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

Activity: Tree Plantation

Location: FETE Area Crossing to CMS Office

Date: 11 September 2024, Wednesday

On September 11, 2024, a tree planting event was held to introduce *Terminalia bellirica* (Bahera) into the landscape. This initiative, located at the FETE Area Crossing to the CMS Office, was attended by esteemed scholars and experts, including Dr. Rafat Siddique, Dr. Kulbir Singh, Dr. Anoop Verma, Dr. Hari Shankar Singh, Dr. Dhamodharan, Dr. Ashutosh, and other distinguished colleagues. Their participation emphasized the significance of this event as a collective endeavor toward enhancing environmental sustainability and promoting biodiversity.

The planting of *Terminalia bellirica* highlights the integration of traditional botanical knowledge with modern environmental strategies, showcasing how collaborative efforts among experts can make valuable contributions to *ecological* conservation. This event reflects a shared commitment to fostering a greener and more sustainable future.

Details of Plants

Name of Plant	Botanical Name	No of Plants	CO_2 Absorption (Pounds/year)
Bahera	Terminalia bellirica	50	38-46 (mature plant)

Tree planted by Student and Faculty

Watering and planting Dr. Kulbir Singh, ADoS-1

	
Tree planting by Staff	Tree planted by Dr. Rafat Siddique, DoS
	
Watering and planting by Dr. Rafat Siddique, DoS	Tree planting by Dr. Hari Shankar Singh, Coordinator, Sustainability

Significance of the Planting

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.

Sustainability and Environmental Impact: The planting of *Bahera* trees aligns with broader sustainability goals aimed at enhancing biodiversity, improving soil health, and mitigating the effects of climate change. By introducing these species into the environment, the event promotes the regeneration of green cover, supports local ecosystems, and reinforces the commitment to environmental stewardship.

Biodiversity Enhancement: Both *Bahera* play critical roles in supporting biodiversity. It attracts pollinators like bees and butterflies and provides shelter and food for various bird species. By planting these trees, the event contributes to creating a thriving ecosystem that sustains a wide range of flora and fauna.

Soil and Water Conservation: The deep-rooted systems of these plants help stabilize the soil, reduce erosion, and improve water retention. This is particularly important in areas prone to soil degradation and water scarcity. The introduction of *Machira* is especially beneficial in rehabilitating degraded lands, while *Sita Ashoka* enhances soil fertility through its leaf litter

(Kulbir Singh)
Associate Dean Sustainability

(Rafat Siddique)
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