



# Miranda House

## UNIVERSITY OF DELHI

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### Samaveshan

Environmental consciousness and response with Social Entrepreneurship

#### Objective of the Practice

Miranda House (MH) is firmly committed to **capacity building** and imparting smart entrepreneurship that is **climate resilient, gender-sensitive and socially inclusive**. MH strives to create a **holistic space of learning beyond classrooms** through community-based environmental practices and outreach efforts. The college is dedicated to generating and disseminating a consciousness of sustainable living and social entrepreneurship through various activities and programmes. The environmental practices that are being followed in the college and the outcomes achieved by them are a testimony to the commitment towards **Sustainable Development Goals (SDGs)**. In this process, young minds are trained to become the **torchbearers of social change**.

#### The Context

India in its march towards 'Atmanirbharta', is faced with a unique set of challenges having to manage **imperatives of development and pressures of environmental degradation**. Contributing towards **inclusive environment-conscious entrepreneurship and capacity building**, MH has employed an advanced strategy for **Institution-Community synthesis** through proactively **adopting strategic methods of social outreach**. In efforts geared towards environment protection and consciousness, **the institution is committed to 3R - reduce, reuse, recycle, which has expanded to 6R – reduce, reuse, recycle, recover, re-create, refuse!** This is also aligned with the **vision and mission of the college to contribute toward creating responsible green citizens**. The institution identifies the **desired developmental needs** to make a significant difference in the larger community by



# Miranda House

## UNIVERSITY OF DELHI

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strengthening engagements with institutions/bodies/agencies and the private sector through their CSR initiatives.

### The Practice

1. Aligning with its commitment to environmental consciousness, and adhering to all applicable environmental regulations, MH undertakes several innovative and **transformative green practices**. These play a vital role in achieving sustainable development.
2. MH buildings are designed to ensure optimal utilization of natural light and ventilation. The college uses solar energy through **Solar Photovoltaic (SPV) Street Lights, Solar Water Heaters** and a **Grid Interactive Rooftop SPV plant**. To conserve fresh water, the college has set up a grey **Water Recycling unit**.
3. The college has conducted **green, environmental and energy audits** as best practices.
4. MH has **verdant lawns** with **maximum tree/plant coverage**. The institution through its various societies encourages faculty and students to plant saplings on a regular basis leading to both an aesthetically pleasing and environmentally friendly campus.
5. The college has an effective **Solid Waste Management** system that starts with **waste segregation at source**. **Anti-litter drives** are regularly conducted. The **composting unit** converts **biodegradable waste** into compost. Used paper is recycled at the **Paper Recycling Unit**. The recycled paper is made with natural additives: leaves, fruits and petals for improving the appearance, texture and colour, imparting pest-resistance by neem leaves and higher tensile strength using bamboo shavings.
6. MH is **dedicated to capacity building and imparting entrepreneurship skills** that contribute towards the welfare of the larger community. This has been reflected in our environment friendly practices, efforts towards sustainable development and community outreach initiatives led by **Unnat Bharat Abhiyan (UBA) cell, Enactus**,



# Miranda House

## UNIVERSITY OF DELHI

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- NSS, NCC, and MH *Vatavaran*. They have been striving toward **nurturing meaningful partnerships across communities**.
7. The **UBA cell** has adopted five villages and implemented a Village Development Plan (VDP). They train rural women to make **handmade masks and bags from sustainable materials for sale**. This imparts **livelihood skills enabling them to become entrepreneurs**.
  8. UBA cell conducted a two-week online certificate course on **Community Outreach Program: ‘Together we can’** to understand the nuances of positive collaborative community engagement. More than 600 students and faculty from different parts of the country attended this programme.
  9. **Enactus**, seasoned in **developing innovative environment-friendly business models for life and livelihood for marginalized communities**, also effectively leads community development projects. They have been involved in activities such as **employing women from low-income areas and training them in stitching, sewing and making natural handmade spices through sustainable and eco-friendly mechanisms**.
  10. **MH undertakes awareness generation programmes for environmental consciousness like *Swachhta Pakhwada*** for the neighbourhood. MH is also collaborating with **UNEP** through students' **Little Book of Green Nudges (LBGN)** programme generating awareness of environmental protection. The college has promoted initiatives like **“Bring your Own Mug”** in order to discourage **Single Use Plastic (SUP)**. MH received the **‘Plastic Free College of the Year’** award from the Indian Institute of Ecology and Environment (IIEE) and the National Institute of Cleanliness Education and Research (NICER), on World Environment Day 5 June 2018.
  11. Conservation of water, food, paper, electricity, and other resources is encouraged through student-led campaigns.



# Miranda House

## UNIVERSITY OF DELHI

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### Evidence of Success

1. The surplus energy generated by the **7kWp renewable SPV that is fed into the grid** leads to deduction in equivalent electricity units. **40 standalone SPV lights and 7 Solar water heaters** contribute towards electricity saving.
2. **300-400 Litres of grey-water** from hostel kitchen is recycled using **Hydroponics technique** which, along with rejected water from the Industrial RO units, is channelised for irrigating lawns and gardens.
3. MH lawns cover a total area of **398279 sq. ft.** with **163 full-grown, 350 semi-grown trees**, and approximately **9920 shrubs/hedge plants**. The college has a carbon absorption capacity of **22.49 tons**.
4. The **Composting Unit** processes up to **100 kg of biodegradable waste** and a proportionate amount of **horticulture waste** every day. MH also encourages sustainable practices in its **vicinity**. The neighbouring **non-teaching staff-quarter** has been recognised by the **Municipal Corporation of Delhi** for its **zero-waste management**.
5. MH **souvenir-shop sells** in-house recycled paper products, compost, and indoor plants. These are also presented as **gifts and souvenirs** to guests and resource persons.
6. In association with Pradhan Mantri Kaushal Vikas Yojna (PMKVY) and National Skill Development Corporation (NSDC) MH has launched skill-hub centres on the campus.
7. The Skill Hub imparts and inculcates skills among underprivileged and school drop-out women between the age-group of 15-40 and makes them empowered and *Atmanirbhar* (self-reliant). **Two courses** under this initiative are: 1) 3 months course on **Green Paper Bag Making** which has **74 students** and 2) 6 months course on **Artificial Intelligence** which has **17 students**.



## Miranda House UNIVERSITY OF DELHI

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8. Community outreach initiatives like **Skill-Hub** and **UBA Cell** train women from marginalized sections in making **Green bags** and **Home-made Masks** respectively.
9. **Entrepreneurship projects** like *Ikhtiyaar* aim to produce manure using water hyacinths extracted from river Yamuna. **Multidisciplinary research projects** like *Climate Variability, Water Security and Livelihood Resilience* investigate the role of indigenous knowledge and modern technologies to create climate-smart communities in rural areas.
10. MH was recognized as a **sustainable campus** by MGNCRE, Department of Higher Education, Ministry of Education, Government of India. In September 2019, MH received an award for delivering **Excellence in the area of Environment and Society** given by Pandit Deendayal Upadhyaya Smriti Sansthan (PDUSS) under the guidance of the Ministry of Environment Forest and Climate Change (MoEFCC).
11. MH has been recognized as a '**Social Entrepreneurship, Swachhta & Rural Engagement Cell (SES REC) Institution**' for its community outreach, entrepreneurship and environmental awareness programmes post COVID-19 by Mahatma Gandhi National Council of Rural Education Department of Higher Education, Ministry of Education, Government of India.

### **Problems encountered, and resources required**

1. The institution can expand these **outreach endeavours** with greater resources to make meaningful contributions to national efforts toward sustainable living.
2. With time, the college will require greater **capacity for e-waste management**.
3. MH needs to create a viable **Business to Business network, markets** and **generate sufficient resources** to support social entrepreneurship in this venture.
4. The outreach programmes can further improve when these upgraded skills are **sustained** over a period of time.
5. **Removing socio-cultural and language barriers** has been identified as crucial for building durable ties with the community.



## Miranda House UNIVERSITY OF DELHI

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6. More viable **economic models** with **promotion** of environment-friendly practices are needed to enhance the **marketing of recycled products**.
7. **Increased financial assistance** is required for efficient maintenance of several environmental projects undertaken by the college.

### Future Plans

1. MH is forging ahead to bring scalability to this best practice by setting up of **Social Entrepreneurship, Swachhta and Rural Engagement Cell (SES REC)** supported by MGNCRE, **Ministry of Education**. MH will offer **short-term research internships** and conduct **workshops** on Sanitation, Hygiene, Waste, Water and Energy Management.
  2. Disaster Preparedness Team, Centre for Environmental Studies and Disaster Management along with IBSD MH are planning to conduct a range of **multidisciplinary workshops** and **risk assessment mapping**.
  3. UBA cell plans to expand its initiatives towards **holistic school education and strengthen sustainable livelihood initiatives** for rural women.
  4. MH will enhance the **use of renewable solar energy** by installing a **virtual solar metric** to be completed by 2023.
  5. **Panchavati** trees were planted, adding to its efforts for *Nakshatra Vanam* instilling **Vedic knowledge** about **conserving biodiversity**.
  6. MH will continue to build **stronger intra-community ties** in promoting environmental literacy among the target community, along with imparting skills for a better future.
  7. The marketing of homemade products can be enhanced by e- marketing.
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