



E-ISSN: 2278-4136

P-ISSN: 2349-8234

[www.phytojournal.com](http://www.phytojournal.com)

JPP 2020; Sp 9(4): 311-315

Received: 24-05-2020

Accepted: 26-06-2020

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## Marketing strategies and methods adopted by companies to promote micro irrigation among farmers in Ranga Reddy district of Telangana

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**Abstract**

A study on adoption pattern and farmers' behavior towards micro irrigation was conducted in Ranga Reddy district of Telangana state in the year 2019-20. In the study, 120 farmers and 10 dealers from the study area were interviewed to know their awareness, adoption pattern, knowledge level and preferences, marketing strategies, customer relationship management, promotional strategies of micro irrigation companies towards micro irrigation systems in Ranga Reddy district of Telangana state. Ranga Reddy district was selected purposively for the present study as more area under micro irrigation mainly for cultivation of horticultural crops is observed. It is also noticed that during the last 10 years, micro irrigation adopting farmers have been increasing in a large number. The study revealed that majority of the farmers opined that companies were maintaining customer relations as a part of their marketing strategies like organizing farmers' meetings, post sales service, regular field visits, demonstration and field days, van campaigns, wall paintings and sales promotional methods. Majority of the companies have focused strategy (50 per cent) as competitive advantage across its chosen market, while 27.5 per cent companies pursues cost leadership and 22.5 per cent pursues differentiation strategy.

**Keywords:** Marketing strategies micro irrigation ranga reddy farmers' Telangana

**Introduction**

Water is the most precious natural source, vitally important for agricultural development and day-to-day living. Intensive agriculture and our growing population are depleting the already scarce resource i.e. Water. This is challenging situation and the need of the hour is to conserve water and ensure its efficient use.

Water is a relatively scarce resource in India since we have 17 per cent of the world's population and only four per cent of the usable fresh water at global level. Irrigation is the sector that uses water the most. Nearly 80 per cent of the world's water resources are used for irrigation. In India also irrigation uses more than 80 per cent of the available water. The water resources in India are estimated at 4000 cubic kilometer given the geographical area of 3.29 million hectares and an average annual rainfall of 1170 mm and nearly 50 per cent of this water is lost due to evaporation, percolation, and sub-surface flows to oceans and only 1953 billion cubic meter of water is available for usage (Global AgriSystem, 2014) [3].

To increase area under micro irrigation, Government of India launched the Pradhana Mantri Krushi Sinchayi Yojana (PMKSY) in 2015-16 by combining ongoing schemes. Under the more crops per drop component of the PMKSY, small farmers get paid to the tune of 55 per cent of cost of micro-irrigation systems; other farmers get 45 per cent of the unit cost. The task force on micro irrigation, 2004 had estimated a potential of 69.5 million hectare under micro irrigation. Presently, area under micro irrigation in India is 7.73 million hectare (Drip-3.37 million hectares and Sprinkler-4.36 million hectares). The top five states in India for area under micro irrigation are Rajasthan (16.85 lakh hectare), Maharashtra (12.71 lakh hectare), Andhra Pradesh (11.63 lakh hectare), Karnataka (8.47 lakh hectare) and Gujarat (8.29 lakh hectare). The potential for micro-irrigation is estimated as 69.5 million hectare and cereal crop tops in the list with 29.6 lakh hectare. Seven states in the country were identified having potential for micro-irrigation of more than 80 per cent. However, it will take long time to achieve this potential if the current target of achieving 0.5 million hectare per year is adopted and still 61.8 million hectares of land is untapped potential (Priya and Panchal, 2017) [6]

The micro irrigation technology has the potential to really double the area under irrigation through judicious use of water with efficiency as high as 80 to 90 per cent as compared to 30 to 50 per cent in case of surface irrigation. Under such condition, management of irrigation requires adequate attention for efficient utilization of every drop of water. Micro irrigation

systems have 80 to 90 per cent irrigation efficiency (Drip), 65 to 85 per cent irrigation efficiency (Sprinkler) and are capable of increasing yield by 30 to 100 per cent with 50 to 70 per cent water saving and making 40 per cent reduction in fertilizer as well as electricity demand because water is directly applied to effective root zone of plants through net work of plastic pipe. Thus, there is a scope to increase the irrigated area by two to three times if micro irrigation system is adopted in horticultural crops.

At present, Telangana Micro Irrigation Project, a unique and comprehensive project is being implemented in Telangana state, and area covered under micro-irrigation is 7.42 lakh hectares (Micro Irrigation Projects, Telangana state, 2019). Technological interventions like the drip and sprinkler method of irrigation can aid significantly in achieving higher water use efficiency there by aiding in bringing more area under irrigation. Higher yields will result because of the efficient and timely use of water by the crop.

### Materials and methods

Ranga Reddy district was selected purposively as micro irrigation technologies are gaining importance in recent times in this district because Ranga Reddy district is adjacent to Hyderabad city and farmers in this district are major suppliers of vegetables and flowers to the city of Hyderabad. Two mandals with the highest micro irrigation area from Ranga Reddy district was selected purposively. From each mandal three villages with the highest micro irrigation area were selected. The lists of farmers who are adopting micro irrigation technologies were prepared from the selected villages and 20 farmers for each village were selected randomly. 120 micro irrigation farmers and 10 micro irrigation dealers were selected for which data was collected

for analyzing the present study. Thus, total sample size for the present study was 130. Survey method was used to collect the required data from the selected respondents with the help of a well-structured pre-tested-questionnaire for the agricultural year 2019-20.

### Results and discussions

#### Marketing strategies and methods adopted by companies to promote micro irrigation among farmers in Ranga Reddy district of Telangana

The results show that out of 120 respondents in the sample, all the respondents (100 percent) were aware of micro irrigation systems.

#### Perception or opinion of farmers about customer relations maintained by micro irrigation companies

From fig. 1 it can be stated that 62.5 per cent of farmers opined that companies are maintaining customer relations as a part of their marketing strategies. Whereas, 37.5 per cent of farmers replied that companies are not maintaining any customer relations. In fig. 2 details regarding customer relation strategies adopted by private companies are given. From fig. 2 it can be observed that 86.1 per cent of farmers replied that companies are organizing farmers' meetings. Further, 68.4 per cent of farmers mentioned that companies are organizing regular field visits. Farmers also mentioned that companies are creating awareness in new MIS technologies and are providing on time repair and maintenance services, and their proportion is 39.2 per cent and 2.5 per cent, respectively. Whereas, 7.6 per cent of farmers also opined that companies are taking up other types of customer relation strategies in promoting their products.

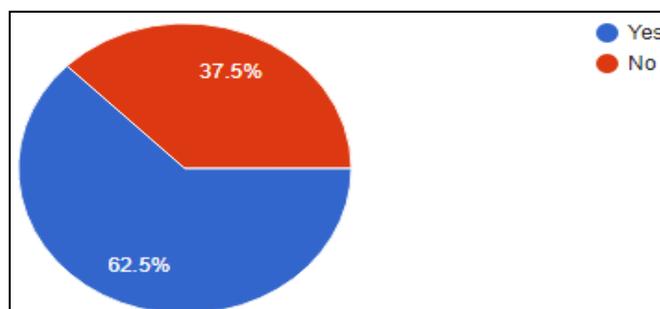


Fig 1: Customer relations of MIS firms

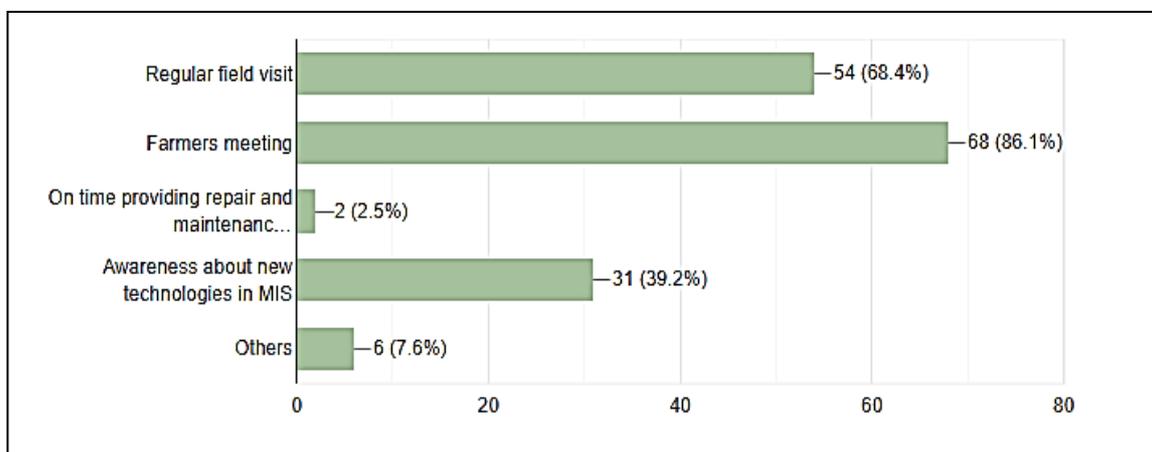


Fig 2: Type of customer relationship strategy

### Promotional tool used by company

In fig. 3 it can be stated that details regarding promotional tools adopted by private companies are given. From fig. 3 it can be observed that 63.3 per cent of farmers replied that companies are adopting sales promotional tool for marketing products. Further, 56.7 per cent of farmers mentioned that

companies are adopting advertisement. Farmers also mentioned that companies are adopting personal selling and publicity as promotional tool for marketing the products and their proportion is 38.3 per cent and 35 per cent respectively.

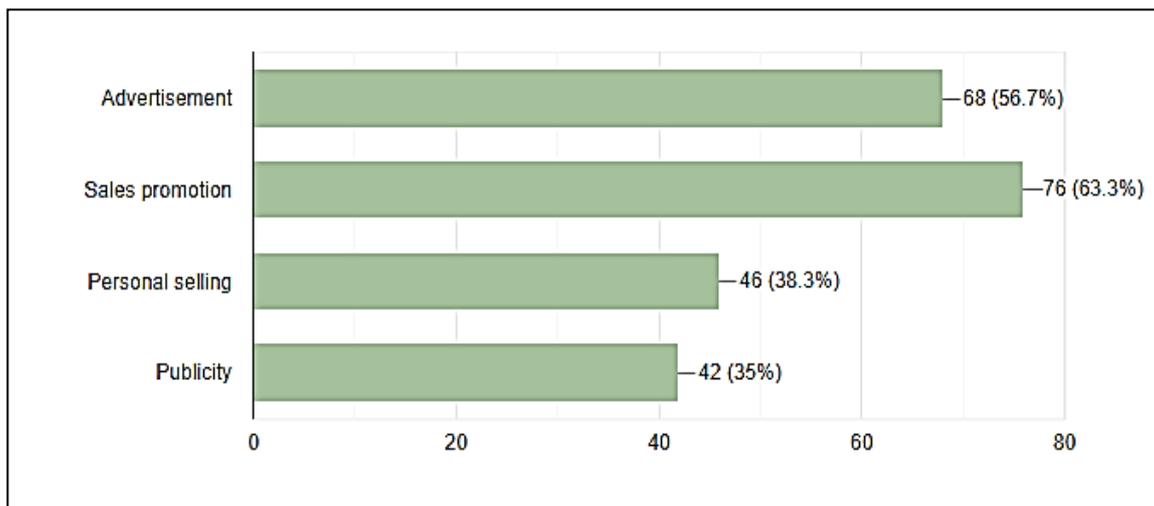


Fig 3: Promotional tool used by company

### All strategies are for promoting the products

Fig. 4 shows the details regarding marketing strategies adopted by companies to influence to adopting of micro irrigation system. From fig. 4 it can be observed that 81.7 per cent of farmers replied that companies are organizing farmers' training at village level. Further, 80 per cent of farmers mentioned that companies are creating awareness and knowledge transfer campaigns. Farmers also mentioned that

companies are conducting van campaigns and painting the walls, demonstration and field days, socioeconomic survey and market linkages are 65 per cent, 64.2 per cent, 10 per cent and 2.5 per cent, respectively. Whereas, 15.8 per cent of farmers opined that companies are taking up other types of marketing strategies which influenced farmers to adopt micro irrigation system.

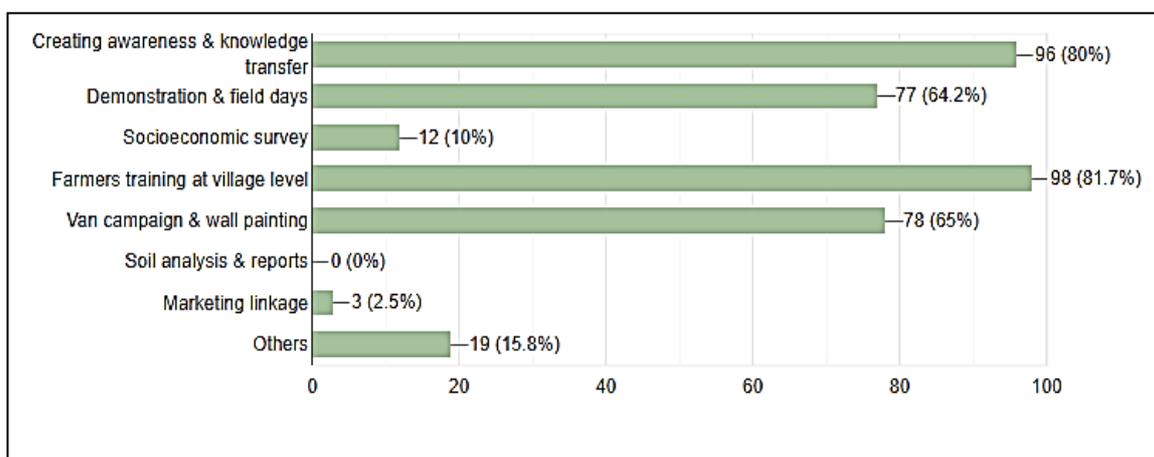


Fig 4: All strategies are for promoting the products

### Farmers' preferences for various brands of micro irrigation systems

Fig. 5 shows that majority of the farmers preferred Finolex irrigation company (30 per cent) followed by Jain irrigation company (25 per cent), Signet (13.3 per cent), Netafim (9.2 per cent), Mahindra EPC and Kumar (5.8 per cent) each, Sudhakar (1.7 per cent) and Kothari (0.8 per cent).

The land size for future plan for extension of area under the micro irrigation by farmers noted that 46.7 per cent of farmers

were not ready to expand area under micro irrigation and 53.3 per cent farmers were willing to expand area under the micro irrigation. Fig. 6 shows that majority of the farmers wanted to prefer Jain irrigation company (73.8 per cent) followed by Finolex irrigation company (47.6 per cent), Netafim (26.2 per cent), Signet (11.5 per cent), each Mahindra EPC, Sudhakar and Kumar (6.6 per cent) each, Kothari (3.3 per cent) for further area expansion under micro irrigation.

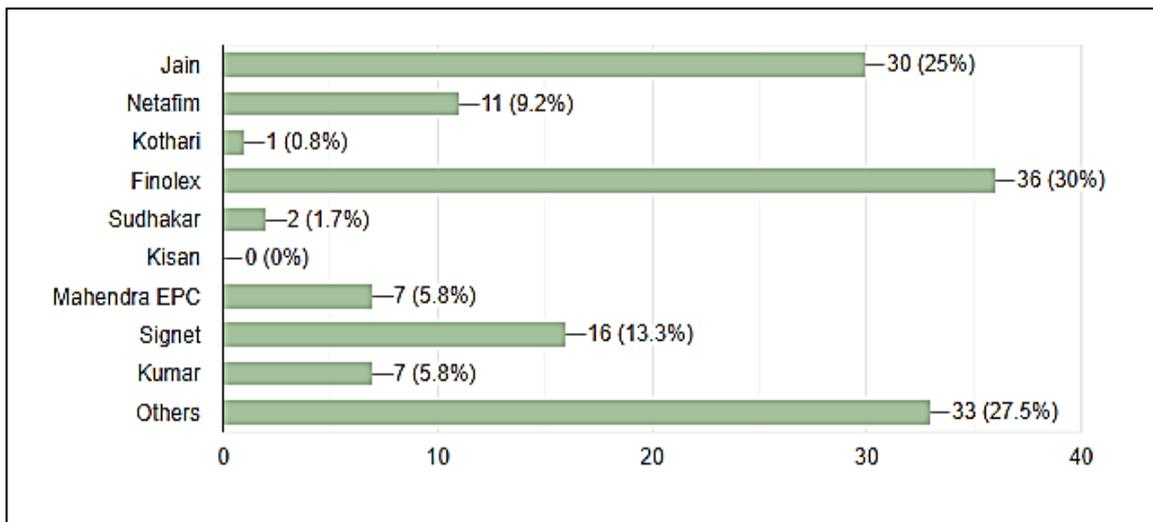


Fig 5: MIS brand used by farmers

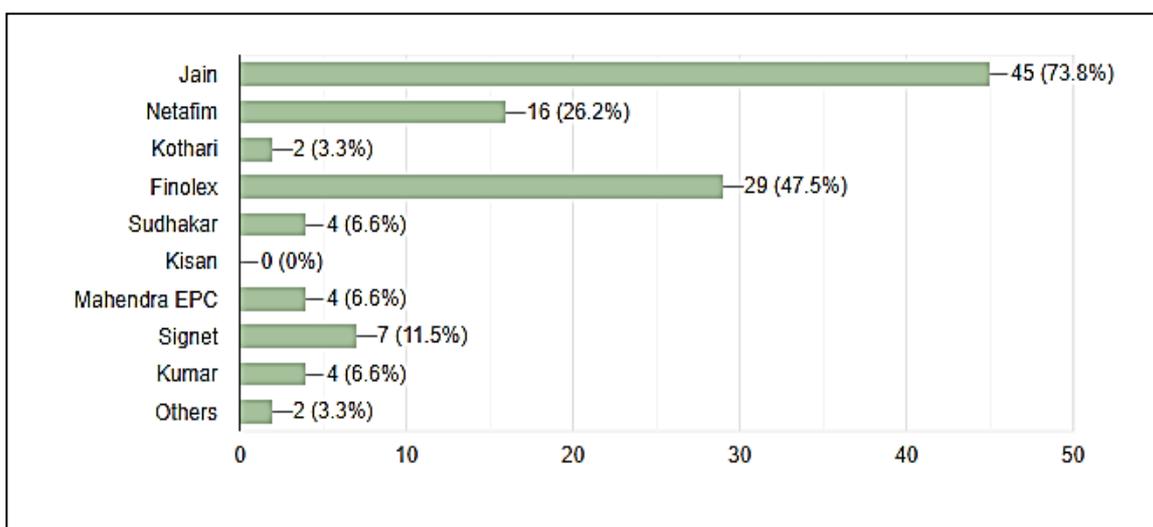


Fig 6: which company MI material wants to purchase for future expansion?

**Factors influencing the purchase decision for above said company materials**

Details regarding major factors that are influencing purchasing decision are given in fig. 7. From fig. 7 it can be concluded that 80 per cent of farmers replied that availability of government subsidy for particular brand is the major influencing factor in selecting the brand in purchasing micro irrigation equipments. Whereas, 65 per cent and 46.7 per cent

of farmers replied that quality parameter and availability in the market are major factors in taking purchasing decisions. Further, 45 per cent each farmers mentioned that brand image and better technology are the influencing factors in deciding the brand to be selected. Moreover, 36.7 per cent, 11 per cent and 2.5 per cent of farmers opined that durability; low prices and good service are the influencing factors in taking decisions regarding selection of brand, respectively.

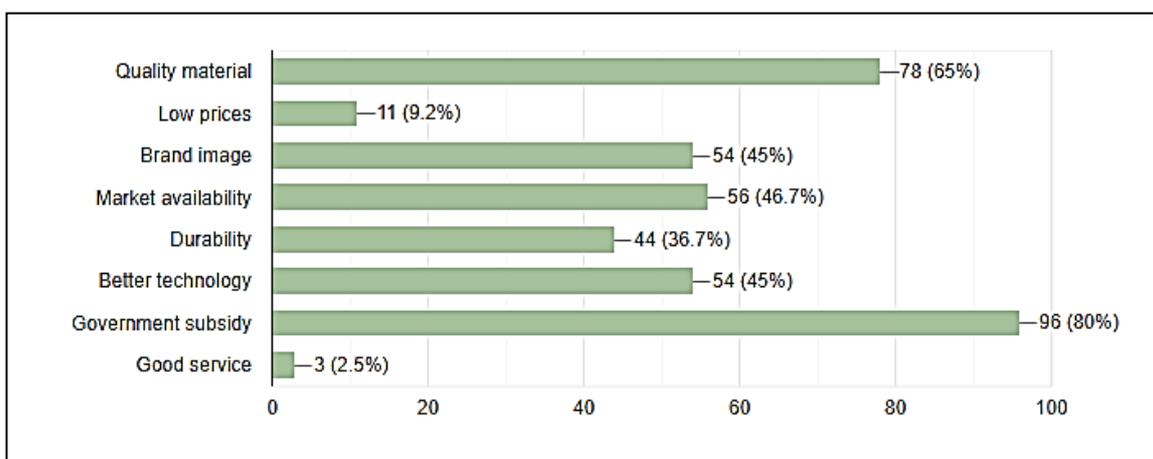
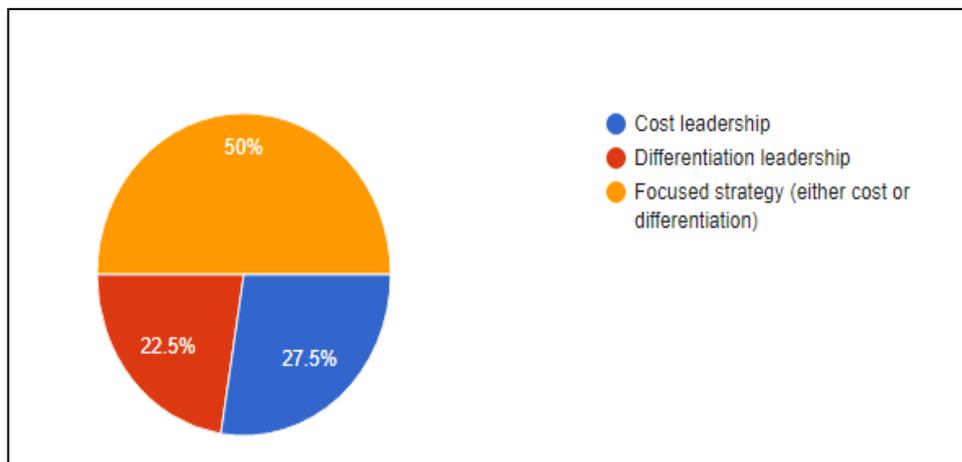


Fig 7: Factors influencing the purchase decision

### Strategies adopted to pursue/sustain competitive advantage

Details regarding strategies adopted to pursue competitive advantage of micro irrigation companies are given in fig. 8. From fig. 8 it can be observed that 50 per cent of micro

irrigation companies have focused strategy either cost or differentiation strategy, whereas, 27.5 per cent and 22.5 per cent of companies follow cost leadership and differentiation strategy, respectively.



**Fig 8:** Details regarding competitive advantage

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