

**ICAR-National Dairy Research Institute,**

**Karnal-132001, Haryana**

## **Environmental Sustainability Policy**

**"Pioneering Sustainable Dairy Science for a Greener Tomorrow"**

### **1. Preamble & Vision**

As India's premier dairy research institution, ICAR-NDRI recognizes that sustainable livestock production is inextricably linked to environmental health. This policy serves as a roadmap to transform the ICAR-NDRI campus into a "Green & Circular Campus," aligning with the [National Education Policy \(NEP\) 2020](#), [UGC Quality Mandate](#), and the [Ministry of Environment, Forest and Climate Change \(MoEFCC\)](#) guidelines.

### **2. Policy Objectives**

- To achieve **Carbon Neutrality** in campus operations by 2040.
- To integrate **Sustainable Development Goals (SDGs)** into the core research academic curriculum and outreach activities of the university.
- To establish a **Circular Economy** model for dairy/plant waste and water management in the university
- To educate faculty, staff, students and residents of the campus about the issues related to Sustainable Development Goals (SDGs)

### **3. Core Policy Pillars**

#### **A. Energy Conservation & Renewable Energy (SDG 7 & 13)**

- **Solar Transition:** Installation of rooftop solar PV systems on all major administrative and academic blocks to meet at least 30% of campus energy needs.
- **Energy Efficiency:** Mandatory use of BEE Star-rated appliances and 100% LED lighting across the campus and hostels.
- **Green Building Standards:** New infrastructure must comply with **GRIHA** or **LEED** green building ratings, optimizing natural light and ventilation.
- Promoting responsible use and consumption of energy among the

#### **B. Water Stewardship & Conservation (SDG 6)**

- **Rainwater Harvesting:** Revitalizing and maintaining campus-wide rainwater harvesting pits to recharge the groundwater table in the Karnal region.
- **STP & Greywater Recycling:** 100% treatment of liquid waste through Sewage Treatment Plants (STP), with treated water utilized for campus horticulture and fodder plots.
- **Smart Irrigation:** Implementation of drip and sprinkler systems in research farms to minimize water footprint per liter of milk produced.

### C. Waste Management & Circularity (SDG 12)

- **The 5R Principle:** Commit to Refuse, Reduce, Reuse, Repurpose, and Recycle.
- **Bio-Waste Management:** Utilizing the large volume of bovine waste for **Biogas Production** and **Vermicomposting**, providing organic manure for the institute's agricultural lands.
- **Plastic-Free Campus:** Strict ban on Single-Use Plastics (SUP) in cafeterias, hostels, and official meetings.
- **E-Waste:** Disposal of laboratory and IT e-waste exclusively through MoEFCC-authorized recyclers.

### D. Biodiversity & Green Cover (SDG 15)

- **Campus Forestation:** Maintaining a minimum of 33% green cover through the "Miyawaki" method or traditional groves, focusing on indigenous species.
- **Conservation of Local Flora/Fauna:** Protecting the local ecosystem within the sprawling university campus. Identifying and conserving the "Biodiversity Zones" as "Biodiversity Park" on the basis of their richness in biodiversity including flora, fauna and microbial lives.

### E. Sustainable Dairy Research (SDG 2 & 12)

- **Methane Mitigation:** Prioritizing research into enteric methane reduction through nutritional interventions, housing management and breeding.
- **Eco-Friendly Packaging:** Developing biodegradable or recyclable packaging solutions for NDRI dairy products.

### 4. Academic & Community Engagement

- **Sustainability Credits:** Introducing mandatory non-credit courses on "Climate Change and Sustainable Agriculture" for UG/PG students as per UGC guidelines.
- **Green Audit:** Conducting annual external **Green, Energy, and Environment Audits** to track performance.
- **Swachhata Hi Seva:** Regular cleanliness drives and awareness workshops for the community and local dairy farmers.

### 5. Governance & Implementation

- **Sustainability Committee:** Chaired by the Director, comprising the Administrative officers, Faculty representatives, Estate Officer, and Student Green Ambassadors.
- **Reporting:** An annual "Sustainability Progress Report" shall be published on the Institute website.