

Brief Report On the Guest Lecture

"Soil carbon sequestration for sustainable agriculture"

Organized by Department of Agriculture, Integral Institute of Agricultural Science and Technology, Integral University, Lucknow on 4th February 2022

The Department of Agriculture (IIAST), organised an educational and interactive '*Guest Lecture*' on 4th February, 2022 through virtual platform (Google meet). The Guest speaker was Dr. Ranjan Bhattacharyya, Principal Scientist, ICAR - Indian Agricultural Research Institute, New Delhi, India. He is an eminent Soil Scientist and has vast experience and knowledge in the area of Soil Carbon Sequestration, Climate Change Adaptation, Soil Conservation and Conservation Agriculture.

The Topic of discussion was **Soil Carbon Sequestration for Sustainable Agriculture**. The event began with a brief introduction of guest speaker by Dr. Deepranjan Sarkar. The guest speaker was heartily welcomed by Dr Saba Siddiqui, Head, Department of Agriculture. Dr. Ranjan Bhattacharya discussed that the Soil Organic Carbon (SOC) stocks are a primary indicator to assess soil carbon sequestration because they are proportional to the amount of soil organic matter. He emphasized that improving the SOC stocks helps to reduce CO₂ emissions. The capacity to store or increase SOC depends on several factors, including climate, soil characteristics and land-use change. Hence, it can be inferred that enhancing carbon sequestration in the soil is associated with the increased biomass and in turn to soil fertility.

He interacted with around 80 students and staff and addressed all the queries put forward by the audience. The audience found it very informative and quiet relevant to the present soil productivity issues. The lecture helped the participants in understanding the concept of Soil Carbon Sequestration. The event was concluded with vote of thanks. The program was actively supported by all the members of the Department.

Glimpse of Guest Lecture

