



E-ISSN: 2278-4136
P-ISSN: 2349-8234
JPP 2019; 8(5): 2143-2145
Received: 28-07-2019
Accepted: 30-08-2019

B Raja Madhu Shaker
Krishi Vigyan Kendra, Wyra,
Khammam, Telangana, India

Dr. J Hemantha Kumar
Krishi Vigyan Kendra, Wyra,
Khammam, Telangana, India

Dr. V Chaitanya
Krishi Vigyan Kendra, Wyra,
Khammam, Telangana, India

P Sri Ranjitha
Krishi Vigyan Kendra, Wyra,
Khammam, Telangana, India

Dr. K Ravi Kumar
Krishi Vigyan Kendra, Wyra,
Khammam, Telangana, India

Dr. P Jagan Mohan Rao
Krishi Vigyan Kendra, Wyra,
Khammam, Telangana, India

Corresponding Author:
B Raja Madhu Shaker
Krishi Vigyan Kendra, Wyra,
Khammam, Telangana, India

Constraints faced by chilli farmers in production and marketing of dry chilli in Khammam district of Telangana state

B Raja Madhu Shaker, Dr. J Hemantha Kumar, Dr. V Chaitanya, P Sri Ranjitha, Dr. K Ravi Kumar and Dr. P Jagan Mohan Rao

Abstract

The present study was undertaken to know the constraints faced by chilli growers in production and marketing in Khammam district. Relevant information was collected through a survey method with the help of pre-tested questionnaire. The frequency and percentage of each constraint were worked out to measure the constraints encountered by the respondents, the data was collected pertaining to the agricultural year 2018-19. Data was collected from 120 respondents. The study revealed that, major constraints faced by majority of the chilli growers in production and marketing of chilli are high cost of the hybrid seed, high labour wages, increased incidence of pests and diseases, heavy rains followed by dry spells, lack of regulated markets, heavy price fluctuation for the produce, lack of storage facilities and non availability of quality inputs.

Keywords: Chilli, production, marketing, constraints

Introduction

Chilli is universal spice of India and it is the largest producer of spices in the world with an area of 39,69,390 lakh hectares with a production of 84,13,980 Million Tonnes of spices a year (Horticultural Statistics at a Glance 2017) ^[5]. There are over 60 spices produced in India and good numbers of them are grown in the country which is indigenous. Among them pepper, cardamom, ginger and dry chilli are important. Among spices, a few spices *viz.*, clove, nutmeg, vanilla and certain varieties of chillies were introduced to the country. Among the spices consumed per head, dried chilli fruits constitute a major share. Many varieties of chilli are grown for vegetables, spices, condiments, sauce and pickles. Chilli occupies an important place in Indian diet. It is an indispensable item in the kitchen as it is consumed daily as a condiment in one form or the other. Red chillies/ dry chillies are grown across India on 8.31 lakh hectares with a production of 1.87 million tonnes (Horticultural Statistics at a Glance 2017) ^[5] in Telangana, Andhra Pradesh, Karnataka, Madhya Pradesh and Maharashtra. The crop is planted in August and September, and harvested in March and April. 70% of the chilli produced is consumed domestically, while 30% are exported. Dried chilli exports make up 22% of all the spices exported from India. Dry chilli area in Telangana is 12.43 lakh hectares with a production of 48.29 lakh tonnes (Horticultural Statistics at a Glance 2017) ^[5]. In Khammam chilli is the predominant crop grown in almost all the mandals, farmers invest huge amounts in its cultivation right from sowing to harvesting. Though the cost of cultivation has increased greatly due to various reasons like high labour costs, high cost of inputs etc, the yields are in the downward trend due to technological, biotic, abiotic, institutional, marketing and other constraints which directly affect the economic condition of the farmer. Apart from this due to illiteracy, ignorance and financial weakness, the farmers possess a weak bargaining power and on the other hand, the traders take the advantage of the farmer's weakness because they are generally well informed, well organized, financially sound and very tactful in their dealings. Hence an effort has been made in Khammam to study the major constraints faced by the chilli growers.

Materials and Methods

Khammam district was purposively selected as it is the largest chilli growing district in Telangana state, further it has largest areas under horticultural crops among all districts of the state. The sample covers 120 chilli cultivators from 6villages. For the purpose of the study, multi-stage sampling was adopted. The district has 21 mandals, out of these 3 mandals were selected. In the second stage, from each of the mandals, 2 villages were selected on purposive

basis. In the final stage, from each of the sample villages, 20 farmers were selected on the purposive basis. Thus 120 farmers were selected from 6 villages. Primary data was collected using a pretested interview schedule from the selected farmers by personal interview method. The data was collected for the year 2018-2019. The frequency and percentage of each constraint were worked out to measure the constraints encountered by the farmers in chilli production and marketing.

Results and Discussion

The results obtained from the present investigation as well as relevant discussions have been summarized below

Constraints in production and marketing of dry chilli: The selected dry chilli respondents from different villages were interviewed for the problems faced by them in producing and marketing of dry chilli and their responses were ranked accordingly. The information regarding the important problems faced by the growers are divided into Technological, Socio Economic, Biotic, Abiotic, Institutional, Marketing, Infrastructure and Supply Constraints.

Technological constraints are presented in Table 1. It is revealed from the table that high cost of the hybrid seed was the major technological problem faced by 76 dry chilli growers (63.30 percent), ranked first followed by Non-availability of quality seed (54.17 percent), Total dependence on private hybrids (50.84 percent), Indiscriminate heavy application of complex fertilizers (46.67 percent), Lack of knowledge on micro nutrient deficiencies (41.67 percent), Indiscriminate use of the pesticides (35.00 percent), Heavy use of non-recommended bio-pesticides (30.00 percent) and Lack of knowledge on post harvest operations (17.50 percent) were ranked respectively. The results were in agreement with the findings of Shasikant *et al.* (2012), Dangore *et al.* (2015) [2] and Geetha *et al.* (2017) [4]

Table 1: Technological Constraints faced by the chilli growers n=120

S. No	Technological Constraints	Frequency	%	Rank
1	Total dependence on private hybrids	61	50.84	III
2	Non-availability of quality seed	65	54.17	II
3	Lack of knowledge on post harvest operations	21	17.50	VIII
4	Lack of knowledge on micro nutrient deficiencies	50	41.67	V
5	Heavy use of non-recommended bio-pesticides	36	30.00	VII
6	Indiscriminate use of the pesticides	42	35.00	VI
7	High cost of the hybrid seed	76	63.34	I
8	Indiscriminate heavy application of complex fertilizers	56	46.67	IV

The results in Table 2 indicated that under Socio-economic constraints High cost of labour was the major problem expressed by 87 dry chilli growers (72.50 percent) followed by Scarcity of labour & intensive requirement of labour at picking (59.17 percent), High cost of inputs (44.17 percent) and Uncertainty in market prices (36.67 percent) ranked respectively. The results were in agreement with the findings of Deore *et al.* (2015) [3] and Dangore *et al.* (2015) [2].

Under biotic constraints nearly 90 respondents felt that increased incidence of sucking pests (White fly, Jassids,

Thrips, mites and mealy bugs) and diseases was observed in chilli cultivation (75.00 percent) followed by spurious seed by 84 respondents (70.00 percent) and Development of resistance in pests against the insecticides by 64 respondents (53.34 percent) were ranked respectively. The results were in agreement with the findings of Ahire *et al.* (2015) [1] and Deore *et al.* (2015) [3].

Table 2: Socio Economic, Biotic, Abiotic and Institutional Constraints faced by the chilli growers n=120

S.no	Socio Economic Constraints	Frequency	%	Rank
1	Uncertainty in market prices	44	36.67	IV
2	Scarcity of labour & intensive requirement of labour at picking	71	59.17	II
3	High cost of inputs	53	44.17	III
4	High cost of labour or wages	87	72.50	I
	Biotic Constraints	Frequency	%	Rank
1	Spurious seed	84	70.00	II
2	Development of resistance in pests against the insecticides	64	53.34	III
3	Increased incidence of pests and diseases	90	75.00	I
	Abiotic Constraints	Frequency	%	Rank
1	Drought	55	45.84	III
2	Heavy rains followed by dry spells	87	72.50	I
3	Sudden and unexpected/ unseasonal rains during winter season spoiling the quality of the fruit	71	59.17	II
4	Strong winds/ gales	35	29.17	IV
	Institutional Constraints	Frequency	%	Rank
1	Lack of quality control and inspection	57	47.50	IV
2	Dominance of private input agencies	77	64.17	II
3	Lack of market information on prices and arrivals	66	55.00	III
4	Lack of regulated markets	95	79.17	I

From Table 2, it is also inferred that under Abiotic constraints the major problem expressed by the chilli growers was Heavy rains followed by dry spells (72.50 percent), Sudden and unexpected/ unseasonal rains during winter season spoiling the quality of the fruit (59.17 percent), drought (45.84 percent) and strong winds or gales (29.17 percent) were ranked respectively.

The study revealed from Table 2 that, the farmers have major institutional constraints as Lack of regulated markets (79.17 percent), Dominance of private input agencies in the market (64.17 percent), Lack of market information on prices and arrivals (55.00 percent) and Lack of quality control and inspection (47.50 percent). The results were in agreement with the findings of Geetha *et al.* (2017) [4].

From Table 3 it is inferred by the respondents that the major marketing constraints expressed by chilli growers were heavy price fluctuation for the produce (75.00 percent), lack of market information & Intelligence (72.50 percent), heavy commission charges (59.17 percent), Irregular & delay in payment by intermediaries (44.17 percent), no support price for chilli from government (35.00 percent), Low remunerative price at peak time (29.16 percent). The results were in agreement with the findings of Shasikant *et al.* (2012), Dangore *et al.* (2015) [2] and Deore *et al.* (2015) [3].

Table 3: Marketing, Infrastructure and Supply Constraints faced by the chilli growers n=120

	Marketing Constraints	Frequency	%	Rank
1	Irregular & delay in payment by intermediaries	53	44.17	IV
2	Lack of market information & Intelligence	87	72.50	II
3	Heavy price fluctuation for the produce	90	75.00	I
4	No support price for chilli from govt	42	35.00	V
5	Heavy commission charges	71	59.17	III
6	Low remunerative price at peak time	35	29.17	VI
	Infrastructure Constraints	Frequency	%	Rank
1	Lack of drying space	71	59.17	II
2	Lack of storage facilities	86	71.67	I
3	Absence of grading and processing	45	37.50	IV
4	High transport costs	50	41.67	III
	Supply constraints	Frequency	%	Rank
1	Non availability of quality inputs	75	62.50	I
2	Irregular supply of fertilizers	49	40.84	III
3	Inadequate finance	54	45.00	II

The results presented in the Table 3 indicate that, the farmers have various Infrastructure problems like Lack of storage facilities (71.67 percent) the result is in agreement with report given by Horticultural division, Department of Agriculture according to which only 432 cold storages with a capacity of 1.75 million tones was available in erstwhile Andhra Pradesh (Horticultural Statistics at a Glance 2017) [5], Lack of drying space (59.17 percent), High transport costs (41.67 percent) and Absence of grading and processing (37.50 percent).

With regard to Supply constraints it is suggested from Table 3 that, Non availability of quality inputs was the major problem (62.50 percent) followed by In-adequate finance (44.17 percent) and Irregular supply of fertilizers (45.00 percent). The results were in agreement with the findings of Ahire *et al.* (2015) [1].

Conclusion

The present study was conducted in Khammam district of Telangana state. Constraints found during pre-testing were structured. List of chilli growers in each selected village was prepared with the help of local Leaders, sarpanch and Horticultural officers. A proportionate random sample of chilli growers from each selected village was taken to make total sample size as 120. On the basis of results obtained from the study, following conclusions are drawn.

The major constraints expressed by chilli growers were high cost of the hybrid seed, government should provide the seed at subsidized rates where as for high labour wages, farmers should be educated to schedule and plan the activities in order to avoid engagement of labour at high prices. For increased incidence of pests and diseases, heavy rains followed by dry spells, extension agents should educate the farmers to overcome biotic and abiotic constraints. For marketing and infrastructure constraints like heavy price fluctuation for the produce, lack of storage facilities, efforts should be made to develop some processing and storage units so that farmers can store their produce in these units at the time of low price in the market and avoid distress selling by the farmers.

Supply constraints like non availability of quality inputs means procuring quality inputs at higher costs so efforts should be made by the government to supply quality inputs on time and in sufficient quantities.

Authors' affiliations

B. Raja Madhu Shaker is working as Subject Matter Specialist (Extension), Dr. J. Hemantha Kumar is the Programme Coordinator, Dr. V. Chaitanya is working as Subject Matter Specialist (Horticulture), P. Sri Ranjitha is working as Subject

Matter Specialist (Crop Production), Dr. K. Ravi Kumar is working as Subject Matter Specialist (Plant Protection) at Krishi Vigyan Kendra, Wyra, Khammam District, Telangana. Dr. P. Jagan Mohan Rao is the Associate Director of Research at Regional Agricultural Research Station, Warangal district, Telangana under Professor Jayashankar Telangana State Agricultural University, Rajendranagar, Hyderabad.

References

- Ahire RD, Karhale RS, Kadam RP. Constraints faced by the respondents and their suggestions in adopting Pigeonpea production technology. *Agriculture Update*. 2015; 10(4):335-339.
- Dangore UT, Bahekar AK, Datarkar SB, Darekar AS. Constraints faced by dry chilli growers in production and marketing of dry chilli in Wardha district of Maharashtra. *Agriculture Update*. 2015; 10(3):252-254.
- Deore SG, Pawar PP, Pulate SL. Economics of marketing of Green Chilli in Western Maharashtra. *International Journal of Applied Social Science*. 2015; 2(3&4):84-89.
- Geetha R, Selvarani K. Constraints and Suggestions of Chilli Growers in Virudhunagar District of Tamilnadu. *International Journal of Advance Research and Innovative Ideas in Education*. 2017; 3(1):1493-1496.
- Horticultural Statistics at a Glance Horticulture Statistics Division, Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India, PDES – 256 (E), 500 - 2017 – (DSK-III), 2017.
- Shashikant VG, Laxm Rani Dubey, Arpita Kotnala. Constraints faced by Redgram growers in Gulbarga district of Karnataka. *Environment & Ecology*. 2012; 31(2):440-443. A report on spices in India, Spice Board of India -2017.