Eco. Env. & Cons. 20 (2) : 2014; pp. (523-524)
Copyright@ EM International
ISSN 0971–765X

Constraints of drip irrigation user in adoption of Banana

V.V. Bahire[1], V.N. Sidam[1] and A. R. Kadam[2]*

[1]Department of Extension Education, VNMKV, Parbhani (M.S), India.
[2]Department of Horticulture, VNMKV, Parbhani (M.S), India.

(Received 23 July, 2013; accepted 30 August, 2013)

ABSTRACT

The present study was conducted in Nanded District of Marathwada region of Maharashtra state. The Nanded and Ardhapur talukas of Nanded district were purposively selected for the study. Sample of 120 respondents was purposively selected, 60 respondents from each taluka on the basis of their involvement in Adoption of management practices of drip irrigation for banana in Nanded district. The respondents were interviewed with the help of well structured interview schedule.

Key words: *Knowledge, Adoption, Drip irrigation, Constraint.*

Introduction

There are problems in adoption of drip irrigation system, farmers think that it is difficult to install and its subsequent functioning drip irrigation system. That is why the farmers are reluctant to adopt the drip management practices in their fields. Moreover, complex and time consuming nature of the management practices aggravates the problems severely, hence the farmers root out the drip set within 2 to 3 years after installation in the field. Govt. of Maharashtra, India gives 20 to 30 per cent subsidies to seek the answer which is sufficient amount, however it is not the sole remedial measure to solve this problem.

Methodology

For the study two talukas viz. Nanded and Ardhapur, were selected purposively from Nanded district having high area under drip irrigation (i.e. 5470 ha) respectively and six villages from each taluka were selected purposively, from each villages ten respondents were selected comprising total sample of 120 respondents. Ex-Post Facto research design was used for the research study

Finding

The findings obtained from the present study as well as relevant discussion have been presented as follows.

Constraints faced by the drip irrigation users in adoption of drip irrigation system

The various constraints faced by the banana growers in adoption of drip irrigation system are given in Table 1.

It was noticed from technical constraints that lack of technical knowledge was the main constraint in the adoption of management practices of drip irrigation which was reported by 85.00 per cent respondents, another major problem was wrong design reported by 80.00 per cent respondents. It was also observed that clogging of emitter or dripper (75.00 per cent), low discharge of water at the end dripper

***Corresponding author's email:** kadamaditya007@gmail.com
Address : Mr. Aditya R. Kadam, Room No. C-20, Vaidyanath Hostel (New P.G.) VNMKV Campus, Parbhani 431 402

Table 1. Constraints faced by the farmer in adoption of management practices of drip irrigation

(N=120)

Sl. No.	Constraints	Frequency	Per cent
Economic constraints			
1.	Higher initial cost of drip unit	90	75.00
2.	Higher cost for repairing	54	45.00
3.	Higher cost of spare parts of drip unit	24	20.00
4.	Higher cost of HCl acid	30	25.00
5.	Higher cost of liquid fertilizer	54	45.00
6.	Subsidies not available in proper time	12	10.00
Technical constraint			
1.	Clogging of emitter or dripper	90	75.00
2.	Damage of laterals by rat/squirrel	66	55.00
3.	Leakage of water	36	30.00
4.	Cracking of laterals	66	55.00
5.	Low discharge of water at the end emitter	90	75.00
6.	Cracking of screen of screen filter	24	20.00
7.	Low quality spare part	18	15.00
8.	Wrong design of drip unit	96	80.00
9.	Drip unit useful for specific crop only	18	15.00
10.	Inter cultivation is difficult	12	10.00
11.	Lack of knowledge about pressure and pressure gauge	24	20.00
12.	Lack of technical awareness	102	85.00
Other constraints			
1.	Guidance from extension agencies or dealers at incorrect time	30	25.00
2.	Lack of proper training	54	45.00

were also reported problems by 75.00 per cent respondents and cracking of laterals (55.00 per cent). Regarding the economic constraints the major problems expressed by the drip user was higher initial cost of investment (75.00 per cent) also higher cost of drip repairing (45.00 per cent) and higher cost of liquid fertilizers (45.00 per cent) as compared to other fertilizer.

The other major constraints were the lack of proper training (45.00 per cent) and guidance from extension agencies or dealer at incorrect time (25.00 per cent) faced by drip users. Very few of the drip irrigation users mentioned the constraints of non availability of subsidies in proper time (10.00 per cent), difficulties in intercultivation due to drip unit installation (10.00 per cent), low quality of spare parts (15.00 per cent), drip unit useful for specific crops only (15.00 per cent).

Conclusion

It was observed that major constraints faced by drip users were lack of technical knowledge and wrong design of drip irrigation unit, also clogging of emitters, low discharge of water at the end of emitters.

References

Deshmukh, P.S., Khalche, P.G., Phadtare, V.R. and Pawar, N.G. 1997. Socio-economic constraints in use of drip irrigation under sugarcane farming. A research report presented to Research Review Committee held on 29th April. MPKV, Rahuri (M.S.).

Dhamane, S.D. 1989. *Knowledge, adoption and constraints in adoption of water management practices of the well owner farmer in Miraj taluka of Sangli district.* M.Sc. (Agri.) Thesis (Unpub.), MPKV, Rahuri (M.S.).

Farpat, B.N. 1997. *Constraints in adoption of improved cultivation practices in banana of Jalgaon district.* M.Sc. (Agri.) Thesis (Unpub.), MKV, Parbhani (M.S.).

Ingale, P.O. and Sagane, N.A. 1992. Constraint in the use of drip irrigation system. A case study. *Journal of Maharashtra Agril. University.* 17(2) : 294-297.

Kharat, G.R. 1996. *Constraints faced by the farmers in adoption of improved package of practices of pomegranate cultivation.* M.Sc. (Agri.) Thesis (Unpub.), MPKV, Rahuri (M.S.).