

## Community Outreach on Energy Efficiency and Clean Energy Awareness

Centurion University actively provides diverse and ongoing community-based programmes aimed at educating local populations on the importance of energy efficiency, clean energy, and sustainable practices. These initiatives combine hands-on demonstrations, farmer and teacher training, research-based outreach, and youth engagement, ensuring that knowledge translates into practical community-level action.

### ICSSR Project on Solar Energy for Tribal Community Development

As part of its continued commitment to inclusive and sustainable community development, Centurion University was awarded with a research project funded by the Indian Council of Social Science Research (ICSSR) titled: “**Efficiency of Solar Energy in the Socio-Economic Development of Tribal Farmers' Households in Odisha**”, under the thematic area Solar Energy & Sustainability (2024–25). The project aims to explore the role of solar energy solutions in transforming the livelihoods of tribal communities through clean, accessible, and sustainable irrigation practices. As part of the initial outreach, a pilot study was conducted in Nabarangpur District, where a Focused Group Discussion (FGD) was organized with tribal farmers currently using solar-powered irrigation systems. This community-engaged research approach is designed to capture the lived experiences, challenges, and socio-economic benefits of renewable energy adoption at the grassroots level. The project ultimately seeks to provide actionable insights and policy recommendations to empower tribal households, enhance agricultural productivity, and contribute to sustainable rural development through community-driven energy solutions.



Rural Farmer with Solar Operated Irrigation System



FGD with Rural Farmers in Nabarangpur District, Odisha

## **Farmer Training and Community Outreach on Climate-Smart and Carbon-Conscious Agriculture**

Centurion University actively conducted farmer training, awareness programs on 24-25th January 2025 focusing on climate-smart agriculture and carbon-conscious farming practices in . These initiatives were designed to equip local farmers with the knowledge and skills necessary to reduce agricultural emissions and enhance carbon sequestration through sustainable land management techniques. As part of its broader community development and environmental outreach, the university provided extension services to promote carbon capture strategies in surrounding rural areas.



Farmer Training at Centurion University

## **Capacity-building Program for the Secretaries of Primary Agriculture Cooperative Societies (PACS), Govt. of Odisha**

As part of the 3-day capacity-building program was conducted from 26-28th April 2024 for the Secretaries of Primary Agriculture Cooperative Societies (PACS), Centurion University integrated targeted training modules aligned with the United Nations Sustainable Development Goals (SDGs). The sessions conducted at both Bhubaneswar and Paralakhemundi campuses focused on sustainable agricultural practices, climate-resilient farming, renewable energy adoption, and resource-efficient irrigation systems, directly supporting SDG 2 (Zero Hunger), SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), and SDG 13 (Climate Action). Participants were exposed to Centurion University's live demonstration units such as solar-powered irrigation systems, biogas plants, automated polyhouses, and organic waste management technologies, encouraging the adoption of low-carbon, eco-friendly farming solutions. Additionally, interactive workshops emphasized community-driven afforestation, carbon sequestration through agroforestry, and financial literacy for sustainable cooperative governance. This holistic approach not only strengthened the technical skills of PACS secretaries but also equipped them to act as local champions of sustainable development in their respective regions.



3-day Capacity-Building Program for the Secretaries of Primary Agriculture Cooperative Societies (PACS)

### **Sprinkler Irrigation for Maize Cultivation for Rural Farmers**

Centurion University has implemented sprinkler irrigation for maize cultivation at its R. Sitapur research field in Paralakhemundi as part of its community development and sustainable agriculture outreach. This initiative aims to demonstrate efficient water management practices to local farming communities, enhancing crop productivity while conserving water resources. By showcasing modern irrigation techniques such as sprinklers, the university empowers farmers with practical knowledge and encourages the adoption of climate-resilient farming methods, contributing to improved livelihoods and sustainable rural development in the region.



Before and After Sprinkler Irrigation in Maize Field

## Capacity-Building Experience from a PACS Secretary's Perspective

*“My name is Ramesh Sethi, and I serve as the Secretary of a Primary Agriculture Cooperative Society (PACS) in Ganjam district, Odisha. Attending the 3-day capacity-building program organized by Centurion University of Technology and Management (CUTM) was a truly transformative experience for me. The training, held across the Bhubaneswar and Paralakhemundi campuses, wasn't just a set of lectures—it was a deep, hands-on engagement with sustainable agriculture and cooperative development strategies aligned with the Sustainable Development Goals. I was particularly impressed by the live demonstration units. Seeing a fully functional solar-powered irrigation system, biogas plants, and automated polyhouses in action gave me practical insights into technologies that can truly improve the livelihoods of farmers back home. These were not theoretical concepts; they were scalable, community-focused solutions. I realized how easily solar energy and drip irrigation can be introduced in our cooperative to reduce costs and improve crop yields, especially in drought-prone areas. The workshops on climate-resilient farming, waste-to-energy models, and agroforestry made me rethink how PACS can contribute not only to farming but to environmental stewardship. Sessions on financial literacy and cooperative governance helped me understand how to manage our society more transparently and efficiently, especially when adopting green technologies. Perhaps most importantly, this program made me feel empowered. I left with a renewed vision for my community: to lead by example and implement small but impactful changes that can make our cooperative a model of sustainable and inclusive development. I am now determined to promote solar-powered pumps and biogas plants among our members and guide them in adopting practices that are environmentally friendly and economically viable. CUTM's initiative was more than training—it was a roadmap for rural transformation.”*

### CHSE–Centurion University Teachers' Training Programs: Advancing the SDGs through Education

Centurion University, in partnership with the Council of Higher Secondary Education (CHSE), Odisha, successfully conducted seven Teachers' Training Programs between December 2024 and February 2025, training 350 educators across key academic disciplines. These programs were not only aimed at improving subject proficiency and pedagogical effectiveness, but were also strategically aligned with multiple Sustainable Development Goals (SDGs), thereby promoting an education model that fosters sustainability, inclusion, and global citizenship.

The sessions were conducted in the following disciplines, each mapped to relevant SDGs:

- **Botany and Zoology (3 batches):** Focused on SDG 13 (Climate Action) and SDG 15 (Life on Land) by incorporating themes of biodiversity, environmental sustainability, and ecological conservation into science education.
- **English (2 batches):** Emphasized SDG 4 (Quality Education) and SDG 5 (Gender Equality) by training teachers in inclusive language practices, critical thinking, and communication skills to build equitable and inclusive classroom environments.

- **Economics (1 batch):** Linked to SDG 8 (Decent Work and Economic Growth) and SDG 10 (Reduced Inequalities) by highlighting inclusive economic education, financial literacy, and sustainable development principles within the curriculum.
- **Physics (1 batch):** Linked to SDG 7 (Affordable and Clean Energy) and SDG 9 (Industry, Innovation and Infrastructure) by introducing real-world applications of physical sciences in energy systems, technology, and innovation for sustainability.

Each training session was designed and delivered by subject experts from Centurion University, with a strong focus on practical implementation, interactive pedagogy, and SDG-based curriculum integration. The initiative provided participants with tools to deliver education that is not only academically sound but also socially and environmentally responsive.





CHSE Training Program at Centurion University

### **SDG-Aligned Training for Agri RPL Farmers**

Centurion University, through its NSDC-approved Skill Development Centre – Gram Tarang, in collaboration with the M.S. Swaminathan School of Agriculture, successfully conducted a specialized RPL training program for farmers in Upalada village, Odisha. The training focused on paddy seed production techniques, equipping local farmers with modern, sustainable, and market-aligned agricultural practices. The training program addressed several SDGs, Climate Action. It covered climate-resilient agricultural practices, encouraging adaptation to changing environmental conditions.



Farmer Training Program

### Van Mahotsav Plantation Drive by NSS Unit

As part of Van Mahotsav 2024, the NSS Unit of Centurion University, Paralakhemundi Campus, successfully organized a large-scale plantation drive on 1st July 2024 at Bald Hill Plantation, Bhoya Hill, Paralakhemundi. During the event, volunteers collectively planted 500 saplings, aiming to enhance green cover, promote environmental sustainability, and contribute to climate change mitigation through natural carbon sequestration. This initiative underscores the university's enduring commitment to ecological conservation, community engagement, and the development of a more sustainable and biodiverse campus environment.



Large-scale Plantation Drive

*My name is Priya Reddy, a second-year student of Agriculture at Centurion University, Paralakhemundi Campus, and a proud NSS volunteer. On 1st July 2024, I had the incredible opportunity to participate in the Van Mahotsav Plantation Drive organized by our NSS Unit at the serene Bald Hill Plantation in Bhoya Hill. Along with my fellow volunteers, we planted 500 saplings that day—not just as a ceremonial act, but as a heartfelt contribution to our planet. The experience was empowering. With each sapling we planted, I felt more connected to the earth and more responsible for its future. We were briefed about the species we were planting, the ecological benefits they provide, and how they contribute to carbon sequestration—a natural way to combat climate change. It was inspiring to see our university’s strong commitment to sustainability in action, and being part of that effort made me proud. What stood out most was the spirit of collaboration. Students from different disciplines came together, bonded over a shared mission, and worked hand-in-hand to make our campus greener and healthier. This event wasn’t just about planting trees; it was about planting hope, awareness, and a deeper sense of environmental responsibility in all of us. Participating in the Van Mahotsav Drive reaffirmed my belief that students have the power to lead change, starting with simple actions like planting a tree. This experience has inspired me to start a campus-based environmental awareness group and continue working towards a greener tomorrow.*

## Students Achievement

Congratulations to Mr. Ayush Kumar Sahoo (Runner-up) and Ms. Nafia Iqbal (3rd Position), both from BBA 3rd Year, for their outstanding performance in the University-Level Group Discussion on Climate Change! Their articulate views, critical thinking, and impactful participation have earned them the honor of representing Centurion University at the Regional Round in Siliguri under the prestigious Young Indians – Bharat Rising initiative. We wish them the very best as they take this meaningful dialogue on climate action to the next level!



Students Achievement Certificates

Through these initiatives, Centurion University not only raises awareness of energy efficiency and clean energy but also empowers farmers, educators, rural leaders, and youth with the knowledge, skills, and tools to adopt sustainable practices. The university’s programmes serve as replicable models for integrating community development with clean energy transitions.