Constraints Analysis on Production and Marketing of Guava in Tamil Nadu

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C A R A S

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J. Jeevamathi*[1], G. Srinivasan[2] and S. Radhakrishnan[3]

Guava (*Psidium guajava*) is the most important and commercially cultivated fruit crop belonging to the family Myrtaceae and it is originated in Tropical America, stretching from Mexico to Peru [1]. Due to its adaptability in wide range of soils and high nutritional quality and low price, it is known as 'Poor man's apple' and 'Apple of Tropics', and also known as back yard fruit [2]. Guava is the fourth most important fruit in India which occupies 6.5 per cent of the area under fruit cultivation. India is the leading producer of guava with 45 per cent of guava production in the world [3].

In Tamil Nadu, Guava is the third important fruit crop next to mango and banana with the cultivated area of 10,045 hectares, production of 92,500 tonnes and productivity of 7.2 million tonnes. The most popular varieties of Guava in Tamil Nadu were the Allahabad Safeda and the Lucknow 49 [4]. Even though, Guava cultivation has been very popular in the state, the farmers were unaware of the improved cultivation practices and they have many problems relating to production and marketing. At this juncture, this study was carried out in Villupuram district of Tamil Nadu with following specific objectives: i) To analysis constraints on production of guava in the study area, ii) To analysis constraints on marketing of guava in the study area and (iii) To offer policy suggestions based on the results of the study.

The selection of Villupuram district was done purposively as Villupuram district is one of the major districts in producing guava in Tamil Nadu and it has its own problems of production and marketing. For the study, Thiruvennainallur block of Villupuram district (Rank first in area among the blocks) was selected taking into consideration of area under guava cultivation. The list of guava growing villages of the selected block was prepared on the basis of information obtained from the respective Block Statistical Office. According to acreage under Guava cultivation, four top ranking villages were selected from Thiruvennainallur block.

For selection of the sample cultivators, a list of guava growers was prepared from the revenue records of each of the villages. They were grouped into the three categories on the basis of their area under guava viz., small farmers (0.01 ha – 0.40 ha), medium farmers (0.41 ha - 0.80 ha) and large farmers (0.81 ha and above). From each group, 10 farmers were selected in each village randomly.

Tools of analysis

Garrett's ranking techniques

The respondents were asked to rank the problems in guava production and marketing. In the Garrett's ranking techniques these ranks were converted into per cent position by using formula:

$$\text{Percent position} = \frac{100 \times (R_{ij} - 0.5)}{N_j}$$

Where;
R_{ij} = Ranking given to the ith attribute by the jth individual
N_j = Number of attributes ranked by the jth individual

By referring to the Garrett's table, the per cent positions estimated were converted into scores. Thus, for each factor, the scores of the various respondents were added and the mean values were estimated. The mean values thus obtained for each of the attributes were arranged in descending order. The attribute with the highest mean value was considered as the most important one and the others followed in that order.

Constraints in production of guava

The farmers were asked to elicit the problem faced by them relating to various aspects of production of Guava in the study region and subjected to analysis by using Garrett's ranking techniques and the results are presented in the following (Table 1).

The most important constraint identified by the farmers in the study area was High cost of digging out pits (59.17) followed by no irrigation facilities as second

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constraint (55.10), High cost of planting material as the third constraint (48.36) followed by other constraints were

unawareness of improved layering methods and identification problem of pest and disease [6].

Table 1 Production constraints faced by guava farmers

Problems in production of guava	Mean score	Rank
High cost of digging out pits	59.17	I
No irrigation facilities	55.10	II
High cost of planting material	48.36	III
Unawareness of improved layering methods	44.31	IV
Identification problem of pest and disease	41.52	V

Constraints in marketing of guava

The farmers were asked to elicit the problem faced by them relating to various aspects of marketing of Guava in

the study region and subjected to analysis by using Garrett's ranking techniques and the results are presented in the following (Table 2).

Table 1 Marketing constraints faced by guava farmers

Problems in marketing of guava	Mean score	Rank
Method of sale by pre harvest contractor	56.67	I
Low market price	54.09	II
High Perishability	53.64	III
Unavailability of Grading and Packing facilities	51.39	IV
Transportation and storage facilities are not available and costly	45.18	V

The most important marketing constraint expressed by the farmers was method of sale by pre harvest contractor (56.67). This was followed by low market price as the second marketing constraint (54.09), high perishability as third constraint (53.64) followed by other constraints were grading and packing facilities are not available and also transportation and storage facilities are not available and costly [7-8].

SUMMARY

Guava is also known as 'Super Fruit' because it has high nutritive value with many health benefits. Even though, Guava cultivation has been very popular in the Tamil Nadu, the farmers were unaware of the improved cultivation practices and they have many problems relating to production and marketing. At this juncture, this study was carried out in Villupuram district of Tamil Nadu with following specific objectives: i) To analysis constraints on production of guava in the study area, ii) To analysis constraints on marketing of guava in the study area and (iii) To offer policy suggestions based on the results of the study. For the study, Thiruvennainallur block of Villupuram

district (Rank first in area among the blocks) was selected and from the block, four villages were selected and finally, 120 growers were selected from the villages randomly. The most important constraint identified by the farmers in guava production was high cost of digging out pits (Garrett score: 59.17) while the most important marketing constraint was method of sale by pre harvest contractor (Garrett score: 56.67), followed by low market price (Garrett score: 54.09). The study suggested that state government may provide transport and storage facilities to help the farmers in the study area. The area under Guava cultivation has been increasing in the study area due to its popularity and adoptability but the identified production and marketing constraints were limit the profitability of the guava farmers. The study suggested that scarcity of labour mainly due to the migration of labour from rural to urban has to check with suitable incentives, so that labour required for field operations would be available in time in the study area. The Guava cultivating farmers might be encouraged to adopt drip irrigation to enhance the water use efficiency and the Government may provide transport and storage facilities to help the farmers to increase the efficiency of guava marketing in the study area.

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