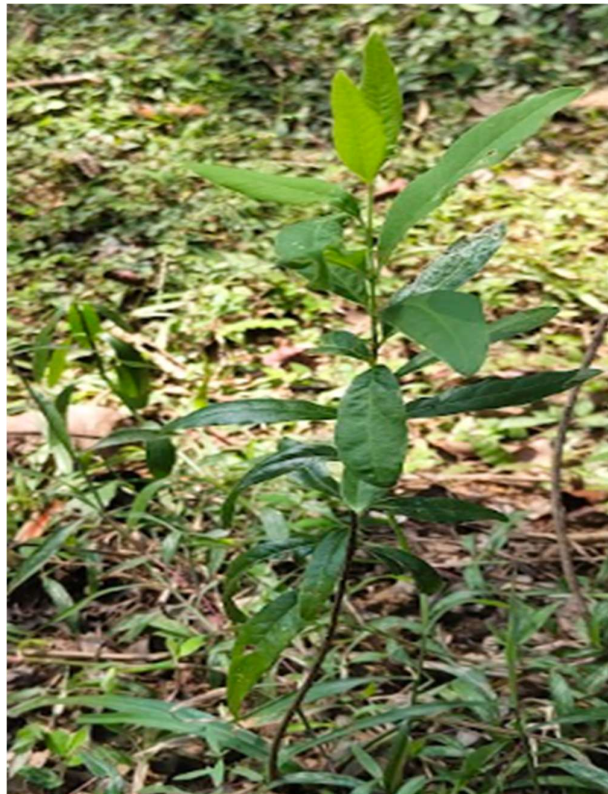
Psychotria dalzelli



Putranjiva roxburghii



Salacia chinensis



Sanatatum album



Sapandis trifoliatus



Sterculia guttata



Swietenia mahogany



Syzygium gardneri



Syzygium cumini



Syzygium caryophyllatum



Syzizium jamboos



Tamarindus indica



Tactona grandis



Terminalai bellarica



Terminalia catappa



Terminalia paniculata



Vateria indica



Vitex altissima



Vitex negundo



Zanthoxylum rhesta



Aporosa lindleyana



Ficus glomerata

Chapter 7: Status of plants (planted during June, July and August 2024)



Aporosa lindleyana



Artocarpus hirsutus



Artocarpus lakoocha



Cinnamomum malabattrum



Cinnamomum malabattrum



Mesua ferea



Flaucortia montana



Syzigium travancoricum



Myristica malabarica



Syzigium travancoricum



Calophyllum inophyllum



Lagerstroemia speciosa



Mimusops elengi



Madhuca indica



Lagerstroemia speciosa



Mimusops elengi



Madhuca indica



Madhuca indica



Magnolia champaka



Mammea suriga



Mangifera indica



Mangifera indica



Mangifera indica



Mangifera indica



Mesua ferrea



Psidium guajava



Pongamia pinnata



Psidium guajava



Salacia chinensis



Saraca asoca



Simarouba glauca



Swietenia mahogany



Swietenia mahogany



Syzizium cumini



Syzizium cumini



Syzizium gardinerii



Vitex negundo

