

Shiv Nadar Institution of Eminence

Sustainable management of land for agriculture

Shiv Nadar Institution of Eminence is committed to enhancing awareness on sustainable management practices of land for agriculture. The university is situated in western Uttar Pradesh which is primarily the agrarian belt and is committed to creating awareness amongst the local farmers. We, as a university, urge our faculty, staff, and students to be aware and also reiterate the knowledge to the local communities through outreach for the local communities.

Researchers at the university are actively involved in monitoring a farmer's field in the vicinity by collecting soil moisture, canopy temperature, leaf area index (LAI), and spectral reflectance data using different instruments and sensors available with the group. By observing the data on biomass, grain yield, irrigation application, and soil properties, researchers are suggesting sustainable agricultural practices. The group is also interacting with farmers to get details about the impact of climate change on crop yield and monitoring the health and productivity of the crops in the farmers' fields.

Through the Water Management Field Laboratory co-funded by the Government of India and the university is serving as a state-of-the-art research facility. It has an extensive crop experimentation facility equipped with a drip irrigation system and research equipment facility for monitoring crops and soil parameters for efficient land use. The research group conducts interactions, workshops, and training with local farmers.

Researchers at the university are also creating awareness about the applications of drones in precision agriculture. Drones facilitate seed sowing, soil condition monitoring, irrigation scheduling, assessing crop conditions for their health, estimating stress, and livestock management and hence can be effective in intelligent and sustainable farming.

