



Constraints Faced by Fruit Nursery Growers in District Kulgam of Jammu and Kashmir, India

Farah Farooq ^{a*}, Syed Shafat Kubrevi ^a,
Quadri Javeed Ahmad Peer ^a, Nazir Ahmad Ganaie ^b,
Angrej Ali ^b and Fehim Jeelani Wani ^c

^a Division of Agriculture Extension and Communication, Faculty of Agriculture, SKUAST- K Wadura, India.

^b Division of Horticulture, Faculty of Agriculture, SKUAST- K Wadura, India

^c Division of Agricultural Economics and Statistics, Faculty of Agriculture, SKUAST- K Wadura, India.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The main purpose of this study was to analyse the constraints faced by fruit nursery growers in district Kulgam of Jammu and Kashmir. The study is based on personal interview with 218 fruit nursery growers of the district. The study found that the constraints faced by the fruit nursery growers include non-availability of seedlings/planting materials, lack of training facilities, inadequate funds, electricity/power cuts and irrigation under production and potential buyers unaware of existing nurseries, less margin/ low profit, low sales, price fluctuation and instability of policies on seedling production under marketing. Government should come up with different programmes and

*Corresponding author: E-mail: makhdoomifarah@gmail.com;

policies in order to support and help fruit nursery growers by providing them with different subsidies. The agriculture and horticulture departments should develop close linkages with fruit nursery growers and provide timely guidance to them relating to their problems.

Keywords: Constraints; fruit nursery growers; kulgam.

1. INTRODUCTION

India is an agrarian nation, with roughly 65% of the population engaged in agriculture [1]. The agricultural sector provides food, employment and foreign exchange as well as raw materials for the nation's agro-allied industries among other benefits [2]. Massive amounts of fruits and vegetables must be grown in order to meet the nation's growing population's nutritional needs [3]. Fruits and vegetables have very important place in human diet due to their nutritional status. It is well recognized now that the area under fruits and vegetables should be increased [4]. Therefore, the government has placed great emphasis on growing various fruit trees and medicinal plants around the nation [5]. Improved fruit and medicinal saplings/seedling varieties are essential in this situation to distribute among farmers and other motivated individuals. Numerous privately owned plant nurseries have been developed around the nation, and they are essential to the effective implementation of the nation's tree planting and forestation programmes [6].

Nursery is pre requisite for meeting the quality seedlings demand and nursery management is a potential tool to execute the activity in successful way [7]. Planting materials, such as seedlings, saplings, cuttings, etc., are nurtured, multiplied, and propagated in the nursery under ideal conditions before being transplanted into beds that have been prepared [8]. Plants are nurtured in nurseries by being given the best conditions for growth to ensure germination. The nursery significantly reduces the time needed to raise the following crop. A nursery can be as basic as a raised bed in a field or as complex as a greenhouse with controlled atmospheric systems and micro-sprinklers. Nurseries are an important source that supply the seedlings for meeting the fruit, pulp and paper, fuel wood, timber and other demands of the industries [9].

1.1 Objectives of the Study

The main objective of the study was to analyse the constraints faced by the fruit nursery growers in District Kulgam of Jammu and Kashmir, India.

The Specific objectives are:

- To study the constraints relating to the production of saplings.
- To study the constraints relating to the marketing of fruit saplings.

2. MATERIALS AND METHODS

The study was conducted purposely in District Kulgam which is having highest number of fruit nursery growers among all the districts. A list of registered fruit nursery growers was obtained from Nursery Registration Office, Lal Mandi, Rajbagh and a list of unregistered fruit nursery growers was obtained from concerned heads (sarpanchs and panchs) of the village. In District Kulgam, there were 118 registered and 100 unregistered fruit nursery growers [10].

The dictionary meaning of constraint is the threat or use or force to prevent, restrict or dictate the action or thought of orders. Constraints are the circumstances or the causes which prohibit the dairy farmers from adoption of the improved management practices [11]. Constraints were faced by the respondents in 2 aspects viz. production and marketing. Each aspect had 5 constraints under it viz. non-availability of seedling/planting material, lack of training facilities, inadequate funds, electricity/power cuts and irrigation under production and potential buyers unaware of existing nurseries, less margin/ low profit, low sales, price fluctuation and instability of policies on seedling production under marketing. The constraints were measured by constructing scores for each aspect.

3. RESULTS AND DISCUSSION

It is evident from Table 1. that, the lack of training facilities ranked first (and highest), followed by instability of policies on seedling production as second, price fluctuation as third, inadequate funds as fourth, low sales, power cuts, potential buyers unaware of existing nurseries, less margins, non-availability of planting material and irrigation ranked fifth, sixth, seventh, eighth, ninth and tenth, respectively.

Table 1. Ranking of respondents according to constraints faced by the fruit nursery growers in production and marketing

I)	Production of fruit saplings;	Ranking	CFI
a.	Non-availability of seedlings/planting material	IX	28
b.	Lack of training facilities	I	248
c.	Inadequate funds	IV	171
d.	Electricity / Power cuts	VI	110
e.	Irrigation	X	10
II)	Marketing of fruit sapling		
a.	Potential buyers unaware of existing nurseries	VII	102
b.	Less margins/low profit	VIII	94
c.	Low sales	V	153
d.	Price fluctuation	III	205
e.	Instability of policies on seedling production	II	236

The respondents were asked to indicate the extent of difficulty caused by each constraint by checking any of the four responses such as very high, high, little and not at all and weight was assigned to these responses as 3,2,1 and 0 respectively. Thus, the possible score of each respondent could range from 0 to 15 in each aspect, 0 indicating no constraints and 15 indicates high constraints. Percentage and frequency of each constraint were obtained and based upon the maximum mean score the constraints were ranked.

An overall constraint score for each respondent was computed by adding his constraints scores in two aspects. Possible range of overall constraint score of the respondent could range from 0 to 30, while 0 indicating no constraint facing and 30 indicating high constraint facing. The 10 aspects of constraints were arranged in a rank order for clear understanding and a Constraint Facing Index (CFI) was developed by using the formula

$$CFI = P_n \times 0 + P_l \times 1 + P_h \times 2 + P_{vh} \times 3$$

Where,

CFI = Constraint facing index

P_n = Percentage of farmers having no constraints

P_l = Percentage of farmers having little constraints

P_h = Percentage of farmers having high constraints

P_{vh} = Percentage of farmers having very high constraints

CFI for any aspect of constraint could range from 0 to 300, 0 indicating no constraint and 300 highest constraints.

From Table 2, it was reported that majority (57%) of the respondents faced low constraints regarding production of fruit saplings followed by 33 per cent and 10 per cent having medium and high constraints respectively.

From Table 3, it is concluded that majority of the growers (47%) had medium constraints followed by 39 per cent having low constraints and 14 per cent having high constraints regarding marketing of fruit saplings.

Table 2. Distribution of the respondents according to their constraints in production of fruit saplings N=218

Variable	Categories (Score)	Frequency	Percentage
Production of fruit saplings	Low (upto 5)	124	57
	Medium (6-10)	72	33
	High (11-15)	22	10

Table 3. Distribution of the respondents according to their constraints in marketing of fruit saplings N=218

Variable	Categories (Score)	Frequency	Percentage
Marketing of fruit saplings	Low (upto 5)	85	39
	Medium (6-10)	103	47
	High (11-15)	30	14

4. CONCLUSION AND RECOMMENDATION

On the basis of the findings and their logical interpretations, it can be concluded that majority of fruit nursery growers faced low constraints followed by medium and high in the case of production as well as marketing of fruit saplings.

The results of the study would provide guidelines for researchers, planners and concerned agencies to prepare future programmes and timely information to fruit nursery growers, besides helping the extension personnel of developmental departments to provide need based information to fruit nursery growers.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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