



**BHARATI VIDYAPEETH  
(DEEMED TO BE UNIVERSITY)  
PUNE**

**BEST PRACTICE-2**

## **Title of the practice**

Enabling sustainability: Driving impact through implementation of SDGs across education, research, and outreach

## **Objectives of the Practice**

### **1. Education that Transforms Lives:**

To integrate sustainability principles into curricula equipping future leaders with knowledge and skills to address global challenges.

### **2. Building Knowledge Societies:**

To contribute to research aimed at developing innovative solutions for sustainability challenges, fostering collaboration between academicians and communities.

### **3. Science and Innovation for Sustainable Future:**

To engage school communities through outreach to raise awareness and build capacities to implement education for sustainable development (ESD).

### **4. Partnerships for Sustainability:**

To collaborate with local and global stakeholders to address specific sustainability issues, fostering partnerships for effective initiatives.

### **5. Catalysts for Sustainable Development:**

To serve as catalysts and drive positive change for sustainable development by educating, researching, and actively engaging with all stakeholders.

## **The Context**

Sustainable development today is paramount and as communities face environmental degradation, climate change, and biodiversity loss the role of academia in addressing these challenges has become increasingly crucial. Through their commitment to education, research, and outreach, higher education institutions are key drivers of societal change and progress.

Bharati Vidyapeeth established the Bharati Vidyapeeth Institute of Environment Education and Research (BVIEER) in 1994. It embodies Bharati Vidyapeeth's unwavering commitment to addressing environmental challenges and advancing the Sustainable Development Goals (SDGs). Through its various activities that include

education, research and outreach contributing to sustainability and mitigating environmental problems, BVIEER has evolved as key institution in the country to address sustainability challenges.

Its interdisciplinary curriculum prepares future leaders to tackle global challenges and drive positive change. Research efforts focus on developing innovative interdisciplinary solutions and informing policy. Outreach initiatives engage school communities, local self-governing bodies, government officials and students fostering awareness and action at individual and institutional levels. BVIEERs partnerships across stakeholders and sectors are the lynchpin of its sustainability programs and positions it as a leader in addressing sustainability challenges and advancing the SDGs.

BVDU has 25000+ students in its various programmes, educating them and making them aware of key environmental issues and SDGs goes a long way in environmental protection and sustainability.

### **The Practice**

**Integrating sustainability principles:** The Institute's sustainable development education spans over a decade, beginning with faculty orientation and leveraging international partnerships to cultivate faculty awareness towards **integrating sustainability into curriculum**. The curriculum is now aligned with Sustainable Development Goals (SDGs).

The master's programs include, a **mandatory Sustainable Development course** spanning 36 hours. **Co-curricular activities** such as interactive environment games, ICT-based footprint calculators, recycling drives, discussion events ('wild katta'), film screenings, campus greening drives, and bird watching undertaken by student clubs alongside campus-wide sustainability events, further fortify students' understanding of SDGs. The teaching of UGC's **Compulsory Core Module in Environment Studies** across all programs in the University emphasizes the sustainability dimension in all programs.

**Contributing to research:** The institute's collaborative, interdisciplinary research links to several other domains such as health geoinformatics, environmental biotechnology,

microplastic pollution, air pollution and 4IR technologies, urban expansion modelling with geoinformatics, micro metrological modelling for urban health islands and comparative citizen science (in India and Germany simultaneously), etc. Students align their six-month research projects with relevant SDGs, contributing to innovative local solutions. The research at BVIEER aligns to SDG 3, 4, 6, 7, 8, 11, 12, 13, 14 and 15.

**Engaging with school communities:** The institute's outreach education program spans 150 schools nationwide, fostering sustainability and climate change education, emphasizing innovation and life skills. Collaborating with the University of Cologne, Germany, BVIEER implements citizen science initiatives, providing mobile access to sensor data for air pollution awareness. SDG posters reach 9000 Maharashtra schools through partnership with the State Social Forestry Department. The students participate in various community engagement activities relating to SDGs.

**Collaborating with stakeholders:** The institute collaborates with Engagement Global, Germany, on a six-month Leadership Program on Education for Sustainable Development (ESD), training educational leaders nationwide enabling the integration of ESD concepts into state training programs. This initiative has integrated ESD concept into state training programs and textbooks.

It is a consultant to national (DST, NCERT) and state (Forest Department) government projects, offering science-based inputs on climate change and sustainability policies. Additionally, it partners with industries, providing consultancies on biodiversity conservation policies.

**Serving as catalysts and driving positive change:** The comprehensive multipronged approach involving various stakeholders' underscores BVIEERs pivotal role as catalyst for sustainable development, driving meaningful progress towards achieving the SDGs and fostering positive change on local, national, and global scales.

### **Evidence of Success**

**Curriculum Alignment and Progression:** the curriculum is aligned with SDGs with standalone sustainability courses, integrated sustainability content, and value-added environmental courses such as Nature Based Solutions, Sustainable Lifestyles etc. Our

unique curriculum fosters robust international collaborations, strengthening our sustainability initiatives. Regular joint fieldwork sessions with international students and teaching modules led by international faculty enrich the curriculum and also offer diverse cross-border perspectives. **Our distinctiveness led us to secure a highly competitive grant for international exchange and has sparked the opportunity to craft a joint master's program curriculum, made possible by a seed grant from DAAD (German Academic Exchange).**

**Research Impact:** the institute's contributions are evident in published papers across diverse sustainability domains, including high-impact journals, handbooks for teachers, and SDG posters. Our credibility has led the government to seek our involvement in various committees, funding from government and corporates for research. Furthermore, faculty members' appointments to national and international committees drive policy and curriculum development in Environmental Studies. Recognitions such as Lifetime Service Awards, Young Naturalist Awards, and inclusion in prestigious lists like Top 75 Women in STEAM further elevate our stature, solidifying our position as a leading sustainability institute nationally. **Policy inputs provided by the institute have resulted in concrete programs at both national and state level for fostering conservation and sustainability education.**

**Community Engagement:** In the past five years, our impactful initiatives resulted in number of outreach workshops for educational leaders. Additionally, we have conducted national-level seminars reaching over 1000 participants across various states. Over 800 outreach activities and training modules for students have been conducted.

### **Problems Encountered and Resources Required**

- Limitations in Trained Manpower and Financial Resources
- Up scaling of Interdisciplinary Collaboration
- Challenges in scaling successful sustainability initiatives at regional and national level
- Socio-cultural and economic Barriers

- The institute is mitigating these challenges with dedicated intramural funding, additional grants from various agencies and NGOs, capacity building measures and its sustained efforts towards achieving SDGs.

### **Notes (Optional)**

In conclusion, addressing climate change sustainability remains a critical global imperative, demanding urgent attention from all stakeholders, particularly the professionals of tomorrow. Our initiatives stand out as one of the few in the country employing a multipronged strategy to tackle these pressing issues with a structured programme and appropriate action. Our journey towards integrating sustainability principles into university curricula has achieved a remarkable success. However, some challenges remain. Through embracing interdisciplinary collaboration for teaching and research, engaging with communities, policy makers, corporates and cultivating a culture of sustainability within academia, we have become true catalysts for positive change at local, national, and global levels. We believe every effort counts towards building a more sustainable future.