

Proceedings
Webinar on “Use of Micro-irrigation for Enhanced Water Use Efficiency”
Date: 17.8.2020 at 4.30 P.M, Krishi Bhawan, New Delhi

Department of Agriculture Cooperation and Farmers Welfare (DAC & FW), Ministry of Agriculture and Farmers Welfare organized a webinar on 17.8.2020 on the topic “Use of Micro Irrigation for Enhanced Water Use Efficiency” under the chairpersonship of Dr. Alka Bhargava, Additional Secretary, DAC & FW. The experts from Ramthali Micro Irrigation Project, Govt. of Karnataka, Gujarat Green Revolution Company Limited (GGRC), Gujarat, Irrigation Association of India, AgWiQ Technologies Bengaluru, Jain Irrigation, Solar Pump Irrigation Cooperative Enterprises (SPICE), Gujarat, Officials from Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD & GR), National Rainfed Area Authority (NRAA), Department of Agriculture Cooperation and Farmers Welfare (DAC & FW), National Committee on Plasticulture Applications in Horticulture (NCPAH) were made a presentation and participated in the discussion. Total about 80 participants from various organisations and implementing States were joined the Webinar.

2) The proceedings of the webinar are given below:

I) Shri Pankaj Tyagi, Director (RFS), DAC&FW, welcomed the participants and highlighted the outlined content covered during the session. He added the need of expediting the area coverage of micro irrigation under PMKSY-PDMC component.

II) Dr Alka Bhargava, Additional Secretary, DAC&FW, during her inaugural address highlighted areas that could be dovetailed including existing GoI schemes to increase the area coverage. She added that integration of solar with MI and popularizing annadaata to urjadaata from the Hon'ble PMs vision to make Indian Agriculture a self-reliant or atmanirbhar. She applauded the participants and speakers of showing interest by their active participation and suggested to take this initiative in a big way for increasing the adoption of micro irrigation in the country. She also mentioned that MoWR, RD & GR DAC&FW and MNRE need to work closely with more coherence towards achieving the target of covering 100 lakh ha under Micro Irrigation in five years period.

III) Dr. Ashutosh V Vadawale, Manager (Tech & MIS), Gujarat Green Revolution Company Ltd. (GGRC), shared the success witnessed by the state of Gujarat and how GGRC has been implementing the concept of water saving using micro irrigation. He also highlighted the modus operandi of GGRC and its model, which have been effectively working under GoI schemes in promoting per drop more crop. He also informed that 65% of total potential assessed under MI had already achieved. He also added that digitization of entire workflow towards disbursement of financial assistance have proved to be a boon towards implementation of the MI scheme in the state and more such interactive platforms are in process keeping Farmer First Policy to achieve the untapped potential.

IV) Shri. Shrikant Goenka, President, Irrigation Association of India (IAI) in his presentation the status of micro irrigation in the country with glimpses of YoY achievement made under GoI MI schemes. He further added that coverage of micro irrigation have improved over last two decades but citing the Task Force Report on

MI, 2004 wherein 69.5 mha have been estimated as the total potential mentioned that going by present scenario this humongous task could be herculean to achieve. Further, he added that delay of funds and inefficiency of the implementing states to provide matching share is a major issue in achieving the desired targets. He also mentioned to increase the rate of adoption there is need to introduce certain policy reforms such as making FPOs to practice and popularize MI in respective states, thrust should be given with additional support to under-developed states, incentivizing MI for water guzzling crops like sugarcane, paddy etc. He further suggested routing of funds through banks rather than Government treasury which could expedite process of release of funds. He stated that six states namely AP, Maharashtra, Karnataka, Tamilnadu, Gujarat and Rajasthan contribute nearly 82% of the total area. He stressed the need of giving emphasis to other states for coverage of MI. He also suggested to promote MI in water guzzling crops like Sugarcane, paddy etc.,

V) Shri Manoj Ranjan, Ramthal Irrigation project briefed about the community irrigation project of Ramthal, Karnataka and how micro irrigation adoption have changed the lifestyle of the farmers in the command area of Ramthal. He highlighted various attributes and end to end model of the Ramthal project and how state government have supported the project. He further added that to increase the adoption of MI such successful models need to be replicated in other canal commands and farmers need be given assurance of the benefits that they may derive on adoption these technologies. He also mentioned establishment of 2-hectare demonstration plot whereby all components of various precision farming technologies are demonstrated.

VI) Shri Vijay Reddy from M/s AgWiQ Technologies, Bangalore made a presentation on Smart Autonomous Irrigation Pump Controller. He highlighted various parameters wherein the energy consumed and water used in irrigation could be digitized using IoT, AI/ML to have significant savings to Indian farmers. Detailed presentation of the device used for irrigation pump were shared and estimated benefits have been highlighted. He requested to include such gadgets/devices under GoI schemes having MI component for having saving of inputs and its effective calibration.

VII) Dr. Sangita Ladha, Vice President, Business Development, Jain Irrigation SL(JISL) made a presentation on how JISL have created Resource to Roots model in different states like Punjab, Rajasthan, Gujarat and how it had benefitted the farmers. The entire model of community based micro irrigation system for various sites was briefed to the participants with benefits that have been realized under the project in terms of saving of inputs and target achievement.

VIII) Dr. B.R.K Pillai, Commissioner, DoWR, RD &GR during his interactions highlighted that although 10% of each project as per MoU with state should be under MI technology but still not on ground which could be on main canal or branch canal too. There is a wide gap in its implementation. He further added that water distribution in canal commands is under WUAs but they have not been considered under PDMC scheme. He also mentioned due to non-availability of matching state share have also hurdled the adoption rate, hence central share may be increased. There need to be a coherent approach at central level managing the MI schemes for better adoption. He also mentioned that higher subsidy rates are also playing

adverse roles in area enhancement of Micro Irrigation He mentioned the need of recognizing Water User Associations (WUA)in implementation of Micro Irrigation schemes . There was also mention about rising cost of MI systems. He also mentioned that on standalone basis, PDMC contribution to MI area would be restricted to 27-30 percent. In canal command area, unless some assurance like availability of diggies, adoption of MI in main canal & tail end are important. Coutour canal system could be adopted.

IX) Shri. B Rath, Technical Expert representing NRAA mentioned in his remarks that subsidy is not the mainstay of MI technology in the country; however, it had been the driving force towards adoption. Beside concerted efforts so far, there is a need to integrate minor/surface irrigation such as tanks/ponds with MI systems with special focus to rainfed areas. He further added that India blessed with immense renewable sources should harness it and use as energy for operating these systems. At present, irrigation is primarily usig groundwater rather than surface water. He requested the chair that a composite scheme having DAC&FW , DOWR,RD & GR and Ministry of New Renewable Energy (MNRE) need be developed having MI systems. Policy reforms such as all tube wells especially private mandated to be used with MI systems and innovative approaches and coverage of field crops.

3) Way Forward:

- The farmers in the States selected by DACFW and MNRE - Rajasthan, Tamil Nadu, Gujarat and Himachal Pradesh need to be dovetailed for KUSUM and PDMC scheme.
- Increase use of Grey water pockets with MI in crop production.
- Micro Irrigation Fund to be utilized for enhancement of Micro Irrigation coverage through innovative projects.
- An interaction with States to be planned for Canal Command/Community Based Irrigation projects having all desired stakeholders.
- Ways and means for encouraging adoption of MI for water guzzling crops such as sugarcane, paddy, cotton should be suggested on priority
- Supporting start-ups and innovations may be explored for its adoption to increase area under MI.
- Small focused groups to be formed to address all issues, especially bringing in new technology in MI having experts from Industry and related organizations.
- A brainstorming session could be conducted with support of stake holders and other partners on Community Irrigation under Micro Irrigation.

The webinar ended with vote of thanks to chair and all participants by Executive Director, NCPAH.
