

Director's Message

Water is the elixir of life and the support system for all living organisms on the planet. Water can neither be created, nor can be destroyed, but can be transformed from one form to the other. Keeping this in view, it becomes imperative to use this precious resource judiciously in all sectors with much emphasis on the agriculture sector, which consumes about 70% of total available fresh water resources. Efforts for storage of water and its use in agriculture is attempted since time immemorial and the irrigation water management technologies are tested under different agro-ecological settings in India. The Indian Institute of Water Management (IIWM) under the aegis of Indian Council of Agricultural Research (ICAR) in last 34 years since its inception have contributed immensely in research, training, demonstration and dissemination of agricultural water management technologies under different programmes of GOI and through International and National Funding agencies. However, the technologies which were standardized, tested and implemented need to be revisited under the present context of crop-water demand under changing climate, hydrologic design aspects of soil and water conservation structures under changing climate and use of Information and Communication Technologies (ICT) leading to digital and climate smart agriculture. Technological intervention and science led innovations would assist us in reshaping of the agricultural water management technologies which can be IoT enabled integrated sensing systems of soil moisture sensor and flow measurement systems; Integrated Farming System approach to enhance water productivity and farm income; innovative surface irrigation methods (covers about 85% irrigated area) need to be adopted to enhance water productivity; water footprint, erosion and carbon foot print based land use planning leading to land degradation neutrality; Use of solar power and small scale hydro-electric power or zero energy spring shed management for irrigation; Management of poor quality water and its use in irrigation; innovative methods for ground water recharge and its management in coastal regions; Integrated modelling frame work of crop models, hydrologic and climate change models and flood and drought estimators for holistic management of the natural resources; protocols for quantification of ecosystem services and rewarding farmers based on ecosystem services; use of AI/ml in irrigation scheduling and development of irrigation scheduling Decision Support System for crops and cropping systems pan India; development of mobile apps for automated irrigation in different irrigation methods are different areas of research which can be targeted for enhancing water productivity and farm income in a sustainable manner. Moreover, publication of research manuscripts in high rated peer reviewed journals and patenting and copyrighting of developed technologies and its subsequent commercialization and disseminating agricultural water management technologies to different stakeholders besides working in tandem with Government schemes will be attempted by the Institute in phased and focused manner.



New web site of IIWM as per ICAR guidelines is under finalization and will be hosted in this link. We seek feedback and suggestions for improvement besides holistic development of ICAR-IIWM, Bhubaneswar, Odisha.

With warm regards

AdS

(DIRECTOR, ICAR-IIWM)