



Dr Manoranjan Kumar (Principal Scientist, ICAR-CRIDA)

Dr Manoranjan Kumar obtained PhD from Indian Institute of Technology, Kharagpur in 2003. He received bachelor degree in agricultural engineering in 1996 from College of Agricultural Engineering, Jabalpur followed by master degree in agricultural engineering with specialization in soil and water conservation engineering from Indian Institute of Technology, Kharagpur in 1998.

Dr. Kumar is presently working as principal scientist (Soil and Water Conservation Engineering) at ICAR-CRIDA, Hyderabad. He joined ICAR in 2001 as scientist and worked at ICAR-VPKAS, Almora representing hill and mountain agro-ecosystem. In 2009, he moved to CRIDA, Hyderabad on direct selection as senior scientist to further serve in drylands. Thus he has diversified research and development experience of varied climate, topography and conditions. During his initial years of service, he led projects on application of plastics in agriculture in which greenhouse structures and LDPE lined tanks extensively popularized in the Hills of Uttarakhand that brought many success stories. He has been involved in many external funded projects along with institute project as PI and Co-PI. Those include projects funded by central water commission, NAIP, National horticulture mission, National Innovations in Climate Resilient Agriculture (NICRA), water platform, NABARD, Bharti Cement, Allana Foods and USAID etc. Dr. Kumar also pioneered in application of artificial intelligence in hydrological modelling particularly potential evapotranspiration. His major contribution includes artificial neural network techniques in modelling of hydrological processes, development of gravity fed micro irrigation system and solar powered micro-irrigation system, LDPE lined tanks for hill region, climate change modelling. He published more than 40 research paper in journals of international and national repute. His other publication includes edited books, book chapters, atlases, technical bulletin, training manual and resources, leaflets etc. He has guided PhD and imparted training to many MTech and BTech students.