INDIAN MICRO IRRIGATION MARKET
Indian Micro Irrigation Market Overview

Micro irrigation has seen a steady growth over the years. Since 2005, area covered under micro irrigation systems has grown at a CAGR of 9.6% and reached 7.73 million hectares. However, the potential area which can be covered under micro—irrigation was totaled to 69.5 million hectares in 2015.

Although, adoption of micro irrigation techniques by farmers is growing at a fast pace, the market penetration is still very low. With half the cultivable land in the country still being rain-fed, there is mammoth potential for promoting micro irrigation.

Majority of the area covered under micro irrigation systems comes under sprinkler irrigation with 4.36 million hectares while 3.37 million hectares comes under drip irrigation. Area under drip irrigation has shown stronger growth in recent years, growing at a CAGR of 9.85% during 2012-2015, while sprinkler irrigation has grown at a pace of 6.60% during the aforementioned period.

The drip and sprinkler irrigation methods differ in terms of flow rate, pressure requirement, wetted area and mobility. India has enormous potential for both the irrigation methods. Among the crops, maximum adoption of drip irrigation system was in fruit crops, followed by plantation crops, in terms of area coverage.

The Indian micro irrigation market is highly competitive with the presence of large and small scale drip and sprinkler irrigation equipment producers and marketers across numerous states in India. Presently, there are nearly 200 micro irrigation companies in the country.

**Top 10 States**
The states with the largest area under micro-irrigation include: Rajasthan (1.68 mh), Maharashtra (1.27 mh), Andhra Pradesh (1.16 mh), Karnataka (0.85 mh), Gujarat (0.83 mh) and Haryana (0.57 mh).

**Top 10 States with Micro Irrigation Area Covered; 2015**

![Diagram showing top 10 states with micro irrigation area covered in 2015.](source: Mission for integrated development for horticulture Website)
Rajasthan had the maximum area under micro irrigation, whereas Haryana had the highest penetration rate of 16.3% in 2015. Sprinkler irrigation is popular among Rajasthan, Gujarat, Haryana, Madhya Pradesh, Chhattisgarh and Bihar. However, drip irrigation is popular in Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu.

Government Initiatives

Recognizing the importance of micro irrigation, the government has taken various initiatives since 1992. The first real thrust however came in 2006, when the government launched a Centrally Sponsored Scheme (CSS) for micro irrigation with the objective to enhance water use efficiency in the agriculture sector by promoting appropriate technological interventions like drip & sprinkler irrigation technologies and encourage the farmers to use water saving and conservation technologies. In June, 2010, it was up-scaled to National Mission on Micro Irrigation (NMMI), which continued till the year 2013-14. From 1st April, 2014, NMMI was subsumed under National Mission on Sustainable Agriculture (NMSA) and implemented as “On Farm Water Management” (OFWM) during the financial year 2014-15.

The Pradhan Mantri Krishi Sinchayee Yojna (PMKSY) was launched in July, 2015. The objective of the scheme is “to achieve convergence of investment in irrigation at the field level, expand cultivable area under assured irrigation.”

India’s Positioning in the Global Market

India now has close to 8 mh under micro irrigation. This is attributed to the large cultivable area and area under irrigation. However, penetration of micro irrigation systems is still very low in India. Penetration of micro irrigation in states of India is variant. The average penetration at the all India level is 5.5%, which is much lesser compared to countries like Israel, US and even China.

Till date, farmers have adopted micro-irrigation mainly for fruits, vegetables and other high-value crops that can provide a good return on the investment. The most dramatic gains in this sector have occurred in China and India, the world’s top two irrigators, where the area under micro-irrigation expanded 88-fold and 111-fold, respectively, over the last two decades. India now leads the world, with nearly 2 million hectares (about 5 million acres) under micro-irrigation. Some of the impediments with our efforts to promote micro irrigation are lack of focus on micro irrigation as currently there is no dedicated programme for micro irrigation. Further, we also lack IT-backed operations like geo-tagging and referencing for tracking the progress. In order to have sustainability in agriculture with shrinking natural resource base, especially water, micro irrigation is of extreme importance.