Exploring Sustainability at the Institute’s Experimental Facilities

## Description

???? The **Institute of Plant Breeding and Genetic Resources** isn’t just a research center—it’s a hub for learning, where students and the public can experience sustainable agriculture and circular economy principles in action. As part of the **PRIMA-SAFE** project, the institute offers hands-on education on advanced agricultural techniques that promote resource conservation and resilience.

Visitors to the institute get an up-close look at innovative methodologies used in sustainable farming, including:

1. **Water Reuse in Agriculture**: Students learn about the process of treating wastewater to make it safe for crop irrigation. This involves filtration, nutrient management, and quality control to ensure

that reused water supports healthy plant growth while conserving fresh water.
2. **Circular Nutrient Management**: The institute demonstrates how nutrients in treated wastewater, such as nitrogen and phosphorus, are repurposed to reduce reliance on synthetic fertilizers. This approach maintains soil health and closes nutrient cycles, aligning with circular economy principles.
3. **Resilient Crop Breeding**: Through their work in plant genetics, researchers at the institute show how specific crop traits are selected to enhance tolerance to treated water, drought, and other environmental stresses. Visitors witness firsthand how plant breeding can adapt agriculture to future climate and water availability challenges.

These educational visits empower young minds and the public to understand the real-world applications of sustainable agriculture. By connecting science with practical experience, the institute fosters a new generation committed to sustainability and environmental stewardship.

**Category**

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