



## GLOBAL GOALS, LOCAL ACTIONS

SUSTAINABILITY REPORT 2022



# SUSTAINABILITY REPORT 2022 FOREWORD

It is with great enthusiasm and a profound sense of empathy that we present the remarkable odyssey of Centurion University of Technology and Management in our steadfast pursuit of sustainability. The culmination of this journey is our latest achievement: a comprehensive institutional 2022 ustainability report 'Global Goals: Local Actions" that stands as a testament to our unwavering commitment in addressing the world's most pressing challenges, encapsulated within the United Nations Sustainable Development Goals 2030 agenda (SDGs).

In a world where the term "sustainability" is often bandied about with casual regard, Centurion University distinguishes itself through its tangible and profound actions. Our 2022 sustainability report does not merely vocalize our dedication; rather, it serves as a vivid showcase of our concrete advancements toward various SDGs. We stand firm in our mission to combat poverty SDG 1, alleviate hunger SDG 2, promote health SDG 3, ensure access to quality education SDG 4, foster gender equality SDG 5, drive industry and innovation SDG 9, conserve marine ecosystems SDG 14, sustain terrestrial biodiversity SDG 15, and cultivate global partnerships for the greater good SDG 17.

What sets our report apart are the poignant narratives it weaves and the deep engagement we have in our region and state.

These narratives transcend the ordinary and vividly demonstrate how our localized endeavours have created meaningful and lasting impacts for wide segments of society. Our efforts have not only uplifted the lives of individual people but have also contributed to the collective well-being of entire villages and communities while making significant strides in environmental conservation.

The stories in this report are more than moving anecdotes; they also serve as living and concrete proof of our unwavering commitment to making the world a better place starting with Odisha. They substantiate the notion that, even in the face of daunting global challenges, our humble, local actions wield the transformative power to effect profound and positive change.

As the President of Centurion University, I take immense pride in our achievements and feel a deep sense of gratitude for the steadfast support of our valued community and industry partners. Our audacious pursuit of the SDGs is not merely an objective; it is a solemn duty that steers us towards a brighter and more equitable future.

With the release of our 2022 sustainability report, our intention transcends the simple exhibition of our accomplishments.

We seek to inspire and encourage others to join us on this transformative journey. Our commitment to addressing global goals through local actions remains unshakable, and we extend a heartfelt invitation for you to become an integral part of this extraordinary voyage.

Although our dedication to sustainability, environmental stewardship and social impact has been unwavering since the University's inception, it is only now that we have meticulously documented our comprehensive efforts. We take pride in our distinctive approach to nurturing responsible global citizens. The creation of this report is the outcome of our sustained dedication and unwavering effort to this end.

Our approach is succinctly encapsulated in the acronym "CARES", signifying Community Engagement, Academics, Research, Entrepreneurship, and Social Impact. CARES encompasses a complex array of initiatives aimed at promoting sustainable practices and teaching and research programs engendering a positive impact within our local and global communities.

Looking ahead, our vision includes involving a broader team to systematically and comprehensively document our labours and positive impact on the environment and society. The aspiration to achieve "Sustainability Surplus" is non-negotiable for not only the senior management, but each member of Centurion University.

Despite Centurion University's longstanding commitment to sustainability and genuine concern for the environment, it has not formally documented all of its relevant interventions, activities, educational initiatives, and engagements. The University takes great satisfaction in its distinctive approach to cultivating future global citizens who possess character, responsibility, and productivity qualities. The present document represents the inaugural comprehensive sustainability report that has been diligently prepared and extensively reviewed by Team Centurion over an extended period of time, including significant dedication and effort.

We have diligently incorporated our commitment to sustainability within a comprehensive framework known as CARES, which stands for Community Engagement, Academics, Research, Entrepreneurship, and Social Impact. This strategic approach encompasses a wide range of initiatives and programs aimed at fostering sustainable practices and making a positive difference in our local and global communities.

In the coming years, we will be more organized and have a larger team to capture and quantify the University's attempts, action and activities having positive impact on the ecology and eco-system within which the University lives and survives. It is an institutional aspiration of Centurion University to be Sustainability Surplus which, the top-management has imposed as a non-negotiable mandate on itself.



**Prof. Mukti Kanta Mishra** President, Centurion University

# SUSTAINABILITY Centurion CARES

#### **OUR FRAMEWORK**

Centurion University of Technology and Management CARES is committed to the UN SDGs 2030 agenda. The commitment to this emerges from the office of the President and it is evident across the management, faculty and non-teaching staff. Focusing on Community Engagements, Academics, Research and Entrepreneurship, we acknowledge the 17 Sutainable Development Goals in attaining the social Impact.

#### COMMUNITY ENGAGEMENT

#### OFFICE OF THE PRESIDENT

The University is committed to engaging with the community in every discipline.

#### Key Responsibilities

- CALP through Problem Solving
- Community Diagnostic Center and Diploma in Community Health Practice
- Increase Supply of Qualified Manpower in Developing Countries and Crèche Facility
- Appropriate and Relevant Skills Training for Livelihood through Employment and Nano Entrepreneurship
- Industry and CSR connects for capacity building
- Capacity Building Training for different Stakeholder

#### **ACADEMICS**

#### OFFICE OF THE VC, DEAN (ACADEMICS) AND DIRECTOR QA

The University focuses on aligning its curricula and the entire academic process with the SDGs.

#### Key Responsibilities

- Courses for everyone with Multiple Entry and Multiple Exit – from school dropouts to PhD – integrated and inclusive approach (all levels working in the same labs)
- Scholarship, Safe and Secure residential facility on Campus
- Skills Integrated Higher Education and NSQF and NCrF compliance
- Contextualizing and Institutionalizing lab to land and land to lab

#### RESEARCH

### OFFICE OF THE VC and PRO VC (RESEARCH AND QA)

The University continuously strives to align all R and D activities towards SDGs.

#### Key Responsibilities

- SDG aligned Patents (such as Insulin pump/Technology Intervention for preventing animal fatalities on railway tracks, seed production and nutraceuticals)
- Furthering and enhancing research on waste to wealth (inhouse developed STP, building material production, design thinking for sustainable products and new material)
- Navigates SDG related awareness, so encourages Collaboration: Conducts Hackathons: Smart India Hackathon aligned with National Government World Skills: Builds up Capacity for Skill Olympics
- · Seed money and sponsored research

#### **ENTREPRENEURSHIP**

### OFFICE OF THE VC and PRO VC (RESEARCH AND QA)

The University believes in the model of linking education to employability, employment, entrepreneurship and commercialisation. The outcome of the same manifested in productivity and positivity. It is inculcated in the academic rigour of the University.

#### Key Responsibilities

- Has five enterprises under the Umbrella Brand 'Gram Tarang' incubated by the University
- Focus is on patent ideas, concepts, New Product Development of Products and Commercialization
- In pursuit of cherishing Entrepreneur the University promoties and incubates nano, mini, micro enterprises
- Value addition to local produces CO extraction, Mini Diary, Seed Production Unit and Tranforming degraded landscape

#### **SOCIAL IMPACT**

#### A SHARED APPROACH

The University strives for and thrives on Social Impact in all what it designs and delivers.

#### Key Responsibilities

- Gender Equity is central to values of the University as apparent in its Leadership
- Extending skill and domain courses on online and offline mode to learners outside the University
- Waste to Wealth Committed to Circular Economy (Reduce, Reuse, Recycle and Upcycle)
- Sustainably revitalizing soil, water and air (Vermicomposting, Food Waste to Manure and Native Plants)
- Commercialization of patents / products for social impact
- Services through Drone technology (Example: Drone spraying insecticides on approx 50000 acres, health analysis of crops)
- Financial inclusion opening of 17 million no-frill accounts
- Horizontal Vertical linkage to and for tribal farmers for enhancing earnings.
- Inclusive ecosystem women, differently abled, transgenders, socioeconomically challenged segments, youth from Remote Rural Regional areas.
- Local and Global partnerships for SDG outcomes

## SUSTAINABILITY DATA R PROGRESS

We aspire to be in the top 10 overall globally for The Times Higher Education Impact Rankings by 2025.



600-800

in the global Times Higher Education University (THE) Impact Rankings for our work and progress on the SDGs

#### **Achieved 2022**



17 Million (Since 2011)

GTIDS, the university's social arm, has been key in advancing financial inclusion in Odisha and Andhra Pradesh.



12567/day

(As of 2023)

Freshly prepared meals every day across campuses

#### **Targets**



19 Million (For 2026)



144452/day (For 2028)



(As of 2023)

Provided healthcare access to beneficiaries belonging to rural underserved localities of Odisha.



 $25000 \quad \textit{(For 2024)}$ 

SDG<sub>3</sub>



(Batch of 2022)

Students got placed in companies of thier choices.



(For 2026)



(As of 2023)

Female personnel in higher echelon of top leadership



18 (For 2026)





₹ 350 Million

Revenue from industry



₹ 400 Million



(Since 2017)

Community outreach activities by School of Fisheries in Sustainable fishing



120 (For 2028)



24500 kg Honey/year

is the production from in-house apiary



28000 kg Honey/year

## SUSTAINABILITY HIGHLIGHTS 2022

#### **COMMUNITY ENGAGEMENT**







#### **OUR COMMITMENT**

Our community engagement efforts involve the provision of skills and various outreach initiatives, which contribute to enhancing employability, facilitating employment opportunities, increasing productivity, fostering product development, and entrepreneurship promoting among demographic groups (such as youth, farmers, differently abled individuals, women, transgenders). These initiatives have a significant influence on multiple Sustainable Development Goals (SDGs), with a particular emphasis on SDG 1, which aims to eradicate poverty. These programs aim to cultivate diversity and inclusivity.

Prof. Mukti Kanta Mishra
President

#### **HIGHLIGHTS**



Represented India in CNC Turning at World Skills 2022 at Leonberg, Germany.



Transforming the skill landscape

Finalist at National Skills Competitions in the area of Health and Social Care, Cyber Security and Cloud Computing.

#### **ACADEMICS**







#### **OUR COMMITMENT**

Our institution demonstrates a strong dedication and determination towards the education of both students and staff members on the Sustainable Development Goals (SDGs). All students enrolled at the University are required to complete two courses: "Climate Change, Sustainability, and Organizations" "Gender, Human Rights, and Ethics." and Additionally, students have the option to pursue specializations in various fields such as Smart Agriculture, Organic Farming, *Intensive* Aquaculture, Dairy Processing and Development, and Seed Production utilizing both manual and molecular techniques. We additionally facilitate several faculty development activities that underscore our dedication to the Sustainable Development Goals (SDGs).



**Prof. Supriya Pattanayak** *Vice-Chancellor* 

#### HIGHLIGHTS



Patent Granted on Saving the Elephants from collision at railway tracks.



Employing Electric Mobility Solutions While Aiming for a Carbon-Neutral Campus.

## SUSTAINABILITY HIGHLIGHTS 2022

#### RESEARCH









#### **OUR COMMITMENT**

The University is actively leading research efforts pertaining to all Sustainable Development Goals (SDGs), with a particular emphasis on topics linked to poverty, health and well-being, terrestrial ecosystems, marine ecosystems, gender equality, accessible and clean energy, industrial innovation and infrastructure, and climate change. A number of patents have been published in several fields, including solar appliances, animal monitoring for accident prevention, systems additive vehicles, and smart manufacturing, electric agriculture, among others. Additionally, University actively promoting is commercialization of various goods, including day creams, oils, and insulin pumps, with the objective of generating significant social effect.

0

**Prof. Supriya Pattanayak** *Vice-Chancellor* 

#### **HIGHLIGHTS**



 $4500\ Research$  papers in relevant Sustainable Development Goals.



Transforming the skill landscape

76 published patents and 11 granted.

#### **ENTREPRENEURSHIP**





#### **OUR COMMITMENT**

Entrepreneurship lies at the heart of the University's cultural fabric. The University possesses robust industry connections and has successfully nurtured numerous firms within the overarching brand 'Gram Tarang'. The organization offers employability training services, fintech products and services, technology products and services, nutraceutical products, and basic services within urban slums. Moreover, the University provides support to both staff members and students in their pursuit of entrepreneurship, resulting in the establishment of various startup ventures.

0

**Prof. D.N.Rao** *Vice-President* 

#### **HIGHLIGHTS**



49 Spin-offs and 300 million industry income since 2015.



5 Women led start-ups employoing the differently abled.

## SUSTAINABILITY HIGHLIGHTS 2022

#### **SOCIAL IMPACT**









#### **OUR COMMITMENT**

Our University is a beacon of social impact, where Gender Equity guides our leadership. We extend our knowledge through skill courses both online and offline, reaching learners beyond our campus. Committed to a circular economy, we reduce, reuse, recycle, and upcycle, transforming Waste to Wealth. We sustainably revitalize our environment through Vermicomposting, converting Food Waste to Manure, and nurturing Native Plants.

Our commitment to social good is evident in the commercialization of patents and products, positively impacting society. With Drone technology, we efficiently cover 50,000 acres for insecticide spraying and crop health analysis. Financial inclusion is our focus, with 17 million no-frill accounts opened.

We bridge horizons for tribal farmers, enhancing their earnings, and cultivate an inclusive ecosystem, welcoming women, differently-abled individuals, transgenders, socio-economically challenged segments, and rural youth. Through local and global partnerships, we strive to achieve Sustainable Development Goals, leaving a lasting social

impact.

Prof. Supriya Pattanayak

Vice-Chancellor

#### **HIGHLIGHTS**



In 2022, covered an area of 50,000 acres using drones to spray insecticides.



Over 17 million no-frills accounts have been opened since 2011.

**Target 1.4:** By 2030, ensure equal economic rights and access to resources and technology for all, particularly the poor and vulnerable.

## **Ending Multi-Dimensional Poverty**

#### EXPLORING STRATEGIES FOR ESCAPING POVERTY

Centurion University, through its incubated units such as Gram Tarang Training **Employability** (GTET), places emphasis on establishing avenues for transitioning from work to entrepreneurship for individuals who have experienced a sense of hopelessness. The process of transitioning from being a school dropout to acquiring a valuable skill, then securing a meaningful job, and making a positive financial contribution to one's family is an immensely fulfilling experience for numerous individuals hailing from the arduous and isolated regions of rural India. For a significant number of young individuals, this approach has shown to be the most respectable means of transitioning out of impoverished circumstances. Abhinav Madan, who has expertise in skill development is the Managing Director of GTET and Gram Tarang Vocational Education & Training.

#### TRAINING OF BLUE-COLLARED EMPLOYEE AND GTVET

In the context of India, the concept of "Learn and Earn" remained largely elusive for a substantial portion of the population. Countless school dropouts, who were unable to pursue their aspirations, found themselves in factory jobs, effectively disconnected from the formal education system. However, it's worth noting that GTVET, collaboration with Centurion University, stands as a remarkable social entrepreneurial initiative of university, having entered into a Memorandum of Understanding with the Directorate General of Training, Government of India.

This partnership has given rise to a program, transformative Flexi-ITI wherein individuals employed in factories are provided with an opportunity to engage in integrated vocational training, reminiscent of the renowned German TVET model. As of the year 2023, over ten thousand trainees have already reaped the benefits of this visionary scheme, which has not only bridged the gap between work and education but has also paved the way for countless school dropouts to realize their dreams and aspirations while actively contributing to the workforce and the nation's development. This pioneering initiative has, in essence, turned the tide, providing a shining beacon of hope and opportunity for those who previously marginalized from education system.

#### FINANCIAL INCLUSION

Gram Tarang Inclusive Development Services Pvt Ltd (GTIDS) is a social enterprise affiliated with Centurion University, which operates within the realm of Financial Inclusion. The GTIDS initiative successfully enlisted a total of more than 10,000 banking correspondent agents to serve 16 Public Sector Banks located in 15 different states inside India. GTIDS successfully opened more than 17 million basic accounts as of 2023, generated Fixed Deposits worth Rupees 2 billion, accumulated savings amounting to Rupees 20 billion, and recovered over 4 billion from non-performing assets (NPAs) on behalf of Partner Banks. Under the Government's Mudra Scheme, GTIDS allocated a sum exceeding Rupees 4 billion in Microfinance loans to a total of over 160,000 recipients.

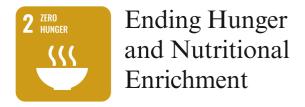


Moreover, in order to provide industryintegrated education to its agents and facilitate the establishment of a career pathway, GTIDS, in partnership with Centurion University, introduced a three-year Bachelor of Business Administration (BBA) program specializing in Finance and Financial Inclusion

#### SERVICES TO URBAN SLUM DWELLERS

The Urban Micro Business Centre (UMBC) is the flagship project of Centurion Science and Technology Entrepreneurship Facilitation Centre, an independent Section 8 (not for profit) Company set up in Odisha by the University, with the support of Government of Odisha.

This model has been designed to address the poverty and livelihood challenges nano-novo-mini-micro through enterprises and entrepreneurship. It was recognized by the National Skill Development Agency, Government of India, as one of the 5 most promising models for urban poor skill development in the country, which should be replicated in other states and taken up support by Government Departments and agencies. The mission of UMBC is to be a one-stop center for urban slum dwellers for information on training opportunities, direct support for entrepreneurship and indirect supply chain linkages, market information, and business ideas. The Centre that incubates business ideas, extends support and handholds for commercialization. A hub for local small and family businesses seeking skilled and semi-skilled human resources trained or mobilized. An Accelerated Action Learning Center for students of any stream and level of



Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

## Centurion University's Pursuit of Eradicating Hunger

Despite significant progress, hunger and malnutrition are urgent humanitarian issues that continue to plague the world. A healthy diet is crucial for mental and physical health. Consequently, encouraging better nutrition is essential to overall well-being. Addressing issues related to human welfare, health, economic development, environmental sustainability, and global peace is a matter of concern. A shared commitment towards ensuring that people have access to enough safe, nutritious food and promoting responsible agricultural practices needs to be implemented.

The University aims to alleviate this suffering and improve the well-being of the most vulnerable populations. It works towards ending hunger, improving nutrition, and promoting sustainable agriculture. Hunger and food insecurity are often exacerbated in conflict zones and regions with high levels of inequality. Addressing these issues is not only a moral imperative but also essential for social stability. Sustainable agriculture could help provide livelihoods for millions of people around the world.

#### COMMUNITY BASED SUSTAINABLE AGRICULTURAL INITIATIVES

M. S. Swaminathan School of Agriculture students and mentors organize training sessions for farmers with the goal of enhancing the farmers' capacity for a sustainable way of life. In the year 2022, 37 such programs were organised in which approximately 3000 farmers had participated. Training programs, such as on mushroom cultivation is offered, taking into account the climatic conditions of the Gajapati district. The farmers also receive training on fish farming and the sustainable use of aquatic resources. The university also hosts workshops to raise awareness on growing horticultural and vegetable crops, effectively maintaining a kitchen garden, producing organic nutrients, and cultivating organic vegetable crops. Such ventures facilitate farmers to effectively upscale their agricultural productivity.











## Ending Hunger and Nutritional Enrichment

#### ZERO FOOD WASTE AND ECONOMIC DEVELOPMENT

Food is wasted substantially at all points along the supply chain, from production to consumption. The university's mission to end hunger includes reducing food waste while making sure that resources are used more effectively. Centurion University ingeniously recycles leftover food by feeding animals on and around the campus. The University's sophisticated bio-composting method further demonstrates its commitment environmental sustainability. This process carefully manages food waste to produce compost that is valuable. These initiatives constructively address reduction while benefiting waste neighbourhood.

Initiatives at Centurion University to reduce waste have benefits for economic growth in addition to the environment. Projects like the nursery and greenhouse promote organic farming and improve sustainability. A holistic commitment to "Zero-Waste" principles and sustainable practices is embodied by the University's approach, which essentially weaves thoughtful consumption, inventive waste repurposing, and innovative composting.



#### IMPROVED NUTRITION AND QUALITY DIET

In order to address larger societal and global issues and lessen the burden of diet-related diseases, meeting dietary requirements and improving nutrition are necessary. The University puts quality over quantity in keeping with its unwavering dedication to sustainability. Food that is grown locally or purchased from reputable suppliers is preferred, especially organic food. Consequently, the University actively contributes to the economic growth of the regions it serves, promoting prosperity far beyond the campus's own borders.

The University also relies on organic farm products cultivated on its own possessions, like its Diafit rice and maize. Each month, the mess uses about 5-6 quintals of these premium rice and maize varieties, illustrating the university's dedication to high quality and sustainability. The mess offers a balanced selection of meals, including breakfast, lunch, snacks, and dinner. For transparency, the weekly menu is prominently displayed. The food is consistently of a high caliber and complies with dietary requirements.









**Target 3.4:** By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

## **Quality Healthcare Services in Underserved Localities in Odisha**

Delivering high-quality healthcare services in regions with limited resources presents numerous challenges related to social, economic, geographical, and infrastructural factors. Several underserved localities in Odisha face significant challenges in accessing healthcare facilities due to factors like limited transportation, thereby impeding the ability of residents to avail themselves of essential medical services. The healthcare workforce in these geographical locations frequently experiences excessive workloads, resulting in a decline in the quality of care provided. Insufficient or delayed treatment has resulted in the inability to deliver essential and fundamental care in these areas. Addressing challenges in these jurisdictions necessitates the implementation of a comprehensive and multifaceted approach. The School of Paramedics and Allied Health Sciences (SoPAHS), an entity of Centurion University, is dedicated to delivering essential healthcare services to underserved areas in Odisha. The School of Paramedics and Allied Health Sciences, in collaboration with its registered diagnostic facility, Community Diagnostic Centre (Reg. no. 38/2019/Khordha), has made significant progress in enhancing public health.

The school is dedicated to the establishment of an exceptional educational ecosystem for creating a professional healthcare workforce by fulfilling rising demand and meeting gaps in the health sector. It envisages its goal by focusing on skill development, meeting industry requirements, and engaging in public health interventions to target poor and marginalized communities.

#### FREE HEALTH SCREENING CAMPS

The University organizes health screening camps that have a substantial impact on the health and well-being of the communities. These initiatives provide opportunities to make meaningful contributions to society, actively participate in local communities, and provide essential healthcare services to individuals who require assistance. These camps are organized with the purpose of addressing specific healthcare needs and challenges in order to provide tailored services accordingly. In the year 2022, the school has organized 9 health screening camps in socioeconomically disadvantaged areas such as Naranpur, Bodapalasa, Janla, Malkangiri, Bhawanipatna, Gunupur, Keonjhar, and others. These interventions also offer students valuable practical experience in addressing real-world health challenges. The implementation of targeted screening programs in these villages has facilitated the effective management of issues related to women's health hygiene, anemia, hypertension, diabetes, and other related conditions. These camps provide free teleconsultation, physiotherapy consultation, diabetic screening, drug distribution, and blood donation services.

These camps are coordinated in association with local panchayats to optimize the efficiency and scope of the health camps. The University supports and enables competent healthcare professionals to deliver precise diagnoses and effective treatment. Mobile health camps are instrumental in facilitating access to healthcare services in remote areas. In order to ensure the long-term sustainability of these initiatives, follow-up screenings are also implemented. The health camp maintains records that include the number of participants, services rendered, and any identified health concerns. These records serve the purpose of future planning, impact assessment, and facilitating follow-up care for patients. Patients suffering from chronic conditions or requiring ongoing treatment are provided with referrals to healthcare facilities and clinics to ensure they receive continuous support.







#### COMPREHENSIVE EYE EXAMINATION AND OPTICAL DISPENSING

Vision Care Service is an innovative and essential healthcare initiative of the University, aimed at bringing eye care services directly to individuals in need, regardless of their geographical location or accessibility to traditional healthcare facilities. This service aims to effectively tackle the pressing issue of vision impairment and eye health by providing meticulous eye examinations, vision assessments, and eyewear prescription services directly to patients or communities with limited access to eye care facilities. This initiative effectively extends its reach to remote and underserved populations, thereby ensuring equitable access to quality eye healthcare for all individuals. This initiative acknowledges the significant importance of ensuring accessible vision care. The primary objective is to deliver exceptional vision care services, encompassing comprehensive eye examinations and the provision of prescription glasses. In the year 2022, 8 camps have been organized in various localities, including Titlagarh, Totapada, Panabaraj, Kantia, Balasore, Paralakhemundi, Pandua and Jagatsinghpur.

The University offers comprehensive eye examinations and provides complimentary prescription glasses to individuals holding BPL (below poverty line) health cards. This initiative is being carried out in partnership with Essilor. The objective of these programs is to extend eye care services to the tribal and rural areas of Odisha, thereby enhancing their access to quality eye healthcare.



#### HEALTH AWARENESS CAMPS AND SURVEYS

The University coordinates initiatives aimed at educating and informing individuals and communities about various aspects of health and well-being. These camps aim to promote awareness regarding preventive measures, healthy lifestyles, and various health concerns, including diabetes, nutrition, mental health, women's health, and hygiene. Professionals specializing in these specific health fields, in collaboration with student volunteers, tackle these issues. In order to enhance the engagement and interactivity of the camps, we organize demonstrations, employ visual aids, and facilitate hands-on activities. These strategies are implemented to promote a deeper understanding and improved retention of the information presented







## Affordable and accessible education for all

**Target 4.3:** By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.

# Skill Integrated Outcome Based Education and World Skills Olympics

#### **OBJECTIVES**

The concept of Skill Integrated Outcome Based Education and World Skills Olympics best practice stems from a core conviction that the institution has "skill integrated inculcated. education" in letters and spirits which empowers the student community by making them a self-reliant and opening path of entrepreneurship aligned with UN SDGs 4, 9 and 17. Students undergo rigorous training on the chosen skills with active support from their mentors and external experts by selecting a special module/domain in the academics called "World Skills". The World Skills modules are specialized to a particular domain and it is designed in progressive a way accommodating competition at different echelons.

#### THE CONTEXT

The contextual framework for this practice requires a deeper understanding of students' interests and the profile of the students that the University attracts. A large proportion of university students have expectations of getting placed in companies of their choice. The University has made it possible by imparting specialized domain courses which prepare them for different job opportunities. For example, the domain of Data Science and Analytics prepares students for a career as Data Scientists. The World Skills competition cycle lasts for 2 years excluding the preparation time before making a first attempt. Besides this, each skill category in world skills has a limitation of age which ranges from 21 years to 25 years. It basically shrinks the available student base. In order to increase participation, the University regularly conducts awareness programmes, road shows, hackathons, and open days to exhibit the benefits of the endeavor.

#### THE PRACTICE

The Skill Integrated Outcome Based Education and World Skills Olympics practice lies in its uniqueness in the context of India's higher education. However, there are several constraints or limitations that limitations, involved as well.

#### Sample of Program Design

The project is planned for a cycle of 2 years and 6 months as the competition cycle itself is of 2 years. The mentors of different skills category promote their areas through open days, road shows, seminars, and hackathons. Many students have an inbuilt aptitude for a particular skill and they all were hand-picked by the mentors for further training depending on their commitments.

The identified students are put on a training cycle of a minimum of 2 hours a day in a dedicated time slot after the mandated academic hours or sometimes within it.

#### **Success Story**

SDG 4 Following the identification of students specializing in various trades, including Joinery, Carpentry, Health and Social Care, Automobile Technology, Cybersecurity, Cloud Computing, and 3D Gamer Art, they underwent an initial screening test at the University. This test was conducted by mentors and the World Skills Coordinator to assess their readiness for competition. Subsequently, qualified students embarked on an intensive training program, meticulously preparing them for the WorldSkills competition right from the outset.

To become eligible for the WorldSkills competition, students had to progress through several tiers of competition, starting with the District Level, followed by the State Level, then the Regional Level, and finally the National Level.

After successfully clearing three elimination rounds at the national level, they earned the opportunity to compete at the WorldSkills.

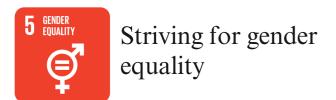
#### **EVIDENCE OF SUCCESS**

The outcome of this best practice is reflected in the University through its performance against targets and benchmarks, review, and results.

The following infographics delineates the result of the endeavor made:







**Target 5.5:** Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.

## **Promoting Gender Equality and Fostering an Inclusive Atmosphere**

The University is committed to promoting equality of opportunity between women and men and eliminating harassment and unlawful discrimination. The University will assess the impact of policies on students and staff, monitor their recruitment and progression and publish the results of impact assessments and monitoring. It will be the endeavour of the University to see that every individual understands and demonstrates attitudes and behaviours that promote gender equality. Further adequate resourcing for gender work will be ensured.

#### ACTIONS TAKEN BY THE UNIVERSITY TO ADVANCE GENDER EQUALITY

Centurion University has a work culture based on inclusivity, integrity, and impartiality, in line with its motto "Shaping Lives and Empowering Communities." The University is an equal opportunity employer that values diversity and recognizes the importance of supporting women in particular. We are proud that the University's three statutory positions, Vice Chancellor, Registrar, and Director Quality Assurance/Controller of Examinations, are all held by women.

The University follow policies and processes that ensure the safety, security and well-being of women as follows:

#### Measures

- 'Gender, Human Rights and Ethics' has been introduced as a mandatory subject for all students.
- All students participate in Gender sensitization session during their induction programme also regular workshops organized for all staff and students.
- Collaborating with women's wings of apex bodies such as FICCI FLO, WICCI for various activities.
- Women Entrepreneurship Cell on campus encourage establishment of start-ups. · Screening of women centric films and proactively participating in MAVA (Men Against Violence and Abuse) film festival organized by the University

#### Common Rooms

 Common rooms and leisure/ recreational spaces for men and women have been established to facilitate informal meetings and discussions.

#### Other Measures

- Observing special days like International Women's day, International Day for the Elimination of Violence Against Women, International Human Rights Day, National Girl Child day etc.
- Every effort is made to ensure diversity, gender sensitive and inclusive recruitment process.

#### Safety and Security Measures

- Well-trained and vigilant women security guards are stationed across the campus. Extensive CCTV surveillance network with 24x7 monitoring.
- Rotational duty by faculty members in women's hostel to ensure discipline and security.
- Awareness campaigns by students volunteers through street plays (Nukkad Natak) rallies and camp on women's safety and gender sensitivity.
- Female student volunteers appointed at the University as 'Special Police Officers' in collaboration with Commissionerate of Police, Odisha.

#### WOMEN IN TOPMOST ECHELON OF LEADERSHIP



**Prof. Supriya Pattanayak** Vice-Chancellor



**Dr.** Anita Patra Registrar



**Dr. Jyoti Syantani**Director QA



### Global Renewable Energy Progress and India's Greener Future

"Clean energy is the cornerstone of a sustainable future. In the face of environmental challenges, it stands as a beacon of hope, offering a pathway to mitigate climate change and preserve our planet for generations to come.

Unlike fossil fuels, which contribute to pollution and global warming, clean energy sources harness natural elements like sunlight, wind, water, and geothermal heat, providing power without harmful emissions.

Renewable energy technologies such as solar, wind, hydroelectric, and geothermal power have seen tremendous advancements, becoming increasingly efficient and cost-effective. Solar panels convert sunlight into electricity, wind turbines harness the power of the wind, while hydroelectric plants generate energy from flowing water. These sources not only reduce greenhouse gas emissions but also decrease our dependence on finite resources, promoting energy independence.





Transitioning to clean energy is not just an environmental choice; it's an economic one. The sector offers opportunities for job creation, technological innovation, and economic growth. Investments in renewable energy infrastructure and research and development drive a wave of new employment while nurturing a burgeoning industry with vast potential.

Furthermore, embracing clean energy solutions contributes to energy security and resilience. Diversifying energy sources and decentralizing power production through localized systems can safeguard against disruptions and create more robust, reliable energy networks.

The road to a fully clean energy-powered world is not without challenges. Obstacles like intermittency of some renewable sources and the need for energy storage solutions require ongoing innovation and investment. However, advancements in battery technologies and grid management systems offer promising solutions, making it increasingly feasible to rely on renewable sources consistently.

Individuals, communities, governments, and businesses all play pivotal roles in the transition to clean energy. Policies that encourage renewable energy adoption, incentivize sustainable practices, and discourage fossil fuel usage are crucial. Businesses embracing sustainable models and consumers making eco-conscious choices further accelerate the shift towards a greener, healthier planet.



## Clean Energy for All









As of the latest data, renewable energy accounts for around 26% of global electricity generation. It's estimated that by 2050, renewables could make up nearly 90% of global power generation, as per the International Renewable Energy Agency (IRENA). Over the last decade, the cost of renewable energy technologies has significantly decreased. For instance, the cost of solar photovoltaic (PV) modules has plummeted by about 90% since 2009, making solar power more accessible and affordable. The renewable energy sector employs over 11 million people globally. This number is expected to continue growing, providing new job opportunities, especially in countries investing heavily in clean energy. Renewable energy has played a pivotal role in reducing carbon dioxide emissions. Estimates suggest that global renewable electricity capacity has prevented around 2.6 billion tons of CO2 emissions per year.

India has set an ambitious goal of achieving 175 GW of renewable energy capacity by 2022 and has further extended the target to 450 GW by 2030, as part of its commitment to the Paris Agreement. India is making significant strides in solar power. The country's solar capacity has increased drastically, with the cost of solar power falling below that of coal. India's solar capacity has surpassed 40 GW. Wind energy also holds great promise in India. The country has the fourth-largest installed wind power capacity in the world, with plans to expand this further. The renewable energy sector in India has not only contributed to environmental sustainability but has also generated employment. It's estimated that the sector has created over 100,000 jobs in recent years, and this number is expected to rise. The Indian government has introduced various initiatives and policies to encourage the adoption of renewable energy. Schemes such as the National Solar Mission and various state-level policies aim to support the growth of renewable energy in the country.

These statistics and trends illustrate the global and Indian commitment and progress towards clean energy adoption, showing the potential for significant environmental impact, economic growth, and job creation.

The imperative to combat climate change and environmental degradation propels the urgency for widespread adoption of clean energy. It is not merely an option; it is a necessity. By harnessing the power of innovation, collaboration, and determination, the world can pivot towards a future where clean, renewable energy sources power our homes, industries, and aspirations, steering us toward a more sustainable and prosperous tomorrow."



Industry Income and Employee Strength

**Target 9.7:** Promote tech advancement and innovation in developing nations, fostering a favorable policy environment for industrial diversification and commodity value addition.

## SDGs and Growth of Entrepreneurship

In a call to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030, the United Nations adopted SDGs in 2015. Also known as the Global Goals, there are 17 SDGs which are integrated and action in any one area may impact the outcomes in the others. The SDGs are designed to end poverty, hunger, AIDS, discrimination against women and girls, and acknowledges that development must balance social, economic and environmental sustainability. Technology, knowledge transfer, creativity and financial resources from all aspects of society, as well as collaboration between developed and under-developed nations, is necessary to achieve the successful fruition of the SDGs in every context.













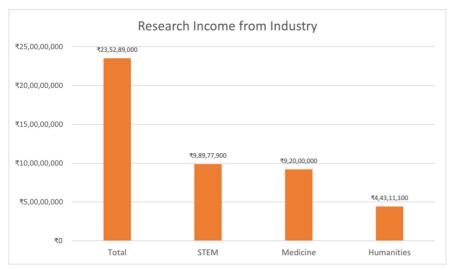








## Industry Income and Employee Strength



Area wise research income from industry

University is committed to sustainability since its inception. Its efforts has resulted in an overall rank in the band of 600-800 in the TIMES Impact ranking 2022. The SDGs, the University has endeavoured are 1, 2, 3, 4, 5, 9, 14, 15 and 17.

One of such endeavour is its commitment to Industry, innovation and infrastructure (SDG 9).

The University's research centres apply intense efforts in action research in cutting edge areas and does technology transfer to different industries in the areas of STEM, medicine and arts and humanities.

#### WOMEN ENTREPRENEURS

The WEC was established as a part of CIEC for engaging women in economic activity for the overall economic growth of Odisha. Women who have the time and ability to run businesses are often held back by poor facilitation. Other obstacles are lack of awareness of schemes, design, and marketing. More active interventions are needed to ensure ease of doing business.

#### Sangam Designs

This is a women led start-up which uses the latest textile technology to transform waste/discarded clothes to high-quality, best-in-the-class hand- woven products. It mostly employs differently- abled girls who are upskilled by University's social entrepreneurial outreach entity: Gram Tarang. Besides being a successful start-up, Sangam Designs is an excellent example of women empowerment where differently-abled, destitute women, become financially self- sufficient and contribute to the society.

#### Evart Ltd.

This is another women-led start-up in innovations in Renewable Energy. This involves the transformation of old bicycles to refurbished ones with solar panels as a driving energy. The concept works on the line of the Waste-To-Wealth approach and endeavours to contribute to the Sustainable Development Goals (SDG 7).

#### Susmita Enterprises

This start-up is an all-women employee in the area of textile technology.









**Target 11.6:** By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

# Community Cremation Ground: Bringing Decency and Dignity to Death

The act of cremating the deceased holds profound cultural significance within Hindu culture and is an integral practice that is deeply rooted in the traditions and beliefs of the people. In urban regions of India, the responsibility for the upkeep of cremation grounds primarily rests with state government bodies, such as municipal councils or corporations. These institutions are entrusted with ensuring that these grounds are well-maintained and provide a dignified space for the final rituals of the departed. However, in rural areas, like Gopalpur, the responsibility for overseeing these grounds often falls on the shoulders of local Panchayats. While these Panchayats play a vital role in the governance of the village, they sometimes face challenges, especially financial constraints, which can lead to inadequate development and maintenance of essential community spaces.

The predicament faced by the residents of Gopalpur in 2022 exemplified these challenges. A community cremation ground in the village, lacking proper fencing and oversight, became a target for encroachment by two local residents. This encroachment posed substantial difficulties for the residents when it came to performing the last rites of their loved ones. Gopalpur, despite being a small village with around 100 families, found itself in a situation where the absence of a nearby cremation ground necessitated that people had to travel long distances to conduct the final ceremonies, further adding to the emotional and logistical burden on grieving families.

In response to this critical issue, the University, in a remarkable display of community engagement, embarked on a collaborative effort with the local government and the villagers of Gopalpur. This cooperative endeavor, rooted in the spirit of collective welfare, proved successful in reclaiming the encroached-upon area and contributed to the active management and redevelopment of the cremation ground. The sanctity of this space was restored, allowing families to bid farewell to their loved ones with the dignity and respect that their cultural traditions demand.

Furthermore, the University, displaying a proactive commitment to the well-being of the village and its future, took the initiative to establish a children's park within the community. The introduction of such a park, especially one dedicated to children, is highly esteemed in Indian villages. It not only serves as a space for recreation and play but also symbolizes a commitment to the growth and happiness of the younger generation. The University's comprehensive plan goes beyond rectifying past issues; it encompasses the creation of a community playground for the village's children and the removal of any other encroachments within the village, thereby safeguarding public spaces for the greater benefit of the community.

This multifaceted approach is a testament to the University's dedication to the well-being of the Gopalpur community. It serves not only to restore the sanctity of the cremation ground but also to preserve the communal and recreational spaces that are integral to the physical, emotional, and cultural well-being of the village's residents. The University's actions have not only rectified a specific issue but have also sown the seeds for a stronger, more cohesive, and culturally enriched community that can thrive in the years to come. This collaborative effort between the University, the local government, and the villagers is a shining example of how collective action can bring positive change to rural India and uphold the values and traditions that bind its diverse communities together.



**Target 14.4:** By 2020, regulate and end overfishing, illegal, unreported, and destructive fishing practices to restore fish stocks to sustainable levels.

# Conserving, Safeguarding, and Resuscitating an Inert Pond: University's Initiative at Remote, Regional, and Rural Location

Centurion University has been actively engaged in collaborative efforts with local communities to address their challenges and concerns. One notable instance of this collaboration occurred in the village of Gopalpur, where one of the university's campuses is located. In Gopalpur, a pressing issue centered around the "Jamkhala" pond, a water body with a history dating back to before 1950, sprawling over an expansive area of over 25,000 square feet. For generations, it had been the sole source of water for approximately 100 families in the village, bearing both economic and cultural significance.

The pond played a vital role in the lives of the villagers, as it not only served as a crucial source of drinking water but also held economic importance. Local fishermen used the pond to rear various fish species, which were subsequently sold in the market. Moreover, a substantial portion of the revenue generated from the fishery activities supported the regional festival known as "Dola Purnima."

As time passed, the significance of the pond shifted. While the families were no longer solely reliant on it for drinking water, it remained a symbol of cultural heritage for the community. However, the rapid urbanization of the area posed a serious threat to the pond's existence. Harmful algal blooms started to emerge, and the expansion of the Gopalpur market led to the direct discharge of wastewater into the pond, rendering it entirely unusable. This unfortunate situation also jeopardized the survival of indigenous fish species.

Recognizing the critical need for action, Centurion University, with government support, successfully initiated measures to divert the wastewater from the Gopalpur market into a newly constructed drainage system. Subsequently, the university formally applied for and was granted a lease on the 5th of October 2023, officially designating it as the custodian of the "Jamakhala Pond." With a vision for the years to come, the university has developed comprehensive plans for the pond's revival.

One of these plans involves using the pond as an educational resource for university students across various courses, as well as a platform for corporate social responsibility (CSR) activities. To restore the pond's ecological balance and preserve its cultural and economic significance, endangered fish species such as Khakarkhai, Koinadia, Bhutusi, Balikira, Phali, and others are being nurtured within the pond. Additionally, different species of lilies have been planted in the pond to serve as natural cleansing agents, contributing to the overall restoration effort.

In essence, the transformation of the previously deteriorating pond into a thriving ecosystem has become a cause for celebration among the villagers. This revival not only preserves the pond's cultural significance but also reestablishes vital economic connections within the community. It stands as a testament to the power of collaboration, education, and environmental stewardship in the face of environmental challenges.



S. N. - Notopterus notopterus (Bronze featherback; Fali fish)





S.N.- Wallago attu (Fresh water shark or Indian catfish; Balia)

S.N.- Nandus nandus (Gangetic leaffish; Bhutushi)





### Promoting a Sustainable Ecosystem through Bee-keeping at Centurion University

Centurion University, nestled in the serene state of Odisha, has taken a significant stride in promoting sustainable ecosystems and biodiversity championing bee-keeping. Established in 2019 at the M.S. Swaminathan School of Agriculture, Centurion University, Paralakhemundi campus, the Apiary unit has been flourishing under the careful guidance of Dr. Chitta Ranjan Satapathy. This noble initiative aligns perfectly with Sustainable Development Goal 15 (SDG 15) - Life on Land, which aims to protect, restore, and promote sustainable use of terrestrial ecosystems.

The journey of this bee-keeping venture reflects a commitment to preserving biodiversity and enhancing ecosystem health. The introduction of 25 additional bee boxes in various areas of the campus in April 2022 is a testament to the university's dedication to conserving terrestrial ecosystems. As SDG 15 advocates for the sustainable forests, combating management of desertification, and halting biodiversity loss, Centurion University's bee-keeping initiative plays a vital role in this effort.

The production of honey from the Paralakhemundi campus is a remarkable achievement. With a steady production of 24,500 kg/year since 2020, the university is making tangible strides towards fostering a sustainable and vibrant ecosystem. The ambitious vision for 2028, projecting a remarkable 28,000 kg of honey annually, is in perfect harmony with SDG 15's goal of halting the loss of biodiversity and protecting and preventing the extinction of threatened species.

The impact of the bee-keeping initiative transcends the academic realm. Under the Apiculture Entrepreneurship Learning Program (AELP), six batches of students have received comprehensive training. This not only equips them with valuable skills but also cultivates a generation that understands the importance of preserving terrestrial ecosystems.

In addition to the impressive honey production numbers, the bee-keeping workshop held on May 27, 2022, in collaboration with Odisha University of Agriculture & Technology (OUAT), Bhubaneswar, underlines the university's commitment to raising awareness about apiculture. The workshop emphasized the importance of pollinator-friendly practices in agriculture, aligning with SDG 15's objectives to protect and restore terrestrial ecosystems and halt the degradation of land and soil.

During the workshop, Dr. C. R. Satapathy eloquently articulated the cultural significance of honey in Indian traditions, illustrating its connection with religious practices. The workshop highlighted the vital role of honeybees as pollinators and their intricate behaviour, emphasizing their contribution conserving biodiversity. Furthermore, the discussion on the byproducts of honeybees, such as wax, propolis, and royal jelly, showcased their applications in cosmetics and health, aligning with SDG 15's goal of conserving and sustainably using terrestrial and inland water ecosystems.

Centurion University's bee-keeping initiative serves as a shining example of how academia can contribute to SDG 15 by promoting sustainable ecosystems, conserving biodiversity, and enhancing the livelihoods of communities. With the visit of an ICAR peer review team, recognition from Prof D N Rao, Vice-President, Centurion University, and the commitment to training and skill development, Centurion University is actively contributing to a sustainable and healthy ecosystem in line with the principles of SDG 15.

Centurion University's bee-keeping endeavour is not only a sweet success but also a sustainable initiative in alignment with SDG 15 - Life on Land. Through its impressive honey production, dedication to skill development and commitment to raising awareness about apiculture, Centurion University is actively working towards the preservation of terrestrial ecosystems and conservation of biodiversity. holistic approach to bee-keeping is a model for universities and institutions worldwide, demonstrating the positive impact of academia on sustainable development goals.



Glimpses from bee-keeping at Centurion University

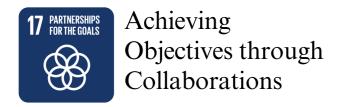












**Target 17 H:** Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

# **Engaging in Partnerships with Non-Governmental Organizations to Address SDGs**

Centurion University has forged a meaningful partnership with the Bapuji Rural Enlightenment and Developmental Society (BREDS), an esteemed non-governmental organization passionately dedicated to actualizing the Gandhian dream of "Gram Swaraj" by establishing a network of self-reliant villages. In this collaborative initiative, the University actively involves its Agricultural Engineering students, who work alongside BREDS to engage with local village communities. Their mission is to impart knowledge and promote the adoption of the latest and most effective farming practices, thereby contributing significantly to the fulfillment of various Sustainable Development Goals (SDGs), with a particular focus on SDGs 2 (Zero Hunger), 4 (Quality Education), 13 (Climate Action), and 17 (Partnerships for the Goals). This partnership reflects our commitment to sustainable rural development and the empowerment of local communities while preparing our students to be agents of positive change.





Paralakhemundi, Dist.- Gajapati Odisha, India. PIN- 761211

Bhubaneswar Dist.- Khurda, Odisha, India, PIN-752050

Dist.- Balangir, Odisha India, PIN-767001

#### Rayagada Campus

IDCO Industrial Area Pitamahal, Rayagada Dist.-Rayagada, Odisha India, PIN-765001

#### **Balasore Campus**

Gopalpur, P.O.-Balasore Dist.-Balasore, Odisha India, PIN-756044

#### **Chatrapur Campus**

Ramchandrapur, Kaliabali Chhak, P.O-Chatrapur, Dist.-Ganjam Odisha, India, PIN-761020