

Natural Resource Management

Natural Resource Management Division of ICAR is conducting basic and strategic researches to develop technologies for conservation, management and sustainable utilization of the natural resources ensuring food, nutritional and environmental security in the country through 15 research institutes, 10 All India Coordinated Research Projects, 3 network projects and 2 Consortia Research Platforms namely on Water and Conservation Agriculture with a wide network of the Cooperating Centres and State Agricultural Universities. The NRM research programmes have been prioritized within the perspective of different themes, viz; Soil Inventory and Characterization, integrated Soil-Water-Nutrient Management, Watershed Management, Resource Conservation Technologies, Crop diversification, integrated weed management, integrated farming System including Agroforestry, dryland farming, arid, coastal and hill agriculture, abiotic stress management, climate resilient agriculture, conservation agriculture, waste water utilization, solid waste management and applications of nanotechnology to enhance nutrient and water use efficiency. The Division is conducting research in farmers' participatory mode addressing issues at ground level and developing location specific, cost effective, ecofriendly, socially acceptable scientific farming practices keeping in view the farmers' resource availability, traditional indigenous technology knowhow and grassroot farm innovations. The outcome of NRM research has been promoted through various developmental Plan schemes of the Government and contributing towards increase in agricultural productivity in the country.

Mission

Developing location specific, cost effective, eco-friendly conservation and management technologies for higher input use efficiency, agricultural productivity & profitability without deteriorating natural resource base.

Vision

Sustainable management of natural resources for achieving food, nutritional, environmental and livelihood security in the country.

Mandate

To plan, coordinate and monitor R & D programmes for sustainable agricultural production and resource conservation and to serve as knowledge repository in the field of natural resource management.

Priority Areas

The major concerns of NRM Division are low farm productivity & profitability, land degradation, low water productivity, soil health deterioration & low nutrient use efficiency, abiotic stresses including climatic aberrations and loss of tree cover & deterioration in ecosystem services. To address these issues, the Division has set following priority areas of research:

- Land Resource Inventory, Characterization Agricultural Land Use Planning ([NBSSLUP, Nagpur](#))
- Integrated Water Management Waste Water Utilization ([IIWM, Bhubaneswar](#); [CSSRI, Karnal](#))
- Nutrient and Bio-waste Management ([IISS, Bhopal](#))
- Management of Problematic Soils – Saline, Alkaline, Acid and Waterlogged Soils([CSSRI, Karnal](#); [IISS, Bhopal](#))
- Soil and Water Conservation- Participatory Watershed Management ([IISWC, Dehradun](#))
- Crop Diversification ([IIFSR Modipuram](#); [CRIDA, Hyderabad](#))
- Organic Farming (NOFRI, Tadong, Sikkim; [IIFSR Modipuram](#))
- Mainstreaming Rainfed /Dryland Farming and Agricultural Disaster Management ([CRIDA, Hyderabad](#))

- Climate Resilient Agriculture and abiotic stress management ([CRIDA, Hyderabad](#); [NIASM, Baramati](#); [CSSRI, Karnal](#))
- Agroforestry Management ([CAFRI, Jhansi](#))
- Weed Management ([DWR, Jabalpur](#))
- Development of Integrated Farming Systems ([IIFSR Modipram](#); [ICAR-RCNEH, Barapani](#); [CCARI Goa](#); [ICAR RCER, Patna](#); [CRIDA Hyderabad and MGIFRI, Piprakothi, Motihari, Bihar](#))
- Arid Land Management and Solar Farming ([CAZRI, Jodhpur](#))
- Conservation Agriculture and Resource Conservation Technologies ([ICAR RCER, Patna](#); [CRIDA Hyderabad](#); [IIFSR Modipram](#); [CSSRI, Karnal](#))
- Hill Agriculture ([ICAR RCNEH, Barapani](#); [IISWC, Dehradun](#))
- Coastal Agriculture ([CSSRI, Karnal](#); [CCARI, Goa](#))
- Nano Technology ([IISS, Bhopal](#))