Relationship of technological gap with socio-economic variables of saffron growers in Kashmir (J & K), India

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ABSTRACT

The study was conducted in three purposively districts *viz.,* Pulwama, Srinagar and Budgam of Kashmir valley by selecting 160 respondents to know the relationship of technological gap with socio-economic variables. The study revealed that the technological gap of small saffron growers had positive and significant relationship with attitude and socio-economic status, while as a positive and non-significant relationship of technological gap with age and caste was observed. The technological gap of medium saffron growers showed a significant and positive relationship with age, socio-economic status, knowledge and attitude. The technological gap of big saffron growers had significantly negative relationship with extension contact.

Key words : Saffron, Technological gap

INTRODUCTION

Saffron (*Crocus sativas* L.) is the legendary crop of Jammu and Kashmir State, where it is mainly grown on Plateau areas. It is a small bulbous perennial medicinal herb cultivated for its mauve coloured flowers having red stigmas, which after drying is called as commercial saffron. It is an important cash crop of Kashmir Valley and can be of prime significance in uplift of rural economy. Saffron growing areas of the state are concentrated in district Pulwama with highest area of 78.91 per cent, Budgam 12.27 per cent, Srinagar 7.32 per cent and small area of Doda 1.5 per cent. During 2006-07 the area under saffron in the state was 2989 ha and the production during the same year was 88.52 quintals. (Anonymous, 2008). The production of saffron is decreasing year by year even in traditional saffron growing area of the valley like Pampore. Like elsewhere, efforts are on to improve saffron production through the adoption of recommended technologies in terms of agronomic practices among the saffron growers (Shah and Tripathi, 2009). Considering all these facts in view, it was felt essential to find out the relationship of technological gap with socio-economic variables of saffron growers in Kashmir.

MATERIALS AND METHODS

The present study was planned to be conducted in the state of Jammu and Kashmir. Out of six districts of Kashmir Valley three districts namely Srinagar, Pulwama and Budgam were selected purposively for the study. The list of saffron growing villages was prepared from all the three districts and 12 villages having maximum area under saffron were selected purposively. A list of saffron growers from the selected villages of the three blocks

was made with help of village heads and 15 respondents from each village selected, thus making a total of 180 respondents for the purpose of study. The saffron growers were categorized into three groups *i.e.*, small, medium and big saffron growers on the basis of their land strength. Small growers have 0.5-1.5 ha of land, medium growers have 1.5-2.5 ha and big growers have above 2.5 ha of land. The data were collected with the help of interview schedule and correlation coefficient and multiple regression analysis was employed to know the relationship of variables with technological gap.

RESULTS AND DISCUSSION

The results obtained from the present investigation as well as relevant discussion have been presented in the following sub heads:

Relationship of technological gap with socio-economic variables:

It is obvious from the Table 1 that technological gap has significant and negative correlation with education, extension contact and knowledge in case of small saffron growers. It means that higher the education, extension contact and knowledge, lower were the technological gap between the recommended and adopted practices of saffron cultivation. These findings are similar with the findings of Bhagwan and Chauhan (2006). The technological gap showed a positive and significant relationship with attitude and socio-economic status in case of small saffron grower. Similar findings were also reported by Popat *et al.* (2006).

The correlation coefficients between technological gap and independent traits of medium saffron growers

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Table 1: Correlation between socio-economic variables and technological gap of various categories of saffron growers

| Sr. No. | Variables | Categories of growers (n = 180) | | | | | |
| | | Small growers (n = 60) | | Medium growers (n = 60) | | Big Growers (n = 60) | |
		r-value	t-value	r-value	t-value	r-value	t-value
1.	Age	0.167	1.286 NS	0.437	3.697**	0.324	2.608*
2.	Education	-0.435	3.680**	-0.401	3.333**	0.361	2.949**
3.	Caste	0.058	0.442 NS	0.0147	0.106 NS	0.116	0.889 NS
4.	Socio-economic status	0.422	3.546**	0.311	2.492*	0.446	3.794**
5.	Ext. Contact	-0.256	2.018*	-0.454	3.880**	-0.327	2.635*
6.	Knowledge	-0.519	4.267**	0.381	3.139**	0.411	3.431**
7.	Attitude	0.267	2.111*	0.497	4.365**	0.519	4.627**

NS = Non significant   * and ** indicate of significance of values at P = 0.05 and 0.01, respectively,

had negative and significant relationship with education and extension contact. It means that medium growers with low education and less extension contact correspondingly have high technological gap. Similar findings were also reported by Bhagwan and Chauhan (2006).

Technological gap has significant negative correlation with extension contact in case of big saffron growers. It means as the frequency of extension contact increases, technological gap will decrease. This finding is supported by the findings of Vinod (2007).

Multiple regression analysis of socio-economic variables with technological gap:

All the socio-economic variables were fitted in the multiple regression equation to show their contribution with technological gap among small saffron growers. As it is clear from the regression Table 2 that the regression coefficients of education, extension contact and knowledge influenced the technological gap in case of

Table 2: Multiple regression analysis of socio-economic variables with technological gap

| Sr.No. | Variables | Categories of Growers (n = 180) | | | | | |
| | | Small Growers (n = 60) | | Medium Growers (n = 60) | | Big Growers (n = 60) | |
		Reg. coefficient	t-value on Reg. coefficient	Reg. coefficient	t-value on Reg. coefficient	Reg. coefficient	t-value on Reg. coefficient
1.	Age	0.1451	0.869	0.2655	1.17	0.1768	0.939
2.	Education	-0.4132	2.164*	-0.9596	2.565*	-0.1580	0.340
3.	Caste	-0.991	0.240	0.263	0.240	3.177	0.789
4.	Socio-economic status	0.8705	1.574	0.3826	1.090	0.9052	1.973
5.	Ext. Contact	-1.0166	2.310*	-0.4995	2.013*	-1.1971	2.749*
6.	Knowledge	-2.4097	5.795**	0.4130	1.783	-0.1465	1.581
7.	Attitude	0.4301	1.27	1.0624	0.140	1.5426	1.601
	R^2	72.20 %		69.10 %		63.50 %	

* and ** indicate of significance of values at P = 0.05 and 0.01, respectively,

Table 3 : Analysis of variance of saffron growers

| Sr. No. | Categories of growers | Variance | | | | | | |
		Source	DF	S.S.	M.S.	F	R2	0..05/0.01
1.	Small Growers	Regression	7	22977.7	3214.4	23.52	72.2%	2..20/3.02
		Error	52	7384.8	121.3			
		Total	59	30362.5				
2.	Medium Growers	Regression	7	28437.2	3710.8	16.16	69.1%	2..20/3.02
		Error	52	9873.2	147.4			
		Total	59	38310.4				
3.	Big Growers	Regression	7	23822.3	2954.2	12.92	63.5%	2..20/3.02
		Error	52	7893.1	98.3			
		Total	59	31715.4				

small saffron growers. All the independent traits, jointly contributed to the extent of 72.20 per cent of variation in the technological gap of small saffron growers. The Table 2 further reveals that the technological gap was most influenced by the variables education and extension contact in case of medium growers. The variables jointly contribute 69.10 per cent of variation in the technological gap. In case of big saffron growers the technological gap was most influenced by the variable *i.e.* extension contact. All the independent traits, jointly contributed to the extent of 63.50 per cent of variation in the technological gap of big saffron growers.

Conclusion :

It can be concluded that most of the socio-economic variables were found positive and significantly related with the technological gap. So there is a need to minimize the technological gap among the saffron growers. A well planned and regular training programme may be organized for the saffron growers of Kashmir valley.

REFERENCES

Anonymous (2008). Crop estimation in Jammu and Kashmir. State Financial Commissioner; Government of Jammu and Kashmir (Srinagar).

Bhagwan, S. and Chauhan, T.R. (2006). Technological gap in moong bean production technology in arid zone. *J. Arid Legumes*. 3: 39-43

Popat, M. N., Rakholia, P. M. and Verma, P. D. (2006). Gap in adoption of soil and water conservation technologies and bear influencial sectors. *Indian J. Soil Cons.*, **43**: 145-148

Shah, A.A. and Tripathi, R.B. (2009). Socio-personnel characteristics of farmers and adoption of improved farming practices in saffron. *Agric. Update*, **4**: 194-196

Vinod, P. (2007). Technological gap in potato production technology. *J. Internat. Academica*, **11**: 106-109

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