

CORRELATES OF WATER RESOURCE UTILIZATION MANAGEMENT OF SUGARCANE GROWERS OF SOUTH GUJARAT

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INTRODUCTION

Irrigation is an important input for increasing agricultural production. Availability and use of irrigation in farming not only increases production, but it also results in overall socio-economic development of the rural mass. A major concern is the supply of irrigation water at the right time and in required quantity.

Water is the natural input. If water is not properly used, shortage may be one of the main problems in future development. The sugarcane is one of the major crops in south Gujarat, that requires more irrigation water. There are two types of farmers in the area, farmers irrigating their fields through canal water and farmers irrigating their fields through lift irrigation. The understanding of the two type of farmers regarding this precious input may differ. This may affect their management ability of utilization of the water resource. The present study was planned to know the correlates of water resource management of sugarcane growers, so as water saving measures can be emphasized.

METHODOLOGY

The study was conducted in 13 village of Valsad and Surat districts. The main reason for selecting these districts was that they occupy maximum area under sugarcane crop. The data on water management of

both the types of farmers were collected with the help of specifically structured interview schedule by personal interview method.

Dependent variable water resource utilization management was measured through scale development by researcher himself. Correlation of coefficient was used to analyze the data.

RESULTS AND DISCUSSION

To get a comprehensive idea of the correlation between water resource utilization management of sugarcane growers and independent variables, correlation analysis was done and results are presented in Table 1.

Personal Characteristics

Of the three personal characteristics namely age, education and family size of the respondents, only education showed significant correlation with water management (Table 1). While, other two characteristics i.e. age and family size showed negative and non significant relationship with water management. The finding is in agreement with findings reported by Bhutiya (1993), Khedkar and Ingle (1994), Farooqui *et. al.* (1993) and Patel (1995).

Economic Characteristics

As far as economic characteristics viz, land holding, occupation and annual income of

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Table 1 : Correlation between characteristics of the farmers and their water resource utilization management

Characteristics of the respondents	Correlation coefficient (r)	
	'A' type respondents	'B' type respondents
Personal characteristics		
Age	- 0.0515	- 0.1473
Education	0.3630*	0.6164**
Family size	- 0.1774	- 0.0902
Economic characteristics		
Land holding	0.4057**	0.8722**
Occupation	- 0.1378	- 0.0360
Income	0.4583**	0.7311**
Psychological characteristics		
Economic motivation	0.8922**	0.8944**
Risk orientation	- 0.0900	0.0037
Attitude	0.9004**	0.8632**
Knowledge	0.8640**	0.8412**

the respondents were concerned, two characteristics i.e. land holding and annual income has shown significant correlation with water management. Occupation showed negative and non significant correlation. The finding is supported by Mohite *et. al.* (1993) and Khedkar and Ingle (1994).

Psychological Characteristics

The data in Table 1 indicated that from amongst the psychological characteristics of the respondents, the risk orientation was not correlated with water management. In both the groups of farmers, remaining three psychological characteristics viz, economic motivation, attitude and knowledge had shown high significant correlation with water management.

Similar observation is also reported by Farooqi *et. al.* (1993), Patel (1994), Vekaria (1989), Reddy (1993), and Tandel (1994).

CONCLUSION

It is clear from the results of the study that out of ten variables six variables namely, education, land holding, income, economic motivation, attitude and knowledge of the respondents of both the groups are significant and positively correlated with their water resource utilization management. While, rest of their characteristics viz, age, family size, occupation and risk orientation did not show significant effect.

REFERENCES

- Bhutiya Khorla (1993) "A study on attitude of adopter and non-adopter farmers towards watershed management programme in Sikkim". Unpublished M. Sc. (Agri.) thesis, G.A.U., Anand.
- Farooqui, H. F.; Khan, S. M. and Mahajan, B. S. (1993). A study of the extent of adoption of water management practices of wheat and summer groundnut crops. Maha. J. Ext. Edu. Vol. XII, pp. 157-160.

- Khedkar, V. L. and Ingle, P. O. (1994). Awareness and adoption of soil and water conservation practices by farmers in saline tract of Purna Valley. *Agril. Ext. Review*. Vol. 6, No. 6, pp. 14-17.
- Mohite, S. M.; Ankush, G. S. and Gare, R. V. (1993). Differential characteristics in relation to utilization of canal irrigation water in Jayakwadi command area. *Maha J. Ext. Edu*. Vol. XII, pp. 91-94.
- Patel, U. K. (1994). To study the input use behaviour of paddy growers in command area of South Gujarat. Unpublished M.Sc. (Agri.) thesis, G.A.U., Navsari.
- Patel, J. B. (1995). Impact of watershed management technology in agriculture development in Panchmahal district of Gujarat State. Unpublished M.Sc. (Agri.) thesis, G.A.U., Navsari.
- Reddy, M. Sudarshan and Iqbal Mohd. (1993). Knowledge of beneficiaries and non beneficiaries on watershed development programme. *Maha J. Ext. Edu*. Vol. XII, pp. 181-184.
- Tandel, G. L. (1994). A study of extent of adoption of sugarcane production technology by the sugarcane growers of Valsad district of Gujarat State. Unpublished M.Sc. (Agri.) thesis, G.A.U., Navsari.
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