



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

# SDG 17 | Report on Partnership for the Goals

# SDG 17

# REPORT 2021



# SUSTAINABILITY REPORT 2021

# FOREWORD

*The word 'sustainability' is probably one of the most abused words. It is abused because many individuals who matter in the world use the word 'sustainability' for policies and actions knowing very well that the output, outcome and impact are unsustainable. Thus, the word sustainability is subjected to individual hubris and avarice de-coupling and de-linking from the universal context.*

Academic institutions, from schools to universities, have the social, moral and ethical responsibilities to not only create awareness about sustainability, but also build the future citizens who own the responsibility with conviction, clarity and commitment for the sustainability of life and living. This is also economically prudent for academic institutions, especially higher education institutions (HEIs) to embrace and embed sustainability, in their governance, curricula, co-curricular and extra-curricular deliveries and activities.

Centurion University was envisioned, enacted and established in the tribal hinterland, which is a Government of India notified aspirational district. The foundation and the fundamentals on which the University survives and thrives are, Accessibility-Diversity-Inclusivity-Equity-Egaloty (ADIEE). These fundamentals have become the DNA of the University. Hence, six of the University's seven Campuses are in rural and remote areas and has also established three English medium schools within its Campuses to ensure that quality education at affordable cost is delivered where it is needed the most.

As a University, CUTM believes in universality and holism of education hence, it has created an ecosystem of education delivery for every segment of the society with an institutionalised pathway of vertical mobility and lifelong learning. Wherever there is a gap, the University has established robust partnerships with various statutory bodies, e.g., National Institute of Open Schools (NIOS) for 10th, 12th and Diploma, and Director General of Training (DGT), Ministry of Skill Development and Entrepreneurship (MoSDE) for craftsmen training scheme certifications (CTS) and craftsmen instructor training scheme certifications (CITS). "The visiting team of NITI Aayog, had the opportunity to experience the University's eco-system of human values, aspiration and learning ... .."

The uniqueness, which is Numero Uno in any parameter is the learning platform and ambiance for school drop outs to master's level students by ensuring simultaneity in entirety entailing Education, Employability, Employment and Entrepreneurship (4Es)." The University directly through its incubated social enterprises has skilled and trained more than 400,000 youth and linked them to gainful employment/ self-employment. A noteworthy accomplishment is that approximately 90% of the total number of students skilled and trained are first-generation formal education consumers. CUTM has direct connect and association with 100,000 farmers (mostly marginal and sub-marginal) to double their farm-based income by exposing and training them for alternative farming practices with an intent to de-risking farmers from the collaterals of environmental changes and abnormalities.

By design, the University Campuses were established in remote areas which have no urban planning bodies, city councils or municipal corporations and therefore had to evolve our own systems and processes to recycle and reuse waste-water and upcycle the food waste into bio-compost for greening the Campus. Further, to remain ecologically responsible, the University partnered with various industries, institutes and other universities to convert waste to wealth.

Although the University has embedded sustainability within its DNA from its inception in its heart and soul, and truly cares for the environment,, it has never attempted to formally put on record all of its relevant interventions, activities, education deliveries and engagements. The University prides itself on this unique approach in building future global citizens with character, responsibility and productivity. This is the first ever comprehensive sustainability report being formally published for which Team Centurion has toiled tirelessly and burnt all-night oil for months.

In the coming years, we will be more organised 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 WE CARE

## OUR FRAMEWORK

The University CARES in delivering the Sustainable Development Goals. The commitment to this emerges from the office of the President and is evident across the management, faculty and non-teaching staff. While focusing on Community Engagements, Academics, Research and Entrepreneurship. We acknowledge the 17 Sustainable Development Goals in attaining the social Impact.

### COMMUNITY ENGAGEMENT

#### OFFICE OF THE PRESIDENT

Centurion University is committed to engaging with the community in every discipline

##### Key Responsibilities

- Community Action Learning
- Community Diagnostic Center
- Urban Micro Business Center
- Appropriate and Relevant Livelihood Training
- CSR connects to capacity building

### ACADEMICS

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

Centurion University focuses on aligning its curriculum and the entire academic process with the SDGs

##### Key Responsibilities

- Courses for everyone – from school dropouts to PhD – integrated approach (all levels working in the same labs)
- Skill Integrated Higher Education
- Facilitating lab to land and land to lab

### RESEARCH

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

Centurion University strives to accomplish SDGs. Its R and D activities are aligned towards different goals.

##### Key Responsibilities

- Patents (insulin pump/ Technology Intervention for preventing animal fatalities on railway tracks and copyrights related to SDGs)
- Seed money and sponsored research
- Research on waste to wealth (inhouse developed STP)
- University encourages Awareness and Competitive Spirit:  
Conducts Hackathons:  
Smart India Hackathon aligned with National Government World Skills:  
Builds up Capacity for Skill Olympics

### ENTREPRENEURSHIP

#### OFFICE OF THE VICE PRESIDENT

Centurion University believes in the model of employability, employment, productivity, product development, and commercialization

##### Key Responsibilities

- Centurion University has incubated five enterprises under the Umbrella Brand 'Gram Tarang'
- Centurion University promotes novo/nano/ mini/ micro enterprises in addition to employment and pursuing higher studies

### SOCIAL IMPACT

#### A SHARED APPROACH

- Centurion University strives for and thrives on social impact in all it designs and delivers
- Extending skill and domain courses on online mode to other universities
- Waste to wealth – Committed to Circular Economy (Reduce, Reuse, Recycle)
- Commercialization of patents/ products for social impact (insulin pump)
- Spraying services through drones for about 50000 acres
- Financial inclusion – opening of 17 million no-frill accounts
- Backward linkages to tribal farmers enabling doubling farmers incomes
- Inclusive ecosystem – women, differently abled, transgenders, socio-economically weaker sections



# SUSTAINABILITY DATA OUR 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

## Targets

### Achieved



## 20000

Unbanked people in rural and urban area of Odisha and Andrapradesh (Indian States) got financial inclusion.



## 35000/day

students graduated from health professions (medicine, nursing and midwifery, and health sciences) across all levels of study.



## 10000

Community diagnostic centre has vaccinated 10000 people from the local community.



## 786

students got placed in companies of their choices.



## 10

Female personnel in higher echelon of leadership



## 300 Million

Revenue from industry



## 101

Community outreach activities by School of Fisheries in Sustainable fishing



## 24500 kg/year

is the production from in-house apiary

### Planned

## 50000

To reach 50000 unbanked people by 2024

## 40000

To reach 40000 meals per day by 2023

Planned 40000 mass health camps by 2024

Increase the placement figure to 1014 by 2023

Increase the number to 20 by 2024

## 600 million

Double the revenue by 2023

## 202

Double the number by 2024.

## 31000

Target to increase 3100 kg per year by 2023

# SUSTAINABILITY HIGHLIGHTS 2021

## COMMUNITY ENGAGEMENT



### OUR COMMITMENT

Our community engagement, through imparting skills and other outreach initiatives, enables employability, employment, productivity, product development and entrepreneurship to different segments of the population (youth, farmers, women, differently abled, transgenders, etc) which has direct impact on several SDGs and particularly on SDG 1, No Poverty. Through these initiatives we nurture diversity and inclusiveness.

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

We are serious and committed to educating students and faculty on the SDGs. We have mandated all students of the University to undertake two courses, 'Climate Change, Sustainability and Organizations' and 'Gender, Human Rights and Ethics' and several specializations related to Smart Agriculture, Organic Farming, Intensive Aquaculture, Dairy Processing and Development, Seed production using manual and molecular methods. We further conduct several faculty development programs which highlights our commitment to the SDGs.

Prof. Supriya Pattanayak  
Vice-Chancellor

### HIGHLIGHTS



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



E-mobility solution and Carbon neutral campus.

# SUSTAINABILITY HIGHLIGHTS 2021

## RESEARCH



### OUR COMMITMENT

The University is spearheading research on all SDGs focusing on Poverty related issues, Health and Wellbeing, Life on Land, Life under water, Gender Equality, Affordable and Clean Energy, Industry Innovation and infrastructure, and Climate Change. Several patents have also been published in the area of solar appliances, animal tracking system so as to avoid accidents, additive manufacturing, e-vehicle, smart agriculture and so on. Further, the University is encouraging faculty and students to commercialise some products such as day creams and oils, insulin pump; all this with an aim to have large social impact.

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

At the core of the University's culture is entrepreneurship. The University has strong industry connect and has incubated several enterprises under the umbrella brand 'Gram Tarang'. These provide employability training services, fintech products and services, technology products and services, nutraceutical products and basic services in urban slums. Further, the University assists faculty and students on the pathway to entrepreneurship and several startups have been established in the process.

Prof. D.N.Rao  
Vice-President

### HIGHLIGHTS



49 Spin-offs and 300 million industry income.



5 Women led start-ups employing the differently abled.



## Ending Poverty in All Forms

# NO POVERTY ENDING MULTI-DIMENSIONAL POVERTY

### **PATHWAYS OUT OF POVERTY**

The University through its incubated units, Gram Tarang, focuses on creating pathways from employment to entrepreneurship for those who had given up on life. The trajectory from being a school drop out, gaining a skill followed by gainful employment and contributing to the family income is the most satisfying experience for many of the youth from some of the most challenging geographies of rural and remote India. This has been the most dignified way of moving out of poverty for most youth. Mr. Abhinav Madan, MD. GTET and GTVET.

### **EMPLOYABILITY TRAINING**

Gram Tarang Employability Training Services Pvt Ltd (PIA), a social enterprise incubated unit of Centurion University, in collaboration with Government of India implements the DDUGKY program focusing on catering to the occupational aspirations of rural youth and enhancing their skills for wage employment. The strong industry connect facilitates relevant and industry ready skills. As GTET also has an apparel production unit, a component of action learning helps hone their skills. GTET has trained over 360,000 people across 10 states of India and is working towards an overall mission of making 100,000 youth employable annually with a focus on residential hands-on training of rural and marginalized communities. Work integrated skill training and apprenticeship (WISTA) program enables lifelong learning by going the extra mile to support youth beyond the duration of their degree/ diploma/ vocational course and help build career paths.

This is achieved through strong post placement networks and support and implementation of work integrated skill training and qualifications through National Skill Qualification Framework (NSQF) after the vocational students are placed. Presently, GTET is training 15,000 and certifying 2000 youth under the WISTA program.

### **FINANCIAL INCLUSION**

Gram Tarang Inclusive Development Services Pvt Ltd (GTIDS), a social entrepreneurial outreach of Centurion University is active in Financial Inclusion space. GTIDS recruited over 10,000 banking correspondent agents for 16 Public Sector Banks across 15 States of India. GTIDS opened over 15 million no-frills accounts, mobilized Fixed Deposits to the tune of Rupees 2 billion, savings to the tune of Rupees 20 billion and collected over 4 billion from non-performing assets (NPAs) from the beneficiaries on behalf of Partner Banks. GTIDS disbursed more than Rupees 4 billion in Microfinance loans to over 1,60,000 beneficiaries under the Government's Mudra Scheme. Further, to offer industry integrated education to its Agents and help create a career pathway, GTIDS in collaboration with Centurion University launched a 3 year BBA program in Finance and Financial Inclusion.

### **URBAN SERVICES**

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 Centurion University of Technology and Management (CUTM), with the support of Department of Housing & Urban Development and Bhubaneswar Municipal Corporation (BMC) and Ministry of Housing, Urban & Poverty Alleviation, Government of India, in order to inculcate enterprise, and develop entrepreneurship.

This model has been designed to address the poverty and livelihood challenges through nano- novo-mini-micro 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 for support by Government Departments and agencies. The mission of UMBC is to be A One-Stop-Centre 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 levels of learning.



## Ending Hunger and Nutritional Enrichment

# ZERO HUNGER

### Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY)

The university has been playing a pivotal role in supporting the social and economic programs where youth drawn from poor families with no or marginal employment are trained in various skills in addition to meeting the nutritional and food needs of the underprivileged sections of the population. Several programmes have been initiated towards this end, including establishing agricultural production units, and the university, as part of the Skill India program, participates in the Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) program under the Ministry of Rural Development. The DDU-GKY program is part of the National Rural Livelihood Mission that works with the objectives of adding diversity to rural low-income families' incomes and catering to the career aspirations of the rural youth.

The university has made provisions for meeting the food and nutritional needs of the students based on the calorific recommendations of the Indian Council of Medical Research (ICMR) and Recommended Dietary Allowances (RDA) of various nutrients (carbohydrates, proteins, fats, vitamins, and minerals). A well-balanced diet containing adequate proportions of cereals, pulses, fruits and vegetables, and meat products that supply all the essential nutrients for meeting the requirements is provided. The same is incorporated in the menus across campuses.

DAY	BREAKFAST	LUNCH	SNACKS	DINNER
MONDAY	Upama, Sambar, Matar Curry, Milk, Banana, Tea	Rice, Dal, Mix Veg curry, Paneer Curry, Papad, Pickle	Tea, Alu Chop	Rice, Dalma, Roti, Chips, Sweet, Banana
TUESDAY	Idili, Sambar, Chutney, Milk, Banana, Tea	Rice, Dal, Chicken Curry (NV), Paneer Curry (Veg), Chips, Papad, Pickle	Tea, Ragi ladoo	Rice, Dal, Roti, Rajma, Kheer, Banana
WEDNESDAY	Vada, Matar Curry, Milk, Banana, Tea	Rice, Dal, Fish Curry, Soyabean Curry, Chips, Salad, Pickle	Tea, Pakodi	Rice, Dalma, Roti, Veg Fry, Sweet, Banana
THURSDAY	Poha (Chuda), Matar Curry, Boiled Egg, Milk, Banana, Tea	Rice, Dal, Mashroom Curry, Veg Fry, Papad, Pickle	Tea, Ragi Biscuit	Rice, Dal, Roti, Kabuli Chana curry, Sweet, Banana
FRIDAY	Puri, Alu Curry, Boiled Egg, Milk, Banana, Tea	Rice, Dal, Fish Curry, Mix Veg Curry, Chips, Papad, Pickle	Tea, Bread Chop	Rice, Dal, Roti, Mix Veg curry, Sweet, Banana
SATURDAY	Upama, Sambar, Matar Curry, Milk, Banana, Tea	Rice, Dal, Egg Curry, Potola Curry, Mix Veg Fry, Papad, Pickle	Tea, Alu Chop	Rice, Dal, Roti, Soyabean Curry, Sweet, Banana
SUNDAY	Puri, Alu Dum, Pickle, Milk, Banana, Tea	Rice, Dal, Chicken Curry, Paneer Curry, Mix-Veg Fry, Papad, Pickle	Tea, Samosa	Rice, Dal, Roti, Kabuli Chana curry, Kheer, Banana

### FOOD MENU (MEETS THE REQUIREMENTS OF ICMR- CALORIFIC RECOMMENDATIONS)

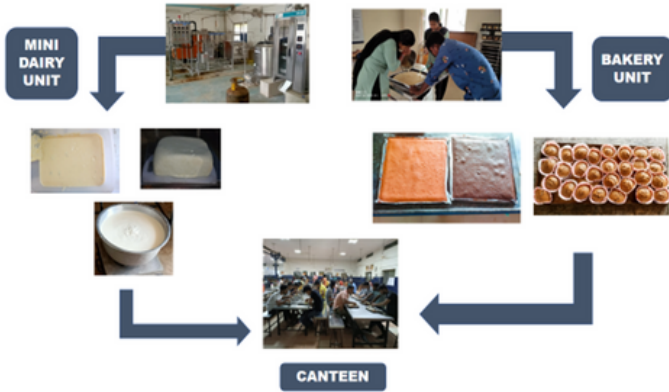
The university also ensures that the food's safety, quality, and nutrient composition is monitored and frequently tested by a nutritionist for ensuring adequacy. Right pre-cooking processes and appropriate cooking methods are being followed for providing safe and clean foods. A variety of whole grains, beans, and other legumes are included in the menu for meeting the fiber requirements. The moderate use of edible oils such as butter, vanaspati, and animal foods is followed. Dairy products (milk, yogurt, paneer) are included for meeting the calcium and protein requirements. Preparation and distribution of processed foods rich in salt, sugar, and fats are kept minimal.



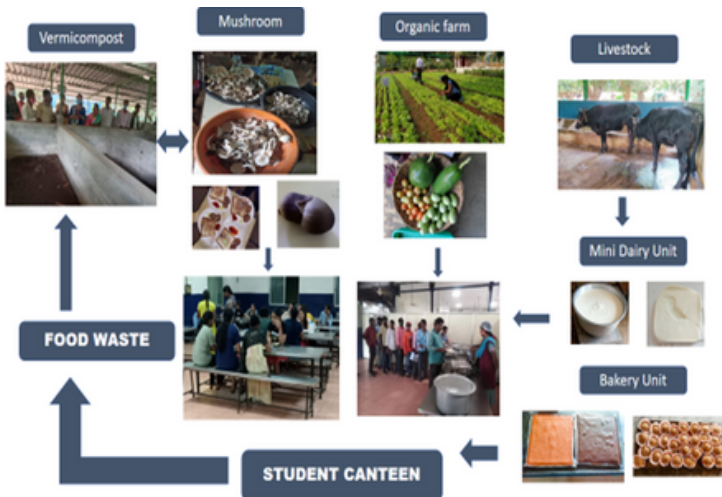
2 ZERO HUNGER



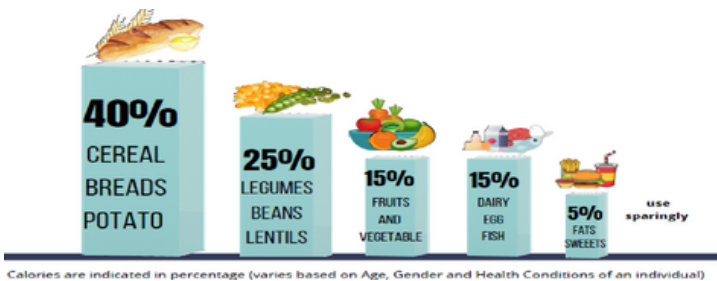
# Ending Hunger and Nutritional Enrichment



## HAWKESBURY CLIMATE FORUM



## SUSTAINABLE AGRI AND FOOD ECOSYSTEM OF CUTM



## CALORIC REQUIREMENTS BASED ON ICMR GUIDELINES

Foods rich in micronutrients (iron and calcium) such as ragi laddoo/ragi biscuit/ragi cakes with jaggery, and fermented foods, both dairy (curd/yogurt), and baked (bread/buns) are provided in the form of snacks. The programs undertaken by the management and ensuring food security have also ensured the supply of nutritious food at lower cost, strengthened the most vulnerable sections, indirectly helped in tackling poverty and structural inequalities, and is also promoting a positive impact on human health and the environment.



## Students and staff dietary interventions

Global trends in malnutrition, especially undernutrition, are alarming. The prevalence of undernourishment estimates the proportion of the population whose habitual food consumption is insufficient to provide the dietary energy levels required to maintain a normally active and healthy life. The Food Insecurity Experience Scale (FIES) produces a measure of the severity of food insecurity experienced by individuals or households. Nearly 11.9% of the global population, approximately 928 million, faced food insecurity at severe levels. Most Asian countries face unacceptably high undernutrition levels that manifest as stunting and wasting in children, anemia in women, and chronic ailments. There is a critical need to promote sustainable nutritional security, especially for vulnerable sections of the population.

## ORGANIC FARMING

Primarily an agricultural system devoid of chemicals and organic fertilizers are mainly derived from plant and animal wastes (vermicomposting, green manure, bone meal) and nitrogen-fixing cover crops. The system uses fewer pesticides (biologically based pest controls), reduces soil erosion, decreases nitrate leaching into the groundwater, and recycles animal waste into the farm. The system incorporates traditional and sustainable farming practices coupled with the health benefits of producing vegetables with no chemical residues and no harmful effects on the environment. Although low, the yield of the crops (eggplant, tomato, cowpea, spinach) was far superior in quality compared to the crops grown with the conventional methods. The physical parameters – shape, size, colour, and nutrient composition are comparable or relatively high, and perishability is very low. The harvested produce is supplied to the on-campus food outlets serving the student community.



Accessible  
health care  
facility for all

# A SIGHT SAVER EMPOWERING ALL

## 2.5NVG Eye Mitra Program

As a part of the partnership with Essilor India the Optometry department and Centurion University was envisaged with the role of an assessor for the on-going program of Essilor 2.5 NVG “Digital Eye Mitra”. Since January 2022 till March 2022 approximately 350+ assessment has been completed across 4 states of India (Andhra Pradesh, Bihar, Madhya Pradesh, Maharashtra). Essilor created its inclusive business arm 2.5 New Vision Generation (2.5 NVG) in 2013 in collaboration with B-Able (Training Partner) to find new and sustainable ways to provide vision care to underserved populations without access to conventional distribution channels



## Essilor Vision for Life Program

As a part of the recent collaboration with Essilor’s “Vision for Life” program it is entrusted with the optometry department to carry out social outreach vision camps in the localities of different districts of Odisha and provide the underprivileged with free of cost visual treatment and spectacles. As a part of Vision 2020 initiative globally uncorrected refractive error is the leading cause of preventable blindness. Vision for Life program is aimed at screening the people suffering from such conditions specially in the rural outskirts and provide them eyewear and appropriate correction free of cost.

Apart from the community perspective Essilor is collaborating in setting up an in-house optical outlet in Centurion University Bhubaneswar campus. The optical store is set up inside the Community Diagnostic Centre (CDC) of the university under the banner of Essilor 2.5NVG and is aimed to function commercially.





Affordable and accessible education for all

# Skill Integrated Higher Education

'Skill Integrated Higher Education' is the model of Centurion University that lays specific emphasis on creating sustainable livelihoods on a national scale in challenging geographies through education that results in employability and sparks entrepreneurship. It goes beyond skilling to competency building in multidisciplinary spheres. It enables shaping lives and empowering communities and promotes a value system of Inclusivity, Integrity, Equity, Respect and Sustainability in all that we do. Dr. Prasanta Mohanty, Dean Academics.

## OUR TEACHING

Sustainability thinking is embedded within the programs offered at Centurion University. All courses of the University have a theory, practice, project or internship component or a combination of them. This enables students to understand the application of theories thus focusing on the idea of lab to land and land to lab. The University provides 150 skill courses and 45 domain specializations from which students can choose from. Students can opt for multiple domains if they desire. Further, the University has made it mandatory for all students to take two courses: Climate Change, Sustainability and Organizations and Gender, Human Rights and Ethics.

## COMMUNITY ACTION LEARNING PROGRAM

Community Action Learning Program (CALP) involves students taking their skills and learning to the community. Every student has to go the communities nearby and offer their services in the skill areas that they have developed competencies in. This may include a student pursuing Electrical Engineering to offer his services for repairing electric appliances, or a student pursuing Automotive Engineering to repair vehicles, or a civil engineering student to provide a survey map of the homestead. It also means that an Allied Health student may conduct awareness camps or collect blood samples for tests, etc. This serves a dual purpose for students, of applying their knowledge and skills to a real life problem, while at the same time learning communication, negotiation, critical thinking and appropriate behavior. This ensures that students have a lesson in good citizenship as well.

## EDUCATION TO ENTREPRENEURSHIP

The education model of Centurion University is such that the outcomes it focuses on are employability, employment, productivity, production and entrepreneurship through hands on, practice oriented and experience based training. In order to ensure this, the University has incubated several social outreach enterprises under the umbrella brand of Gram Tarang, Gram Tarang Employability Training Services (skills training to school drop outs), Gram Tarang Inclusive Development Services (financial inclusion), Gram Tarang Foods (nutraceuticals), Gram Tarang Technologies (technology products and services), Gram Tarang Vocational Education and Training (career pathways for industrial workers) and Urban Micro Business Center (entrepreneurship skills to urban slum dwellers). Students undertake internships in these entities and learn in a real life situation. In addition to this, Centurion University has incubated some student startups, Skyrider Electric, Mittiland World Pvt Ltd and some faculty (and students) startups, Urvi Fashions, Kquantico Gifts.



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*





Striving for  
gender  
equality

# GENDER EQUALITY AN INCLUSIVE ENVIRONMENT

## ACCESS AND PARTICIPATION STATEMENT

The University has campuses across different locations in Odisha and which are mostly beyond the city limit thereby providing a conducive environment for study and safety. The University encourages women applicants and it pays special attention to the courses where their representation is inadequate. Women's participation in such courses are ensured by counselling them by a specialised team of career counsellors. The University offers special bursaries, scholarships (Chandrika) for studying in such unconventional courses. The University has various tie-ups and through its banking partners, educational loan is offered to the students. The University has a dedicated woman's mentoring scheme which assures:

1. Overall academic health of the student,
2. Taking actions on the area where the student has limitations by understanding the difficulties faced and connecting it to the faculty concerned.
3. Form a close loop information network between parents, faculty and mentor
4. Aid the student in decision making in choosing his/her desired career path.
5. Understanding the emotions of a student and prepare the student appropriately.

Further to this the overall health of a student is important for their all-round development. The Community Diagnostic Centre regularly conducts free health check-ups for all the students. Women students are educated on safe menstrual hygiene through one of programme called P.A.C.E. The University has placed sanitary pads at every strategic locations.

The crèche facility is available to women employees and students. The safety of the women students is ensured by an exclusive all female hostel inside the campus. The hostels are supervised by trained female wardens.

The University working hours are scheduled in a way to suit the convenience and safety of women employees and students. The work-life balance is maintained through weekly holidays besides vacation and adherence to public holidays. The University reaches out to the community on imparting skill training to the school or college dropout girls. Besides this these girls are given an opportunity to join academic education through National Institute of Open Schooling programme.

The University is committed to admit, recruit, retain and promote talented women and it is ensured and substantiated by the University's adherence to the following legislations and constitutional directives;

1. Article 14 of the Constitution of India which enshrines right to equality and it also corroborates 'Rule of Law'.
2. Article 17 of the Constitution of India which delineates prevention of untouchability.
3. Article 19(1) of the Constitution of India which enshrines freedom of speech and expression.
4. Article 21 of the Constitution of India which enshrines protection of life and personal liberty.
5. Article 23 and 24 which enshrines right against exploitation.
6. Retaining the unconstitutionality of Section 497 of IPC which had criminalised adultery and it had treated women as sexual chattel of men.
7. The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.
8. Article 39a and Article 39d; which ensures egalitarianism between men and women in all terms including income.
9. Article 42 of Directive Principle of State Policy; which ensures just and humane conditions of work and for maternity relief.

These provisions of the Constitution of India are aligned to the following SDGs: 1, 2, 3, 4, 5, 8, 10, 13 and 16.



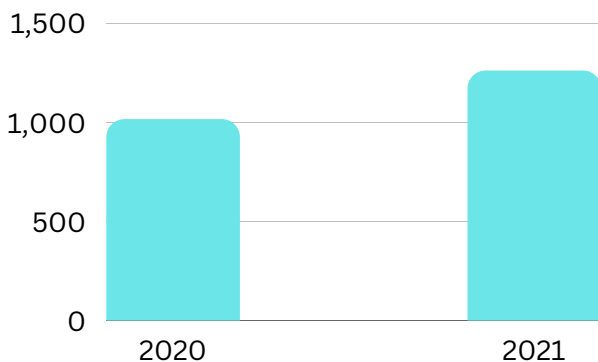
## WOMEN MENTORING

The Women's Mentoring Program is open to diploma, undergraduate and graduate of the University. During the course of their studies the mentees are paired with a female mentor in their personal and professional fields of interest. Mentors and mentees decide on the format of their mentoring relationship and the time commitment they wish to make. All are required to meet at least once in a fortnight and during mentor appreciation event. All the mentors have undergone mandatory All India Council for Technical Education (AICTE) Universal Human Value programme.

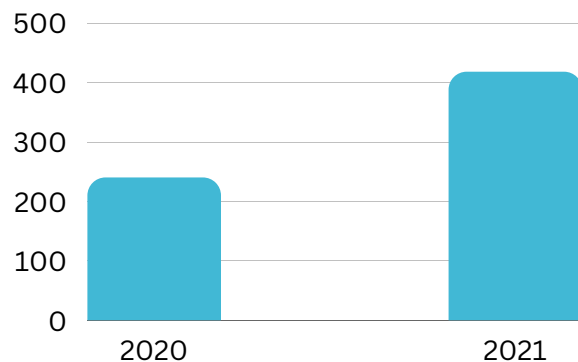
The University conducts mentoring activities such as confidence building, leadership, life skill development, programmes on financial and legal literacy. Initially, a base level evaluation was conducted for all women entering the mentoring activities. The purpose of this evaluation is to understand the strength and weaknesses of each of the students. The mentors then work on the limitations of the students by orienting them through the requisite programmes. The speciality of this program is the guidance of a trained female mentor and customised or need based approach of mentoring.



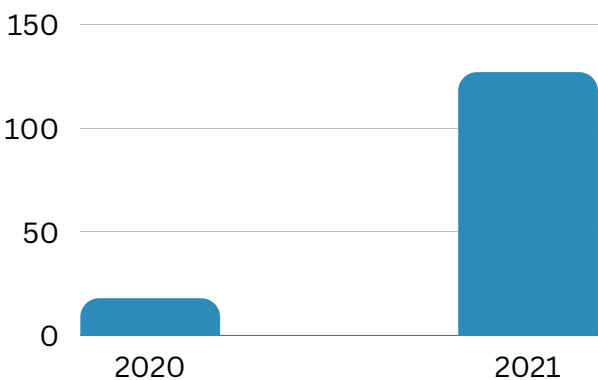
## RESEARCH AND ANALYSIS



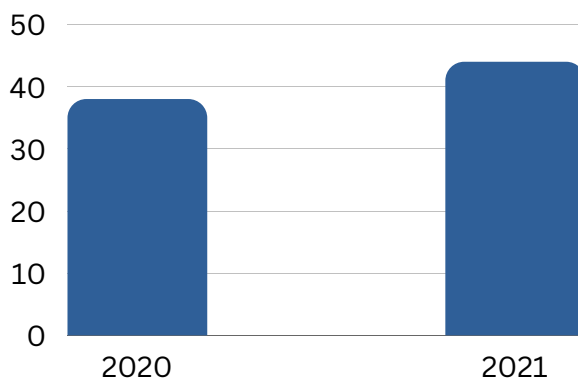
**Total Number of Employees**



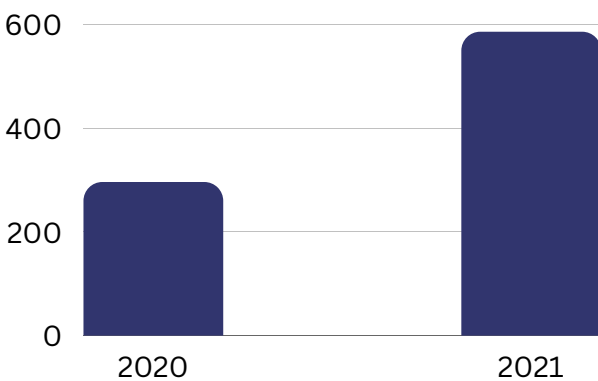
**Number of academic staff by subject area: STEM**



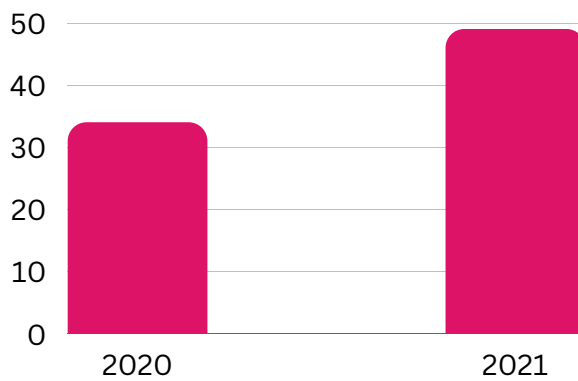
**Number of academic staff by subject area: Medicine**



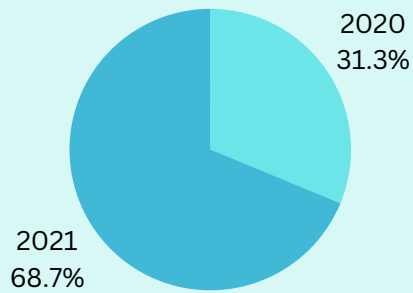
**Number of academic staff by subject area: Art and Humanities/ Social Science**



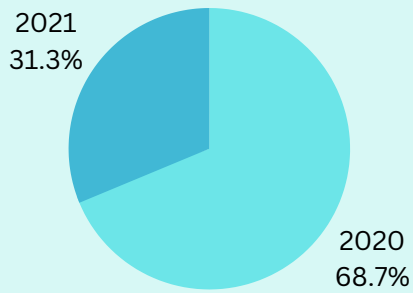
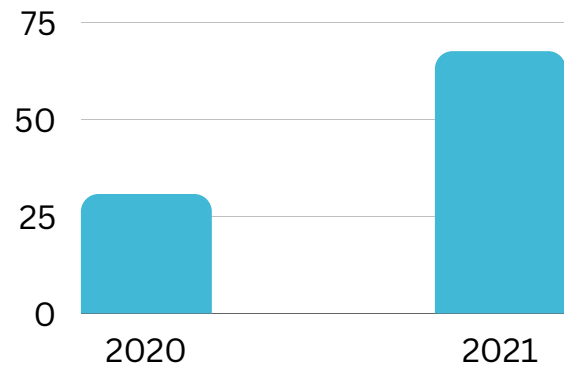
**Number of academic staff**



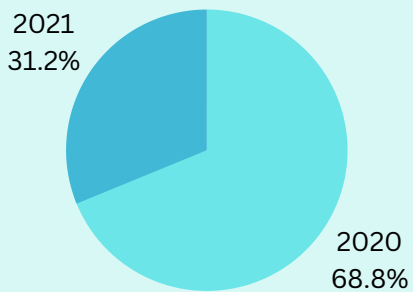
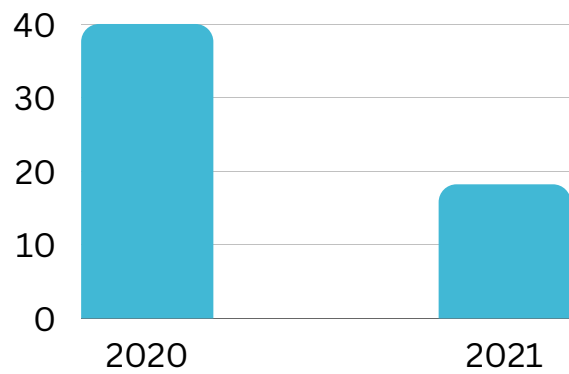
**Number of university spin-offs**



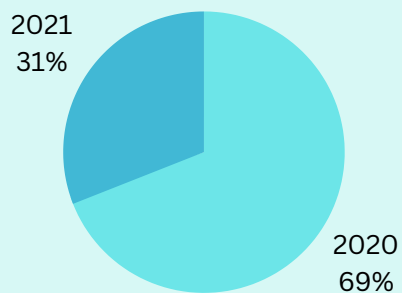
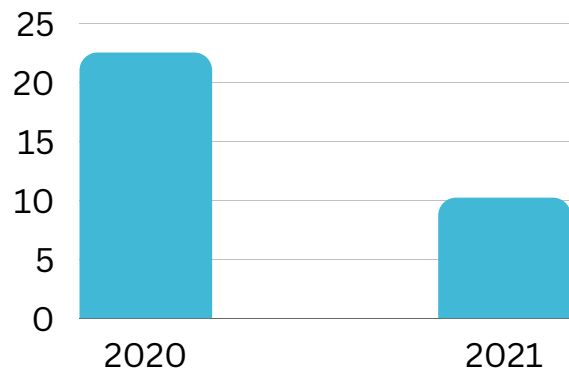
**Total Income**



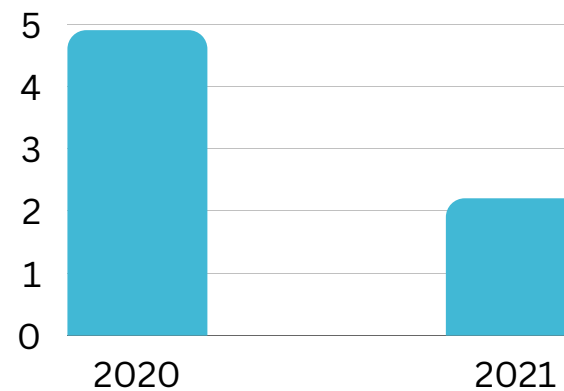
**Total Income from STEM**



**Total Income from Medicine**



**Total Income from Art and Humanities/  
Social Science**





## Sustainable Fishing and Economics

# Intensive Aquaculture

*Centurion University organizes Kisan Melas and various training programs on various aspects of intensive aquaculture in order to spread the message of aquaculture as a viable enterprise. Feed Formulation for Sustainable Aquaculture is key as production of tropical fish and crustacean species have intensified. Advanced aquaculture practice models like Aquaponic, Recirculatory Aquaculture System, flow through based raceway system are demonstrated for farmers. Dr. Sambid Swain, Associate Dean, School of Fisheries*

### **CAPACITY BUILDING**

Centurion University provides training in Biofloc Technology (BFT) which is considered as the new “blue revolution” since nutrients can be continuously recycled and reused in the culture medium, benefited by the minimum or zero-water exchange. BFT is an environment friendly aquaculture technique based on in-situ microorganism production. Biofloc is the suspended growth in ponds/tanks which is the aggregates of living and dead particulate organic matter, phytoplankton, bacteria and grazers of the bacteria. It is the utilization of microbial processes within the pond/tank itself to provide food resources for cultured organisms while at the same time acting as a water treatment remedy.

Capacity building for farmers in Aquaponics, a sustainable method of raising both fish and vegetables is a constant feature of the School of Fisheries, Centurion University. It is a form that combines raising fish in tanks (recirculatory aquaculture) with soilless plant culture (hydroponics). In aquaponics, the nutrient-rich water from raising fish provides a natural fertilizer for the plants and the plants help to purify the water for the fish. Aquaponics is a great example of year round, indoor farming. It can be done anywhere, providing fresh local food that is free of pesticides, herbicides and chemical fertilizers.

### **COMMUNITY OUTREACH**

Kisan Mela's or Farmer Fairs are held every year by Centurion University to create awareness among the farmers about the sustainable technologies for better fish production and to guide them in embracing new scientific and economic techniques. The theme was “Blue Economy: Better farming for better lives”, which emphasized sustainable and resilient technology interventions to increase fish production, increase job opportunities and reduce poverty and hunger. Several community outreach programs have been conducted to highlight the ills of over fishing. Further, Centurion University students actively participate and help the local residents for clearing and cleaning aquatic weed in and around water bodies which usually affect the water quality and choke during fishing activities.

### **CONSERVATION ACTIVITIES**

Centurion University also focuses on the overall development of the aquaculture/ fishing communities by involving faculty and students. Cleaning of beaches along with local communities is undertaken by faculty and students of the University. Every opportunity is taken to spread the knowledge of fish quality management before, after and during harvesting.





## Sustainable Livelihoods

# Sustainable Ecosystems

*“Centurion University promotes sustainable ecosystems through smart and precision agriculture practices which are transferred to farmers for application. Further, it promotes organic agriculture and the use of vermicompost and biofertilizers. It is engaged in seed production using manual and molecular methods, tissue culture, dairy processing and intensive aquaculture. The University is promoting the use of soil sensors, automated polyhouses, smart farm machinery and drones in spraying of fertilizers and pesticides.”*

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

### SMART AGRICULTURE

Centurion University is commercially producing exotic flowers like gerbera, dutch rose and various orchids; vegetables like capsicum, cherry tomatoes and cucumber in polyhouses. Further, coriander, lettuce, spinach and mint are produced using intensive aquaponics. Further, the University nurtures the use of soil sensors for precision agriculture, automated polyhouses to ensure controlled conditions for different crops, smart farm machinery to reduce the drudgery in various agricultural activities. The University has a large tissue culture facility to propagate large numbers of banana variety.

### RESTORING LOCAL BIODIVERSITY

Apiary practice is promoted by Centurion University. Bee keeping for restoring local biodiversity has been promoted. Handling Bee-boxes and generating income through producing honey and bee colonies is being taught to local farmers. University has established 25 boxes also started commercially marketing the honey under the brand name Jagannath Honey. Centurion University has also established a Butterfly, Bee and Cactus garden to conserve the insect and butterfly diversity.

# Waste to Wealth

*“The very culture of Centurion University is about reduce, reuse and recycle and creating wealth from waste. To this end, Centurion University has several initiatives to help the rejuvenation of the ecosystem in which it is located while contributing to society at large. At Centurion University, we recycle all the waste generated, water, food, paper, cloth and plastics. We produce almost all that we require and where not possible we procure locally. Dr. Mukti Mishra, President Centurion University”*

*-Dr. Mukti Mishra, President Centurion University*

### CREATING WEALTH FROM FOOD WASTE

At Centurion University, four biodigesters convert the food waste to compost which is subsequently used in the garden/ farms. 50000 meals are cooked per day with per capita wastage of 150 grams. This has led to the generation of 40 tonnes of compost per year. This in turn responsible for the green campuses, as the campus being located in a laterite zone, is not prone to having a lot of vegetation. Presently the biodiversity in the campuses have been expanded to include 4195 number of forest trees, along with plantation trees and horticultural species. The trees categorised according to their use indicates that there are 348 varieties contributing to fuel wood, 2232 to timber, 1532 fruit trees, 787 ornamental trees and 1954 medicinal trees.

### WASTE WATER RECYCLED

Centurion University has several in-house designed Sewerage Treatment Plants which recycles the water. The waste water is further treated with biochemicals and the grey water is used to water the play grounds on campus. Further, to conserve water, water harvesting structures including several interconnected ponds have been established on the campuses. In terms of infrastructure, water conserving faucets and vacuum toilets have been experimented with and awaiting upscaling. Further sensors have been placed on all tanks to stem overflow.

### PLASTIC WASTE TO PAVER BLOCKS

Centurion University has a paver block manufacturing unit. With in-house R&D, plastic waste was incorporated in the making of the paver blocks. This provided both strength and durability to the blocks and captured the plastic waste. The blocks are reusable, thus ensuring that the plastic does not go into dumps with other building waste.

