

Soil information System

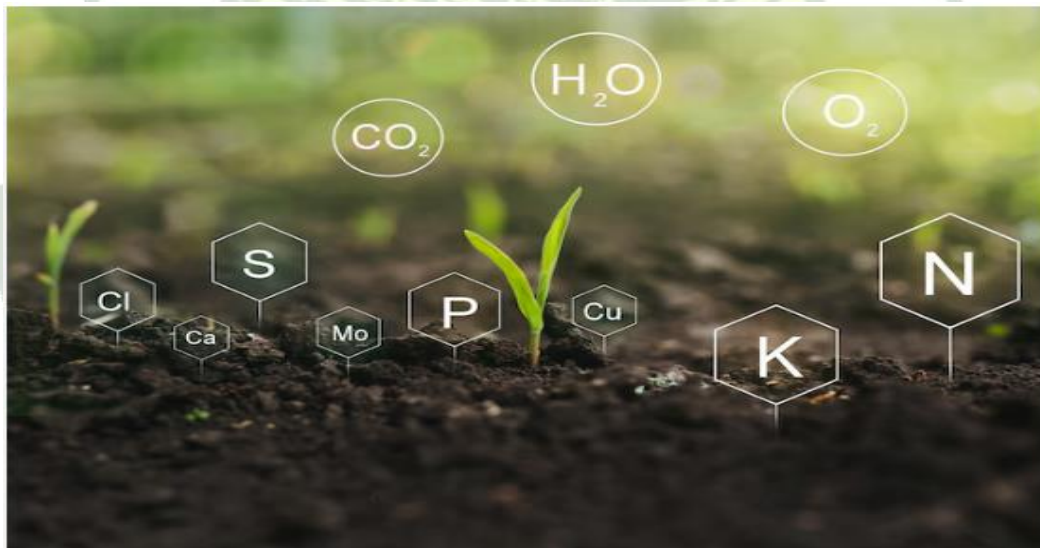
¹ S.P.Panigrahi, ²S.K.Mahapatra

¹ I.Ag.Sc, Banaras Hindu University, Varanasi

² FAS, Siksha 'O' Anusandhan, Bhubaneswar

Introduction

Soil information system is a 3-Dimensional soil mapping system which utilizes the advanced IoT sensors and Artificial intelligence to provide accurate information related to Soil. It also uses the advanced geo processing algorithm. Information related to soil, i.e. soil structure, texture, Electrical conductivity, organic carbon, organic matter etc. are very crucial for the farmers to make better farm and soil management decision. Soil information system in global level is called as SOTER (Soil and Terrain Digital database) and Soil Information system at National level is called as NSIS (National Soil Information System).



Benefits

- SIS helps to make better soil and farm management decision; it is also helpful to maximize the productivity.
- Better Input application
- Increase in yield
- Optimize the use of water, fertilizer etc.

Application of SIS

Land evaluation

SIS plays an important role in evaluation of land, which is very much crucial for farmers to know whether the particular land is suitable for crop cultivation or not. If the land is suitable for crop cultivation, then by using Soil information system, the farmers will get an idea that which crop is suitable for the land

Systematic planning and designing of field

Systematic planning and layout of the field is important for gaining long term yield. Proper layout is important for any land for getting more yield for a longer period of time.

Increasing yield

SIS helps farmers to make better informed decision related to the farm management practices, so that it also helps to increase the crop quality and productivity.

