

CONSTRAINTS IN ADOPTION OF IMPROVED TURMERIC PRODUCTION TECHNOLOGY

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ABSTRACT

Turmeric is having great importance as a condiment as well as a medicinal value. Turmeric growers are facing constraints in adopting its production technology. Present study was conducted to study the various constraints encountered by farmers in adoption of improved production technology. Unavailability of suitable varieties, lack of Government initiative in advancing loans and granting subsidies, distress sale due to immediate need of money, lack of cold storage and warehousing facilities in the area and lack of irrigation water were the major constraints as faced by the farmers.

INTRODUCTION

Turmeric (*Curcuma Lenga L.*) is an important condiment, grown as a cash crop in tropical and subtropical countries of the world. India, the home of spices produced 3.08 million tones in 2001-2002 with turmeric 21.6 percent share in the world market. In Rajasthan, Udaipur district ranks first in terms of total area (140 ha.) and production (569 Mt.) with an average yield of 4064 kg per hectare.

Turmeric has assumed a great importance as an condiment as well as a crop of medicinal value. It is also utilized as a raw material for some sophisticated products like turmeric oil, colours used in pharmaceuticals, dyes in colouring wool, silk and cotton industries etc. Besides, turmeric has a medicinal value as anti-microbial and antiseptic activity, stomach tonic and as a blood purifier. It is also effective against intermittent fever and dropsy too. It also finds a place in religious and ceremonial occasions. It is one of the most popular flavouring and colouring agents and also mostly used in preparation of soup, pudding, curries and cooking vegetables etc. It is a

rich source of vitamin A, B, C and Niacin. Although turmeric cultivation is becoming popular among the farmers, they are facing certain constraints in adoption of its production technology. Considering these facts in mind, the present study was conducted with the objective to unfold the various constraints encountered by the farmers in adoption of improved turmeric production technology.

METHODOLOGY

The present study was conducted in Jhadol Panchayat Samiti of purposely selected Udaipur district of Rajasthan. The appeal for selecting Jhadol Panchayat Samiti owed to its highest area under turmeric cultivation. Finally, 8 villages from the aforesaid Panchayat Samiti were selected and five farmers from each village were selected randomly, thus constituting a sample of 40. For obtaining reliable information, assistance from the experts of Horticulture department, Rajasthan College of Agriculture, Udaipur was taken to select the respondents. The data were collected on a specially prepared and structured schedule employing personal interview technique. To measure the

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Table 1 : Technical Constraints

Sr. No.	Statements	MPS	Rank
i)	Lack of technical guidance	75.52	III
ii)	Inadequate technology	70.05	IV
iii)	Lack of literature in simple language on turmeric	60.37	V
iv)	Un-availability of suitable variety	90.33	I
v)	Inadequate knowledge of agriculture functionaries	48.00	VI
vi)	Unavailability of inputs in the village	75.00	II

intensity of constraints, three point continuum scale was used with the weightage of 2, 1 and 0, respectively; on the continuum points. The data were analyzed, MPS calculated and accordingly ranks were assigned.

RESULTS AND DISCUSSION

The constraints have been classified into:

- a) Technical Constraints,
- b) Economic Constraints,
- c) Marketing Constraints,
- d) Storage Constraints,
- e) General Constraints and

The data depicted in Table-1 explicit that the respondents were seriously confronted with the problem of unavailability of suitable variety of turmeric (MPS 90.33). Exactly three-fourth of the respondents perceived unavailability of inputs in the village as an impediment in turmeric cultivation. This was followed by lack of technical guidance (MPS 73.52), inadequate technology for turmeric cultivation (MPS 70.05) and lack of literature in simple language on turmeric (MPS 60.37).

However, inadequate knowledge of agricultural functionaries as a constraint was not agreed upon by majority of respondents (MPS 48.00). Unavailability of suitable variety of turmeric as a high intensity constraint as reported by the respondents seems obvious. This is simply because of the unavailability of the improved varieties in the villages and nearby towns in the vicinity of the study area.

The findings are in line with the findings of Satendra Kumar (1997) who reported that majority of turmeric cultivators had serious problem of improved varieties of turmeric.

A critical examination of data presented in Table 2 reveals that lack of Government initiative in advancing of loans and granting of subsidies (MPS 82.63) was expressed as major constraint by the respondents and was considered first in order of the economic constraints hierarchy. Whereas, difficulty in borrowing loans (MPS 78.57) and high cost of inputs (MPS 71.45) were next important constraints faced by the respondents and were ranked second and third respectively. The least important constraint expressed by the farmers was delayed payment from sale

Table 2 : Economic Constraints

Sr. No.	Statements	MPS	Rank
i)	Difficulty in borrowing loans	78.57	II
ii)	Lack of Govt. initiative in advancing of loans and granting of subsidies	82.63	I
iii)	Delayed payment from sale of produce.	41.62	IV
iv)	High cost of inputs	71.45	III

Table 3 : Marketing Constraints

Sr. No.	Statements	MPS	Rank
i)	Problem of transportation	65.00	III
ii)	Lack of proper market	41.39	VI
iii)	High fluctuation in market prices	77.04	II
iv)	Distress sale due to immediate need of money	91.07	I
v)	Lack of procurement price of produce by the Govt.	58.00	V
vi)	Lack of marketing procedure	37.62	VII
vii)	Malpractices of middlemen	61.40	IV

of produce, the MPS of which was 41.62.

The findings are similar to the findings of Khetawat (1991) who reported that high cost of inputs, availability of chemical fertilizers and plant protection chemicals at the right time in the local area were major constraints experienced by the farmers raising coriander crop.

The perusal of Table 3 reveals that distress sale due to immediate need of money was perceived as most important constraint by the respondents with MPS 91.07 and ranked first amongs the marketing constraints. This was followed by high fluctuation in market prices with MPS 77.04. The third, fourth and fifth positions were occupied by problem of transportation, malpractices of middlemen, lack of procurement price of produce by the Government. The mean percent scores of these aspects were 65.00, 61.40 and 58.00, respectively. The constraints which were perceived with less intensity under the marketing constraints hierarchy were lack of proper market (MPS 41.39) and lack of marketing produce (MPS 37.62) with sixth

and seventh rank, respectively. The realization of problem of distress sale due to immediate need of money may be due to the fact that study area has been suffering from rain failure since last 5-6 years resulting in poor socio-economic conditions of the farmers and as such the constraint seems obvious.

The findings are in accordance with the findings of Khetawat (1991) who reported that with other constraints, price fluctuation of the produce was also the major constraint reported by the respondents who were raising coriander crop in their fields in Kota district.

Table 4 divulges that lack of cold storage and warehousing facility in the area was expressed as one of the most prominent constraints and ranked first by the respondents with MPS 85.00. This was followed by lack of technical know-how about curing, turmeric as a perishable commodity and lack of technical knowledge of storage with MPS 56.77, 44.47 and 35.05, respectively. High rent on account of cold storage was placed at the bottom of the

Table 4 : Storage Constraints

Sr. No.	Statements	MPS	Rank
i)	Perishable commodity	44.47	III
ii)	Lack of technical knowledge of storage	35.05	IV
iii)	High rent on cold storage	26.00	V
iv)	Lack of technical know-how about curing	56.77	II
v)	Lack of cold storage and warehousing facility in the area	85.00	I

Table 5 : General Constraints

Sr. No.	Statements	MPS	Rank
i)	Lack of irrigation water	95.00	I
ii)	Fragmented and undulated land	41.00	IV
iii)	Rhizome rot of turmeric	85.63	III
iv)	Resource poor farmers	87.00	II
v)	Un-awareness about medicinal value of turmeric crop	21.00	VI
vi)	Lack of motivating agencies in the area	29.65	V

storage constraints hierarchy by the respondents with MPS 26.00. This may be attributed to the fact that cold storage and warehousing facilities are not available to the turmeric growers in the study area and thus, as such might have reflected as a constraint in the study area.

The findings are in agreement with the findings of Sharma (1991) who reported that lack of storage facility in the area was main constraint in cumin production.

The data incorporated in Table 5 show that lack of irrigation water (MPS 95), resource poor farmers (MPS 87) and Rhizome rot disease of turmeric (MPS 85.63) were considered as major constraints by the turmeric growers with 1st, 2nd and 3rd ranks, respectively. However, the constraints which were perceived as least important were fragmented and undulated land (MPS 41.00), lack of motivating agencies in the area (MPS 29.65) and un-awareness about medicinal value of turmeric crop (MPS 21.00) and were assigned 4th, 5th, and 6th ranks, respectively. The realization of problems relating to lack of irrigation water has become more serious in the area due to erratic rainfall and drought conditions since last 5-6 years resulting in to unavailability of sufficient ground water to raise turmeric crop.

The present findings are in agreement with those of Satendra Kumar (1997) who reported that resource poor farmers, lack of motivation agencies and fragmented land were the major constraints in the adoption

of turmeric crop.

CONCLUSION

On the whole, it could be concluded that unavailability of suitable varieties, lack of Government initiative in advancing of loans and granting subsidies, distress sale due to immediate need of money, lack of cold storage and warehousing facilities in the area and lack of irrigation water were the major constraints as encountered by the farmers in adoption of improved turmeric production technology.

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