Office of Dean of Sustainability
Thapar Institute of Engineering & Technology
(Deemed to be University)
Patiala – 147004 INDIA

Activity: Tree Plantation

Location: Ambaram Hall

Date: 07 August 2024

On August 7, 2024, a significant event took place with the ceremonial planting of three important plant species—Terminalia chebula (Harad), Terminalia bellirica (Bahera), and Pimenta dioica (Allspice). The occasion was graced by the presence of eminent scholars and experts, including Dr. Ajay Batish, Dr. Rafat Siddique, Dr. Kulbir Singh, Dr. Anoop Verma, Dr. H. D. Joshi, and several other distinguished colleagues.

This event underscored the collective dedication to promoting botanical diversity, advancing scientific research, and fostering sustainability. The selection of these species was particularly noteworthy due to their cultural, medicinal, and ecological significance. Terminalia chebula and Terminalia bellirica are integral to traditional medicine, known for their extensive health benefits and role in promoting well-being. Pimenta dioica (Allspice), with its rich aromatic properties, adds both culinary and medicinal value.

The presence of such esteemed experts not only highlighted the importance of this initiative but also reflected a shared commitment to sustainable practices. By planting these species, the participants emphasized the need to conserve and propagate plants that contribute to ecological balance, support biodiversity, and provide long-term benefits to communities and the environment.

This event serves as a reminder of the crucial role that collaboration and shared knowledge play in advancing both scientific understanding and environmental stewardship. The planting of Harad, Bahera, and Allspice symbolizes a step forward in the journey towards a more sustainable and health-conscious future.

Details of Plants

Name of Plant	Botanical Name	No of Plants	CO_2 Absorption (Pounds/year)
Harad	Terminalia chebula	10	42-46 (mature plant)
Bahera	Terminalia bellirica	18	38-46 (mature plant)
Allspice	Pimenta dioica	17	42-50 (mature plant)

	
Tree planted by Dr. Ajay Batish, Deputy Director	Watering by Dr. Ajay Batish, Deputy Director
	
Tree planted by Dr. Mohit Agarwal, ECE	Tree planted by Dr. Hem Dutt Joshi, Associate Dean, DCT

Significance of the Planting

Terminalia chebula (Harad): *Terminalia chebula*, commonly known as Harad, is a cornerstone of traditional Ayurvedic medicine. Revered for its potent medicinal properties, Harad is used to treat various ailments and is recognized as a powerful antioxidant. Its benefits extend beyond health, as the plant is also valuable for soil conservation due to its deep root system, which helps prevent erosion and improve soil structure. By planting Harad, we are contributing to both the preservation of traditional knowledge and the promotion of ecological balance.

Terminalia bellirica (Bahera): *Terminalia bellirica*, known as Bahera, is another crucial species in the Ayurvedic system. Bahera is lauded for its extensive health benefits, including its use in digestive, respiratory, and immune system support. Ecologically, Bahera is vital in afforestation projects due to its ability to thrive in degraded soils and its role in maintaining biodiversity. Its large canopy provides habitat for various wildlife, while its fruit supports local economies. Planting Bahera highlights the importance of integrating species that offer both environmental and economic sustainability.

Pimenta dioica (Allspice): *Pimenta dioica*, commonly referred to as Allspice, is a plant renowned for its aromatic berries, which are used both in culinary applications and traditional medicine. Allspice's essential oils are valued for their antiseptic and anti-inflammatory properties. Beyond its medicinal and culinary uses, Allspice plays a role in sustainable

agriculture. The plant's resilience to pests and its compatibility with agroforestry systems make it an excellent choice for sustainable farming practices. By cultivating Allspice, we contribute to a more diversified and resilient agricultural system that aligns with the principles of sustainability.

Environmental Impact: Planting *Harad*, *Bahera*, and *Allspice* contributes to environmental sustainability in several ways. These species help combat soil degradation, support wildlife, and enhance biodiversity. Their ability to adapt to different climatic conditions makes them crucial in addressing the challenges posed by climate change. By planting these trees, we are investing in long-term solutions that promote environmental resilience and the health of our ecosystems.

Community and Economic Benefits: The event also underscores the importance of plants that provide economic value to local communities. The medicinal, culinary, and agricultural uses of these species can create sustainable livelihoods, particularly in rural areas. This aligns with broader sustainability goals, which advocate for solutions that benefit both people and the planet.

Conclusion: The ceremonial planting of *Terminalia chebula* (Harad), *Terminalia bellirica* (Bahera), and *Pimenta dioica* (Allspice) on August 7, 2024, marks a significant commitment to sustainability, biodiversity, and the preservation of traditional knowledge. The event serves as a model for how scientific collaboration, ecological awareness, and sustainable practices can come together to create a positive impact on both local and global scales. Through such initiatives, we take meaningful steps towards ensuring a sustainable and thriving environment for future generations.

(Kulbir Singh)
Associate Dean Sustainability

(Rafat Siddique)
Dean Sustainability

	
Tree planted by Dr. K. S. Sandha, AHECE	Plantation and invitee and student Associate Dean, DCT
	
Tree planted by Dr. Mohit Agarwal, ECE	Tree planted by Dr. Ajay Batish, Deputy Director