

Constraints in Production of Orange (*Citrus reticulata Blanco*) in Vidharbha Region of Maharashtra

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ABSTRACT

The present study was conducted in Vidharbha region of Maharashtra with specific objectives to study the constraints faced by orange (*Citrus reticulata Blanco*) growers in cultivation and marketing and to provide suggestions offered by growers to overcome these constraints. Three districts, namely Nagpur, Amaravati and Wardha, purposively selected and from each district two blocks and from each block two villages were randomly selected. Ten farmers from each village were selected randomly to make 120 samples. The major constraints were high incidence of disease, frequent shedding of electricity, lack of disease resistant varieties and lack of information regarding improved orange variety. High fluctuation of price, price not according to quality of produce, lack of cold-storage facilities and more commission charged by commission agents. The important suggestion offered by growers were: establishment of cold storage facilities at village level, easy accessibility of credit with low interest rate and timely electricity supply with low cost, establishment of processing industries at production-catchments area, establishment of co-operative marketing agencies, government support during crop failure and lower down the commission charged by APMCs.

Keywords : Co-operative, constraints, implication

INTRODUCTION

Maharashtra is a major orange producing state and has highest area under orange production. However, orange crop faces a number of constraints in its development such as paucity of planting material, narrow germplasm base, inadequate research, non-availability of standard package of practices, poor processing facilities, non-availability of extraction units and non-availability of trained manpower and highly fluctuating price of orange. Keeping this in view, a study was conducted in Vidharbha region to identify the constraints faced by orange growers in cultivation and marketing of orange and to study documents suggestions offered by farmers and stakeholders in overcoming these constraints.

METHODOLOGY

For this study, an *ex-post-facto* design was used instead of creating a treatment, since the researcher has to study the effects of the phenomenon after its occurrence. The study was carried out purposively in the Vidharbha region of Maharashtra. Three districts, namely Amaravati, Nagpur and Wardha, were selected purposively. From each district two blocks and from each block two villages were selected randomly. Thus, total 6 blocks and 12 villages selected which were having high concentration of orange production. There was no wide variation in number of orange growers in each village. Hence from each village 10 farmers were selected randomly following the criterion that selected farmers

should have at least five years of experience in orange cultivation. Thus, total respondents identified for the study were 120. An interview schedule was developed for data collection and appropriate statistical tools like frequency, percentage and ranking techniques were used for analysis of data.

RESULTS AND DISCUSSION

The findings of the present study are given here: The constraints regarding the orange production were classified into 2 categories, *i.e.* constraints in cultivation and constraints in marketing. The constraints faced by orange growers in cultivation of orange are summarized

Table 1: Constraint perceived by orange growers in cultivation of orange

Constraint in cultivation	Frequency	Percentage	Rank
High incidence of diseases (like citrus decline, phytophthora, gummosis)	112	93.33	I
Frequent shedding of electricity	111	92.5	II
Lack of disease resistant variety	109	90.83	III
Lack of information regarding new variety	106	88.33	IV
Alternate bearing	97	80.83	V
High cost of orchard establishment	93	77.5	VI
High cost of insecticides and pesticides	82	68.33	VII
High cost of staking	68	56.66	VIII
High fluctuating weather condition	40	33.33	IX
No government support during crop failure	36	30	X

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The data presented in the Table 1 depicted that the high incidence of disease (93.33%) was most serious constraint perceived by the orange growers followed by frequent shedding of electricity (92.5%), which is mostly required for the irrigation of orange field, lack of disease resistant varieties (90.83%) and lack of information regarding improved orange variety (88.33%).

The constraints perceived to lesser extent were; no government support during crop failure (30%), high fluctuation of weather condition (33.33%).

Thus, the appropriate information about diseases, pests and their control measures was lacking among the farmers, may be due to low awareness about improved variety. Lack of intensive research on the disease and pesticides and failure of extension system in dissemination of information may be major factors in the perception of the constraints.

The constraints perceived by orange growers in orange marketing are presented in the Table 2.

Table 2: Constraints perceived by orange growers in marketing of orange

n = 120

Marketing constraints	Frequency	Percentage	Rank
High fluctuation of market price	109	90.83	I
Price are not according to the quality of produce	101	84.16	II
Lack of cold-storage facilities	95	79.16	III
More commission charged by commission agents	86	71.67	IV
High transportation and loading unloading cost	84	70.	V
High commission charge per thousand rupees by APMCs	82	68.33	VI
Lack of co-operative marketing	72	60	VII
Breaking contract by contractor if market price slash down	68	56.67	VIII
Delay in payment by contractor	63	52.5	IX
Delaying in harvesting of orange due to contractor	45	37.5	X

It could be observed from Table 2 that major constraints perceived by majority of the orange growers in the marketing of orange were high fluctuation of price (90.83%) followed by the price not according to quality of produce (84.16%), lack of cold-storage facilities (79.16%), more commission charged by commission agents, delay in payment by contractor (52.5%) and delay in harvesting due to contractor (45%); were got the least rank.

High fluctuation in price could largely attributed to the factors like rainfall, demand, unavailability of cold-storage industries and processing units. There was no negotiation of price by farmers with marketing agencies, lack of co-operative marketing agencies, middle men and contractors may be the main reasons for not getting price according to quality. Corruption, inadequate infrastructure might be the reason for the lack of cold-

storage facilities. Lack of infrastructure facilities was the major constraints faced by the stakeholders.

Suggestions offered by orange growers: The suggestion offered by the orange growers for boosting the production in the region are listed in the Table 3.

Table 3: Suggestions offered by orange growers

n = 120

Suggestions offered by orange growers	Frequency	Percent	Rank
Establishment of cold storage facilities at village level.	108	90	I
Easy accessibility of credit with very low interest rate	101	84.16	II
Timely electricity supply with low cost to farmers.	97	80.83	III
Establishment of processing industries at production catchments area.	84	70	IV
Establishment of co-operative marketing agencies.	84	70	V
Development of disease resistance variety	72	60	VI
Timely information provision unit regarding new varieties, price and commission charges should be established at village level.	70	58.33	VII
Government should give minimum support price for produce	68	56.66	VII
Government should provide support during crop failure	63	52.5	IX
Lower down the commission by APMCs	46	37.5	X

The perusal of Table 3 revealed that the establishment of cold-storage facilities at village level (90.0%), easy accessibility of credit with low interest rate (84.16%) and timely electricity supply with low cost (80.83%) were the important suggestions offered by the orange growers. Establishment of processing industries at production catchments area (70.0%) and establishment of co-operative marketing agencies (70.0%) showed the equal importance as per orange farmers. Government should provide support during crop failure and lower down the commission charged by APMCs got least rank.

CONCLUSION

Through the constraint analysis, the high incidence of disease, frequent shedding of electricity, lack of disease resistant varieties and lack of information regarding improved orange variety were the major constraints faced by orange growers in the cultivation of orange.

High fluctuation of price, price not according to quality of produce, lack of cold storage facilities and more commission charged by commission agents were the major constraints encountered by the orange growers in the marketing of orange.

The important suggestions offered by growers were: establishment of cold-storage facilities at village level, easy accessibility of credit with low interest rate and

timely electricity supply with low cost, establishment of processing industries at production-catchments area, establishment of co-operative marketing agencies, government support during crop failure and lower down the commission charged by APMCs.

Implication of the research

The co-operative marketing of oranges can be useful to farmers in getting good remuneration price to their produce

Availability of cold-storage facilities will help in balancing the supply-demand position and maintaining the price level.

Processing of oranges need to be developed in the study area, so that farmer can take advantage of value addition to their produce by way of processing

Alternatives source for electricity must be taken into due consideration by government and it requires a serious action.

Co-operative credit institution and crop insurance scheme must be brought to provides necessary financial support for orange crop.

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