

International Journal of Agriculture Extension and Social Development

Volume 9; Issue 8; August 2026; Page No. 568-570

Received: 14-05-2026
Accepted: 18-06-2026

Indexed Journal
Peer Reviewed Journal

Constraints faced by sapota growers in production and marketing in Palghar district of Maharashtra

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DOI: <https://www.doi.org/10.33545/26180723.2026.v9.i8h.4064>

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Abstract

The present study examined the major constraints faced by sapota growers in production and marketing in Palghar district of Maharashtra. Palghar district was selected purposively because of its importance in sapota cultivation. The study covered 144 sapota growers selected from Dahanu, Talasari and Palghar tahsils. Four villages were selected from each tahsil and 12 growers were selected randomly from each village. The growers were classified into small (64), medium (47) and large (33) farm groups. Primary data were collected through personal interviews for the financial year 2024–25. Constraints were assessed using mean scores and ranks, with a higher mean score indicating greater perceived severity. At the overall level, pest and disease problems were the most serious production constraint, followed by non-availability of labour during harvesting and non-remunerative prices. In marketing, seasonal price fluctuation ranked first, followed by perishability of produce and lack of market information. The findings indicate that strengthening integrated pest and disease management, ensuring timely harvesting labour and farm inputs, improving market information, reducing post-harvest losses, and strengthening storage and transport facilities are important for improving the profitability of sapota growers in the study area.

Keywords: Sapota, Chikoo, production constraints, marketing constraints, price fluctuation, perishability, Palghar

1. Introduction

Sapota is an important fruit crop in Palghar district of Maharashtra and provides an important source of farm income to growers. However, profitability from fruit cultivation depends not only on production technology but also on the timely availability of labour and inputs, effective pest and disease management, market access, price realization and post-harvest handling. Constraints at either the production or marketing stage can reduce productivity, increase costs and weaken the returns obtained by farmers. Identification and prioritization of constraints from the farmers' perspective is therefore useful for designing practical interventions. The present study assesses the production and marketing constraints faced by sapota growers in Palghar district and compares their severity across small, medium and large farm groups.

2. Objectives

To identify and rank the major constraints faced by sapota growers in production and marketing.

3. Materials and Methods

3.1 Study area and sampling

Palghar district of Maharashtra was selected purposively due

to maximum area under sapota cultivation. Dahanu, Talasari and Palghar tahsils were selected. Four villages were selected from each tahsil and 12 sapota growers were selected randomly from each village, giving 144 growers. The sample comprised 64 small, 47 medium and 33 large growers. The stratification was carried out as given in the table no1.

Table 1: Classification of sample grower

Farm group	Holding size	Growers
Small	Up to 1.24 ha	64
Medium	1.24–2.94 ha	47
Large	Above 2.94 ha	33
Overall	—	144

3.2 Data collection and analysis

Primary data were collected through personal interviews for financial year 2024–25. The Garrett ranking technique was used to identify and rank the constraints faced by sapota growers in production and marketing. Under this technique, the ranks assigned by the respondents were converted into percent positions using the following formula:

$$\text{Percent Position} = [100(R_{ij} - 0.5)] / N_j$$

Where, R_{ij} represents the rank given to the i th factor by the j th respondent, and N_j represents the total number of factors ranked by the j th respondent. The calculated percent positions were then converted into Garrett scores using the Garrett conversion table. The scores obtained for each constraint were summed and divided by the total number of respondents to obtain the mean Garrett score. The constraints were finally ranked according to their mean scores, with the highest mean score indicating the most important or severe constraints.

4. Results and Discussion

4.1 Production constraints

Table No.2 presents the major constraints encountered in production by sapota growers across small, medium, and large farm categories based on the mean scores assigned by

the respondents. The higher the mean score, the more severe the constraint perceived by the farmers.

Problems of pests and diseases emerged as the most serious production constraint overall, with a mean score of 63.60 and Rank I. It ranked first among small and medium growers, with scores of 67.36 and 72.51, respectively, while it ranked second among large growers. Non-availability of labour during harvesting ranked second overall (59.20). Non-remunerative price ranked third overall (52.30) and first among large growers (43.96). Non-availability of fertilizers and manures in time ranked fourth (44.70), followed by non-availability of plant protection chemicals (41.80), lack of knowledge (38.40), non-availability of credit (34.30), and electricity fluctuation (32.10).

Table 2: Constraints faced by farmers in sapota production

Sr. No.	Parameter	Small (N=64)		Medium (N=47)		Large (N=33)		Overall (N=144)	
		Mean score	Rank	Mean score	Rank	Mean score	Rank	Mean score	Rank
1	Non availability of labour in time harvesting	65.77	2	61.28	2	43.34	3	59.2	2
2	Problems of pest and diseases	67.36	1	72.51	1	43.43	2	63.6	1
3	Price received was not Remunerative	53.42	3	56.68	3	43.96	1	52.3	3
4	Non availability of fertilizers and manures in time	48.95	4	44.70	4	36.38	4	44.7	4
5	Non availability of plant protection chemicals in time	46.14	5	41.57	6	33.49	5	41.8	5
6	Lack of knowledge	39.88	6	42.77	5	29.32	6	38.4	6
7	Non availability of credit in time	35.11	7	37.51	8	27.96	7	34.3	7
8	Fluctuation in electricity	31.80	8	38.77	7	23.23	8	32.1	8

4.2 Marketing constraints

Table No.3 presents the major constraints encountered in marketing by sapota growers across small, medium, and large farm categories based on the mean scores assigned by the respondents. The higher the mean score, the more severe the constraint perceived by the farmers.

Seasonal fluctuation in price was the most serious marketing constraint overall, with a mean score of 57.80 and Rank I. It ranked first among small and medium growers, while

perishability ranked first among large growers. Perishability of produce ranked second overall (54.30), followed by lack of market information (48.80). Distant markets ranked fourth (46.70), high transport charges fifth (39.60), storage problems sixth (38.80), issues concerning understanding between commission agents and traders seventh (38.10), lack of specialized training eighth (37.30), and high commission charges ninth (34.20).

Table 3: Constraints faced by farmers in sapota production

Sr. No.	Parameter	Small (N=64)		Medium (N=47)		Large (N=33)		Overall (N=144)	
		Mean score	Rank	Mean score	Rank	Mean score	Rank	Mean score	Rank
1	Distant market away from farm	58.0	3	42.87	4	30.19	9	46.7	4
2	Perishability of produce	62.95	2	52.70	2	39.72	1	54.3	2
3	Seasonal fluctuation of price	62.94	1	63.68	1	39.53	2	57.8	1
4	Lack of market Information	55.36	4	48.19	3	36.98	4	48.8	3
5	Lack of specialized training	44.45	6	30.81	8	32.68	7	37.3	8
6	High transport charges	45.36	5	34.15	6	36.36	5	39.6	5
7	Mutual understanding between commission agent and trader	41.95	8	33.57	7	37.11	3	38.1	7
8	High commission charges	38.86	9	29.51	9	31.72	8	34.2	9
9	Storage problem	43.09	7	36.51	5	33.77	6	38.8	6

4. Conclusion

Sapota growers in Palghar district face substantial constraints at both production and marketing stages. Pest and disease problems constituted the most important production constraint overall, followed by harvesting labour shortages and non-remunerative prices. Seasonal price fluctuation was the leading marketing constraint, followed by perishability and lack of market information. The results suggest that improved crop protection, timely labour and input supply, better market intelligence, post-harvest management, storage and transport facilities can contribute to improved returns

from sapota cultivation.

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