



# Kristu Jayanti College

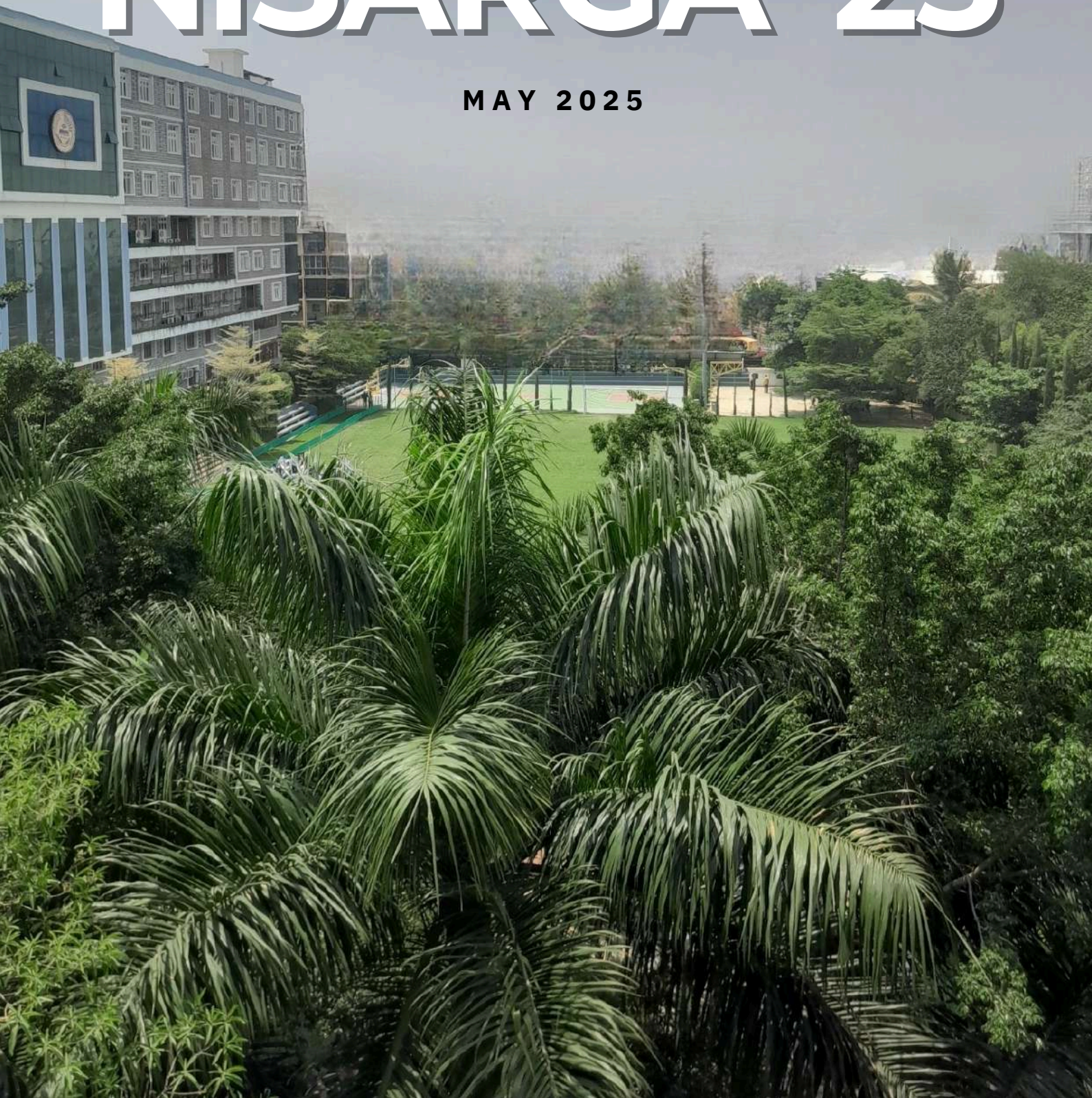
**AUTONOMOUS** Bengaluru

Reaccredited A++ Grade by NAAC | Affiliated to Bengaluru North University

**CENTRE FOR ENVIRONMENT AND  
SUSTAINABILITY**

# NISARGA '25

**MAY 2025**



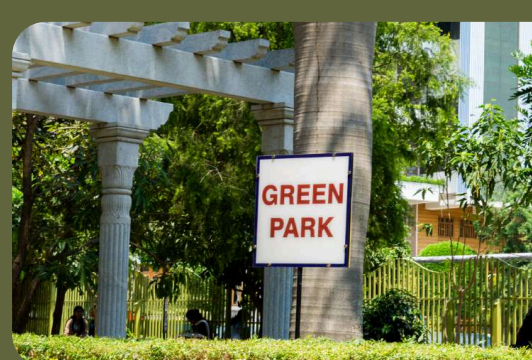




**St. Kuriakose Elias Chavara**

Founder of CMI Congregation







# ABOUT THE COLLEGE

Kristu Jayanti College, founded in 1999, is managed by "BODHI NIKETAN TRUST", formed by the members of St. Joseph Province of the Carmelites of Mary Immaculate (CMI). The institution strives to fulfill its mission to provide educational opportunities for all aspiring young people to excel in life by developing academic excellence, fostering values, creating civic responsibility, inculcating environmental concern and building global competencies in a dynamic environment.

The College is affiliated to Bengaluru North University and is reaccredited with grade 'A++' in 2021 by NAAC in the Third Cycle of Accreditation. The college is recognized by UGC under the category 2(f) & 12(B). The College has been accorded Autonomous Status since 2013 by the University Grants Commission, the Government of Karnataka & Bangalore University.

In the NIRF 2024, our college has been ranked 60th place in the top 100 colleges in the country. The institution received first prize at the National Level for 'Clean and Smart Campus Award' from Shri. Dharmendra Pradhan, Minister of Education, Govt. of India. The college is ranked under the Sustainable Institutions of India (Platinum Band) in the Sustainable Institutions of India–Green Rankings 2025 by R. World Institutional Ranking, and is the only autonomous college to be placed in the Platinum Band among other universities.

The ranking is based on a very good percentage of green cover area, execution of green policies, involvement of the management, staff, and students in green practices, presence of a large number of indigenous trees and more than 80 species of medicinal plants, student research projects using medicinal plants, water conservation through rainwater harvesting, usage of renewable energy sources like solar energy, and water recycling initiatives at Kristu Jayanti College.

Kristu Jayanti College has been designated as a United Nations Academic Impact (UNAI) Hub for SDG 2, highlighting its strong commitment to addressing hunger and promoting food security. In the India Today - MDRA survey 2024, Kristu Jayanti College, Bengaluru is consecutively ranked as the Best Emerging College of the Century at National Level for Commerce, Science, Arts and Social Work.



# PRINCIPAL'S MESSAGE



It is with immense pride and joy that I present Nisarga 2025, Volume II, a publication that mirrors the spirit of sustainability and reflects the vision of Kristu Jayanti College to be a catalyst for positive change in society. This edition is a testament to our collective commitment to the 17 Sustainable Development Goals (SDGs) envisioned by the United Nations. These goals are not just a global call to action—they are an urgent reminder that education must inspire responsibility, compassion, and a shared purpose. In this magazine, you will find thoughtful articles exploring each of these goals—from the eradication of poverty and hunger to the pursuit of peace, justice, gender equality, and climate action.

At Kristu Jayanti College, sustainability is not a separate initiative—it is woven into the very fabric of our academic and institutional ethos. Our campus is a living example of environmentally conscious planning and action. Our in-house medicinal garden is not only a source of biodiversity but also a space for experiential learning about the rich heritage of Indian medicinal plants. Our sewage treatment plant reflects our commitment to resource conservation and circular use, where waste becomes a source of renewal. These initiatives are more than infrastructural features—they are daily reminders to our students and staff of our duty towards nature and future generations.

Various student-led and faculty-driven cells, clubs, and centres—including the Jayantian Extension Services, the Centre for Environment and Sustainability, our anti-ragging cell, and student welfare centers—play a vital role in fostering awareness and action. These platforms enable students to engage directly with communities, address social and environmental concerns, and cultivate a lifelong commitment to sustainable living and inclusive growth.

I congratulate all contributors of this edition—students, faculty, and coordinators—who have brought depth, creativity, and insight into each page of Nisarga. Let us continue to grow as a community that learns, leads, and lives in harmony with our environment. Together, we can shape a future that upholds dignity, justice, and sustainability for all.

Fr. Dr. Augustine George  
Principal



# VICE PRINCIPAL'S MESSAGE



It is with great delight that I extend my warmest greetings to all readers of Nisarga 2025, Volume II. This edition is a meaningful tribute to the global mission of sustainability and reflects the deep-rooted commitment of Kristu Jayanti College towards nurturing socially and environmentally responsible individuals.

The 17 Sustainable Development Goals (SDGs) are not merely global benchmarks—they are powerful reminders of the shared responsibility we all hold in shaping a just, inclusive, and sustainable world. Through this magazine, our students and faculty have explored these goals with remarkable insight, presenting articles that span diverse themes such as quality education, peace and justice, clean water and sanitation, zero hunger, climate action, and more.

Our college continues to strive for a balance between academic excellence and social consciousness. Our campus infrastructure and initiatives demonstrate this commitment in tangible ways—be it through the medicinal garden, which encourages awareness of traditional knowledge systems and biodiversity, or the sewage treatment plant, which exemplifies the practice of recycling and resource conservation within the campus.

Kristu Jayanti College takes immense pride in nurturing this vision through dynamic student-led platforms like the Jayantian Extension Services, the Centre for Environment and Sustainability and other institutional bodies. These initiatives ensure that our students engage not just in theoretical learning but also in practical application—working alongside communities, leading environmental awareness drives, and promoting sustainable practices in everyday life.

I wholeheartedly congratulate the editorial team and all contributors for curating this inspiring volume of Nisarga. May this magazine serve as a beacon of awareness and action, and may it continue to motivate all Jayantians to be thoughtful stewards of our planet.

Let us always remember—every small action in sustainability today leads to a stronger, healthier, and more compassionate tomorrow.

Fr. Dr. Lijo P Thomas  
Vice - Principal



# DIRECTOR'S MESSAGE - STUDENT WELFARE OFFICE



With great joy and pride, I present to you the second edition of Nisarga, the magazine from the Centre for Environment and Sustainability (CES).

This edition is dedicated to the United Nations Sustainable Development Goals (UN SDGs), a global call to action for building a more sustainable, just, and inclusive world. The CES continues to inspire a sense of environmental responsibility among our students, encouraging them to take meaningful action toward sustainability.

Through awareness initiatives, research, and collective efforts, our faculty and student volunteers are actively working to address environmental challenges and promote sustainable solutions. This magazine brings together insightful articles which bring out how Kristu Jayanti College has accomplished setting up a sustainable environment within the campus following the Sustainable Development Goals, contributed by our Jayantians.

It highlights key sustainability issues, how Kristu Jayanti College innovates solutions, and encourages a deeper understanding of our role in shaping a better future. I hope this edition serves as a source of inspiration, motivating every reader to actively engage with the UN SDGs and contribute to positive change.

I extend my sincere appreciation to the Editorial Board, the students, and the faculty of Centre for Environment and Sustainability for their dedication and hard work in bringing Nisarga to life.

Fr. Deepu Joy  
Director - Student Welfare Office



## DEAN'S MESSAGE - FACULTY OF LIFE SCIENCES



It is a matter of great pride and pleasure to pen the foreword for this edition of 'Nisarga' 25 the annual magazine of the Centre for Environment and Sustainability. The publication stands as an evidence to the passion, commitment and creativity of our students, and this year, the focus on the United Nations' Sustainable Development Goals (SDGs) adds a powerful and timely dimension to the initiative.

The editorial team deserves special appreciation for thoughtfully choosing this theme and for encouraging contributors to reflect on the SDGs in their submissions. This focus not only highlights the global relevance of sustainability but will also inspire readers to consider the ways in which individual and collective action can shape a better future.

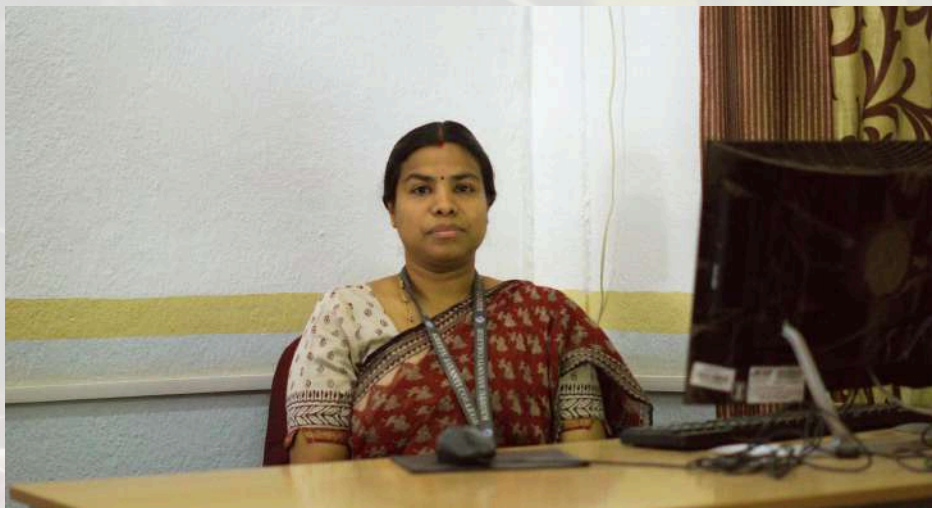
Congratulations to all the contributors whose articles fill these pages with insight, awareness, and a strong sense of purpose. Each piece is not only interesting and well-crafted but also deeply sensitizing, prompting readers to think critically about the environmental challenges we face and the solutions we must pursue.

Kudos to the editorial team for curating such a meaningful collection and for their dedication in bringing out this magazine with excellence and care. May this edition continue to inspire thought, dialogue and action in the service of our planet and its people.

Dr. Calistus Jude A. L.  
Dean, Faculty of Sciences



## CO-ORDINATOR'S MESSAGE - CES



‘The earth is our shared possession’. The Centre for Environment and Sustainability has launched Nisarga '25, a lookbook of nature's magazine, featuring a thematic edition on the 17 Sustainable Development Goals established by the United Nations. Our commitment to excellence and sustainable development fosters an innovative and creative environment where a diverse community of students and staff can flourish. CES offers environmentally conscious extension services, awareness programs, and sustainability goals in multiple fields. The magazine showcases the green practices of Kristu Jayanti College, highlighting its holistic approach to environmental stewardship. This forum acknowledges and pays tribute to the efforts of Management, faculty members of CES, student coordinators and volunteers who aided in this year's launch of Nisarga'25. I hope that this compilation will reliably instill bibliophiles with an appreciation for Mother Nature.

Dr. Sivagamasundari,  
Coordinator, Centre for Environment and Sustainability (CES).



# CENTRE FOR ENVIRONMENT AND SUSTAINABILITY



The Centre for Environment and Sustainability (CES) of Kristu Jayanti College strives to promote awareness, social responsibility and develop green consciousness among the students to contribute to environmental preservation and enhancement within their community and campus. The Centre emerged from the transformation of the Environment Club, emphasizing a more professional approach in 2021. The vision of the Centre is a greener earth in which people are responsible and adopt the principle of reduction, reuse and recycling of natural resources.

It aims to sensitize the students on different environmental issues to maintain and restore the quality of the environment. Issues such as industrial pollution, deforestation, ozone layer depletion, and greenhouse gas emissions adversely impact both the environment and human health. Conserving biodiversity and preventing environmental pollution are essential steps toward promoting ecological balance and enabling sustainable development. Sustainability emphasizes judicious resource use and long-term planning, focusing on optimizing fossil fuel usage, waste reduction, recycling, renewable energy adoption, time efficiency, and pollution control. The Sustainable Development Goals (SDGs) spans poverty alleviation, hunger eradication, improved human well-being, and environmental preservation. These goals are the blueprint to achieve a better and more sustainable future for all.



# EDITORIAL TEAM



With immense joy and pride, we present to you the second edition of Nisarga, the official magazine of the Center for Environment and Sustainability. This edition is a tribute to our shared vision of a greener, more equitable world—guided by the United Nations Sustainable Development Goals (SDGs).

Each page of Nisarga reflects the creativity, passion, and commitment of our contributors who have beautifully woven together stories, research, and art that echo the spirit of sustainability. From climate action to responsible consumption, gender equality to clean energy—this edition seeks not only to inform but also to inspire every reader to become an active participant in the journey toward a more sustainable future.

As an editorial team, curating this magazine has been a journey of learning and purpose. We are deeply grateful to all the writers, artists, and environmental enthusiasts who brought this vision to life.

Our special thanks to the mentors and faculty who constantly empower us to raise our voices for the planet. We hope Nisarga ignites a spark within you—as it did within us—to think globally, act locally, and dream collectively for a better tomorrow.

In harmony with nature,  
The Editorial Team  
Center for Environment and Sustainability



# EDITORIAL TEAM

## Magazine Coordinators

Dr. Gopinath D., Assistant Professor, Department of Computer Science  
Dr. Anoja Kurian, Assistant Professor, Department of Life Sciences

## Student Chief Editors

Ms. Rithika K, VI Semester, Bsc Biotechnology and Biochemistry  
Ms. Andrea Ann Abraham, IV Semester, BA Psychology

## Student Proofreader

Ms. Suzanne Borde, II Semester, Bsc Forensic science, Criminology & Biochemistry

## Writers

Mr. Abhishek Kumar Singh, IV Semester, Bsc Biotechnology and Genetics  
Ms. Jovita V Mathew, VI Semester, Bsc Biotechnology and Biochemistry  
Ms. Kumud Pandey, VI Semester, Bsc Biotechnology and Genetics  
Mr. Mayank Bharti, VI Semester, Bsc Biotechnology and Genetics  
Ms. Rithika K, VI Semester, Bsc Biotechnology and Biochemistry  
Ms. Tanvi Loharuka, VI Semester, Bsc Biotechnology and Biochemistry  
Mr. Tarun Kumar M, VI Semester, Bsc Biotechnology and Biochemistry  
Ms. Rishika Bhattacharya, VI Semester, Bsc Biotechnology and Botany

## Photographers

Mr. Dineshtarun G, VI Semester, BCA Analytics  
Mr. Goutham S, VI Semester, BCA Analytics  
Mr. Jeevan R Sarode , VI Semester, BCA Analytics  
Mr. Steve Mathai Mathew, II Semester, BCA Cybersecurity



## FROM THE MAGAZINE COORDINATORS - CES



**Dr. Gopinath D**

**Magazine Coordinator, Centre for Environment and Sustainability**

“It has been an honour to contribute to **Nisarga' 25**, a magazine that echoes the voice of sustainability and thoughtful expression. Each page reflects the dedication of young minds working harmoniously towards meaningful impact. This edition proudly aligns with the United Nations Sustainable Development Goals, highlighting our collective responsibility toward a more just, equitable, and greener future”



**Dr. Anoja Kurian**

**Magazine Coordinator, Centre for Environment and Sustainability**

“Working with the team of **Nisarga' 25** has been a truly inspiring experience. The students’ passion and creativity have breathed life into every article and design, making this edition a heartfelt tribute to nature and change. Through its themes and initiatives, **Nisarga' 25** beautifully echoes the essence of the UN SDG goals, inspiring action at both individual and community levels.”



## FROM THE STUDENT COORDINATORS- CES



“It gives me immense pleasure to present to you the second edition of Nisarga. As the Secretary of the Centre for Environment and Sustainability, it’s both an honour and a responsibility to carry forward the vision of this magazine—a platform dedicated to thoughtful environmental discourse, student voices, and sustainable action. We hope this edition inspires you to think, act, and engage with nature more deeply.”

**Tarun Kumar M**

**III Year, B.Sc. Biotechnology & Biochemistry**

**Secretary, Centre for Environment and Sustainability**



“I was lucky enough to be given the responsibility to conduct a number of green activities for the club, including cleanups, plantation drives, and awareness campaigns, while also collaborating and coordinating with many talented members of the club. The second edition of Nisarga, demonstrates our club’s work and our college vision. towards fostering sustainable practices and environmentally responsible behaviour.”

**Rishika Bhattacharya**

**III Year, B.Sc. Biotechnology & Botany**

**Secretary, Centre for Environment and Sustainability**



## **CENTRE FOR ENVIRONMENT AND SUSTAINABILITY (CES)**

### **Staff Coordinator:**

Dr. Sivagama Sundari, Department of Life Sciences

### **Staff Members:**

Dr. Indira M.N., Department of Life Sciences

Ms. Mini Gopalakrishnan, Department of Physical Science

Dr. Gopinath D., Department of Computer Science

Ms. Shiny T.L., Department of Physical Science

Ms. Gaadha B., Department of Professional Accounting & Finance

Dr. Rituparna Saha, Department of Life Sciences

Dr. Rabina Deabbarma, Department of Psychology

Dr. Premkumar A., School of Management

Dr. Frankline Noah K., Department of Life Sciences

Dr. Austin Richard S., Department of Life Sciences

Dr. Anu Savio, Department of Professional Accounting & Finance

Dr. Anoja Kurian, Department of Life Sciences

Ms. Syalini, Department of Professional Management Studies

### **Student Coordinators:**

Ms. Rishika Bhattacharya , III Year Department of Life Sciences

Mr. Tarun Kumar M, III Year Department of Life Sciences



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## SUSTAINABLE DEVELOPMENT GOALS



United Nations aspires in attaining sustainable, inclusive and just societies. The conjecture of the varied Nations and their problems apropos of having dynamicity in terms of beliefs and systems posed an encumbrance in enabling absolute development. Apprehending the severity of the concern, United Nations has eventuated the possible elucidation and has concocted Sustainable Development Goals with the aim of extricating any country from practices leading to any potential hurdle in the path of development. These goals aim in bringing a mainstreamed model in terms of intervening with identified issues with an attempt of revamping and ameliorating the existing laws that lead to further predicaments. United Nations' primary stance is to ensure egalitarianism thereby enabling equality and equity among all.

Through the primary interventions and actions that are reviewed, the United Nations has recommended effectual frameworks and machineries for implementation thereby making necessary amendments in the laws, provisions and clauses. The effective intervention of academic institutions as a strong machinery have enabled the organization to come up with possible solution of enhancing opportunities among people. The interventions of various Academic Hubs has equipped the people with knowledge and awareness regarding identified issues which are a part of the seventeen SDGs. Establishment of strong dialogues with the stakeholders has not only led to empowerment of the initiatives taken by the academic hubs but has also resulted in building an effected mechanisms for United Nations to achieve the agendas. The staunch equilibrium of the country's overall circumstances has further strengthened by enabling such academic hubs to have more effective interventions.



# UNAI SDG Hub 2: Zero Hunger



Kristu Jayanti College, Bengaluru, believes that quality education is a powerful tool to achieve a zero-hunger world. As a dynamic SDG Hub, it is committed to fostering academic excellence, civic responsibility, and global competencies among its 9,000 students through over 60 undergraduate and postgraduate programs.

The College emphasizes the formation of intellectually competent and socially sensitive individuals. It hosts several research centers, including a PhD program in Social Work, and collaborates with local, national, and international organizations on projects tackling poverty and promoting community-based vocational training.

Through its Social Outreach Program and Jayantian Extension Services (JES), the College runs 135 initiatives that empower students to impact marginalized communities. It also offers computer literacy, language competency, and capacity-building programs, and has adopted five villages to address hunger and promote sustainable livelihoods.

Rooted in the values of service and social responsibility, Kristu Jayanti College continues to strive toward its motto: "Light and Prosperity."



# QUALITY EDUCATION

# 1





# 1

Quality Education is one of the United Nations' 17 Sustainable Development Goals (SDGs) that aims to ensure inclusive and equitable education while promoting lifelong learning opportunities for all. Education is the cornerstone of societal progress, empowering individuals with the knowledge and skills needed to make informed decisions and contribute meaningfully to their communities. For institutions like ours, focusing on quality education reflects our commitment to fostering personal growth, innovation, and sustainability.

Kristu Jayanti College is dedicated to this goal by implementing various initiatives to enhance the educational experience of both the students and the surrounding community.

## **PROMOTING QUALITY EDUCATION FOR COLLEGE STUDENTS**

Kristu Jayanti College offers numerous after-class workshops aimed at enhancing their skills and interests. Language and music courses help students explore creative and communicative dimensions, while workshops on gender equality instill a sense of social awareness and inclusivity. Additionally, training sessions for national entrance exams and aptitude tests empower students to excel in competitive fields, ensuring they are well-prepared for higher education and career opportunities. Crochet and knitting workshops encourage artistic expression while promoting self-reliance through the development of small-scale business ideas.

Skill-based courses are another cornerstone to promote quality education. Topics such as environmental sustainability, financial literacy, cyber security, artificial intelligence (AI), the Bharatiya Knowledge System, and yoga are offered online, enabling students to enhance their understanding of modern and traditional disciplines. These programs encourage lifelong learning and ensure that students are equipped to thrive in a rapidly evolving world.





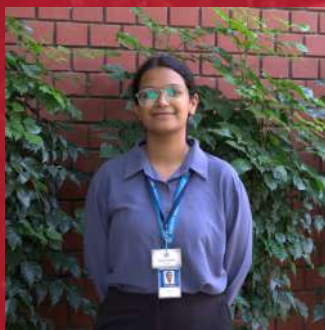
## EXTENDING EDUCATION BEYOND CAMPUS

The commitment of the College to quality education goes beyond the boundaries of its campus. Several clubs and departments engage in outreach activities that bring learning opportunities to underprivileged communities. The Centre for Social Activities (CES) and the National Service Scheme (NSS) are key drivers of these initiatives. These groups regularly visit government schools and slums, conducting programs that focus on teaching and mentoring children.

The Karnataka Civil Defence Corps (KCDC) has also played a significant role through events like Computer Literacy Drives, Yuvapatshala, and the Yuva Avishkar STEM on Wheels program. These initiatives provide hands-on education in science, technology, and computer skills, making complex topics accessible and exciting for young learners. Such programs run consistently over semesters, ensuring sustained engagement with the community.

The CES further supports Sustainability Goal No. 4 by organizing activities that combine education with environmental awareness. Volunteers visit government schools to clean the surroundings, plant trees and teach students about cleanliness, hygiene, and sustainable practices. These efforts not only improve the quality of life for the children but also instill a sense of responsibility toward the environment.

Beyond the clubs, various academic departments and clubs in our college also contribute to quality education through extension services. These include workshops, seminars, and awareness drives tailored to the needs of different communities. By combining the expertise of faculty members with the enthusiasm of students, these initiatives create a positive and lasting impact.



**JOVITA V MATHEW**  
**22BTBC36**



# GENDER EQUALITY

# 2





# 2

The boundaries of cultural, economic, and geographic division do not apply to gender equality because it is a right on its own. It ensures equal rights and responsibilities over opportunities for all people, regardless of their gender. Progress has been made so far, but there are remaining challenges, as Watson and Tata have so perfectly argued,

"It is not only a women's issue; it is a global problem."

## **Equality and Equity**

Equity looks at everyone's individual needs and creates a strategy to ensure fairness, while equality makes sure everyone is treated the same. In socially constructed structures, there has always been a bias towards men, hence the need for affirmative action. In a more holistic sense, achieving true equality means creating a balance by empowering women without oppressing men.

## **Gender-Based Violence and Wage Gaps**

Discrimination, wage gaps, lack of representation, and leadership positions cannot go unaddressed for women. Society tends to expect them to abandon their careers to focus on family, which they do at times and is detrimental to professional growth.

## **Challenges Faced by Men and Misuse of Laws**

Men have been taught the need to be emotionally strong and financially able, which can cause them to ignore mental health aspects. It is a shameful act for men to openly ask for assistance due to certain societal views. Legal systems that significantly protect women and do not pay attention to the male side of domestic beating and victimless accusations do not serve bounded welfare. Though violence, workplace harassment, and dowry death laws are important, the evidence on false cases stresses the necessity of non-misuse regulations. These include Section 498A in India and restraining orders in most Western countries, which influence the reputation and family of an individual very adversely when misused.





## **Why Gender Balance Matters**

A gender-equal society fosters respect. Collaboration brings progress. For instance, a study by McKinsey & Company has found that diverse workplaces have higher financial performance. At a social level, it may bring mutual respect. At a psychological level, it frees individuals from stereotypes about each other.

## **Path to Equality: Solutions & Strategies**

**Education & Awareness** — Gender-sensitive values should be taught in schools and colleges from the early years. An example of this sort of campaign would be HeForShe. It emphasizes how men can also be part of the movement without feeling displaced. **Legal Reforms**— To strike a balance between protecting genuine victims and preventing false accusations while also ensuring that the accused receives fair treatment and justice.

**Mental Health Support**—Encouraging therapy and emotional expression can be practiced by both sexes, and this will equally reduce societal pressure among each sex.

**Inclusive Policies**— In delivering human resources, work premises ought to bear gender-neutral qualities. Identifying the differences between the two genders in payment plans and the occurrence of promotions will be better.

**Media Influence**—Social platforms and influencers play a critical role in society, and expressing proper stories about their lives and handling stereotypes significantly encourage progressive conversations.

## **Gender Equality at Kristu Jayanti College, Bengaluru**

Kristu Jayanti College actively champions gender equality through dedicated committees, cells, and diverse initiatives. The institution fosters an inclusive environment through workshops, awareness programs, leadership opportunities, and experiential learning.



## **Key initiatives and programs**

**Committee for Prevention of Sexual Harassment & Internal Complaints Committee (ICC):** Kristu Jayanti College maintains a safe and respectful campus environment through the Internal Complaints Committee (ICC), which was established by UGC regulations (2015). The ICC handles complaints of sexual harassment with fairness, confidentiality, and swift action. Additionally, it organizes awareness programs on topics such as gender sensitivity, appropriate behavior in the workplace, and legal rights. The ICC promotes a culture of respect and inclusivity, encouraging individuals to speak up about their concerns without fear. This reinforces the college's dedication to gender equality and safety.

**Women Empowerment Cell (WEC):** With the motto "Educate and Empower," the WEC conducts conferences, guest lectures, and workshops on gender equality. Events like Srujana, an annual art and craft exhibition, encourage women entrepreneurs. The cell also organizes sessions on women's health, safety, and rights.

**Gender Sensitization Action Plan (2023-2024):** The college has devised a strategic plan to promote gender awareness, equal learning opportunities, and prevent gender-based violence. Key initiatives include:

1. Certification courses on gender studies
2. Expert lectures on equity and inclusion
3. Self-defense training for girls
4. Entrepreneurship programs like Srujana
5. Health and hygiene awareness campaigns

## **Departmental Initiatives**

**Department of Social Work:** Hosted the 10th International Conference on Inclusion, Diversity, Equity, and Accessibility in collaboration with the University of Waikato. Experts discussed gender equity in the public and private sectors.



**Department of Computer Science (UG):** Conducted seminars exclusively for BCA students, instilling gender equality values through discussions on technology and inclusivity.

**Department of Media Studies:** Recognizing media's influence on social norms, the department launched a campaign encouraging students to critically analyze gender portrayals. A student-led short film, "Equal Voices and Equal Choices," was produced to promote gender sensitivity.

**Department of Commerce (UG):** Organized a debate titled "Equality & Empowerment," allowing students to explore gender issues and propose solutions.

### **Clubs & Associations**

**Literary & Cultural Association:** Conducted Street plays highlighting gender discrimination and women's empowerment, creating public awareness through storytelling.

**Media Studies Club:** Facilitated discussions on how media can shape progressive gender perceptions.

### **Workshops & Training Programs**

**Self-Defense" Workshop—"STRENGTHEN":** Trained young women in tactical self-defense techniques, decision-making during threats, and personal safety awareness.

**Crochet & Knitting Certification:** A hands-on program promoting financial independence and entrepreneurship among students through skill-building.

Guest Lectures & Awareness Campaigns like Sexual Well-Being & Reproductive Health, Cyber Crime & Digital Safety, Mental Health & Self-Care,

Gender equality should no longer be seen as a competition but more as a collaboration. Kristu Jayanti College, Bengaluru, has consistently demonstrated a profound commitment to promoting gender equality through a multitude of dedicated committees, cells, initiatives, programs, events, and incentives. This commitment is deeply embedded in the institution's ethos, ensuring a campus environment where all genders are empowered and valued equally.

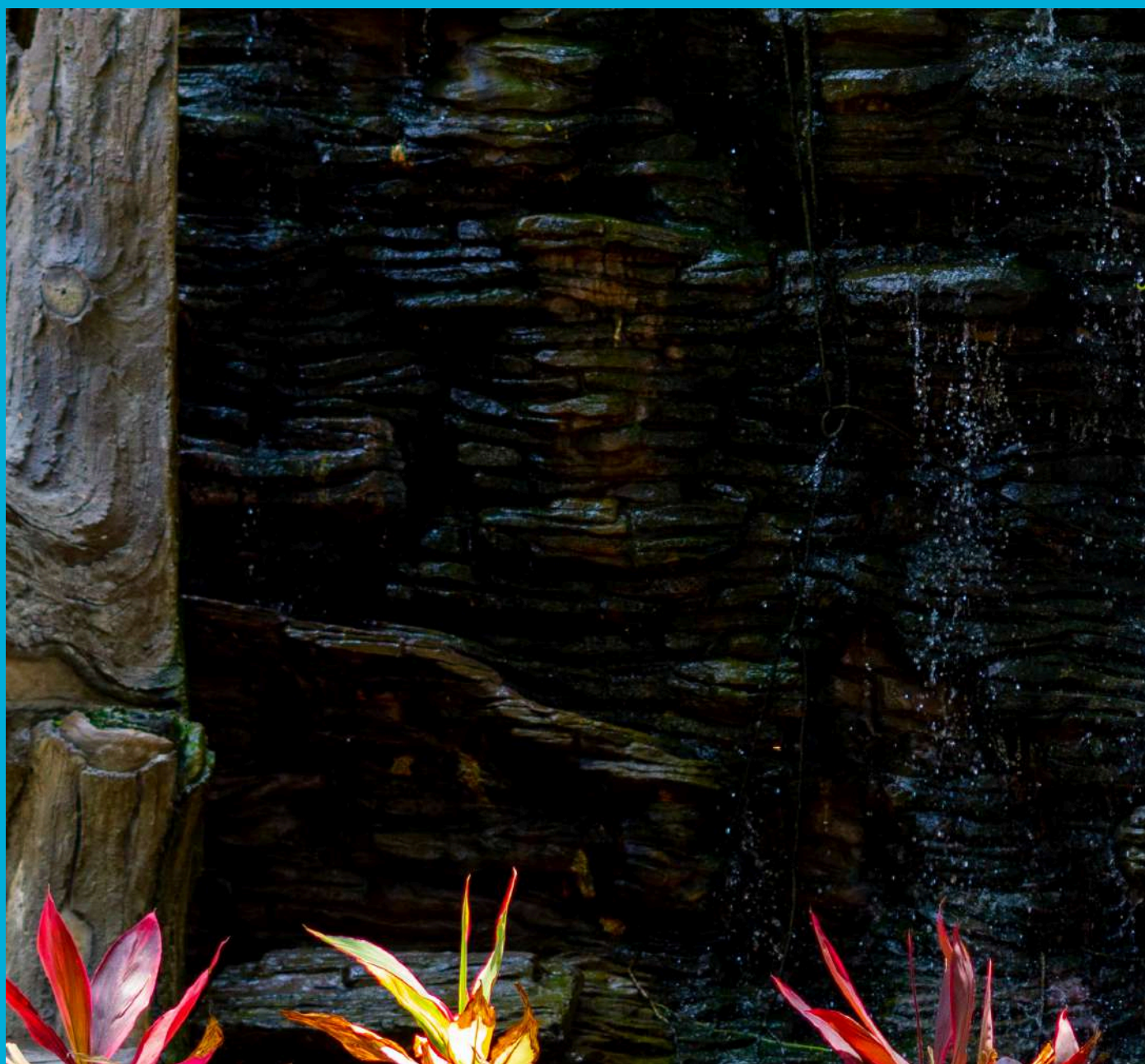


**MAYANK BHARTI**  
**22BTGE78**



# CLEAN WATER & SANITATION

# 3





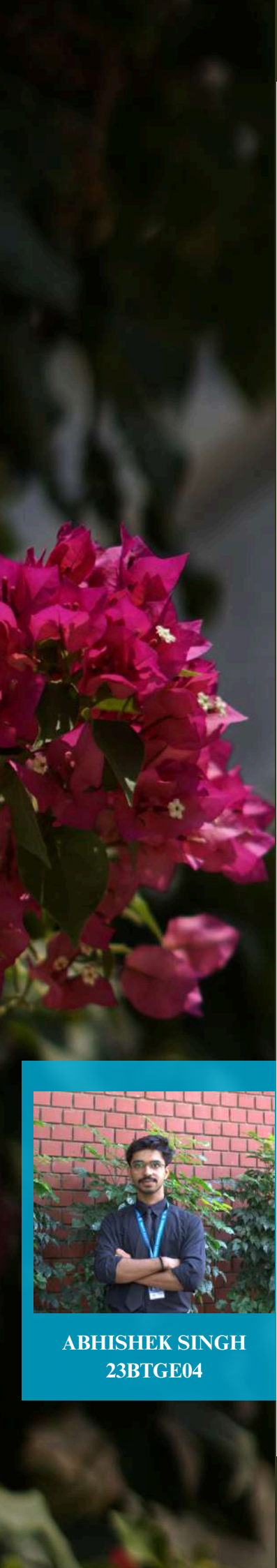
# 3

Water and sanitation form the bedrock of human survival and development, serving as essential determinants of health, education, and economic growth. Globally, the significance of clean water and effective sanitation systems cannot be overstated, as they impact every aspect of society.

At Kristu Jayanti College Autonomous, Bengaluru, initiatives and awareness campaigns on water conservation and hygiene exemplify a commitment to these fundamental causes, underscoring a collective responsibility to safeguard the future of humanity. Kristu Jayanti College Autonomous, Bengaluru, has actively engaged in promoting water conservation and sanitation awareness. Through outreach programs, seminars, and eco-clubs, the institution emphasizes the importance of sustainable practices. Projects like rainwater harvesting, water recycling systems, and campus cleanliness drives reflect the college's commitment to creating an environmentally conscious community

Through student-led campaigns and eco-club activities, the college educates its community on water conservation techniques such as minimizing wastage, fixing leaks, and adopting efficient water-use practices. Through its social outreach programs, the college collaborates with local villages to build awareness about clean drinking water, sanitation, and the importance of building and using toilets. Students and faculty organize hygiene education programs in schools to inculcate the habit of handwashing and maintaining cleanliness among children. The college partners with organizations working in the water and sanitation sector to implement sustainable solutions in underserved communities.





The college is equipped with a rooftop rainwater harvesting system that collects approximately 50 lakh litres of water, which is stored in tanks with a total capacity of 50,000 litres. This harvested water is distributed to designated areas via well-maintained pipelines and is utilized for cleaning and toilet facilities across the campus. The campus is equipped with clean, well-maintained restrooms that adhere to hygiene standards. Separate facilities are available for men and women, ensuring inclusivity and privacy. Regular workshops and seminars on personal hygiene and the importance of sanitation are conducted for students and staff. The college promotes proper disposal of waste by segregating it at source, composting organic waste, and recycling non-biodegradable materials. This initiative supports a cleaner campus and reduces the burden on local waste systems. Students are encouraged to develop innovative solutions such as low-cost water filtration systems and eco-friendly sanitation technologies. Faculty and students collaborate with experts and institutions to study water management techniques and propose policy recommendations for local authorities.

Kristu Jayanti College continues to lead by example in water and sanitation management, inspiring its community to adopt sustainable practices. Looking further into the future, the college plans to expand rainwater harvesting systems, develop more robust partnerships with governmental and non-governmental organizations and introduce advanced research projects on water purification and waste management technologies. Through these initiatives, Kristu Jayanti College reaffirms its dedication to fostering a cleaner, healthier, and more sustainable future for all.



**ABHISHEK SINGH**  
**23BTGE04**



# AFFORDABLE & CLEAN ENERGY

4





# 4


Kristu Jayanti College (Autonomous) in Bengaluru supports Sustainable Development Goal 7: Affordable and Clean Energy through its active work at its Centre for Environment and Sustainability. The institution has embedded access to dependable, sustainable, modern energy systems into its academic activities, cultural operations, and physical facilities because it serves both environmental and economic social development purposes.

The concept of clean energy exists at Kristu Jayanti as an actual practice that manifests throughout the campus facilities. Solar panels have been installed on the rooftops of campus buildings, enabling the college to generate an average of 50 kilowatts of electricity per day. LED lighting systems, along with natural lighting and ventilation features implemented across the college premises, have reduced dependency on artificial energy sources. The implemented energy efficiency measures provide significant contributions toward the broader goal of reducing carbon footprint as well as developing sustainable energy practices.

The college has a solar power generation system capable of producing 50 kilowatts of electricity per hour with the help of solar panels installed on the rooftops of campus buildings. This eco-friendly method of photovoltaic energy contributes significantly to the campus's power supply needs. It supports essential functions such as lighting and ventilation by powering LED bulbs and sensor-based lights throughout the campus. Additionally, the college has collaborated with BESCOM to share the power generated through this renewable energy system. On sunny days, surplus energy is stored or utilized as backup during power outages. The campus also provides charging facilities for electric vehicles like two-wheelers and cars.







The Centre for Environment and Sustainability leads the vital effort of converting energy objectives into effective awareness and practical initiatives. The Centre teaches students and faculty members to adopt energy-conscious habits, which enables them to make mindful use of power throughout academic and living spaces. Prolonged campaigns combined with eco-awareness events remind the community members about their energy conservation duties and cleaner energy exploration responsibilities. Students and faculty at the Centre conduct projects and discussions about renewable energy through initiatives that lead them to explore solar power alongside wind energy and bioenergy.

Academic departments receive backing to implement sustainability through curricular changes that apply energy education as an approach to address critical global problems. The combination of multiple academic disciplines creates students who recognize the energy crisis alongside possessing abilities to help solve it.

The university organizes events across all categories—academic, cultural, and environmental—for the campus that have energy efficiency at their core. The college demonstrates its dedication to defeating its sizeable energy consumption through decorative lighting minimalism and daytime event scheduling, together with extensive responsible energy usage promotion. Besides existing endeavors, the institution pursues renewable infrastructure implementation while planning to install solar energy systems as part of its extended clean energy initiatives.

SDG 7 supports the Centre for Environment and Sustainability in their goal to create affordable and clean energy availability for everyone. Kristu Jayanti College establishes its position as both an educational institution and a sustainability leader through continuous initiatives that serve as an example for all higher education institutions across the country.



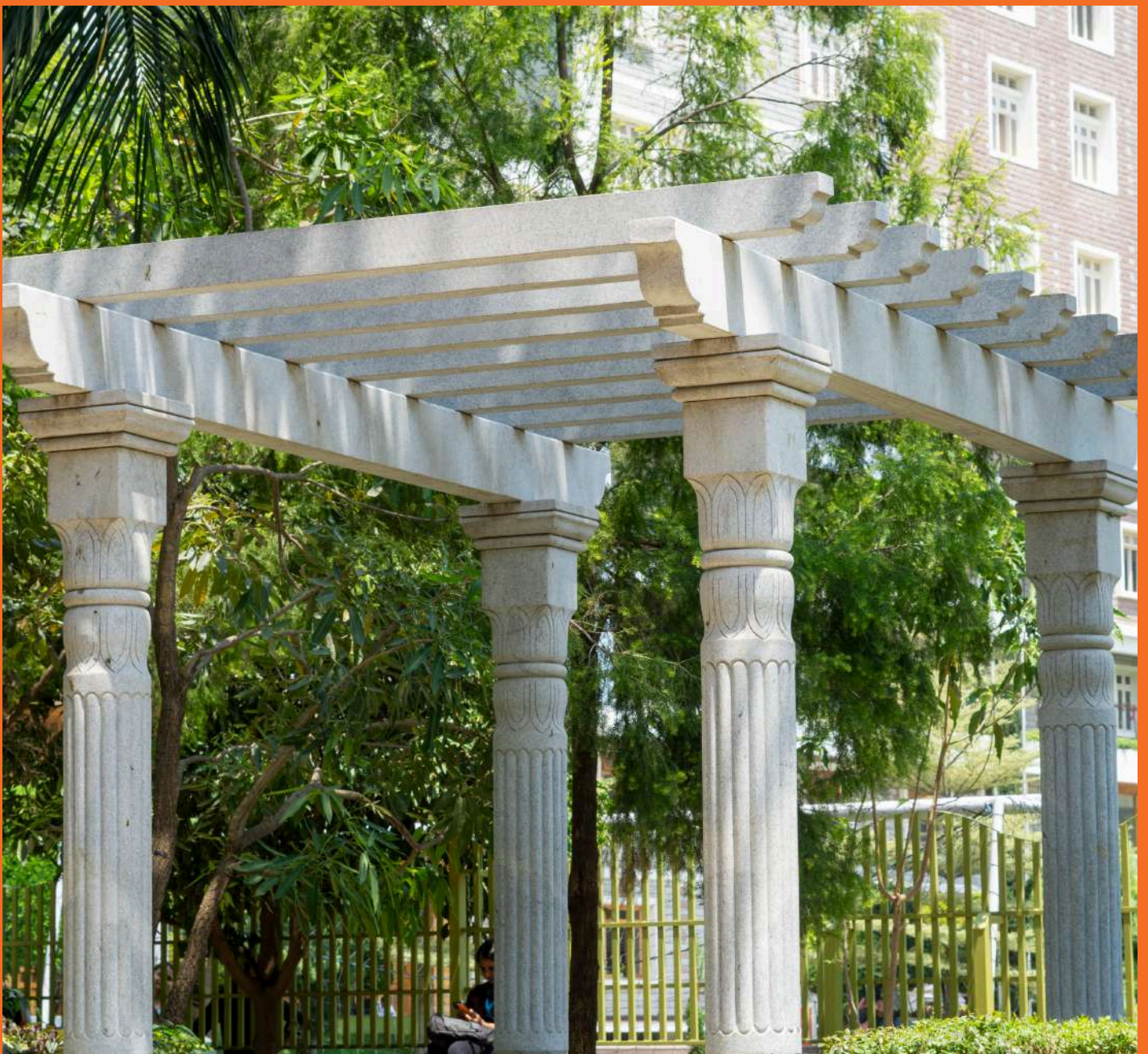
**TARUN KUMAR M**  
**22BTBC28**



# INDUSTRY, INNOVATION & INFRASTRUCTURE

# 5

*Building a Sustainable Future at Kristu Jayanti College*





In an increasingly interconnected world, the seamless integration of industry, innovation, and infrastructure forms the cornerstone of sustainable development. These pillars not only drive economic progress but also play a pivotal role in addressing the most pressing global challenges, including climate change, inequality, and technological disruption. At Kristu Jayanti College in Bangalore, India, this dynamic synergy lies at the heart of the institution's mission, where academic excellence and community development converge to equip students with the skills, knowledge, and vision to succeed in a rapidly changing global landscape.

### **The Role of Industry in Economic Growth**

At Kristu Jayanti College, the institution's strategic partnerships with industry leaders provide students with unparalleled exposure to real-world challenges. Through internships, collaborative projects, and industry placements, students gain valuable hands-on experience that prepares them to be active contributors to both national and global economic progress.


### **Industry-Academia Synergy at Kristu Jayanti College**

At Kristu Jayanti College, the integration of academia and industry goes beyond conventional education. The curriculum is designed with industry relevance in mind, ensuring that students acquire the practical skills and expertise demanded by the ever-evolving job market. Strong collaborations with local and international industries provide students with access to cutting-edge knowledge and networking opportunities while fostering research partnerships that tackle challenges such as digital transformation, sustainability, and resource management. Through industry guest lectures, workshops, and collaborative research, students stay ahead of emerging trends and are prepared to lead in diverse fields.

### **Innovation: The Catalyst for Transformation**

At Kristu Jayanti College, innovation is woven into the fabric of its educational philosophy. Students are encouraged to think critically, embrace new technologies like AI, IoT, and machine learning, and find creative solutions to global problems.





The college's innovation labs, startup incubators, and industry-sponsored research initiatives provide students with the tools and resources to bring their groundbreaking ideas to life. In addition to technological advancements, the college champions social entrepreneurship and novel business models, preparing students to drive meaningful societal change and build more inclusive and sustainable industries.

### **Infrastructure: The Foundation of Learning and Growth**

At Kristu Jayanti College, the focus on world-class infrastructure ensures that students have access to the tools and spaces needed for holistic learning and personal growth. The institution continually upgrades its infrastructure to meet the evolving needs of its student population. To keep up with scientific and technological advancements, it has simultaneously expanded facilities such as laboratories, the library, and other learning resources including computers, e-resources, and Wi-Fi connectivity.

The college's innovation labs, startup incubators, and industry-sponsored research initiatives provide students with the tools and resources to bring their groundbreaking ideas to life. In addition to technological advancements, the college champions social entrepreneurship and novel business models, preparing students to drive meaningful societal change and build more inclusive and sustainable industries.

Furthermore, the college takes a proactive approach to sustainability, integrating eco-friendly infrastructure practices such as energy-efficient buildings, rainwater harvesting, and waste management. These initiatives not only reduce the college's environmental footprint but also instill in students a sense of responsibility, preparing them to become leaders who prioritize sustainability in all aspects of their lives and careers.



**KUMUD PANDEY**  
**22BTGE42**



# SUSTAINABLE CITIES & COMMUNITIES

# 6





# 6


The idea of sustainable communities started at a time when there was an abundance of resources. Practices such as rainwater harvesting, establishing sacred groves, mixed crop agriculture, and use of organic building materials had been an integral part of communities for centuries. However, with urbanization came ignorance as these tried-and-tested methods were overlooked for rapid development and consumerism, which led to an ecological collapse. An average Indian waste approximately 55 kilograms of food annually, 30% of energy is used inefficiently, and hundreds of Liters of water are squandered while millions of people lack access to these basic resources. Therefore, the concept of sustainable cities and communities becomes crucial to tackle the problems of growing population, depleting resources and a warming planet.

Around the globe, multiple communities have been established that are working to harmonize human development with nature. For example, In Japan, 35 recycling units have reduced plastic waste by 87 percent. In Germany, hydrogen-powered trains are replacing traditional trains reducing carbon footprints. In China, "sponge cities" are tackling urban flooding by using green spaces to absorb rainwater. In India, rainwater harvesting is helping conserve water in regions facing scarcity. The introduction of innovative agriculture practices like hydroponics and aeroponics is reducing dependency on land while encouraging organic farming.

Additionally, countries are investing in pedestrian- and cyclist-friendly infrastructure to reduce automobile dependency. Organizations like LEEDS promote the construction of green buildings that incorporate nature into their design, ensuring sustainability without compromising on aesthetics.







Kristu Jayanti College actively contributes to Sustainable Development Goal 11 by promoting eco-friendly practices, green campus initiatives, and community outreach programs. The college has implemented rainwater harvesting, solar energy solutions, and sensor-based lighting to reduce power consumption. A small medicinal garden in the college premises highlights the importance of biodiversity. Trees with lichens around the campus show how good air quality can be measured right outside your door.

The campus also promotes sustainable transport by limiting cars, encouraging electric vehicles and bicycles, and providing buses for outings to reduce the carbon footprint. Waste segregation and biogas plants help turn waste into renewable energy, showing how recycling and resource management can go hand in hand.

The commitment of the College to quality education goes beyond the boundaries of its campus. Several clubs and departments engage in outreach activities that bring learning opportunities to underprivileged communities. The Centre for Social Activities (CSA) and the National Service Scheme (NSS) are key drivers of these initiatives. They conduct classes for underprivileged students and provide them with essential materials like stationery and uniforms to encourage education.

The Centre for Environment and Sustainability further supports Sustainability Goal No. 4 by organizing activities that combine education with environmental awareness. Volunteers visit government schools to clean the surroundings, plant trees and teach students about cleanliness, hygiene, and sustainable practices. These efforts not only improve the quality of life for the children but also instill a sense of responsibility toward the environment. Through education, research, and environmental clubs, the institution fosters awareness and action toward building sustainable cities and communities.



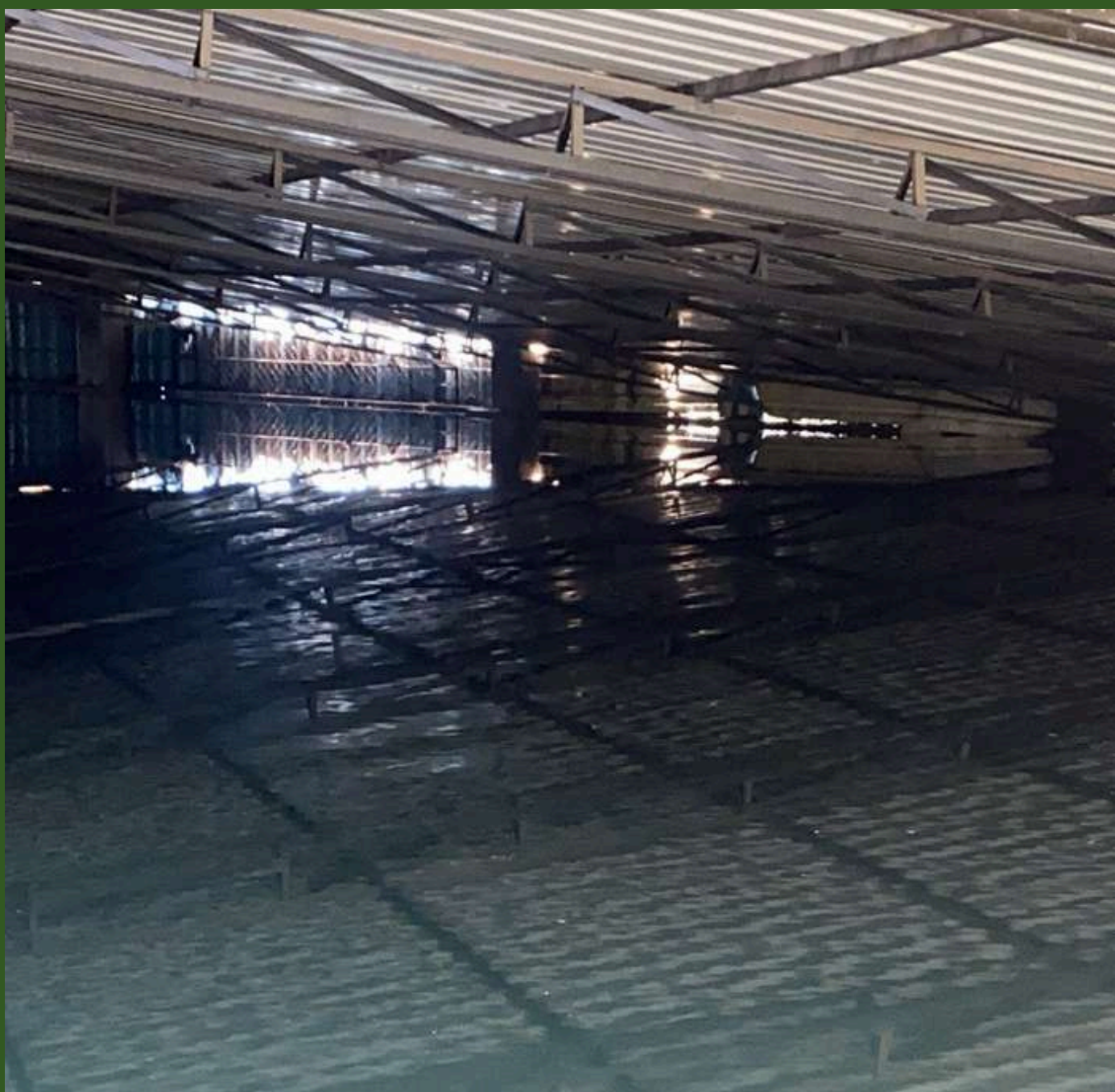
TANVI LOHARUKA  
22BTBC27

*Sustainability is not only a need but also the future.*



# CLIMATE ACTION

# 1





**7** Kristu Jayanti College established the Centre for Environment and Sustainability as a green initiative to take climate action.

Kristu Jayanti College (Autonomous) in Bengaluru operates its Centre for Environment and Sustainability through active UN Sustainable Development Goal 13: Climate Action promotion. Our club dedicates itself to establishing environmental awareness and action-focused practices as sustainability becomes a serious time-related challenge.

Our institution implements different sustainable projects together with education campaigns to establish our facility as a real-life platform for responsible environmental practices.

### **Our Role in Climate Action at KJC**

The core environmental institution at the college consists of the Centre for Environment and Sustainability that works to decrease the campus emission levels through sustainable initiatives and climate action programs. Every aspect of our campus life at KJC incorporates sustainability through our activities dedicated to water conservation and plantation drives.

### **Our Contributions to SDG 13**

#### **1. Greening the Campus**

Tree plantation efforts scheduled monthly at our campus both enhance its aesthetics and reduce carbon dioxide while cleaning the air through pollution absorption. Every new tree plantation at our campus helps reverse climate change through its minimal yet significant contribution.

#### **2. Eco-Awareness Programs**

Our organization implements seminars along with documentary viewings and eco-quizzes together with environmental campaigning as part of our activities during Environment Week, Earth Day, and World Water Day to educate students about climate change origins and effects.





## **2. Eco-Awareness Programs**

Our organization implements seminars along with documentary viewings and eco-quizzes together with environmental campaigning as part of our activities to educate students about climate change origins and effects. Students gain comprehension of their duty to protect the planet through these organized events.

## **3. Sustainable Water Management**

We work together with the campus administration team to feature and boost operational excellence of our Sewage Treatment Plant (STP). The campus implements treated water reuse applications in gardening which decreases both water consumption and power needs during water processing operations.

## **4. Plastic-Free Campus Drive**

Our organization takes the lead in establishing campus-wide programs that aim to decrease plastic usage. The “Bring Your Own Bottle” and “Say No to Plastic” awareness campaigns have led to substantial decreases in the production of non-biodegradable waste.

## **5. Student-Led Projects and Innovation**

Our educational institution actively supports projects that establish climate resilience together with programs focused on waste management and green tech implementation. Student researchers from our institution display climate action presentations during both intercollegiate fests and national conferences.

## **6. Energy Conservation**

Building energy efficiency involves encouraging departmental and classroom usage of LED lights and implementing turn-off-when-not-in-use policies while spreading awareness about electricity conservation throughout the institution.

Crucial change starts with making people aware of environmental issues, which then leads to group action according to the Centre for Environment and Sustainability.



**RISHIKA BHATTACHARYA**  
22BOBT13



# PEACE, JUSTICE & STRONG INSTITUTIONS

# 8







Kristu Jayanti College aims to provide its students with quality education and academic excellence along with co-curricular activities and growth. The students get inspired to face any challenge with confidence and competence keeping in mind their social responsibility. Filled with diversity, inclusivity, and equality, the institution provides a supporting environment that nurtures the ethical and personal growth of every individual, whose dedication reflects a successful organization. This success is a reflection of the commitment and guidance from the collective efforts of the college leadership, including the Principal, Vice Principal, and all the respected Fathers who play a vital role in shaping the institution.

Peace is one of the crucial elements in our life fostering stability and security in societies. The serene campus is ideal for peaceful activities, inner peace, and harmony. The air is filled with calmness and serenity, adorned with luscious greenery every corner. Several activities, such as yoga workshops, help the students to align with their inner child and think straight. The smart medicinal garden contains more than 243 species of plants that were planted by our students and teachers from the Department of Life Science honored by Principal Fr. Dr. Augustine George.

Another crucial motive of our college is Justice. The college upholds justice through its policies and equality. Kristu Jayanti College promotes a culture of respect and dignity for all students regardless of their background. Our college provides a grievance redressal cell, an anti-ragging committee, and awareness programs on human rights that help the students understand fairness and equality.

Kristu Jayanti College fosters a peaceful atmosphere by creating an inclusive and balanced environment where every student and working staff feels valued and respected. The college embraces diverse and inclusive cultures by organizing various events like Ethnic Day.





This inclusivity strengthens the connections between the students enhancing the understanding and promoting mutual respect among them. Initiatives like the Anti-Ragging Committee and Gender Sensitization Cell play a crucial role in making fellow students feel safe and respected by all.

The college regularly organizes various workshops and seminars on topics like Gender Equality and Human Rights reinforce the college's commitment to justice and fairness. Campaigns on Gender Equality by the Women Empowerment cell, Cleanliness Drive by the Environment Club, Awareness activities by the Karnataka Civil Defense Corps, etc, are conducted to educate students in valuable conversations. The college also encourages students to actively participate in decision-making through platforms like the Student Council and Grievance Redressal Mechanism. Kristu Jayanti College's commitment to peace, justice, and strong institutions is reflected through various activities and programs that aim to create a positive impact both within and beyond the campus

Kristu Jayanti College stands not only as a place of academic learning but as a dynamic community that actively educates and inspires its members to become leaders of Peace and Justice. Through its commitment to ethical education, inclusive practices, and real-world engagement, the college nurtures students, faculty, and alumni to make enriching contributions locally and globally. Whether it's through Student-led initiatives, faculty-driven outreach, or alumni making impactful global changes, Kristu Jayanti College embodies the values of peace, justice, and institutional strength in every aspect of its functioning. The stories of its community members serve as a testament to how education, when grounded in responsibility and ethics, can lead to lasting, positive change. As the college continues to foster these ideals, it remains dedicated to shaping individuals who will not only succeed but will also serve as a catalyst for a more just, peaceful, and unified world.



**RITHIKA K**  
**22BTBC23**

*"The quest for peace and justice is meaningless without strong institutions to safeguard both."*

*– Kofi Annan.*





# GREEN COVER CAMPUS



# SEWAGE TREATMENT PLANT

All Member States of the United Nations adopted the 17 Sustainable Development Goals in 2015 to create sustainable pathways for obtaining better outcomes for everyone by 2030. These sustainable development goals target the fundamental worldwide issues along with poverty and inequality and climate change while including environmental breakdown and peace along with justice. KJC together with Bengaluru benefits society by implementing sustainable development initiatives through educational programs and constant innovation and sustainability practices. The institution maintains complete dedication toward building a sustainable green campus. Kristu Jayanti College operates as a sustainable institution by implementing sustainable development goals within its educational culture as well as operational systems for renewable energy and waste management and water conservation efforts. Sewage Treatment Plant (STP) at the college exemplifies institutional environmental leadership by achieving multiple SDG goals through its operations.



## Sewage Treatment and Sustainability at KJC

The sewage treatment plant based at Kristu Jayanti College operates as a vital environmental system designed to treat wastewater from its hostels, canteen, and sanitation systems. Recycled treated water serves all three purposes of gardening, flushing, and landscape maintenance while reducing freshwater usage, thus supporting sustainable resource management.

Aligning with the 17 SDGs, STP at KJC works as an initiative that helps promote the Sustainable Development Goals such as

- **Goal 6: Clean Water and Sanitation** Proper wastewater treatment combined with sanitation guarantees water conservation through reuse programs.
- **Goal 3: Good Health and Well-being** Campus health remains safe because the system both prevents contaminations and reduces waterborne disease spread.
- **Goal 7: Affordable and Clean Energy** The water desalination system utilizes energy-efficient operational systems which minimize power usage and protect environmental quality



- **Goal 9: Industry, Innovation and Infrastructure** The campus relies on contemporary sewage treatment methods which strengthen sustainable development infrastructure.
- **Goal 11: Sustainable Cities and Communities** The system helps lessen municipal water management responsibilities while encouraging sustainability of nearby water supplies.
- **Goal 12: Responsible Consumption and Production** The resource use cycle for water should continue in a circular pattern as a way to reduce unnecessary water consumption.
- **Goal 13: Climate Action** The water conservation goals help decrease groundwater extraction needs while reducing environmental emissions.
- **Goal 15: Life on Land** The process water achieved through treatment enables plant growth and biodiversity expansion which increases the green areas on campus grounds.
- **Goal 4: Quality Education** The filtration operation functions as an educational resource for both environmental science and life science classes to understand connections between classroom information and real-world studies.
- **Goal 8: Decent Work and Economic Growth** Its operation produces chances for people with technical skills to learn and acquire employment opportunities through water management practices.
- **Goal 17: Partnerships for the Goals** The institution facilitates a united environmental sustainability promotion mission through its collective participation of faculty members students and administrative staff.

At Kristu Jayanti College the sewage treatment facility represents both technical efficiency and environmental responsibility and social responsibility. KJC proves that higher education institutions hold the potential to make sustainable development their leading focus by implementing the 17 Sustainable Development Goals. The college operates practices such as the STP which helps decrease its impact on the environment while inspiring its students to become environmental advocates.



**RISHIKA BHATTACHARYA**  
**22BOBT13**

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**TARUN KUMAR M**  
**22BTBC28**



# GREEN CAMPUS AND MEDICINAL GARDEN INITIATIVE

Kristu Jayanti College takes immense pride in its lush, eco-friendly campus, which boasts an impressive green cover of over 40%. Among its many sustainability initiatives, the medicinal garden stands out as a remarkable endeavor, housing more than 243 species of medicinal plants. This meticulously curated space serves as both an educational resource and a testament to the institution's commitment to environmental consciousness.

A unique feature of this garden is the integration of technology to enhance learning and accessibility. Each plant has been assigned a distinct QR code that, when scanned, provides detailed scientific information, including its botanical name, morphological characteristics, phytochemical properties, and medicinal applications. This innovation not only facilitates easy identification but also fosters a deeper understanding of the plants' therapeutic benefits.



The successful establishment and maintenance of this medicinal garden have been made possible through the collective efforts of the dedicated students and faculty members from the Life Science Department and the Centre for Environment and Sustainability.

With unwavering support from the college management, students actively participate in the upkeep of the garden and engage in various research projects exploring the medicinal properties of different plants. Their involvement extends beyond conservation, as they contribute to innovative studies that highlight the importance of medicinal flora in healthcare and traditional medicine. Speaking about this initiative, Fr. Dr. Augustine George, Principal of Kristu Jayanti College, emphasized the significance of creating awareness about medicinal plants among the younger generation. He noted that such efforts not only instill a sense of responsibility toward nature but also encourage students to appreciate the invaluable role plants play in health and well-being. This initiative aligns with the college's broader vision of promoting sustainability, biodiversity conservation, and scientific inquiry among students, ensuring that they develop a holistic approach to environmental stewardship. Through this initiative, Kristu Jayanti College continues to inspire and empower students to take an active role in ecological conservation while gaining practical insights into the world of medicinal botany.



# EXPLORING SDG 15 - SMART MEDICINAL GARDEN AT KRISTU JAYANTI COLLEGE, AUTONOMOUS, BENGALURU, KARNATAKA

In the current era of Sustainable Development Goals (SDGs), which were launched with representatives from 193 nations at the United Nations headquarters in New York from September 25 to 27, 2015, the adoption of the document “Transforming Our World: The 2030 Agenda for Sustainable Development” was a turning point in international sustainable efforts. This objective places a strong emphasis on fostering empowering technology, particularly in the areas of information and communication, and fully implementing technological innovation and development in less developed nations by 2017. Students are positioned as important influences in illustrating the goals and targets of the SDGs, as their achievement requires the cooperation of the community.

Kristu Jayanti College, Autonomous, in Bengaluru, Karnataka, India, is committed to sustainability and has several initiatives in place. The college is certified as a Green Campus by the All India Council for Technical Education (AICTE). The college has a green cover area of more than 50% of its campus, including green parks, medicinal gardens, and trees. The institution received first prize at the National Level for the ‘Clean and Smart Campus Award’ from Shri Dharmendra Pradhan, Minister of Education, Govt. of India. With the speed at which technology is developing, including cutting-edge resources such as Quick Response (QR) codes has become a viable way to enhance educational opportunities, especially when examining the varied world of greenery. Closing the gap between humans and nature is crucial in this age of rapid technological growth.





Finding creative methods to get back in touch with nature is essential in this fast-paced digital age where screens and gadgets are a common part of our lives. Our latest initiative, the QR Code-enabled Herbal Garden, combines technology and tradition to promote a closer relationship with nature. A medicinal plant garden is a place where plant species with medicinal properties are cultivated, researched, and educated about. There are numerous benefits of these portals since they provide a dynamic stream of information in a range of formats and from a variety of sources.

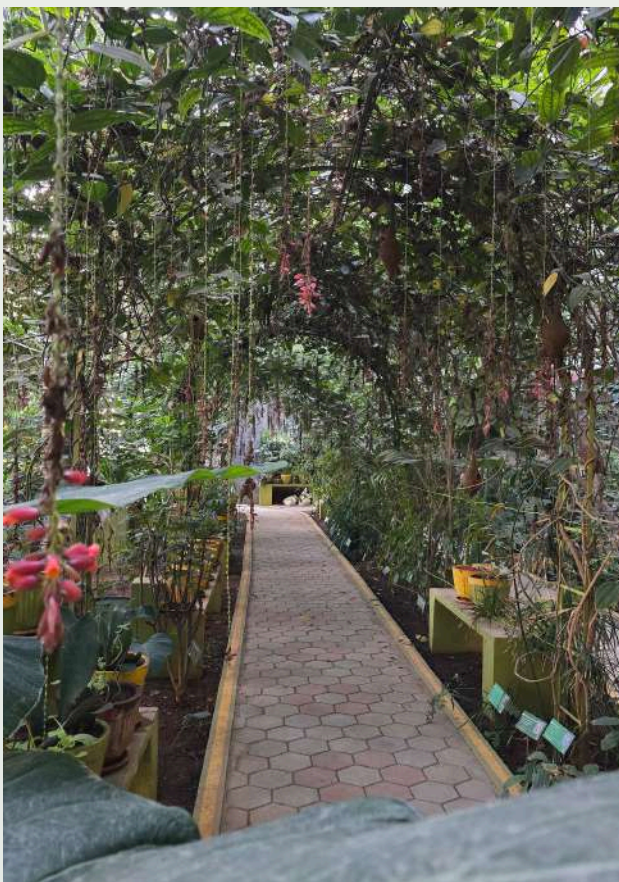
In spite of this, there is a notable gap in the knowledge of students and visitors about the variety of plants on campus. By using an innovative system to enable quick and easy plant identification, this study seeks to close this knowledge gap. The Diffusion of Science and Technology methodology was applied in the medicinal garden on campus. The created system combines a web-based interface with QR Code technology. Upon scanning a QR Code linked to a medicinal plant on campus with a smartphone, the user is redirected to a Uniform Resource Locator (URL) that opens a webpage with comprehensive details about the plant.



The results of testing show that the system functions well, fulfilling its intended function and greatly assisting students and regular visitors in learning about campus vegetation. Increasing students' passion for making contributions to the green campus project that are pertinent to their academic fields. This Python-based application automates the creation of plant information templates, each containing essential details about different plants along with a corresponding QR code. The main goal is to generate visually appealing and informative images for each plant, which can then be used for educational purposes, cataloging, or display. The process begins with the application reading a CSV file that contains various plant details. Each record in this CSV includes information such as the botanical name, common name, family, vernacular names and a hyperlink to additional plant resources.



Using the “Pandas” library, the data is efficiently loaded and converted into a list of dictionaries, making it easy to process each plant individually. For each plant, the application generates a unique QR code that links to the plant's designated webpage. The “QRcode” library is used to create these QR codes, which are saved as image files. These QR codes are later embedded into the templates, allowing users to scan them for further plant details. To create the final template for each plant, a pre-designed image background is loaded into the program. This template serves as the base for adding the plant's details. Using the “PIL (Python Imaging Library),” the application places key information about each plant onto the template. Once all the necessary information is added to the template, the final image is saved with the plant's common name as the file name, ensuring each image is uniquely identifiable. The application repeats this process for every plant in the input data, producing a separate image for each one. The images are saved in a designated folder for easy access and use. This system is particularly useful in contexts where plant information needs to be presented clearly and interactively. The QR code integration adds an extra layer of accessibility, allowing users to quickly access further information online. Whether for educational projects, plant identification apps, or botanical gardens, this application streamlines the process of creating professional-grade plant information templates that are visually appealing and informative.



In conclusion, this tool automates a traditionally manual process of creating plant information templates, saving time and ensuring consistency across all generated images. By combining textual data with visual elements like QR codes, it enhances the user experience, making plant information more accessible and engaging. As a tool for implementing the SDGs on campus, the QR Code scanning technology offers comprehensive information about the plants. As an educational tool, this digital reading technique successfully and efficiently enhances knowledge acquisition and is anticipated to inspire students to apply this knowledge in their daily lives and within the community.

Every plant in our medicinal garden has a unique QR code that may be scanned to provide you with a wealth of information. Our findings on the QR code-enabled Herbal Garden at Kristu Jayanti College started over a year ago in June 2023, with the support of members of Centre for Environment and Sustainability and the graduates of B.Sc. Botany. With the help of a Python-based program, plant information templates that include pertinent information about various plants and a matching QR code may be automatically created. The primary objective is to produce aesthetically pleasing and educative photographs for every plant, which can then be utilized for categorization, presentation, or educational reasons.

Each QR code is linked to a database containing comprehensive information about the respective medicinal herbs. Users can scan the QR codes using their smartphones to access this information instantly, fostering a deeper appreciation for urban biodiversity and environmental stewardship. Through the use of QR codes and an intuitive interface, users may explore the many facets of plants; even a layperson may recognize the common and scientific names of a product, as well as its therapeutic qualities, with the use of a QR scanner app. This approach is especially helpful in situations where interactive and clear presentation of plant information is required. This tool simplifies the process of producing expert-quality plant information templates that are both aesthetically pleasing and educational, whether for botanical gardens, plant identification applications, or educational initiatives.

To sum up, this program saves time and ensures consistency across all generated photos by automating a traditionally manual process of developing plant information templates. Textual information is combined with visual components, like as QR codes, to improve the user experience and make plant information more interesting and accessible. Students become more interested in and knowledgeable about the therapeutic qualities of plants as a result, and they are also better equipped to use technology responsibly. Our website pages can be accessed quickly with QR codes and also enhance educational experiences by providing students and enthusiasts with instant access to comprehensive plant information.





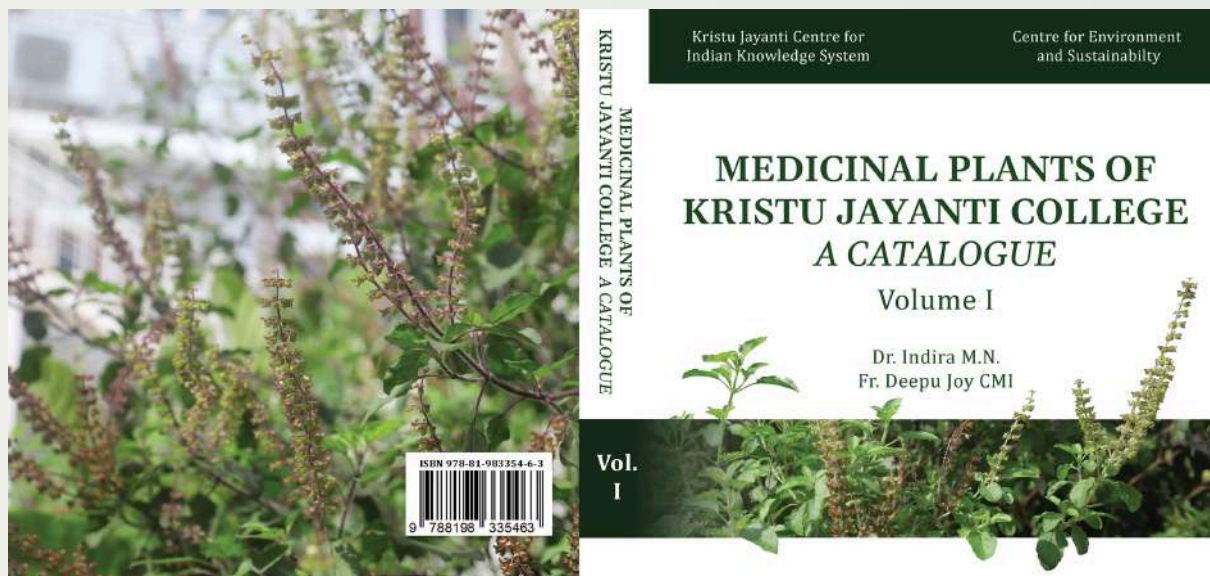
These results expand our understanding of how to choose and use information by laying the foundation for future study and advancement in information system education. The study "Implementation of QR Code Based Plant Identification System: Enhancing Educational and Exploratory Experiences of Flora at Kristu Jayanti College, Autonomous, Bengaluru" was the result of the authors' investigation into this field, which was motivated by the importance of plant information labels for educational purposes and their ability to facilitate research. To sum up, this research provides proof of the ability of technical innovation and interdisciplinary cooperation to promote a greater understanding of the natural world. We hope to encourage future generations to discover the wonders of plants and develop a sustainable relationship with our environment by skillfully fusing education and technology.



**Dr. U. Sivagamasundari**

Assistant Professor, Department of Life Sciences  
and Coordinator of Centre for Environment and  
Sustainability

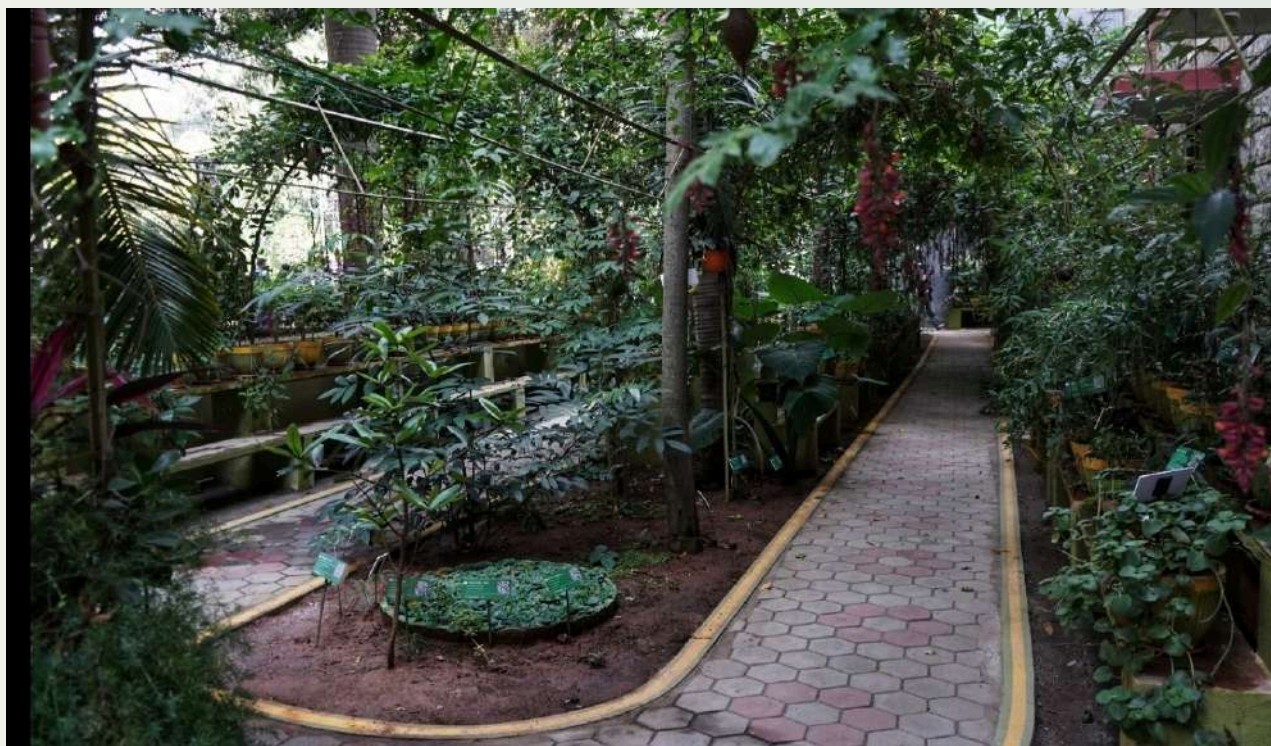
# BOOK ON MEDICINAL PLANTS



The wild and manicured green spaces of Kristu Jayanti College campus is a home to over 400 varieties of indigenous and exotic plants, These botanical treasures are known not only as aesthetic features but also as potential havens for medicinal plants with profound implications for health and well-being. The College boasts of beautiful green cover of over 40%.

The smart medicinal garden at Kristu Jayanti College maintained by the energetic faculty and students of Life Sciences Department, is a testament towards the protection maintenance and documentation of floral biodiversity. The book on "Medicinal Plants of Kristu Jayanti College- A Catalogue volume I" published by Kristu Jayanti College delves into the fascinating intersection of nature and academia. The book features the images of 100 plants captured within the campus. The pages uncover the hidden potentials of these botanical allies, offering short taxonomical description and their uses. These plants have been celebrated in traditional medicine for centuries and are now gaining renewed attention in contemporary wellness practices and are documented in this book.





The book serves as a companion in discovering the extraordinary power of the plants around us. The authentication of the plants has been done in collaboration with experts from The University of Transdisciplinary Health Sciences and Technology (TDU), Bengaluru. Through this book, we aim to foster a deeper appreciation for the natural world, highlight the importance of preserving plant diversity, and inspire collective action to protect the invaluable medicinal plants that share our academic spaces.

**Dr. Indira M.N.**

Associate Professor

Department of Life Sciences

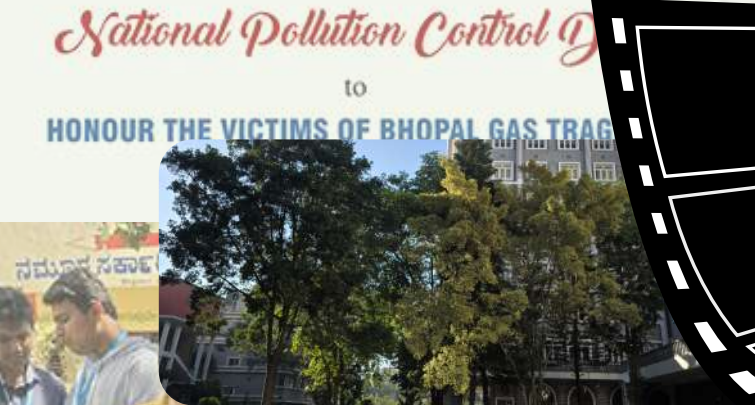
Kristu Jayanti College, Bengaluru







# CES TOWARDS SUSTAINABILITY





# CES Activities

## International Day of Clean Air for Blue Skies

Date: 07 September 2024



An awareness campaign was conducted among the academic community, including students, faculty members, staff, and society, to commemorate International Day of Clean Air for Blue Skies. Students, supported by faculty members, designed posters highlighting essential measures to maintain clean air and blue skies, such as:

- Utilizing green energy
- Reducing air pollution
- Implementing emission-free urban planning
- Improving air quality index
- Taking preventive measures against environment-related pulmonary and respiratory health issues

## Poster Awareness “No Plastic Day” on occasion of Swachhata Pakhwada

Date: 13 September 2024



Awareness was created among the academic community including students, faculty members, staff, and society as a whole by creating a digital poster on “NO PLASTIC DAY” and sharing on social media.

## Digital Poster Awareness on Commemoration of World Ozone Day

Date: 16 September 2024



Awareness was created among the academic community including students, faculty members, staff and society as a whole by creating digital poster on World Ozone Day and sharing in social media. The students designed the digital poster supported by the faculty member. Outcome: It spread awareness on

- Spreading awareness among people about Ozone Layer depletion and searching for possible solutions to preserve it.
- Raising awareness of the ozone layer's importance and the risks of its depletion.
- Encouraging the use of sustainable actions & policies to protect the ozone layer.

## Swachhata Pakhwada: Clean-up drive

Date: 20 September 2024



The Centre for Environment and Sustainability (CES), Kristu Jayanti College conducted a clean-up drive aimed at promoting environmental consciousness and sustainability as a part of its community extension program. With the primary objective of raising awareness by engaging the participants in waste management practices, the centre commemorated World Clean up day at Hormavu Agara Lake, Bengaluru.



The drive began with an orientation session, where students learned about waste management practices and the importance of maintaining a clean and green environment. Equipped with gloves, trash bags, and cleaning tools, participants cleaned the mile long trail around the lake. Awareness was raised among the locals in the area about proper waste disposal and the importance of keeping public spaces clean. The clean-up drive was organized to instill a sense of environmental responsibility in the students and equip them with practical knowledge about sustainability practices. They applied their knowledge of environmental science and waste management to real-world practices. This extension program not only increased their knowledge but also empowered them to become active contributors to environment conservation efforts within their community.

## India's Net Zero Emissions Target: Challenges and Opportunities

Date: 23 September 2024



The Centre for Environment and Sustainability (CES), Kristu Jayanti College conducted a clean-up drive aimed at promoting environmental consciousness and sustainability as a part of its community extension program. With the primary objective of raising awareness by engaging the participants in waste management practices, the centre commemorated World Clean up day at Hormavu Agara Lake, Bengaluru.

## Swachhata Hi Seva - "Plant4Mother"

Date: 25 September 2024



Nationwide “Swachhta Hi Seva Abhiyan 2024” is being observed from September 17, 2024, to October 1, 2024 emphasizing cleanliness and environmental sustainability under the theme “Swabhav Swachhata - Sanskar Swachhata.” “Plant4Mother” campaign launched by the Honorable Prime Minister on World Environment Day, June 5th, 2024 to reiterate the significance of this initiative, which calls for planting trees as a tribute to mothers and to promote environment conservation across country. The Ministry of Environment, Forest & Climate change has set an ambitious target to plant 80 crore saplings by this September 2024. As part of this initiative, to join hands with it, Our Centre for Environment and Sustainability, Kristu Jayanti College, Autonomous conducted series of activities to promote cleanliness, sustainability and environmental conservation. “Plant4Mother” campaign was conducted on Wednesday, September 25th, 2024 at the Government Primary School, K.Narayanapura, Kothanur, Bangalore. The Drive was inaugurated by the school Headmistress, Ms. B. Hemalatha with CES Coordinators and volunteers as well. Around 60 children in the school were given an awareness talk about this launch of “Plant4Mother” campaign by the CES volunteers.

### **Swachhata Hi Seva - “Pledge”**

Date: 26 September 2024



Kristu Jayanti College organized a pledge-taking event, "Pledge for Clean India," as part of the Swachhata Hi Seva initiative, aiming to promote cleanliness and hygiene among students and staff. The event drew 413 participants, comprising students and teachers/staff, who took a collective pledge to maintain a clean environment. The pledge reads: "I will neither litter nor let others litter. I will initiate the quest for cleanliness with myself, my family, my locality, my village, and my workplace. I believe that the countries of the world that appear clean are so because their citizens don't indulge in littering nor do they allow it to happen." By taking this pledge, participants committed to taking ownership of cleanliness and inspiring others to do the same.



## Energy Efficiency Day –slogan writing contest

Date: 05 October 2024



A Slogan contest was conducted for the students of Kristu Jayanti College Autonomous by the Centre of Environment and Sustainability. The theme given for the slogan competition was “This World Energy Day, Be the Change”. Slogans were collected in a google link provided. The submitted slogans were analysed as per the guidelines provided for the students and 3 winners were selected and awarded certificates.

## International E-Waste Day

Date:14 October 2024



Kristu Jayanti College (Autonomous), Bengaluru, Karnataka, in collaboration with the Centre for Environment and Sustainability (CES) and the Department of Computer Science (UG), organized an E-Waste Collection Week starting on October 14, 2024, in commemoration of International E-Waste Day. The event is themed "Join the E-Waste Hunt – Retrieve, Recycle, and Revive", aiming to promote responsible e-waste recycling practices across the campus. Students have been actively participating by disposing of their e-waste in wooden collection boxes placed at the entrances of each block.

This initiative, which ran until October 22, encouraged the college community to engage in eco-friendly practices, contributing to the Sustainable Development Goals (SDGs), particularly:

**Affordable and Clean Energy:** Encouraging energy conservation through the responsible recycling of electronic waste.

**Industry, Innovation and Infrastructure:** Fostering innovative recycling methods that support sustainable industrial growth.

By reducing e-waste and supporting environmentally friendly practices, Kristu Jayanti College is reinforcing its commitment to building a greener, more sustainable future for all.

### **Online Sustainability Challenge to Commemorate World Sustainability Day**

Date: 27 October 2024



Kristu Jayanti College (Autonomous), Bengaluru, Karnataka, in collaboration with the Centre for Environment and Sustainability (CES) and the Department of Computer Science (UG), organized an E-Waste Collection Week starting on October 14, 2024, in commemoration of International E-Waste Day. The initiative aims to raise awareness about responsible e-waste disposal and recycling practices across the campus.

The event, themed "Join the E-Waste Hunt – Retrieve, Recycle, and Revive," encourages students, faculty, and staff to dispose of old or unused electronic items in designated wooden collection boxes placed at the entrances of each block. This ensures proper e-waste management and prevents environmental harm caused by improper disposal.

Volunteers from CES and the Department of Computer Science have been conducting awareness drives to educate participants on the impact of e-waste and the importance of recycling. Additionally, interactive activities such as poster-making contests and quizzes have been organized to engage the college community.



## Digital Poster Awareness on Commemoration of National Pollution Control Day

Date: 02 December 2024



A poster was designed as part of the awareness programme in order to remind students about the significance of increasing pollution and the impact it creates on life. This day also provided an opportunity to remember and honour the victims of the Bhopal Gas Tragedy, which serves as a tragic reminder of the devastating consequences of environmental negligence and the urgent need for stringent pollution control measures. The event was organized to highlight the critical need for pollution control measures, drawing attention to various sources of pollution such as air, water, and soil contamination, and their detrimental effects on human health and ecosystems. The poster featured key facts and statistics on pollution levels, the importance of sustainability, and the role of individuals and communities in reducing pollution. It showcased actionable steps, such as reducing waste, conserving energy, and adopting eco-friendly practices.

## Digital Poster Awareness on World Soil Day

Date: 05 December 2024



The Bible mentions that God created humans from mud, which is significant because soil contains all the elements found in living beings. While soil is a non-living substance, it is vital for life as it nourishes vegetation both on land and in the ocean.

Soil provides the necessary nutrients for plant growth, making it essential for the sustenance of life on Earth. Without healthy soil, vegetation cannot thrive, and this disrupts the entire balance of the Earth's biosphere. However, due to human activities, soil is becoming increasingly contaminated. Industrialization, the use of chemicals, and excessive fertilizers are damaging its quality. To raise awareness about the importance of soil and the need to protect it, we observe Soil Day on December 5th. This day helps highlight the crucial role soil plays in sustaining life on Earth.

### **Awareness Quiz on National Energy Conservation Day**

Date: 16 December 2024



The National Energy Conservation Day and Awareness Quiz was organized on December 16, 2024, to commemorate the significance of energy conservation and inspire individuals to adopt sustainable energy practices. The program aimed to raise awareness about the critical need for energy efficiency and the role of renewable energy sources in combating climate change. An awareness quiz was circulated online among college students and teachers, encouraging widespread participation. The quiz primarily focused on simple energy-saving tips and common practices that are often overlooked in daily life. This initiative was undertaken by the club as a reminder to students and society about the importance of energy conservation.

Beyond the quiz, the event featured insightful discussions on practical strategies for reducing energy consumption, including the adoption of energy-efficient appliances, responsible electricity usage, and the potential of solar and wind energy in everyday applications. Experts from the field shared valuable insights on how small changes in energy habits can collectively make a significant impact on reducing carbon footprints. The session inspired attendees to commit to energy-saving practices and contribute to the global mission of environmental sustainability.

Also, Participants engaged in interactive activities such as group discussions and brainstorming sessions on innovative ways to conserve energy in their daily routines. The event concluded with a pledge-taking ceremony, where attendees vowed to implement energy-saving habits and spread awareness in their communities.



## **“Birds in Campus” Photography Competition to commemorate National Bird Day**

Date: 15 January 2025



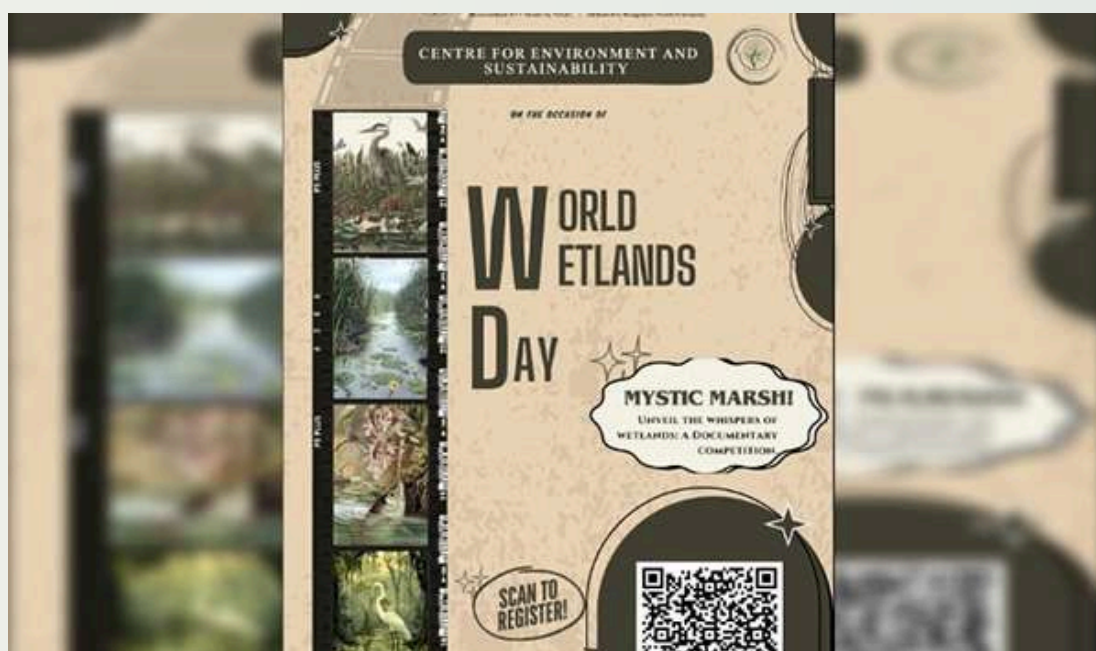
THIS IMAGE WAS  
AWARDED FIRST  
PRIZE IN THE “BIRDS  
IN CAMPUS”  
PHOTOGRAPHY  
COMPETITION

The “Birds in Campus” Photography Competition was organized on 15th January, 2025 to commemorate National Bird Day. The air is alive with the chirping of birds, a symphony often lost in the hustle and bustle of academic life. The photographic competition aimed to change that, sparking a newfound appreciation for the feathered inhabitants among the student body. The innovative event, organized by Centre for Environment and Sustainability, Kristu Jayanti College successfully fostered awareness about bird watching, ornithology, and the captivating art of bird photography.

The competition challenged students to capture the beauty and diversity of birds found within the familiar surroundings of their campus. Armed with cameras and a keen eye, participants ventured out, transforming ordinary strolls between classes into exciting expeditions of discovery.

## **Video Documentary Competition to commemorate World Wetlands Day**

Date: 21 February 2025



Mystic Marsh: The Wetland Chronicles, a video documentary competition was organized on 21st February, 2025 to commemorate World Wetlands Day. The event aimed to raise awareness about the ecological importance of wetlands and their role in climate regulation, biodiversity conservation, and sustainable water management.

Students participated by submitting short documentaries showcasing the significance of wetlands, the threats they face, and innovative conservation strategies. Through visual storytelling, they highlighted critical issues such as pollution, habitat destruction, and climate change, inspiring viewers to take action for wetland preservation.

The online format allowed students from diverse backgrounds to contribute their perspectives and creativity without geographical barriers. This approach ensured greater participation and engagement, fostering a sense of environmental responsibility among young minds. By providing a platform for digital advocacy, Mystic Marsh: The Wetland Chronicles successfully encouraged students to explore sustainability themes and express their ideas through media. The initiative reinforced the importance of wetland conservation and the need for collective efforts to protect these vital ecosystems.

### **Seed Ball Activity to commemorate World Soil Day**

Date: 06 February 2025



The Seed Ball Activity was organized on February 6, 2025, to commemorate World Soil Day at a Government Lower Primary School near Kothanur. The event highlighted the importance of soil and the role of trees in soil conservation. Additionally, school children received hands-on training in making seed balls. Approximately 50 children participated in the program, which was efficiently conducted with the support of 24 student volunteers from the Centre of Environment and Sustainability. The activity aimed to instill environmental awareness and a sense of responsibility toward nature among young learners. The children enthusiastically engaged in the process, gaining practical knowledge about afforestation and its impact on ecological balance.



## **XYLOS - Woody and Dry Floral Arrangement Competition**

Date: 25 March 2025



World Wood Day celebrated annually, aims to raise awareness about the importance of wood as a sustainable and renewable biomaterial and promote its responsible use for a harmonious coexistence between people and nature. The Centre for Environment and Sustainability organized an event XYLOS – Woody and Dry Floral Arrangement Competition on 25th March 2025 for the students of Kristu Jayanti College to exhibit their talent and creativity. The event saw the participation of students from various departments who made artistic exhibits using wood and dry plant materials. The best three exhibits were awarded. This event helped students to be aware of natural resources with a purpose to spread awareness about environment conservation and sustainability.

## **Green Screen Shot - A Short Film Competition**

Date: 22 April 2025



In commemoration of World Earth Day on 22nd April 2025, the Centre for Environment and Sustainability, Kristu Jayanti College (Autonomous), Bengaluru, proudly organized "Green Screen Shot", an eco-themed short film competition. This initiative aimed to raise awareness and inspire action towards environmental conservation through the powerful medium of visual storytelling.

Participants showcased their creativity and commitment to sustainability by crafting impactful short films that reflected pressing ecological issues and innovative solutions for a greener future. “Green Screen Shot” not only highlighted the talents of young filmmakers but also reinforced the importance of collective responsibility in preserving our planet.

### **Expert Talk on the Herp World: Amphibians and Reptiles**

Date: 22 April 2025



The Centre for Environment and Sustainability organized an expert talk to raise awareness on wildlife conservation and promote environmental responsibility among students on 22nd April 2025. The session featured Dr. Rajkumar K.P., a wildlife biologist, herpetologist, researcher, and wildlife photographer. He holds a Ph.D. focusing on the Herpetofaunal diversity of the Periyar Tiger Reserve in the Western Ghats. During the talk, Dr. Rajkumar highlighted the ecological significance of amphibians and reptiles, species often misunderstood yet vital to ecosystem balance. He shared his groundbreaking research on the rare Galaxy Frog (*Melanobatrachus indicus*), now recognized as India’s first frog flagship species. His conservation work, supported by the prestigious EDGE Fellowship from the Zoological Society of London, aims to protect this unique amphibian. The audience was captivated by his field stories and inspired by his passion for wildlife preservation. The Centre for Environment and Sustainability expressed its sincere gratitude to Dr. Rajkumar for his enriching and motivational session.



# SUSTAINABLE INSTITUTIONS OF INDIA GREEN RANKINGS 2025

## *Certificate of Excellence*

IN PURSUIT OF EXCELLENCE TOWARDS PRACTICING SUSTAINABLE  
EDUCATION, THIS CERTIFICATE IS AWARDED TO

**Kristu Jayanti College (Autonomous)  
Bengaluru, Karnataka**

Institutional Band / Category : **Platinum**

**R**  
World Institutional  
**RANKING** ■■■

  
Executive President

Kristu Jayanti College (Autonomous), Bengaluru, has been awarded the Certificate of Excellence under the Platinum category in the Sustainable Institutions of India – Green Rankings 2025. This recognition reflects the college's consistent efforts in promoting sustainable education and fostering eco-conscious practices on campus. It stands as a proud testament to our commitment toward building a greener, more responsible future.



# GREEN PROTOCOL

*Jayantian Initiative for  
Environmental Consciousness and Sustainability*

- ✦ Keep your campus clean
- ✦ Do not litter
- ✦ Close taps, save water
- ✦ Segregate and dispose waste
- ✦ Do not waste food
- ✦ Carry a reusable water bottle
- ✦ Use eco-friendly products
- ✦ Do not waste paper
- ✦ Switch off lights, save energy
- ✦ Plant trees



# NISARGA '25



Kristu Jayanti College (Autonomous)  
K. Narayanapura, Kothanur Bangalore 560077, Karnataka  
E-mail: [info@kristujayanti.com](mailto:info@kristujayanti.com)  
[www.kristujayanti.edu.in/](http://www.kristujayanti.edu.in/)