

Training Report on Preventive Maintenance and Troubleshooting of Farm Machinery in Jute- Based Cropping Systems

A three-day farmers' training programme on **“Preventive Maintenance and Troubleshooting of Farm Machinery in Jute-Based Cropping Systems”** under the STC-TSP was organized during 23–25 September 2026 at ICAR-CRIJAF, Barrackpore. A total of 16 Scheduled Tribe (ST) farmers from Hingalganj Block of North 24 Parganas, West Bengal, participated in the programme. During the inaugural session, Dr. Sanjoy Saha, Head, Crop Production Division and Programme Coordinator, STC-TSP, explained the importance of farm mechanization in agriculture, particularly in jute-based farming systems, for reducing drudgery, improving input utilization and enhancing farm productivity. The training programme was conducted through a two-way interactive approach, combining both theoretical and practical sessions. The major topics covered included the importance of farm mechanization in jute-based cropping systems; the need for regular maintenance of agricultural machinery for trouble-free operation; the role of Custom Hiring Centres in farm mechanization; the systems and operation of oil engines; the use of tractors and power tillers in agriculture; safe operation of plant protection equipment and occupational health and safety at the workplace. During the practical sessions, the trainees were given hands-on exposure to the identification of different engine parts, dismantling of engine components and their reassembly under the guidance and supervision of experts and trainers. The participants were also sensitized to the use of tractors and matching farm implements, including their proper operation and preventive as well as corrective maintenance practices.

In the valedictory session, Dr. Gouranga Kar, Director, ICAR-CRIJAF, interacted with the trainees and assessed the knowledge and skills gained by them during the training programme. He emphasized advanced training in agricultural machinery operation and repair for skill enhancement and employment generation among rural youth. During the session, certificates and agricultural inputs were distributed to the participants. Dr. R.K. Naik, Principal Scientist and Course Director and Dr. Shamna A., Nodal Officer, STC-TSP was also present on the occasion. Dr. M.L. Roy and Dr. Kanti Meena, Co-Course Directors, actively coordinated the entire training programme.

The programme provided the participating farmers with practical knowledge and skills for the efficient, safe and trouble-free operation and maintenance of farm machinery in jute-based cropping systems. The training is expected to contribute to improved machinery utilization, reduced operational problems, enhanced operational efficiency and increased awareness of mechanization opportunities among the participating ST farmers.







