

## The Significance of Incorporating Environmentally Friendly Practices within Higher Educational Institutions to Promote Sustainability

**\*Ram Singh Meena**

### **Abstract**

The goal of the current research is to investigate the different Green practices used in higher education institutions (HEIs) in order to achieve environmental sustainability and ensure that social and economic growth coexist with the environment. Some green practices that can address global environmental issues like climate change and global warming include the use of renewable energy sources, responsible conservation and management of flora and fauna, rainwater harvesting, proper disposal of e-waste and chemical waste from laboratories, reducing the use of non-renewable resources, recycling and reusing precious and limited resources, and building green and eco-friendly structures using locally available building materials and traditional. Because they provide a good example for society, HEIs are crucial in raising environmental awareness among the general public as well as among students. This study also suggests certain green measures, such as offering certificate programmes in organic and natural farming and encouraging a green lifestyle. By reducing carbon footprints and enhancing the institution's reputation, these green initiatives may enhance our quality of life and help preserve the environment.

**Keywords:** Green practices, rainwater collection, solar panels, audits, environmental sustainability, and HEIs

### **Introduction**

The only planet in our solar system that is home to life is Earth. Only the Biosphere, or the thin layer that covers the planet, is home to life. Every living thing interacts with its surroundings and is dependent upon the others.

Our mother planet is in serious danger as a result of flawed development strategies that led to opulent lifestyles or contemporary use and toss culture. It wasn't until the early 1970s that we recognised how detrimental air pollution was to human health and how important it was to pursue sustainable development, which would improve our quality of life while protecting and enhancing our limited natural resources, that we realised this.

Sustainability is an issue that has been discussed and implemented in the educational field at several international conferences, which has also eliminated national borders across domains.

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Consequently, since its introduction in the Brundtland paper "Our Common Future" at the 1987 United Nations Conference on Environment and Development, the concept of sustainable development has drawn attention from all around the world (Brundtland, 1987). Colleges and universities are still falling behind in incorporating green practices into their institutional policies in order to achieve sustainability.

Higher education establishments are little representations of Mother Earth, moulding the brains of future generations.

According to Alshuwaihat and Abubakar (2008), their work culture influences not just the college community but also extends traditions of environmental sustainability outside of it. Thus, housing, socioeconomic contentment, and employability are all correlated with quality of life. According to Kadir et al. (2012), green practices are a crucial part of the campus environment and have a bearing on the university's reputation.

### **Literature Review**

According to Roy et al. (2008), "greening the curriculum" focuses on two key challenges for environmental programming in higher education: cutting down on waste and energy use on campus. A significant step towards reducing the infrastructure and activities used in traditional learning courses is distance learning. By encouraging e-learning, fuel and power usage will be drastically reduced. Cole (2013) identifies many facets of the function of higher education institutions in relation to green initiatives. The knowledgeable stakeholder can provide fresh answers on both a local and global scale. The teaching staff in higher education is tasked with achieving certain objectives in order to teach students about environmental sustainability.

In order to raise pupils' awareness of their surroundings, educational programmes and environmentally friendly activities are crucial, according to Chan (2013) and Cole (2013). Students should get environmental education as part of their curriculum (Barr, 2012). "The people system lies within the eco-system, representing supportive function of the environment in sustaining human life," claims Beringer (2006). Reducing trash, using more energy-efficient sources, conserving water and using less of it, creating a healthy work environment, and maintaining clean indoor air are all ways to achieve environmental sustainability (Sonetti et al., 2016). These programmes have the potential to increase everyone's quality of life, boost economic growth, and lessen their environmental impact (Mat et al., 2011).

### **Objectives of the study:**

1. To draw attention to HEIs' need for green practices.
2. To enumerate the green initiatives that HEIs now use.
3. To assess the environmental effect of green activities.
4. To advise adoption of some additional green practices in HEIs.

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**Methodology:**

A technique is created with the study's aims in mind to hasten the realisation of those goals. This research is being done at the institutional level. Following the study of the literature, a brief survey of HEIs—which comprised government and private colleges as well as universities (Central, State, and private)—was carried out. Additionally, online searches and tabulations of these HEIs' green practices were conducted.

**Result and Discussions****Table 1 Green Practices as practised by Higher Educational Institutions (HEIs)**

S. No	List of green practices
1.	Energy Conservation and Management
2.	Annual Audit of Air, Water and Soil quality
3.	Conservation of water (Rain Water Harvesting)
4.	Conservation and Management of Flora and Fauna
5.	Transport management
6.	Green Library
7.	Promotion of Reduce Recycle and Reuse mindset

**❖ Energy Preservation and Administration:**

Life is impossible without energy as it powers the campus's air conditioning, coolers, computers, fans, heating systems, and other essential systems. It is our responsibility to encourage the campus to employ renewable energy sources and natural lighting, since the former improves mood. It is advantageous for a sustainable environment in addition to being profitable (Kadir et al., 2012; Bantanur et al., 2015). at save energy, use LED lighting, low-wattage white light bulbs, and set the campus air conditioner at 25 degrees Celsius. Solar panels should be installed on buildings' roofs.

**❖ Annual Soil, Water, and Air Quality Audit:**

The three primary components of an ecosystem are air, water, and soil; variations from the average have an impact on the ecosystem either directly or indirectly. Every institution has a primary responsibility to verify these parameters once a year, and if there is any departure from the prescribed range, appropriate action and precaution should be taken to enhance the quality of the campus's water, air, and soil.

**❖ Water Conservation (Harvesting Rainwater):**

Rain is a natural and essential gift from God that sustains life. It is now our responsibility to figure out how to store rainwater so that not a single drop is wasted. The goal of rainwater gathering is to

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address the freshwater problem. This indicator uses a collection system fastened to campus building roofs to collect rainfall. Rainwater harvesting is considered a green activity due to its ability to offer sustainable water supply. (Ayog and others, 2015). Recycling waste water on university campuses is another water management project (CGSS, 2009).

❖ **Preservation and Administration of Fauna and Flora:**

Rich biodiversity inside the establishments may enhance the soil, water, and air quality. For stakeholders, access to clean water and fresh air are essential need. Planting trees should be encouraged, and curriculums should include the management of flora and wildlife.

❖ **Transportation Administration:**

In order to mitigate air and noise pollution on campus, cars have to be confined to designated parking zones.

Cycling and walking habits will undoubtedly enhance the surrounding environment and reduce the number of automobiles on campus, according to Kamal et al. (2015). Carbon monoxide, nitrogen oxides, volatile organic compounds (VOCs), suspended particle matter (SPM), and carbon dioxide (CO<sub>2</sub>) make up the smoke from these cars. It is also possible to lessen the amount of noise pollution that cars produce (Darus et al., 2009).

According to Kadir et al. (2012), carpooling and public transport are viable options for achieving a clean environment on university campuses.

❖ **Green Library**

The idea of a "green library" reduces environmental impact while enhancing interior air quality. To optimise the utilisation of natural sunshine and fresh air, library buildings should be constructed and designed in an ecologically friendly manner. Traditional knowledge and construction materials that are readily accessible locally should be used wherever feasible. Using online study resources should optimise resource conservation. By offering accurate information on all green themes, libraries assist the community and serve as role models for sustainability, according to Antonelli (2008).

❖ **Encouragement of a Reduce, Recycle, and Reuse mentality**

People with a "Reduce, Recycle, and Reuse" mentality may revolutionise environmental sustainability. There won't be a trash disposal issue if we encourage children to participate in a variety of green activities that support the reduce, recycle, and reuse philosophy. This will contribute to a clean and green environment.

Most government-run institutions either have working roof-top solar panels or are in the process of installing them in order to help meet the United Nations Sustainable Development Goals of lowering carbon footprints. Additionally, a few private HEIs have solar street lighting and roof-top panels that are operational. Due to a lack of funding and technical resources, regular audits of the quality of the

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air, water, and soil are seldom conducted. Every HEI plants trees every year during the monsoon season, yet the significant plant death rate resulting from inadequate post-plantation maintenance is evident. In order to increase plant survival rates, post-plantation care should be prioritised. Sustainable development, according to Nifa et al. (2015), promotes green buildings with lower energy and water use as well as a smaller carbon impact. The primary causes of carbon footprints on campus are paper waste, chemical waste, furniture trash, and e-waste. Recycling and appropriate disposal may reduce these.

#### **RECOMMENDED GREEN PRACTICES:**

These are a few eco-friendly strategies that HEIs may use.

1. Housewives may enrol in eco-friendly summer courses like kitchen gardening.
2. Encouragement of an eco-friendly lifestyle
3. Offering certificate programmes in vermi-composting, organic and natural farming, and making the most out of waste.
4. Encouraging paperless offices
5. Honouring a staff member and a student for their green efforts at an annual ceremony.

#### **CONCLUSION:**

By organising a variety of on-campus and off-campus environmental events, HEIs are now playing a significant role in raising environmental awareness among their stakeholders. By putting green measures into practice on campus, they are also educating the general public. Green campuses serve as examples for other establishments. However, there is still much work to be done since preserving the environment is becoming a complicated problem that may be handled by incorporating green techniques both literally and figuratively in order to achieve sustainable development.

**\*Associate Professor  
Department of Botany  
Govt. College Karauli**

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