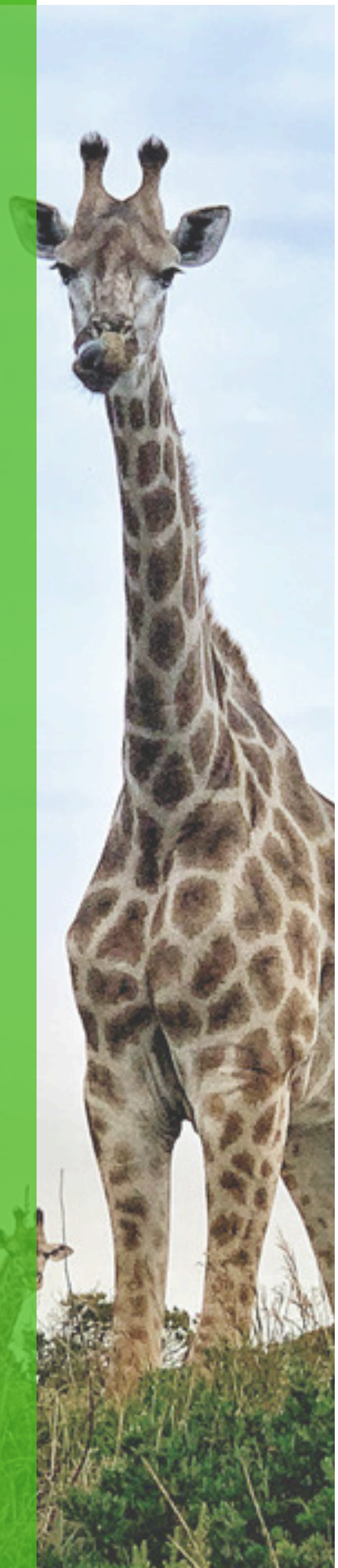




SDG 15

LIFE ON LAND



LIST OF ACTIVITIES

SR. NO.	ACTIVITY TITLE
1	Land Ecosystem Awareness Talk
2	Exploration Of Biofilms In Secondary Infections
3	Prevention Of Signaling Among Disease Causing Bacteria
4	Fungal Fixers Poster Presentation
5	Climate Hackathon for Land Sustainability
6	World Environment Day





ACTIVITY 01: LAND ECOSYSTEM AWARENESS TALK

Organized By:
The Department of Bioinformatics & Biosciences



An educational FM talk was conducted to raise awareness about food safety, microbial contamination, and their connection with land and environmental health. The session highlighted how degraded soil, poor land management, and unsustainable agricultural practices contribute to the presence of harmful microorganisms in the food chain. Key issues such as improper waste disposal, unsafe irrigation, and land-based pollution were discussed as major factors affecting food safety and public health. The initiative emphasized the link between terrestrial ecosystems and safe food systems, particularly for vulnerable populations. It aligned with SDG 15, especially Target 15.1, by promoting the protection and sustainable use of land ecosystems. The activity encouraged responsible environmental practices and awareness to ensure long-term ecological balance and food safety.





ACTIVITY 02: PLASTIC-FREE CHALLENGE AWARENESS DESK

Organized By:
The Department of Bioinformatics & Biosciences



A desk-based awareness activity was conducted to promote environmentally responsible behavior and reduce plastic pollution impacting terrestrial ecosystems. Informative posters and discussions highlighted how plastic waste degrades soil quality, disrupts water infiltration, and affects plant growth and agricultural productivity. The initiative emphasized the role of reducing plastic use in preventing land degradation and supporting ecosystem restoration. It aligned with SDG 15, particularly Targets 15.1, 15.3, and 15.5, by promoting conservation of land ecosystems, combating degradation, and protecting biodiversity. Participants explored the impact of plastic on soil organisms and wildlife, encouraging sustainable alternatives such as reusable and biodegradable materials. The activity fostered environmental awareness and responsible practices for the long-term protection of life on land.





ACTIVITY 03:

FUNGAL INNOVATIONS FOR ENVIRONMENTAL CONSERVATION

Organized By:

The Department of Bioinformatics & Biosciences

	covering. They resemble plant roots and can branch.	spread long distances in soil/wood. - Provide survival advantage.	
Hauistorium (pl. Haustoria)	Specialized hyphal outgrowths that penetrate host cells but remain outside plasma membrane (surrounded by host membrane → haustorial complex).	- Absorb nutrients from host cells. - Essential for parasitic fungi. - Facilitate host-pathogen interactions.	<i>Puccinia graminis</i> (wheat rust), <i>Erysiphe</i> spp. (powdery mildew), <i>Albugo candida</i> (white rust).
Sclerotium (pl. Sclerotia)	Compact, hardened, dark-colored masses of hyphae with a tough rind and internal storage tissue.	- Perennation (survival in unfavorable conditions). - Germinate to form fruiting bodies or hyphae when conditions improve. - Act as nutrient reserves.	<i>Claviceps purpurea</i> (ergot), <i>Sclerotium rolfsii</i>, <i>Rhizoctonia solani</i>.

An academic activity was conducted to explore fungal modifications and their role in environmental conservation through assignments, presentations, and class discussions. Students examined fungal structures, adaptations, and ecological functions, highlighting their contributions to soil fertility, nutrient cycling, plant growth, and ecosystem stability. The session emphasized practical applications such as mycoremediation, biofertilizers, and organic waste decomposition in restoring degraded land. It aligned with SDG 15, particularly Targets 15.1, 15.3, and 15.5, by promoting conservation of terrestrial ecosystems, land restoration, and biodiversity protection. The activity strengthened understanding of fungi as essential components of sustainable land management. It fostered critical thinking and encouraged nature-based solutions for environmental sustainability.





ACTIVITY 04: FUNGAL FIXERS POSTER PRESENTATION

Organized By:
The Department of Bioinformatics & Biosciences



A poster presentation activity titled “Fungal Fixers: Harnessing Biosciences to Heal the Planet” was conducted to highlight the ecological importance of fungi in maintaining terrestrial ecosystems. Students showcased posters on fungal roles in soil fertility, nutrient cycling, biodegradation, plant symbiosis, and land restoration. The activity emphasized applications such as mycoremediation, organic waste decomposition, and sustainable soil management. It aligned with SDG 15, particularly Targets 15.1, 15.3, and 15.5, by promoting ecosystem conservation, land restoration, and biodiversity protection. The initiative enhanced awareness of fungi as key contributors to environmental sustainability. It strengthened students’ understanding of nature-based solutions for protecting life on land.





ACTIVITY 05: CLIMATE HACKATHON FOR LAND SUSTAINABILITY

Organized By:
The Department of Bioinformatics & Biosciences



A Climate Hackathon was conducted to promote innovative solutions addressing land degradation, biodiversity loss, deforestation, and sustainable land-use practices. Students presented models, posters, and conceptual ideas highlighting forest conservation, wildlife protection, and restoration of degraded ecosystems. The activity encouraged interdisciplinary collaboration, critical thinking, and practical problem-solving related to environmental challenges. It aligned with SDG 15, particularly Targets 15.1, 15.3, and 15.5, by supporting sustainable use of land, ecosystem restoration, and biodiversity conservation. The initiative emphasized the role of youth-driven innovation in protecting terrestrial ecosystems. It contributed to strengthening environmental awareness and fostering sustainable, nature-based solutions.





ACTIVITY 06: WORLD ENVIRONMENT DAY

Organized By:
The Department of Bioinformatics & Biosciences



World Environment Day was organized by the Directorate of Sustainability and Environment in collaboration with the GENIX Society and the GYM Club. Students and faculty gathered in front of F-Block participate in this engaging activity. The event aimed to raise awareness about the importance of trees and their role in sustaining the environment. By identifying and learning about various tree species, participants gained a deeper understanding of the significance of conservation and sustainability. To further promote sustainability, saplings were distributed among faculty members. This initiative aligns with the United Nations' Sustainable Development Goal 15: Life on Land, specifically Target 15.1, -15.9 and 15.a-15.c, focusing on ecosystem conservation, combating desertification, and fair sharing of genetic resources.

