

**Sensitization Session on
Innovation Approach for Sustainable Technology
Development through National School Paryavaran
Competition and Harit Ghar Initiatives**



SSIP/IIC Self Driven Activity

30-07-2026

SSIP-IIC

GOVERNMENT ENGINEERING COLLEGE, VALSAD

Coordinator

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Summary

Government Polytechnic, Valsad organized an impactful sensitization session centered on empowering engineering students to adopt and create innovative solutions for future sustainable technology development. Led by expert speakers **Dr. K. L. Mokariya** and **Dr. R. C. Malan**, the event provided a roadmap for young technical minds to align their engineering capabilities with national environmental goals.

The session focused on bridging theoretical engineering knowledge with practical environmental stewardship, motivating students to participate actively in the **National School Paryavaran Competition (NSPC)** and implement the **Harit Ghar (Green Home)** model within their communities.

Key Address & Expert Perspectives

Address by Dr. K. L. Mokariya and Dr. R. C. Malan

- **Role of Engineering in Sustainability:** Highlighted how future technological advances must prioritize energy efficiency, carbon footprint reduction, and resource optimization.
- **Student-Led Innovation:** Urged diploma students to design projects and prototypes focused on renewable energy integration, smart power management, and industrial waste reduction.
- **Academic-Practical Alignment:** Emphasized that engineering solutions should directly address real-world environmental challenges faced by rural and urban communities in Gujarat and across India.
- **Environmental Consciousness:** Stressed the immediate need for mindset transformation among youth towards proactive conservation rather than passive awareness.
- **Framework Engagement:** Detailed how national-level platforms provide students with a recognized showcase for eco-innovations and grassroots action.
- **Community Outreach:** Encouraged students to serve as environmental ambassadors by taking sustainable engineering concepts from the lab into surrounding households.

Core Focus Areas & Technical Frameworks

1. National School Paryavaran Competition (NSPC)

- **Objective:** Encourages nationwide student participation in environmental problem-solving, awareness drives, and sustainable product design.
- **Student Action:** Participants were guided on registering for NSPC, formulating project ideas, measuring environmental impact, and presenting technological solutions for regional ecological issues.

2. Harit Ghar (Green Home) Initiative

The resource persons detailed the **Harit Ghar** framework driven by *Paryavaran Sanrakshan Gatividhi*, emphasizing five key conservation pillars that can be augmented with simple engineering innovations:

- **Water Conservation (Jal Sanrakshan):** Rainwater harvesting setups, greywater filtration systems, and low-flow household fixtures.
- **Energy Conservation (Urja Sanrakshan):** Transitioning to LED lighting, rooftop solar power installations, and smart home energy monitoring units.
- **Land & Plant Conservation (Bhumi & Vriksh Sanrakshan):** Household composting units, balcony/kitchen gardening, and soil health preservation.
- **Forest Preservation (Van Sanrakshan):** Minimizing paper consumption, digital workflow adoption, and community tree plantations.
- **Animal & Habitat Protection (Jeev Sanrakshan):** Creating eco-friendly habitats and promoting harmonious coexistence within urban ecosystems.

- **High Engagement:** Attendees actively participated in an interactive Q&A session covering low-cost green technology, IoT-based environmental monitoring, and solar power applications.
- **Direct Enrollment Commitment:** A substantial number of students committed to registering for NSPC and assessing their own residences against the Harit Ghar green benchmarks.
- **Departmental Projects:** Faculty members agreed to mentor student groups in converting sustainable engineering concepts into final-year diploma projects.

The sensitization session served as a catalyst for mobilizing the student body at Government Polytechnic, Valsad toward actionable environmental responsibility. By integrating the structural frameworks of NSPC and Harit Ghar with core engineering disciplines, the event successfully instilled a practical roadmap for developing clean, scalable, and future-ready technology

Participation Details: (students = 196) +5 =201 total



Class to Class sensitization



Class to Class sensitization



Class to Class sensitization