Integration of Micro Irrigation Systems with Minor Irrigation Projects – A Case Study


Maharashtra is one of the major states of India and it occupies about 9.4% of the total geographical area of the country. Agriculture has been the prominent occupation of the people. The Govt. of Maharashtra in the last 43 years (till 2003) has spent around Rs. 30000 Crores (approximately US$ 6 Billion) for development of irrigation facilities in the state. However, in spite of such a huge capital investment, the Gross Irrigated Area of the state remains at meager 17% as against the national average gross irrigated area of 41%. This is so because the efforts were concentrated only in creating the storage rather than efficient water distribution and application methods in the schemes in the past.

To bring more area under irrigation, to increase the crop production and productivity per unit volume of water vis-à-vis making the scheme economically viable, the minor irrigation projects must be integrated with micro irrigation systems. The integration of micro irrigation systems with minor irrigation schemes have been done in few projects executed by Jain Irrigation Systems Ltd, Jalgaon. In such schemes, the water stored in the minor irrigation projects is distributed through piped network and is applied to the crops using micro irrigation systems. This has lead to huge water savings, increase in irrigated area, increase in agricultural produce and productivity, considerable savings in various inputs, social justice through equitable distribution of water and many other benefits. The case study of one such project would be presented in this paper.

In the wake of the ensuing second green revolution in India, more intensified efforts will have to be made for promoting integration of Micro Irrigation Systems (MIS) with Minor Irrigation Projects (MIP) with active participation of Indian farmers for sustainable water management, food and water security of the nation.

See more of Agriculture: Microirrigation
See more of The 28th Annual International Irrigation Show (December 9-11, 2007)