

Section 4.1.b.i

Director, ICAR-Indian Institute of Soil Science, Nabibagh, Berasia Road, Bhopal- 462038

Indian Council of Agricultural Research, (DARE) Ministry of Agriculture, Govt. of India, New Delhi

Mission and Mandate

The Institute has the mission of "Providing scientific basis for enhancing and sustaining productivity of soil resources with minimal environmental degradation" with following mandates:

- a) Basic and strategic research on physical, chemical and biological processes in soils related to management of nutrients, water and energy
- b) Advanced technologies for sustainable soil health and quality
- c) Coordinate the network research with State Agricultural Universities, National, International and other Research Organizations

Priorities and Thrust Areas

The priorities of the institute are to broaden the soil science research by encouraging multidisciplinary research for efficient utilization of already created infrastructure and, therefore, carry out research work rigorously in the following critical areas:

Programme 1: Soil Health and Nutrient Use Efficiency

- Integrated nutrient management: Indigenous mineral and by-product sources
- Nano-technology
- Precision agriculture
- Fertilizer fortification
- Resilience of degraded soils.
- Developing a workable index of soil quality assessment imbibing influence of different physical, chemical and biological soil attributes
- Organic farming and produce quality

Programme 2 : Conservation Agriculture, Carbon Sequestration and Climate Change

- Conservation agriculture and carbon sequestration sustainable management of land and soil resources
- Tillage and nutrient interactions
- Crop simulation modeling and adaption to climate change
- Remote sensing and GIS

Programme 3: Microbial Diversity and Genomics

- Characterization and prospecting of large soil bio-diversity
- Testing of mixed biofertilizer formulations
- Quality compost production and quality standards
- Exploring microbial diversity for improvement of contaminated soil and water
- Exploring C-sequestration potential mediated microbes under different agro-eco-systems

Programme 4: Soil Pollution, Remediation and Environmental Security

- Soil pollution impact assessment and toxicity amelioration
- Phytoremediation and bioremediation of contaminated soils
- Developing technology for efficient reuse/disposal of city and industrial waste
- Developing soil management practices for minimizing emission of green house gases
- Environmental impact risk assessment of nanoparticles on soil health and plant nutrition

<http://iiss.nic.in/Mandate%20and%20Thrust.html>

<http://iiss.nic.in/Rti/Powers%20and%20duties%20of%20officers%20of%20IISS.pdf>

Organization Set-Up

Divisions

- (i) Soil Physics
- (ii) Soil Chemistry & Fertility
- (iii) Soil Biology
- (iv) Environmental Soil Science

Sections

- (i) Farm Section
- (ii) Administration Section
- (iii) Remote Sensing & GIS

Technical Units/Cells

- (i) Prioritization, Monitoring and Evaluation Cell (PME)
- (ii) Agriculture Knowledge Management Unit (AKMU)
- (iii) Institute Technology Management Unit (ITMU)
- (iv) Library, Information and Documentation Unit
- (v) Right to Information (RTI)
- (vi) Consultancy Processing Cell (CPC)
- (vii) Official Language Cell (Hindi Cell)
- (viii) Vehicle
- (ix) Training Hostel
- (x) Referral Lab
- (xi) Women Cell

All India Co-ordinated Research Projects (AICRPs)

- (i) Long-Term Fertilizer Experiments (LTFE)
- (ii) Soil Test Crop Response (STCR)
- (iii) Micro and Secondary Nutrients and Pollutant Elements in Soils and Plants (MSPE)
- (iv) All India Network Project on Soil Biodiversity and Biofertilizers (SBB)
- (v) Consortia Research Platform on Conservation Agriculture

<http://iiss.nic.in/about%20iiss.html>

About ICAR-IISS, Bhopal

The Indian Institute of Soil Science (ICAR-IISS) was established on 16th April, 1988 at Bhopal with a mandate of “Enhancing Soil Productivity with Minimum Environmental Degradation”. To accomplish the mandate of the institute, it has given the priority to soil health related issues faced by farmers and other stakeholders.

IISS has emerged as a leader in basic and strategic research on soils in the country. It has achieved significant success in the areas of integrated nutrient management, impact on soil under long-term cropping, technology for preparation of enriched composts, soil test based nutrient prescriptions, generation of district-wise GIS based soil fertility maps, organic farming practices, carbon sequestration in soils, sink capacity of soils for heavy metal pollutants, recycling of wastes, soil microbial diversity and biofertilizers, quality standards for municipal solid waste composts etc. The institute has to take up the emerging challenges of increasing food-grain production and ensuring food and nutritional security from shrinking land resources, characterizing and conserving large soil-biodiversity for appropriate deployment in agriculture, achieving self-reliance in crop fertilization through indigenous

mineral and by-product sources, developing efficient technologies for waste recycling, maintaining soil quality and ecological balance, and developing energy efficient agriculture and sequestering carbon by reorienting it's research pursuits addressing the emerging issues viz., enhancing nutrient and water use efficiency; sustaining soil and produce quality; soil biodiversity and genomics, climate change and carbon sequestration; minimizing soil pollution etc.

Location

The Institute is about 10 Km and 7 Km away from Bhopal railway station and Bhopal Airport respectively.

<http://iiss.nic.in/about%20iiss.html>