Press Release

ICAR-IIFSR Conducts Live Demonstration of Green Ammonia Application at IARI, New Delhi

New Delhi, 13 November 2026: The ICAR-Indian Institute of Farming Systems Research (ICAR-IIFSR), Modipuram, in coordination with the ICAR-Indian Agricultural Research Institute (ICAR-IARI), New Delhi, organised a live demonstration of Green Ammonia application at the ICAR-IARI Farm, New Delhi. Organised in collaboration with industry partner ACME Cleantech Private Limited, the programme brought together senior policymakers and officials from the agricultural research, fertiliser, agriculture and renewable energy sectors to witness the field application and assess the potential of Green Ammonia as an alternative nitrogen source for crop production.

The demonstration was witnessed by Dr. M.L. Jat, Secretary, Department of Agricultural Research and Education (DARE) and Director General, ICAR, and Shri Rajat Kumar Mishra, IAS, Secretary, Department of Fertilizers (DoF), Ministry of Chemicals and Fertilizers. They were joined by Ms. Aparna S. Sharma, Additional Secretary, DoF, and Shri Anurag Rohatgi, Shri Krishna Kant Pathak and Ms. Bandana Preyashi, Joint Secretaries, DoF. Dr. D.K. Yadava, Deputy Director General (Crop Science), ICAR, and Dr. Ch. Srinivasa Rao, Director, ICAR-IARI, were also present. More than 50 dignitaries and senior officials attended the programme.

Dr. Sunil Kumar, Director, ICAR-IIFSR, welcomed the dignitaries and briefed them on the institute's research initiatives, followed by remarks from Shri Sanjay Dhawan, Vice Chairman, ACME Cleantech Private Limited, representing the industry partner.

The dignitaries subsequently witnessed the live application of Green Ammonia at approximately 15 cm below the soil surface. ICAR scientists explained the application methodology, its placement in the soil and the process through which nitrogen becomes available to crops. The demonstration also highlighted the technology's potential to improve nitrogen use efficiency and promote sustainable nutrient management.

A key objective of the project is to reduce dependence on conventional urea while improving nitrogen use efficiency in agricultural production systems. The nitrogen use efficiency of conventionally applied urea is estimated at approximately 30–40 per cent, indicating considerable scope for improvement

Under the project, Green Ammonia demonstrations will cover 1,800 acres of wheat and sugarcane across seven districts of Uttar Pradesh: Meerut (300 acres), Muzaffarnagar (200 acres), Bulandshahr (200 acres), Baghpat (200 acres), Shamli (300 acres), Pilibhit (300 acres) and Saharanpur (300 acres). At the national level, ICAR has set a target of conducting demonstrations across 10,000 acres in six states: Uttar Pradesh, Punjab, Haryana, Madhya Pradesh, Bihar and Odisha.

The initiative aims to evaluate Green Ammonia as an alternative to conventional urea in wheat cultivation and familiarise stakeholders with an environmentally sustainable, efficient and safe approach to nitrogen management.

Following the demonstration, the senior officials addressed the gathering and shared their perspectives on the potential of Green Ammonia in advancing sustainable agricultural practices.

The live demonstration at the ICAR-IARI Pusa Farm marks an important step towards showcasing the scientific basis and field-level application of Green Ammonia to policymakers and key stakeholders. The initiative is expected to strengthen institutional and industry collaboration, generate field-level evidence and support the assessment of this emerging technology across diverse agro-climatic conditions.

The programme concluded with a vote of thanks by Dr. Viswanathan Chinnusamy, Joint Director (Research), ICAR-IARI.











