# **KUMARAGURU** Institutions

17 Oct 2024

То

National Institute of Disaster Management (NIDM), Ministry of Home Affairs, Government of India, Plot no. 15, Pocket-3, Block-B, Sector-29, Rohini, Delhi - 110042.

Respected Sir,

## Sub: Kumaraguru Institutions - Acknowledgement Cover Letter for Best Practices - Reg

Kumaraguru Institutions (KI), founded in 1984 by Padma Bhushan Dr N Mahalingam, comprises Kumaraguru College of Technology (KCT), KCT Business School (KCT BS), Kumaraguru Institute of Agriculture (KIA), Kumaraguru College of Liberal Arts and Science (KCLAS), and Kumaraguru School of Business (KSB). The institution synergizes to provide cross-dimensional education and integrated knowledge, nurturing empowered and conscientious students.

We are committed to advancing sustainable urban development, implemented several impactful initiatives aimed at enhancing the resilience of our communities and Campus. Through our interdisciplinary approach, we have undertaken the following projects and implemented certain best practices that exemplify our commitment to urban resilience and sustainability.

We are excited about the opportunity to showcase our best practices for the NIDM - Knowledge platform on urban resilience. We believe that sharing our initiatives can inspire other institutions to adopt similar strategies for urban resilience and community upliftment. As we aspire to become a member of NIDM - IUIN DRR, we consider this application a significant first step for your collaboration.

Thank you for considering our submission. We look forward to showcasing our work with other institutions all over India and engaging in discussions about sustainable & social impact initiatives for the nation building.

Looking forward to hearing from you.

C SSD

**Mr Saravanan Chandrasekaran** Asst. Vice President



## Kumaraguru Institutions: Leading the Path to Green print and Sustainable Campus

Kumaraguru Institutions, with a legacy of 4 decades of academic excellence, encompasses Educational Institutions and Centres of Excellence in the domains of Engineering, Technology, Management, Science, Agriculture, Innovation, Entrepreneurship, Liberal arts and Humanities, aspiring to offer world-class special education. Padma Bhushan Arutchelvar Dr N Mahalingam established the Kumaraguru Institutions (KI), including Kumaraguru College of Technology (KCT) instituted in 1984, KCT Business School in 2005 (KCT BS), Kumaraguru Institute of Agriculture in 2014 (KIA), Kumaraguru College of Liberal Arts and Science in 2018 (KCLAS) and Kumaraguru School of Business (KSB) in 2022 drawing strength from each other for cross-dimensional education and integrated knowledge that expands intellectual horizons and builds empowered and conscientious students. With sprawling 285 acres (about the total floor space of the Pentagon) spread across three campuses, Kumaraguru Institutions offers 25 Undergraduate programmes, 19 Postgraduate programmes and 15 Research programmes. With more than 800 teaching, research, administrative and support staff, and a dozen centres of excellence and industry-sponsored labs, KI currently impacts more than 8000 students annually. Kumaraguru Institutions have been accoladed by national accrediting and ranking agencies such as NAAC, NBA, NIRF and ATAL Ranking. Kumaraguru College of Technology has been accredited with the highest A++ Grade by NAAC, positioning Kumaraguru Institutions for national prominence.



Kumaraguru Institutions are very keen to emphasis the philanthropic approach towards Social Impact, Community engagement and coexisting sustainable lifestyle by encompassing across the entire Kumaraguru ecosystem. Witnessing the contribution,



Kumaraguru Institutions Campus in Coimbatore gets Platinum rated for 5 years by Indian Green Building Council (IGBC) for sustainability initiatives at our campus.

A milestone reached in Kumaraguru Institution's Campus Sustainability Journey! The Main Campus of Kumaraguru Institutions, Coimbatore has been honored with the prestigious Platinum rating by the CII - Indian Green Building Council (IGBC) for its outstanding sustainability initiatives.

This recognition positions Kumaraguru as only the second technical institution in the Southern Region to receive such certification, which is valid for five years. The institution excelled in the CII-IGBC Green Campus Certification - Existing Buildings category, securing a remarkable score of 81 out of 90.

The evaluation encompassed various parameters, with a focus on green concepts and techniques implemented on the campus to address national concerns such as water efficiency, energy efficiency, reduction in fossil fuel use for commuting, consumer waste management, and the conservation of natural resources. Kudos and wishes to all the students, faculty and staff who are leading various campus sustainability initiatives with Kumaraguru Microcosm at their capacities across our campus.





## **Practice 4**

Thematic Area: Sustainable Urban Development

Sub-Thematic Area: Solid Waste Management and Sanitation



Title: Resource Recovery Park

Location: Kumaraguru campus

## **Before Situation**

The campus generated significant amounts of waste, with limited segregation and processing capabilities, leading to reliance on landfills and inefficient waste management practices, and faced challenges related to waste management, and excessive use of single-use plastics. The environmental impact was significant, leading to pollution and resource inefficiencies.

A substantial volume of usable materials (Approx. 30 tons) was being discarded annually from hostels, contributing to plastic waste, e waste, hazardous waste and environmental degradation.

## **Implemented Measures**

**Resource Recovery Park** is an integrated solid waste management facility of Kumaraguru Institutions. In this facility, the waste generated in the campus is segregated and disposed responsibly through composting, upcycling, recycling, incineration, and scientific land filling. Through this initiative, we will also implement various policies to prevent and minimize generation of waste.



## Segregation of waste

The waste collected in the yard is identified and segregated. The solid wastes are categorized into:

- Paper and Boards (Various Forms)
- Plastic (Various Forms)
- E Waste
- Organic Waste
- Glass
- Wood
- Metal
- Sanitary Waste
- Fabrics

## **Disposal of waste**

The disposal of waste involves identifying the material and processing it according to its potential. The methods of disposal of waste are categorized as follows,

• **Recycle** - Any material such as paper, plastic, E -waste, Glass, metal that can be recovered, processed, and converted into a raw material for producing different products are sent to local recyclers.

• **Composting** - All the organic matter that is recovered from the campus is composted at our compost yard using a very simple method of aerobic composting. Aerobic Composting requires Carbon, Nitrogen and Microbes. All the dry leaf litter in our campus is used as source of Carbon. All the vegetable waste is used as the source of Nitrogen and the dung from native cattle that we rear in our campus is used as the source of microbes in this composting process.

• Incineration - The sanitary waste generated from our hostels and places across the campus is incinerated at the resource recovery park. This incinerator works through a four-stage pollutant-filtration namely Fire Clay filter, Wet scrubber, Water Spray and Carbon Filter. This ensures that most of the particulate matter released from the incineration is filtered to ensure minimal air pollution.

## Significant Effect After Implementation

## Waste Disposal and Resource Recovery

Kumaraguru has established responsible disposal methods for various waste types, ensuring valuable resources are recovered. Annual reports show the disposal of approximately 70 tons of overall waste, highlighting the success of these efforts.



## **Community Engagement and Awareness**

Through increased awareness and engagement, the campus has improved waste management practices. Awareness initiatives reached 7% of incoming freshers, instilling sustainable practices from the start of their academic journey. Additionally, over 80 refurbished buckets were distributed, positively impacting more than 300 individuals.

## Benchmark for Institutional Sustainability

Kumaraguru's commitment to sustainable practices has not only transformed its own operations but also set a benchmark for institutions across the region, demonstrating leadership in environmental responsibility. Tamil Nadu Pollution Control Board has awarded Green Champion to Kumaraguru Institutions for outstanding efforts in sustainability, waste management, and environmental conservation initiatives.

## **Financial Details**

Over the last three years, the Resource Recovery Park (RRP) has generated ₹45,00,000 in revenue through effective waste management practices. With an impressive recovery of 50 tons of waste per year. This demonstrates a sustainable model for waste management, and efficient resource utilization within the community.

#### **Other Major Details**

## **Plastic Reduction and Consumer Waste Management**

A focused effort has been made to minimize single-use plastics and implement sustainable consumer waste management practices across the campus. Awareness campaigns launched through Kumaraguru Microcosm and social clubs aim to educate and engage the community in these initiatives.

#### **Reuse and Refurbishment**

Efforts to refurbish and reuse items such as buckets, mugs, and clothes have been actively supported by students, who are involved in segregation and refurbishment processes, contributing to a circular economy model within the campus.