

## Original Research Article

# Constraints and Suggestions of Tomato Growers in Chickballapur District of Karnataka

N. Rashmi\*, Chandrashekar, S. Vaster, D.V. Kusumalatha and K.V. Manjunath

Department of Agricultural Extension, University of Agricultural Sciences (GKVK),  
Bengaluru-560065, Karnataka, India

\*Corresponding author

## ABSTRACT

The present study was conducted in Chickaballapur district of Karnataka during the year 2017-18 by keeping productivity of tomato as criterion. In chickaballapur district, Chickaballapur and Gowribidanur taluks were randomly selected. Further, from each taluk 60 tomato growers were selected making a total sample of 120, by using simple random sampling method and data is collected through personal interview method by using a structured schedule. Timely non-availability of labour (80.00 %), more pest attack (77.50%), more disease incidence (74.17 %), high cost of plant protection chemicals (68.33%), high cost of seed material (65.83%) and high cost of fertilizer (51.67%) Non-availability of loan on time (50.83%) were the major production constraints faced by tomato growers. Fluctuation in market prices (100%), high commission charge (50.83%), high cost of transportation (49.17%) and mal practices in weighing (41.67%) were the major marketing constraints faced by tomato growers. Major Suggestions Offered are Support price for the produce during price fluctuation (91.67%), followed by timely availability of market information (86.67%), procedure to eliminate middlemen in the market (74.17%), Labour saving techniques (51.67%), technical know – how in disease or pest management (47.50%) and training on grading of tomato (45.00%).

## Keywords

Tomato growers,  
Constraints,  
Production,  
Marketing and  
suggestions

## Introduction

Vegetables are grown in India since thousands of years but now-a-days it has become an important commercial enterprise at both national and international level. At present Tomato (*Lycopersicum esculentum*) is one of the important and most popular vegetable which is grown in India because of its high nutritive value, higher production and wide ecological amplitude.

Tomato occupies a significant position in vegetable production of the country. In India, production of tomato is 19,696.92 thousand MT in an area of 808.54 thousand hectares with an productivity of 24.36 MT per hectare accounting for 7.9 per cent of the total vegetable crop acreage. Karnataka is the second leading state producing 2138 thousand MT of tomato from 63.73 thousand hectares with an average productivity of 33.55 MT per hectare after Madhya Pradesh. Tomato is an important commercial vegetable

crop in Chickballapur district, cultivated in an area of 2,583 ha with a production of 67,546 tonnes and productivity of 26.15 tonnes/ha ([www.indiastat.com](http://www.indiastat.com)).

In spite of the considerable efforts from the concerned authorities, tomato which is grown as major commercial crop in the study area has been challenged by inconsistent production low yields and market price fluctuations which has hindered the production potential and livelihood status of tomato growers. Keeping this in view, this present study was conducted with the following specific objectives.

### **Objectives**

1. To elicit the both production and marketing constraints faced by the tomato growers.
2. To document the suggestions in production and marketing of tomato in Chickballapur district of Karnataka.

### **Materials and Methods**

The present study was conducted in Chickaballapur district of Karnataka during the year 2017-18 by keeping productivity of tomato as criterion. Further Chickballapur and Gowribidanur taluks from Chickballapur district and two hoblis from each of the selected taluks were selected by following simple random sampling procedure, thus making total of four hoblis namely, Kasaba and Manchenahalli from Gowribidanur and Nandhi and Mandikal from chickballapur taluk. One mandal from each of the selected hoblis was selected for the study, where tomato cultivation is more, by following simple random sampling procedure, thus making total of four mandals namely, Hirebidanur, Halehalli, Kondenahalli and Mandikal. Two villages from each of the

selected mandal was selected where tomato cultivation is more thus making total of eight villages and Fifteen respondents from each of the selected village were selected randomly thus making total of 120 respondents. Data is collected through personal interview method by using a pre tested structured schedule and data collected were tabulated and analyzed by using suitable statistical measures.

### **Results and Discussion**

#### **Production constraints experienced by tomato growers**

From the table 1, it indicated that majority of tomato growers expressed constraints related to high wage rate (85.83%), timely non-availability of labour (80.00 %), more pest and disease incidence (74.17 %), high cost of plant protection chemicals (68.33%), high cost of seed material (65.83%) and high cost of fertilizer (51.67%) timely unavailability of irrigation (50.83%). A considerable percent (47.50, 44.17, 31.67 and 30.83%) of respondents expressed the constraints related to irregular supply of electricity, lack of technical guidance, non-availability of agricultural implements and Non -availability of loan on time respectively. Very less 17.50 and 6.67 per cent of respondents expressed the constraints related to non- preparation of land on time and untimely availability of seed material respectively.

From the above results it could be noticed that majority of tomato growers expressed production constraint as high wage rate and non-availability of labour. The reasons might be that labour availability become scarce at peak periods as almost all the farmers require the labour at the same time. Another reason might be due to the migration of farm labours to city and the present generation is inclined towards the non-agricultural activities in small and medium scale industries situated

around the urban areas which led to labour problem in the villages and high wage charges. Further it is noticed that majority of the tomato growers expressed the constraints as more of pest and disease incidence. This might be due to the lack of knowledge in identifying the pest and diseases and lack of knowledge about the control measures for various pests and diseases.

Majority of the tomato growers expressed the constraints like, high cost of plant protection chemicals, seed materials and fertilizers. Since, the prices of inputs have gone up, naturally it has attracted the attention of many farmers. Another constraint is non-availability of loan on time. These problems can be overcome by the proper functioning of Government institutions like Banking system in the study area. The present findings are in line with the findings of Karpagam (2000), Sunil Kumar (2004), Raghavendra (2005) Binkadakatti (2008) and Shilpashree (2011).

### **Marketing constraints experienced by tomato growers**

Table 2 reveals that cent per cent of the tomato growers expressed constraints related to sudden changes in market prices and 50.83 per cent of growers expressed that commission agent charge is more. A considerable per cent 49.17, 41.67 37.50 and 30.83 per cent of the tomato growers expressed constraints related to high cost of transportation, mal practices in weighing, delayed cash payment from the traders and market places are far away respectively. About 14.17 per cent of growers expressed constraints related to high hamali charges.

All the tomato growers expressed constraints related to fluctuation in market prices. The reason might be that, the main aim of farmer is to produce more and get better prices for their produce. However, unfortunately, as the supply of product increases, the demand price

of that particular produce decreases and vice versa as a result of which a lot of fluctuations in the market prices occurs. Hence, the fluctuation in the market price has been found to be a major problem in the marketing of tomato.

Nearly half of the tomato growers expressed that commission agent charge is more and high cost of transportation. The main reason for high commission charge is that majority of the tomato growers market their produce through commission agents in the APMC, where three per cent of commission charge is charged for them. The increasing price of the fuel and also due to poor condition of roads made the transporter to demand high price which lead to high transportation cost.

The other problems such as malpractices in weighing, hamali charges and delay in cash payment needs the attention of the agencies involved in marketing of tomato. The problem of markets is far away also need the due consideration of the Government and other marketing organizations. The present findings are in line with the findings of Waman (2000), Sunil Kumar (2004), Nagesha (2005), Raghavendra (2005), Binkadakatti (2008) and Shilpashree (2011).

### **Suggestions given by tomato growers to overcome the problems in production and marketing of tomato**

Table 3 revealed that, suggestions given by the tomato growers to overcome the problems in tomato production 72.50 per cent of respondents suggested labour saving techniques, followed by continuous electric supply (65.00%), technical know – how in disease or pest management (47.50%) and type and use of weedicide (29.17%).

Regarding the suggestions given by the tomato growers to overcome the problems in tomato marketing 91.67 per cent of the

respondents suggested support price for the produce during price fluctuation, followed by timely availability of market information (86.67%), procedure to eliminate middlemen in the market (57.50%), training on post-harvest technology to extend shelf life (45.00%) and training on grading of tomato (33.33%).

Majority of the respondents reported timely non-availability of labour as a major constraint in production of tomato so that labour saving techniques can save the time and cost of production. Major source for irrigation in the study area is borewell so that continuous electricity is required. As we can see more of disease and pest attack in tomato, but farmers lack the knowledge about how to identify and how to take up control measures for pest and diseases so that information on Technical Know – How in disease or pest management would help them to reduce pest and diseases to get higher yield. About more than one third (44.17%) of respondents were not adopted the weedicide as recommended because they lack knowledge about the

application and importance of weedicide so information on weedicide helps them to use and control the weeds and helps them to reduce manual labour.

Major problem in marketing of tomato is more of price fluctuation so that framers were suggested support price for the produce during price fluctuations. Farmers are not getting timely market information so that timely availability of market information is needed. Middleman is taking major share of profit they should be eliminated from the market Tomato is a highly perishable vegetable, where average of 2.85 tonnes/acre wastage of tomato is observed in the study area so that training on post-harvest technology helps to minimise the loss and to get more yield for tomato growers. Grading of tomato provides good price for the produce in the market but tomato growers in that area lack knowledge on scientific grading in this regard they were suggested training on grading of tomato.

**Table.1** Production constraints experienced by tomato growers

(n=120)

Sl. No.	Problems	Frequency	Percent	Rank
1.	High wage rate	103	85.83	I.
2.	Timely non – availability labour	96	80.00	II.
3.	More pest and disease incidence	89	74.17	III.
4.	High cost of plant protection chemicals	82	68.33	IV.
5.	High cost of seed material	79	65.83	V.
6.	High cost of fertilizer	62	51.67	VI.
7.	Timely unavailability of irrigation	61	50.83	VII.
8.	Irregular supply of electricity	57	47.50	VIII.
9.	Lack of technical guidance	53	44.17	IX.
10.	Non availability of agricultural implements	38	31.67	X.
11.	Non -availability of loan on time	37	30.83	XI.
12.	Non- preparation of land on time	21	17.5	XII.
13.	Untimely availability of seed material	8	6.67	XIII.

\* Multiple responses are obtained

**Table.2** Marketing constraints experienced by tomato growers

Sl. No.	Problems	Frequency	Percent	Rank
1.	Fluctuation in market price	120	100.00	I
2.	Commission agent charge is more	61	50.83	II
3.	High cost of transportation	59	49.17	III
4.	Malpractices in weighing	50	41.67	IV
5.	Delayed cash payment from the traders	35	29.17	V
6.	Market places are far away	21	17.50	VI
7.	High hamali charges	17	14.17	VII

\*Multiple responses are obtained

**Table.3** Suggestions given by respondents to overcome the problems in tomato production and marketing

Sl. No.	Statements	Frequency	Percent
<b>a. Production</b>			
1.	Labour saving techniques	87	72.50
2.	Continuous electricity supply	78	65.00
3.	Technical Know – How in disease or pest management	57	47.50
4.	Type and use of weedicide	35	29.17
<b>b. Marketing</b>			
1.	Support price for the produce during price fluctuations	110	91.67
2.	Timely availability of market information	104	86.67
3.	Procedure to eliminate middlemen in the market	69	57.50
4.	Training on post-harvest technology	54	45.00
5.	Training on grading of tomato	40	33.33

\*Multiple responses are obtained

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