

RCER and IIWM Scientists Discussed Agricultural Water Management Issues

On 13th September 2023, an online interaction meeting between Indian Institute of Water Management (IIWM), Bhubaneswar and ICAR Research Complex for Eastern Region (ICAR RCER), Patna was convened. The objectives of the meeting were to discuss common interest, collaboration possibilities and avoid duplicity in research projects.



Dr. Arjamadutta Sarangi, Director IIWM, commenced the meeting with a comprehensive overview of IIWM's ongoing research on water management. He informed that the major research projects running in the institute are assessing the effectiveness of rubber check dam in various parts of the country, IoT based irrigation in banana, canal automation, mapping of irrigated area in Baitarni river basin, etc.

Taking the baton, Dr. Anup Das, Director of ICAR RCER Patna, steered the discussion towards three pivotal issues plaguing agriculture in eastern India: water management, weed management, and agricultural mechanization. He specifically spotlighted the challenges of water management in rice fallow areas. He emphasized that the foundation of RCER focuses on addressing water management challenges in eastern India, especially in Bihar. However, in recent years, RCER's role in handling agricultural water management issues hasn't been as prominent as it should have been. Looking into this, he suggested incorporating RCER Patna in the AICRP, CRP's and in the international projects running with International Water Management Institute (IWMI), Colombo running at IWMI, Bhubaneswar.



Dr. A Upadhyaya, Head DLWM, RCER, then presented water-related research activities i.e. assessment of efficacy of Low Energy Water Application (LEWA) device for small land holders, application of solar pumps in agriculture, mapping of flood in eastern India, multiple uses of water, etc. He also pointed out the few possible research areas like internet of farming, drone application in agriculture, application of DSS etc.

The later part of the meeting was marked by detailed deliberation from different program leaders of IIWM. Dr. R K Panda, Programme Leader of Canal Water Management discussed the major research projects going on this theme are automated canal irrigation system, IoT based smart irrigation management etc. Dr. M Raychaudhuri, Principal Scientist suggested that the IoT devices developed by the institute can be tested at KVKs of RCER, writing joint projects on solving water management issues in eastern India, come up with a policy paper on agricultural water management. Dr. S K Rautaray, Programme Leader of rainwater management suggested that multistage water harvesting might be a prominent option for water management in rice-fallow areas. Dr. S K Jena Programme

Leader of groundwater management told that RCER can be involved in CRP on Water based on its present theme.

Scientists from RCER have given their suggestions to solve agricultural water management issues with respect to eastern India. Dr. Ujjwal Kumar, Head DSEE, RCER suggested IIWM to explore possibilities for installing few rubber check dams in Bihar. Dr. SS Mali, Senior Scientist described his technology on Solar Pump Sizing Tool and how it is effective for small farmers to meet crop water requirement. Dr. Akram Ahmed, Scientist suggested the possible applications of IoT in water management and possible water management solutions for flood affected areas.

At the end, Director Dr. A Sarangi of IIWM expressed a keen interest in joining forces with RCER Patna for selected few programs. He concluded with the promising note of drafting a policy paper on agricultural water management, a testament to the fruitfulness of this meeting and the collaborative spirit of both institutions. He also assured to include RCER on AICRP, CRP and in the international projects running with International Water Management Institute (IWMI), Colombo.

The meeting ended with a vote of thanks from Dr. Pramod Kumar Panda, Principal Scientist, IIWM.