The entrance of the campus with trees on both sides. © Mohsin Bhat.

Conservation in Action:

Exploring Kumaraguru's Green Initiatives

One of the RHATC fellows interacting with the volunteers. © Arunkumar.

The initial disappointment of hearing that Dr. Rajeev couldn't join us for the session due to unforeseen circumstances was soon replaced by excitement as we were told that we would have a field visit instead. Kumaraguru Group of Institutions was already familiar to us from a previous visit, but this time was different—it was a biodiversity trail, something truly special. The first look at the campus, with its lush greenery, immediately sparked thoughts about the variety of life it might host. Could there be more biodiversity hidden within this vibrant space? These thoughts flashed through our minds as we prepared for the adventure ahead. Setting aside our initial excitement, we entered the campus with open minds, eager to explore and absorb new knowledge.

Exploring the Ahimsavanam. © Koshik V Rao.

Our visit was hosted by Miss Pranavi, a third-year graduate student, and Mr. Paramaguru, a staff member, both actively involved in the campus

Observing the nursery of native plant propagation © Koshik V Rao.

biodiversity initiative. They guided us through the 250-acre campus, showcasing various efforts and facilities aimed at promoting sustainability and biodiversity conservation. We began at the Ahimsavanam, a one-acre natural forest created in the campus. Following this, we explored their solid waste management system, where Mr. Netaji, the biodiversity initiative coordinator, joined us and explained their processes. The campus generates about a ton of solid waste and processes 5 lakh liters of sewage water daily, reflecting the scale of operations required to support its population of 12,000 people.

Next, we visited their solar power field, followed by the liquid waste management system, where treated water is purified for reuse.

Solar panels on the roof. © Mohsin Bhat.

One of the most notable stops was their nursery, which aims to raise 1.5 lakh saplings of native tree varieties to be planted both on and off-campus. They also employ a technique of hardening plants through gardening to ensure sapling survival in resource-scarce environments.

Our final stops included the campus's rainwater harvesting system and their cattle collection,

followed by a visit to the Insect Museum at Tamil Nadu Agriculture University.

Among the various initiatives we explored, Ahimsavanam stood out as a significant effort towards ecological restoration, a topic of critical importance in today's conservation debates. The rationale behind naming it "Ahimsavanam" might stem from paying respect to the Father of the Nation, but its direct connection to conservation remains unclear. Nevertheless, the name is secondary to the intention, which is commendable and deserves appreciation.

The initiative of creating and maintaining a small forest within the campus is highly promotable and holds immense potential. Beyond its symbolic value, the forest offers tangible benefits. The microclimate within the forest was strikingly cooler compared to the surrounding areas, a fact that students confirmed, particularly during the summer months. This highlights the immediate environmental benefits of such ventures.

Instead of relying on artificial barriers like concrete walls, the forest is protected through bio-fencing. Ten plant species have been strategically planted around the boundary, forming a natural barrier

The sewage treatment plant. © Mohsin Bhat.

that is already taking shape. This approach not only preserves the natural aesthetic but also supports the overall biodiversity of the space.

Considering the contemporary relevance of restoration efforts, I would personally regard this venture as one of the most impactful steps taken by the campus authorities. Ahimsavanam serves as a model for integrating conservation and sustainability into institutional spaces, offering inspiration for similar initiatives elsewhere.

At the solid waste management plant. © Shivangi.

The visit to Kumaraguru Group of Institutions provided valuable insights into their efforts toward conservation and sustainability. Among these, Ahimsavanam stands out as a remarkable initiative, highlighting the importance of restoration in the present scenario. By creating

a natural forest within their campus, they have not only fostered biodiversity but also demonstrated the environmental benefits of native plants and sustainable practices. Their innovative approach to resource management—recycling waste from the kitchen to cattle, from cattle to compost, and then back to plants—sets an example for maintaining resources in a sustainable cycle.

However, certain drawbacks need to be addressed to enhance the effectiveness of their efforts. The seeds and saplings for the nursery are being collected from across Tamil Nadu, which could introduce issues of regional invasiveness, as plant species native to one region may become invasive in another. Additionally, Ahimsavanam itself has been infiltrated by a few invasive species, which could threaten the delicate balance of its ecosystem.

Another concern is the propagation of a particular Jamun species, whose seeds are being collected from a single tree planted by the Father of the Nation during his visit to Tamil Nadu. While preserving such trees for their historical importance is commendable, using seeds from one tree for large-scale planting could reduce genetic diversity and increase the risk of inbreeding depression.

Despite these challenges, the institution's focus on restoration, biodiversity, and sustainability is inspiring. Their efforts serve as a model for integrating conservation into educational spaces, and with minor adjustments to address these drawbacks, their initiatives could achieve even greater ecological and scientific significance.

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RHATC fellows with volunteers of the biodiversity initiative. © Arunkumar.