Asian Resonance

Constraints Faced by Onion Growers With Regards to Cultivation, Storage and Market

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The present investigation was carried out in Buldhana district of Vidarbha region in Maharashtra state. Result of this study revealed that near about half (46.67%) of the respondents comes under medium level of constraints severity index. While the studying the constraints majority of the respondents reported that they got low prices in market after immediate harvest and non availabity of improved storage methods of onion bulb as well as irregular supply of electricity hence the study suggest that Govt. should provide storage facilities near the vicinity and also provide remunerative prices as well as regular supply of electricity to the onion growers.

Keywords: Constraints, Storage Market Onion Growers

Introduction

Maharashtra state produces 25-30 % onion of the total production of the country. Maharashtra state contributes about 80-85 % in the total onion export. Out of the total onion production in the state, 10-15% onion production is in kharif season, 30-40% production is in Late Kharif and 50-60% production is in Rabi/Summer season.

India's country-wise export of fresh or chilled onion increases day by day. In 2008-2009, India earns foreign exchange worth rupees 1816.14 crores by exporting fresh onion to various countries. India produces 13.60 percent of total world's production and rank second the first being China (Maharashtra State Agricultural Marketing Board Pune:2008-09). .Inspite of being a major onion producing country, India has very low productivity , about 12 tonnes/ha.by adopting the recommended varieties, recommended cultivation practices, agronomic and various other management practices. Onion yield could be increased upto 22-25 tonnes ha^{-1}, however , the desired target of vegetable production cannot be achieved unless majority of the farmers are motivated to adopt recommended onion cultivation practices. At present the farmers are following their own cultivation methods based on their experience. It may not be wrong to call these farmers as potential onion growers. few of them might be aspiring for taking onion on large scale, so for this there is a necessity to disseminate the onion production technology among the potential farmers so as to have the wider adoption of the improved technology and bring radical change in onion yield. The study was therefore undertaken with the following objectives.

Aim of Study

India's country-wise export of fresh or chilled onion increases day by day. In 2008-2009, India earns foreign exchange worth rupees 1816.14 crores by exporting fresh onion to various countries. India produces 13.60 percent of total world's production and rank second the first being China (Maharashtra State Agricultural Marketing Board Pune:2008-09). .Inspite of being a major onion producing country, India has very low productivity , about 12 tonnes/ha.by adopting the recommended varieties, recommended cultivation practices, agronomic and various other management practices. onion yield could be increased upto 22-25 tonnes ha^{-1}, however , the desired target of vegetable production cannot be achieved unless majority of the farmers are motivated to adopt recommended onion cultivation practices. There is a need to educate the farmers that vegetable farming fetches more income from a limited area and time and provides full time employment to all the members of family. At present the farmers are following their own cultivation methods based on their experience. It may not be wrong to call these farmers as potential onion growers. few of them might be aspiring for taking onion on large scale, so for this there is a

necessity to disseminate the onion production technology among the potential farmers so as to have the wider adoption of the improved technology and bring radical change in onion yield. The study was therefore undertaken with the following objectives.

Objectives

1. To study the personal, socio-economic, communication, psychological and situational characteristics of onion growers.
2. To study the knowledge and adoption of onion growers about cultivation and storage practices.
3. To study the constraints faced by onion growers with regards to cultivation, storage and market.
4. To study the marketing behaviour of onion growers.

Variables

The detail about variables selected for the study and their empirical measures are furnished below.

Table 2: Variables and their empirical measures

Sr. No.	Independent Variables
1.	Age
2	Education
3	Land Holding
4	Area under onion crop
5	Annual Income
6	Family Labour
7	Experience in onion cultivation
8	Social Participation
9	Socio-economic status
10	Sources of information
11	Extension contact
12	Irrigation potentiality
13	Economic motivation
14	Market Orientation
15	Knowledge
16	Adoption
	Dependent variable
1	Constraints severity index

Sample

The present investigation was carried out in Buldhana district of Vidarbha region in Maharashtra state. Out of thirteen Panchayat samiti three Panchayat samiti namely Khamgaon, Buldhana and Nandura were purposively selected because of larger area under onion crop in Buldhana district. The list of villages having cultivation of onion crop was obtained from the office of three Panchayat samiti. Out of these villages five villages per Panchayat samiti were selected. From these selected villages, in all 150 onion growers were selected as respondents who constituted the sample for the purpose of present study.The data were collected by contacting the selected farmers personally on their farms and homes, as per their convenience by using interview schedule.

Results and Discussion

1.Personal, socio-economic, communication, psychological and situational characteristics.

1.1 Age

Table 1 indicates that 60.00 per cent of the respondents were included in the middle age group of 36 to 50 years followed by 11.34 per cent appeared in old age of above 51 years. While 28.66 per cent respondents were observed in young category. Similar to the present findings were reported by Phartade (1999) and Sadhaphal (2000).

Table 1:
Distribution of the respondents according to their age

Sr. No.	Age	Respondents (n=150)	
		Frequency	Percentage
1	Young (Upto 35)	43	28.66
2	Middle (36-50)	90	60.00
3	Old (Above 50)	17	11.34
	Total	150	100.00

1.2 Education

It is apparent from table 2 that a little more than one third each of the onion growers were educated Upto high school (36.00%) and college level (33.34%) this was followed by 16.00 per cent who had middle school level education. A small percentage (14.66%) of the onion growers had Upto primary level education. The findings go to corroborate the observations of Wankhade (1996).

Table 2:
Distribution of the respondents according to their education

Sr. No.	Education	Respondents (n=150)	
		Frequency	Percentage
1	Illiterate (No School)	00	00.00
2	Primary school (Upto 4 Std)	22	14.66
3	Middle school (5^{th} to 7^{th} std)	24	16.00
4	High school (8^{th} to 10^{th} std)	54	36.00
5	College (11^{th} and above)	50	33.34
	Total	150	100.00

1.3 Land holding

Table 3:
Distribution of the respondents according to their land holding

Sr. No.	Land holding	Respondent (n = 150)	
		Frequency	Percentage
1	Marginal	10	06.67
2	Small	47	31.33
3	Semi-medium	62	41.33
4	Medium	28	18.67
5	Large	03	02.00
	Total	150	100.00

It was observed from Table 3 that 41.33 per cent of the respondents possessed semi-medium size of land holding, followed by 31.33 per cent having small size of land holding and 18.67 per cent of respondents comes under medium land holding and under marginal (06.67%) and large (02.00%) land holding group.

1.4 Area under onion crop

It is observed from Table 4 that more than one third of the onion growers (37.33%) had put the

area of 0.20 ha. Under onion crop followed by 35.33% and 27.34% of onion growers having 0.21 ha. to 40 ha.and above 0.40 ha. area under onion crop respectively.

Table 4:
Distribution of the respondents according to their area under onion crop

Sr. No.	Area under onion crop	Respondents (n=150)	
		Frequency	Percentage
1	Up to 0.20 ha	56	37.33
2	0.21 to 0.40 ha	53	35.33
3	Above 0.40 ha	41	27.34
	Total	150	100.00

1.5 Annual income

The annual income wise distribution of respondents shows that nearly two third of the onion growers (70.67%) were having annual income in between Rs. 15001 to Rs. 40000 followed by 22.00 per cent of the respondents were in high annual income as well as only 7.33 per cent of the respondents were in low annual income.

Table 5:
Distribution of the respondents according to their annual income

sr. No.	Annual income (Rs.)	Respondents (n=150)	
		Frequency	Percentage
1	Low (Up to Rs.15000)	11	07.33
2	Medium (Rs.15001 to 40000)	106	70.67
3	High (Above 40001)	33	22.00

1.6 Family labour:

The majority of the respondents belonged to low category of availability of family labour indicating that only 2-3 family members were actually engaged on their farms. The proportion of respondents having 4-6 numbers of family labour available to work on their farm was relatively low (21.33%).

Table 6:
Distribution of the respondents according to their family labour

Sr. No.	Category	Respondents (n=150)	
		Frequency	Percentage
1	Low	106	70.67
2	Medium	32	21.33
3	High	12	08.00
		150	100.00

1.7 Experience in onion cultivation

Over two-third of the respondents had an experience in onion cultivation above 10 years. Followed by one fifth having experience in the range between 6 to 10 years. Whereas the percentage of respondents having onion cultivation experience up to 5 years was found to be meager (11.33%). The majority of the respondents had adequate experience in onion cultivation.

Table 7:
Distribution of the respondents according to their experience in onion cultivation

Sr. No.	Category	Respondents (n=150)	
		Frequency	Percentage
1	Up to 5 years	17	11.33
2	6 to 10 years	31	20.67
3	Above 10 years	102	68.00
		150	100.00

1.8 Social participation

Table 8:
Distribution of the respondents according to their social participation

Sr. No.	Category	Respondents (n=150)	
		Frequency	Percentage
1.	Low	122	81.33
2.	Medium	28	18.67
3.	High	00	00.00
		150	100.00

The data in the table 8 indicated that relatively higher proportion of the respondents (81.33%) had low social participation followed by 18.67% of the respondents who had medium social participation. None of the respondents were having higher social participation.

1.9 Socio-economic status

Table 9:
Distribution of the respondents according to their socio-economic status

Sr. No.	Category	Respondents (n=150)	
		Frequency	Percentage
1.	Lower	0	00.00
2.	Lower Middle	8	05.33
3.	Middle	82	54.67
4.	Upper Middle	57	38.00
5.	Upper	3	02.00
		150	100.00

The socio-economic status of respondents in table 9 indicates that majority of the respondents (54.67%) belonged to middle level of socio-economic status in the village community. This was followed by 38.00 per cent of the respondents, who have occupied upper middle position in socio-economic status in their village. Only 05.33 per cent respondents were fond to be in lower middle socio-economic group. The percentage of the onion growers in the upper socio-economic status was reported to be meager (02.00%). It is also worth while to note that not a single onion grower belonged to lower category of socio-economic status.

1.10 Extension contact:

Table 10:
Distribution of respondents according to their extension contact

Sr. No.	Category	Respondents (n=150)	
		Frequency	Percentage
1	Low	46	30.67
2	Medium	87	58.00
3	High	17	11.33
		150	100.00

As regard the extension contact the distribution in table 10 shows that, majority of the respondents (58.00%) had medium level extension contact. Nearly one-third of the respondents (30.67%) had low level of extension contact. Whereas, only 11.33 per cent of the respondents had high level of contact with various extension workers and agencies for acquisition of information.

1.11 Irrigation potentiality

Table 11:
Distribution of respondents according to their irrigation potentiality

Sr. No.	category	Respondents (n=150)	
		Frequency	Percentage
1	Low	22	14.67
2	Medium	107	71.33
3	High	21	14.00
		150	100.00

The majority of the respondents (71.33%) appeared in the medium category of irrigation potentiality. Followed by low and high categories in almost equal percentage (14.67 and 14.00 %) respectively.

1.12 Economic Motivation

Table 12:
Distribution of the respondents according to their economic motivation

Sr.No.	Category	Respondents (n=150)	
		Frequency	Percentage
1.	Low	40	26.67
2.	Medium	76	50.67
3.	High	34	22.66
		150	100.00

The distribution of the farmers as per economic motivation in the table 12 pinpoints that about half of the farmers (50.67%) had medium level of economic motivation. This was followed by 22.66 percent farmers who were high economic motivation and 26.67 percent of the farmer had low economic motivation the majority of the farmers were found to be moderately motivated towards economic ends through cultivation of onion crop.

1.13 Market orientation

Table 13:
Distribution of respondents according to their market orientation

Sr. No.	category	Respondents (n=150)	
		Frequency	Percentage
1	Low	45	30.00
2	Medium	86	57.33
3	High	19	12.67
		150	100.00

Over half of the respondents (57.33%) found to be in the medium level of market orientation, followed by 30 percent of them in low level, whereas the percentage in high level was relatively low (12.67%). The majority of the respondents were oriented towards marketing of onion produce to a moderate extent.

2. Constraints faced by onion growers with regards to cultivation, storage and market.

On the basis of data presented in table 14, it is revealed that near about half of the respondents (46.66%) were observed in medium constraint level. However, 43.33 per cent of the respondents had low constraint level and 10 per cent of the respondents had high constraint level.

Table 14:
Distribution of the respondents according to their constraints severity index

Sr. No.	Category	Respondents(n=150)	
		Frequency	Percentage
1	Low (Upto 33.34)	65	43.33
2	Medium (33.35 to 66.66)	70	46.67
3	High (Above 66.66)	15	10.00
	Total	**150**	**100.00**

On the basis of result obtained during the present investigation, it was concluded that the various constraints can differ from area to area as well as crop to crop. Therefore, in case of onion growers, the maximum number of respondents (46.67%) were found in the medium constraints level as compared to other i.e. low (43.33%) and High (10%). It was concluded that in onion cultivation, storage and marketing practices the farmers still have some difficulties of onion growers.

Constraints analysis of onion growers at different stages while cultivation, storage and marketing practices of onion crop. This data collected and categorized as input supply, technical, financial, labour, storage and marketing constraints and are presented in table 15.

Table 15:
Distribution of the respondents according to their constraints encountered by them in cultivation of onion

Sr. No.	Constraints	Frequency (n=150)	Percentage
A)	**Input Supply**		
1.	Inadequate availability of improved seed and seedlings in time	83	55.33
2.	Inadequate availability of FYM	41	27.33
B)	**Technical Constraints**		
	Irregular supply of electricity	80	53.33
C)	**Financial Constraints**		
1.	High cost of improved variety seeds, fertilizers and insecticides	24	16.00
2.	Inadequate sources of finance for agriculture	32	21.33
D)	**Labour constraints**		

1.	Non-availability of labour at the time of transplanting and harvesting	28	18.66
2.	High wages of labour	33	22.00
E)	**Storage Constraints**		
1.	Non availability of storage facilities	50	33.33
F)	**Market constraints**		
1.	Low price to onion crop	97	64.66

It is observed that in case of input supply constraints 55.33 per cent farmers faced with non availability of improved seeding at proper time followed by inadequate availability of FYM (27.33%). As regard the technical constraints 53.33 per cent farmers faced with irregular supply of electricity.

Incase of financial constraints 21.33 per cent respondents faced the problem with irregular supply of Agril. Loans at time of planting of seedling, transporting, purchasing the fertilizer, pesticides and insecticides followed by high cost of improved variety of seeds, fertilizers and insecticides (16.00%)

Incase of labour constraints majority of the respondent faced the problem of high wages of labour (22.00%) followed by non availability of labour at the time of transplanting and harvesting (18.66%). As regard to storage constraints 33.33 per cent of the respondents faced the problem with non availability of proper storage facilities. In case of marketing constraints (64.66%) of respondents faced the problem of low price to onion.

Conclusion:

It could be concluded that the analysis of these constraints would call for the attention Administrator of the Department of agriculture and other departments for planning systematic efforts to overcome these constraints so as to maximize the production of onion and ultimate benefit to farming community.

Suggestions :

Present study has contributed of constraints analysis of onion in Buldhana District about recommended practices of onion cultivation, storage and marketing. The present test has limited scope for application as they it contained items about only onion cultivation and information related to their package of practices. Hence, it is necessary to develop more representative devices for quick and easy measurement of constraints analysis acquired by individual onion growers.

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