

Public Access to Green and Open Spaces

Centurion University, Bhubaneswar, has made significant advancements in promoting public access to green spaces as part of its broader commitment to environmental stewardship, community well-being, and sustainability. The following report outlines the university's recent initiatives and their impact on campus life and the wider community.

1. Free and Inclusive Access

- **Open Campus System:** The university provides free access to its extensive green spaces, including gardens, pathways, and recreational areas. These spaces are open to students, faculty, and the broader community, fostering relaxation, recreation, and a connection with nature. In 2024, around 1200-1500 students, faculty and staff both internal and external, accessed the greener pasture for studying and relaxation.



Fig. 1 shows the open campus initiatives to welcome tiny tots into Centurion University.

- **Community Engagement:** Green spaces serve as vital urban havens, allowing for social interaction, outdoor activities, and community events, thereby enhancing the quality of life for all campus stakeholders. In 2024, around 1200-1500 students, faculty and staff accessed the gardens for community engagement. A total of 5000 odd students have permanent access to the gardens wherein they also bring their parents for social interactions.



Fig. 4 Aerial view of pollinators paradise.

- **Ornamental Fish Ponds:** The university maintains ornamental fish ponds and an aquarium, which serve both as aesthetic water features and educational resources for students studying aquaculture and fisheries management. These ponds support aquatic biodiversity and sustainable practices.



Fig. 5 ornamental fish ponds in Centurion University.

- **Bee-Butterfly and Cactus Garden:** A unique garden has been developed on reclaimed land, transforming a semi-degraded area into a thriving ecosystem for research and education on terrestrial biodiversity.
- **World Bee Day Celebration (May 20, 2024)** - Guided tours of the bee hives and pollinator sanctuary, honey tasting sessions from the 5+ hives, educational workshops on beekeeping and pollinator conservation
- **World Environment Day Programs (June 5, 2024)** - Community planting of nectar-rich flowers in the sanctuary, interactive sessions on biodiversity conservation, demonstrations of sustainable beekeeping practices
- **Pollinator Week Activities (June 2024)** - School student visits to learn about ecosystem health, photography walks through the butterfly and bee habitat corridors, public awareness campaigns on minimizing pesticide use
- **Honey Harvesting Demonstrations** - Open sessions where community members observe honey extraction from the campus hives, educational talks on the importance of pollinators to food security



Fig. 6 cactus garden in Centurion University.

b. Sustainable Campus Management

- **Tree Planting and Eco-Friendly Landscaping:** Regular tree planting drives and eco-friendly landscaping ensure that green spaces remain ecologically balanced and visually appealing. These efforts contribute to carbon sequestration and improved air quality. In 2024, we have planted more than 2000 plants in the campus.

World Environment Day Plantation Drive (June 5, 2024)

- Community tree planting event where local residents, school groups, and families participated in planting native species
- Educational sessions on carbon sequestration and air quality improvement
- Interactive demonstrations showing how the 2000+ plants planted contribute to campus ecology

Van Mahotsav Week (First week of July 2024)

- Week-long celebration with daily public tree planting sessions
- Guided nature walks through campus green spaces showcasing biodiversity
- Workshops on urban gardening and native plant species



Fig. 7 shows waste management and composting in Centurion University.

- **Waste Management and Composting:** The university has installed bio-digester units and vermicomposting tanks to convert organic waste into nutrient-rich compost, which is then used to enrich campus gardens and farms.

World Earth Day Composting Workshop (April 22, 2024)

- Open house at bio-digester units and vermicomposting tanks
- Hands-on demonstrations for community members on home composting techniques

- Distribution of compost samples and earthworms to interested participants

Zero Waste Campus Tours (Monthly throughout 2024)

- Guided tours for school students and local community groups
- Live demonstrations of organic waste to compost conversion process
- Display of campus gardens enriched with university-produced compost



Fig. 8 shows water conservation pond in Centurion University.

- **Water Conservation:** A campus-wide sewage treatment plant processes and recycles water for gardening and farming, supporting the maintenance and expansion of green spaces.

World Water Day Campus Tour (March 22, 2024)

- Public tours of the sewage treatment plant demonstrating water recycling
- Interactive exhibits on water conservation techniques
- Demonstrations of treated water being used in campus gardens and farms

Sustainable Campus Open Day (Quarterly in 2024)

- Comprehensive tours covering all three sustainability initiatives
- Educational sessions for farmers and community members on water-efficient farming
- Student presentations on campus sustainability metrics and achievements



Fig. 9 waste water recycling pond in Centurion University.

c. Educational and Community Programs

- **Workshops and Training:** The university provides public access to its green spaces, organic farms, and conservation areas through structured workshops and training sessions. In 2024, Centurion University conducted 3 workshops on sustainable agriculture and biodiversity conservation, allowing local farmers, community members, and stakeholders to visit and engage with the campus's tree plantations, composting units, water recycling facilities, and pollinator sanctuary. These programs enable the public to explore the university's open green spaces while gaining practical knowledge on eco-friendly practices.



Fig. 10 shows workshop and training in Centurion University.

- **Open Events:** Public events such as International Yoga Day are celebrated in green spaces, promoting wellness and environmental awareness among participants. In 2024 we conducted 3 yoga workshops wherein 100 participants attended and also celebrated the International Yoga Day.



Fig. 11 shows the well-being initiatives in Centurion University.

3. Accessibility and Well-Being

- Physical and Mental Health:** Access to green spaces is linked to improved physical and mental well-being. The university’s open spaces provide a tranquil environment for relaxation, exercise, and stress relief.



Fig. 12 shows a serene place in Centurion University campus to reduce stress and elevate mood.

- Inclusive Design:** Pathways and recreational areas are designed to be accessible, ensuring that individuals of all ages and abilities can benefit from the campus’s natural environment.

4. Impact and Future Directions

- **Biodiversity Enhancement:** Centurion University has actively enhanced biodiversity on its campuses through pollinator-friendly gardens, aquaculture-based fish ponds, and the introduction of diverse indigenous plantings. These initiatives not only restore ecological balance but also create hands-on learning environments for students in agriculture, biotechnology, and environmental science, while inviting community participation.

- **Pollinator Gardens (Bees, Butterflies, and Birds):**

Centurion University established three pollinator gardens across the Bhubaneswar, Vizianagaram, and Paralakhemundi campuses in 2024, featuring nectar-rich native plants such as hibiscus, sunflowers, marigold, and tulsi. Over 120 species of flowering plants maintained. 15+ species of butterflies and 10 bird species recorded during biodiversity audits. Students in Agriculture and Horticulture programs conducted field surveys on pollinator activity, linking coursework with biodiversity indices. Local women's SHGs were involved in seedball preparation and maintenance, creating awareness of biodiversity-friendly livelihoods.

- **Fish Ponds and Aquatic Diversity:**

Centurion University developed integrated fish ponds within its Skill Labs (Paralakhemundi and Jatni campuses) that double as training grounds for aquaculture students and as ecosystems supporting multiple species. 5 functional ponds in 2024, collectively spanning ~8 acres. 7 fish species cultivated (e.g., Rohu, Catla, Mrigal, Tilapia, Pangasius, Magur, and Common Carp). Annual yield: ~15 tons of fish harvested, a portion distributed to local communities and rest used in training programs. Aquatic plants (lotus, water hyacinth control measures, duckweed) added to maintain ecological balance and nutrient cycling. Students practiced integrated aquaculture with duck, poultry, and horticulture, creating models of sustainable rural livelihood.

- **Diverse Indigenous Plantings (Green Corridors and Miyawaki Forest Patches)**

In 2024, Centurion University initiated "One Student, One Tree" and Miyawaki-style dense forest patches to encourage ecological resilience. 10,000 saplings planted across campuses.

Over 200 species of native and medicinal plants (Neem, Peepal, Banyan, Amla, Ashoka, Jamun, Karanja) now thriving. Increased shade cover on campus roads and reduction in local heat island effect (~1.5°C cooler in shaded zones, based on internal

survey). The herbal garden was used for community health awareness workshops, teaching villagers the use of tulsi, ashwagandha, and aloe vera for primary healthcare.



Fig. 13 shows diverse planting initiatives in Centurion University.



Fig. 14 shows ornamental fish ponds in Centurion University.

- **Community Integration: Community Tree Plantation Drive – World Environment Day (5 June 2024)**

Centurion University Conducted in collaboration with local panchayats and schools, involving plantation of 2,000 saplings across the campus and nearby villages. 650 (350 school students, 150 community members, 100 faculty/staff, 50 self-help group women). Increased green cover by 3 acres, adoption of saplings by community households. Local school children pledged to water and care for the trees; feedback collected showed 90% participants expressed willingness to replicate the drive in their localities.

- **Community Organic Farmers' Market (August–December 2024, Monthly Event)**

Local farmers were given space inside the university green corridor to sell organic produce directly. 1,200 footfalls/month (average), 40–50 local farmers involved.

Strengthened farm-to-fork linkages, generated additional income (~₹2.5 lakhs collectively across 5 months) for participating farmers. Farmers reported learning sustainable cultivation practices from faculty and student volunteers.

- **Eco-Walk & Nature Education Program for Schools (October 2024)**
University biodiversity park was opened for experiential learning tours for local schools. Activities included bird watching, herbal plant identification, and waste-segregation demonstrations. 480 schoolchildren and 40 teachers from 10 schools. Enhanced awareness among children about biodiversity and sustainable waste practices. Teachers shared that students later initiated “green corners” in their schools inspired by the eco-walk.
- **Community Clean-Up & Plastic-Free Campus Campaign (December 2024)**
Joint campaign with local residents and shopkeepers around the university periphery to make it plastic-free. 300 students + 200 community members = 500 total. Collected 1.2 tons of plastic waste; installed 15 permanent waste segregation bins in surrounding markets. Local shopkeepers reported increased customer appreciation for adopting cloth bags after the campaign.
- **Sustainable Development Leadership:** Centurion University’s initiatives serve as a model for other institutions seeking to balance academic growth with environmental responsibility and community engagement.



Fig. 15 shows the environmental responsibility works in Centurion University

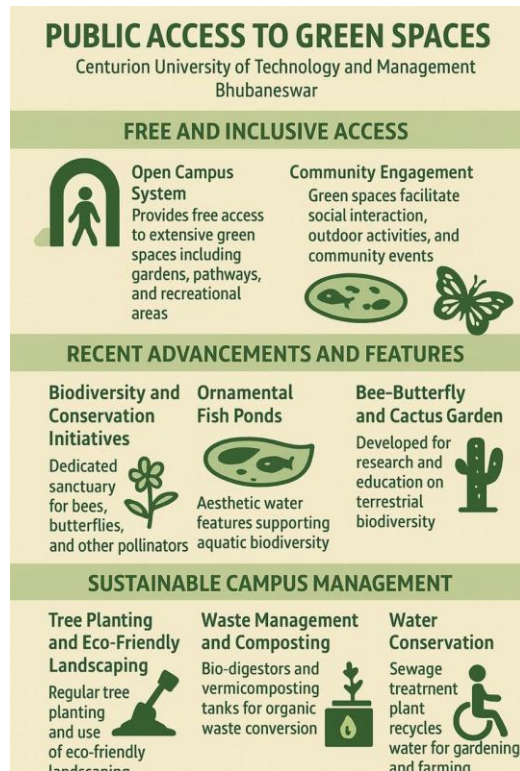


Fig. 16 shows the initiatives under public access to green spaces.

Conclusion

Centurion University's recent advancements in public access to green spaces reflect a holistic approach to sustainability, well-being, and community integration. Through innovative projects, inclusive policies, and ongoing stewardship, the university has transformed its campus into a vibrant, accessible, and ecologically rich environment that benefits both the university community and the public.