

## **Innovative STEM DIY Kits and Science Fair Projects in India 2025 - 2026**

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### **Abstract –**

This article explores a collection of innovative DIY STEM kits available in India for 2025–2026. These projects, ranging from solar-powered lamps to Wi-Fi weather stations, are designed to enhance learning, creativity, and sustainability for students and hobbyists. With unique features and practical applications, these kits serve as ideal school STEM projects and science fair entries.

### **Introduction**

STEM education in India has been gaining significant momentum, particularly with the rising interest in hands-on learning and project-based education. Science fair projects in India are increasingly emphasizing innovation, sustainability, and practical application. With the growing popularity of school STEM projects, students are looking for the best projects 2025 that not only demonstrate concepts but also have real-world impact. DIY kits in India offer the perfect solution, enabling learners to explore electronics, robotics, and renewable energy while building creativity and problem-solving skills. This article highlights some of the most exciting and accessible DIY kits that can inspire students and teachers alike.

### **DIY Wi-Fi Controlled Pet Feeder Kit**

This ESP8266-based pet feeder kit combines IoT and 3D-printed parts to create a smart dispenser for pets. It allows users to control feeding schedules via Wi-Fi, making it practical for busy pet owners while also teaching students about smart home automation. Its unique selling point is the combination of functionality, education, and practical everyday use.

Source: <https://smartxprokits.in/diy-wifi-controlled-pet-feeder-kit-esp8266-smart-dispenser-with-3d-printed-parts/>

### **DIY Solar Bottle Lamp V2.0 Kit**

This upcycled solar lamp kit transforms a plastic bottle into a renewable light source with a 3D-printed enclosure. It promotes sustainability by repurposing waste materials and harnessing solar power. Ideal for science fair projects in India, it teaches

students about renewable energy, recycling, and environmental consciousness.

Source: <https://smartxprokits.in/diy-solar-bottle-lamp-v2-0-kit-upcycled-plastic-bottle-solar-light-with-3d-printed-enclosure/>

### **DIY Tracey Drawing Machine Kit**

This Wi-Fi art robot kit based on Wemos D1 Mini introduces students to robotics and automation. It uses 3D-printed components and programming to create artistic drawings, combining technology and creativity. Its uniqueness lies in merging art with STEM, making it one of the best projects 2025 for creative learners.

Source: <https://smartxprokits.in/diy-tracey-drawing-machine-kit-wemos-d1-mini-wi-fi-art-robot-with-3d-printed-parts/>

### **DIY Solar Powered Wi-Fi Weather Station Kit**

This weather station kit integrates a Wemos D1 Mini Pro and BME280 sensor for real-time data monitoring. It allows students to collect and analyze weather information remotely. As a practical STEM project, it combines IoT, renewable energy, and data science, making it ideal for school STEM projects in India.

Source: <https://smartxprokits.in/diy-solar-powered-wifi-weather-station-kit-with-wemos-d1-mini-pro-bme280-sensor-for-real-time-remote-monitoring/>

### **DIY Mini Lab Power Supply Kit**

This lab power supply kit is built using an XL4015 buck converter with adjustable voltage output and LED display. It helps students understand the basics of electronics and circuit design while providing a useful tool for future experiments. Its compact and educational design makes it perfect for budding engineers.

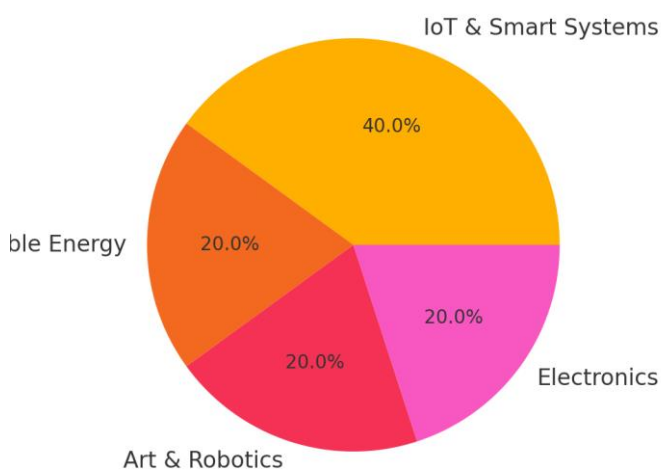
Source: <https://smartxprokits.in/diy-mini-lab-power-supply-kit-with-xl4015-buck-converter-volt-amp-led-display-adjustable-voltage-output/>

## Comparative Analysis of DIY Kits

Project	Focus Area
Wi-Fi Pet Feeder	IoT, Smart Home
Solar Bottle Lamp	Renewable Energy, Recycling
Tracey Drawing Machine	Art & Robotics
Wi-Fi Weather Station	IoT, Data Science
Mini Lab Power Supply	Electronics, Circuit Design

5. <https://smartxprokits.in/diy-mini-lab-power-supply-kit-with-xl4015-buck-converter-volt-amp-led-display-adjustable-voltage-output/>

Focus Area Distribution of DIY Kits



## References

1. <https://smartxprokits.in/diy-wifi-controlled-pet-feeder-kit-esp8266-smart-dispenser-with-3d-printed-parts/>
2. <https://smartxprokits.in/diy-solar-bottle-lamp-v2-0-kit-upcycled-plastic-bottle-solar-light-with-3d-printed-enclosure/>
3. <https://smartxprokits.in/diy-tracey-drawing-machine-kit-wemos-d1-mini-wi-fi-art-robot-with-3d-printed-parts/>
4. <https://smartxprokits.in/diy-solar-powered-wifi-weather-station-kit-with-wemos-d1-mini-pro-bme280-sensor-for-real-time-remote-monitoring/>