

## Technological gap in saffron production technology

T. HUSSAIN WANI, B.D. TIYAGI AND AJAZ A. SHAH

See end of the article for authors' affiliations

Correspondence to :

**T. HUSSAIN WANI**  
Chaudhatry Charan  
Singh University,  
MEERUT (U.P.)  
INDIA

### ABSTRACT

Present study was designed to examine the technological gap by selecting 180 saffron growers from three purposively selected districts of Kashmir. The findings reflected that the highest technological gap 53.75 % was found in post harvest technology followed by 50.21 % was planting of seed corms. Further, technological gap was found in land preparation and manure/fertilizer application (49.62 %), plant protection (47.49 %) and irrigation and intercultural practices (44.71 %). The study also revealed that average technological gap was 55.73 per cent in small growers followed by medium growers (47.73 %) and big saffron growers (44 %).

### INTRODUCTION

Saffron (*Crocus sativas* L.) is a perennial herb, used as spice. Jammu and Kashmir is the only State of India where saffron is grown with an area of about three thousand hectares with a production of 91.24 quintals (Anonymous, 2008). Pulwama, Srinagar and Budgam are important saffron growing districts in J&K. From the last decade, the average productivity is decreasing with a decline of about 40 per cent (Shah and Tripathi, 2009). However, there is a considerable possibility of increasing production by increasing farmer's efficiencies. This means that there is a need to promote the saffron production. This indicates that there is a need to know their existing level of knowledge and extent of adoption for declining the future strategy in respect to promote the saffron production technology.

Obviously the productivity of saffron is low as compared to other saffron growing countries. Reasons for low productivity is lacking of technical know-how of saffron growers and non adoption of improved package of practices by the growers. As a result, the technological gap in saffron production has increased. Keeping these factors in mind, the present study was undertaken to know the technological gap of saffron production technology in Kashmir.

### METHODOLOGY

The present investigation was undertaken in Kashmir of J&K State. Srinagar, Pulwama

and Budgam were selected purposively, since these districts have good percentage of area under saffron cultivation. Further, four villages were selected from each district and ten saffron growers from each village were selected purposively. To measure the farmer's technological gap in saffron production technology, a well structured interview schedule was used for collecting the data from the saffron growers.

### RESULTS AND DISCUSSION

The findings obtained from the present study are presented below:

#### *Extent of technological gap in saffron production technology:*

Technological gap is presented in Table 1 as small, medium and big growers on the basis of improved practices.

The perusal of Table 1 exposes that highest *i.e.* 53.74 per cent gap was found in post harvesting technology followed by 50.21 per cent in planting of seed corms, 49.62 per cent in land preparation and manure/fertilizers application. The overall technological gap was found 49.15 per cent. Plant protection was found in 4<sup>th</sup> position and irrigation and intercultural practices in 5<sup>th</sup> position in the technological gap percentage. Category wise small growers have more technological gap (55.73 %) followed by medium growers (47.73 %) and (44.00 %) in case of big growers. The highest gap in post harvest technology of saffron was due to unawareness regarding

#### Key words :

Saffron,  
Technology gap,  
Post harvest  
technology

Accepted :  
September, 2009

**Table 1: Extent of technological gap of improved package of practices of saffron cultivation**

Sr. No.	Improved package of practices	Small growers (n = 60)		Medium growers (n = 60)		Big growers (n = 60)		Total (n = 180)	
		Gap %	Ranks	Gap %	Ranks	Gap %	Ranks	Gap %	Ranks
1.	Planting of corms (seed)	59.66	I	48.99	II	41.99	III	50.21	II
2.	Land preparation and manure/fertilizers	54.44	IV	47.22	III	47.22	II	49.62	III
3.	Irrigation and intercultural practices	51.66	V	41.66	V	40.83	IV	44.71	V
4.	Plant protection	57.2	II	44.99	IV	40.00	V	47.49	IV
5.	Post harvest technology	55.41	III	55.83	I	49.99	I	53.74	I
	Total	55.73		47.73		44.00		49.15	

**Table 2 : Over-all technological gap level of different categories of saffron growers**

Sr. No.	Category of growers	Level of technological gap (n=180)						Average technological gap (%)
		Low		Medium		High		
		No.	%	No.	%	No.	%	
1.	Small	4	6.66	22	36.67	34	56.67	55.73
2.	Medium	7	11.66	27	45.00	26	43.34	44.73
3.	Big	13	21.66	30	50.00	17	28.34	44.00
	Total	24	13.33	79	43.89	77	42.78	49.15

picking, storage and drying. Almost all the sample growers were found applying traditional methods of drying. The growers also did not know how to store the saffron after drying.

The findings in Table 2 reveal that majority (43.89 per cent) of the saffron growers had medium level of technological gap. It was 36.67 per cent in case small growers, 45 per cent in case medium growers and 50 per cent in case big growers. The percentage of low level of technological gap was found to be 13.33 per cent only, which was made of 6.66 per cent of small growers, 11.66 per cent of medium growers and 21.66 per cent of big growers. Table 2 further indicated that 42.78 per cent of the saffron growers were placed in the high level of technological gap, which was 56.67 per cent in small growers, 43.34 per cent in medium growers and 28.34 per cent in big growers. The average technological gap of small, medium and big growers was 55.73 per cent, 44.73 per cent and 44 per cent, respectively. The lowest technological gap of big saffron growers of the study area was especially due to their more output, high socio-economic status, having their own improved implements etc. These findings are corroborated with the findings of Bhagwan and Chauhan (2006) and Vinod (2007).

### Conclusion:

The overall technological gap was found more than fifty per cent of saffron regarding production technology.

Small growers of the valley had highest technological gap in terms of production technology. With a view to decrease technological gap, it is necessary to aware them about improved technologies of saffron production. The planners and policy makers should take steps to meet the needs and challenges of the saffron growers and promote production technologies at gross root level.

### Authors' affiliations

**B.D. TIYAGI AND AJAZ A. SHAH**, Chaudhary Charan Singh University, MEERUT (U.P.) INDIA

### 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
- 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. InterAcademica*, **11**: 106-109.

\*\*\*\*\*  
\*\*\*\*\*