

ECONOMICS OF PRODUCTION, MARKETING AND EXPORT OF POMEGRANATE**V.A.SHINDE, A.B.BHOSALE, S.S.BHOSALE, V.M.AMRUTSAGAR**

Abstract: Export of pomegranate has decreased in quantity from 35175.17 tons in 2007-08 to 30158.59 tons in 2011-12, whereas in value term it shows an increase trend during the same period. There is tremendous potential for exports of pomegranate from India. Solapur and Nasik districts have been selected purposively. The data were obtained for the year 2013-2014 with the help of a specially designed schedule by survey method. The major market of India's pomegranate during the year 2012-13 was UAE (43.57%). Per quintal price received by the farmer for exporting pomegranates to the Middle East countries was Rs.9017.80. The per quintal price received by the farmer for exporting pomegranates to the European countries was Rs.12363.40

In European markets, the farmers are unable to know the information with regard to the prices fetched by the Indian pomegranate and also for the other countries also. There is need for backward and forward linkages by adopting contract farming in pomegranate.

The sample pomegranate growers therefore opined that the APEDA should play a prime role in this regard and advice those for getting better prices in these markets. The pomegranate growers/processors, value adding processing firms can be formed for minimization of risk after rejection of pomegranates for export.

Keywords: Pomegranates, export, Middle East countries, European countries, constraints

Introduction: As a commercial crop pomegranate is grown to a limited extent in selected locations in many states. The estimated area under pomegranate in India is about 25000 ha. with Maharashtra accounting for more than two third area, while other states like AP, UP, Gujarat, Rajasthan, Karnataka and Tamil Nadu share the rest. According to the data published by **National Horticulture Board of India** there is a undersized decrease in the area of pomegranate cultivation in India from 109.00 thousand ha in 2008-09 to 107.00 thousand ha in 2010-11; similarly, the production has decreased from 807.00 thousand tons to 743.00 thousand tons during the same period. The total area under pomegranate is approximately 1, 20,000 hectare, out of which 90,000 hectares is in Maharashtra.

To understand the problems regarding the quality production of pomegranates especially, with regard

to fruit size, pesticide residues and practical difficulties in pomegranate export, the present study was undertaken in Sangola and Pandharpur tahsils from Solapur district and Satana and Malegaon tahsils from Nasik district having maximum area under cultivation in Western Maharashtra with the objectives to examine per hectare resource use and cost of production for export pomegranates, to study the constraints in production of exportable quality pomegranates, to study the constraints in post harvest management and export of pomegranates.

Results and discussion:**Per hectare cost of cultivation of pomegranate:**

The per hectare cost of cultivation of pomegranate on the sample farms during 2013-14 has been estimated and the same is represented in the Table I.

Table I Itemwise per hectare cost of cultivation of pomegranate

Sr. No.	Cost items	Units	Qty	Value (Rs.)	Per cent
1	Hired human labour				
	a. Male	Man days	33.76	7944.40	2.79
	b. Female	Man days	33.53	4912.82	1.73
2	Bullock power	Pair days	0.87	717.23	0.25
3	Machine power	dddhrs	35.99	10086.92	3.54
4	Manures	qtls	227.59	38346.64	13.47
5	Fertilizers N, P, K			21544.66	7.57
6	Micronutrient			2874.22	1.01
7	Bio-fertilizers			2854.07	1.00
8	Growth regulator			1321.29	0.46
9	Irrigation charges		647	11247.25	3.95

10	Plant protection charges			41250.37	14.49
11	Incidental charges			1952.32	0.69
12	Repairs			1365.48	0.48
	Working capital			146417.67	51.42
13	Int. on working capital			8785.06	3.09
14	Depre. on farm implements			15431.41	5.42
15	Land revenue and taxes			112.83	0.04
	Cost 'A'			170746.97	59.97
16	Rental value of land			70568.14	24.78
17	Int. on fixed capital			17520.19	6.15
18	Amortization cost			19528.48	6.86
	Cost 'B'			278363.78	97.76
19	Family labour		16.03	3754.55	
	a. Male				
	b. Female		17.87	2618.30	
	Cost 'C'			284736.63	100
20	Output	qtls	123.65	1165866.17	
21	Per quintal cost			2302.76	
	B:C ratio			4.09	

It is seen from the table that, per hectare cost of cultivation of pomegranate (i.e. Cost 'C') was worked out to Rs.284736.63. Among the different items of costs, rental value of land was Rs. 70568.14 (24.78 %) which was highest as compared to remaining items of cost. The other important items of cost were manures Rs. 38346.64 (13.47 %), male labour Rs. 11698.95 (8.02 %), female labour (4.74 %) followed by bullock labour (0.25 %), interest on fixed capital (6.15 %) and nitrogenous fertilizer (1.88 %). The cost incurred in

respect of land revenue and other taxes and depreciation were negligible in the cost of cultivation. In the total cost of cultivation, the Cost 'A' was Rs.170746.97 (59.97%), and Cost 'B' was Rs.278363.78 (97.76 %).

Countrywise export of pomegranates from India:

The major Markets of India's pomegranate during the year 2012-13 were UAE (43.57, Bangladesh, Netherlands, UK, Saudi Arabia and Russia. The detailed information is given in Table II.

Table II Countrywise export of pomegranates from India

(Qty. in MT, Value In Rs. Lacs)

Country	2010-11		2011-12		2012-13		
	Qty.	Value	Qty.	Value	Qty.	Value	% Share in Value
U A E	11,229.57	3,884.42	15,899.74	6,416.44	18978.82	12601.31	53.74
Bangladesh	1,964.84	252.55	4,593.46	2,383.70	5401.24	1148.32	4.89
Netherland	389.07	330.17	732.69	1,028.17	1158.72	1898.86	8.10
U K	531.27	825.45	890.85	975.31	512.88	1124.82	4.80
Saudi Arab	1,182.83	368.44	2,196.63	870.39	2511.80	1251.97	5.33
Russia	186.46	279.87	398.08	573.32	927.97	1367.04	5.83
Thailand	104.94	135.50	298.07	310.61	438.84	497.65	2.12
Nepal	819.18	111.07	1,438.26	246.85	1858.66	494.66	2.10
Oman	310.92	85.85	391.87	198.95	755.27	693.91	2.96
Qatar	203.56	59.77	142.06	71.78	446.25	226.85	0.96
Other Countries	1,288.18	719.44	2,832.97	1,487.80	1535.10	1267.83	6.72
Total	18,211.66	7,095.24	30,162.27	14,727.84	36026.27	23447.92	100.00

Source: DGCIS

India's maximum export was to the single country i.e. UAE, which was increased from 48 per cent during 2011-12 to 53.74 per cent in the year 2012-13. Other important countries were Netherland, Saudi Arabia, Russia, Thailand, Nepal etc.

Itemwise cost incurred for export of pomegranates to the destinations of Middle East countries like UAE,

Saudi Arabia, Bahrain, Qatar, Oman etc. from Jawaharlal Nehru Port Trust to Raj-Al-Kahmah and Jabal Ali Port, in Dubai, Masqat and Salalah in Oman and Bandar- Abbas in Iran where more than 50 per cent pomegranates were exported from India is given in Table III.

The per quintal price received by the farmer for exporting pomegranates to the Middle East countries was Rs.9017.80 of which expenses incurred for harvesting and sorting of pomegranates was Rs.1030.92, items of cost incurred by the exporter were packing material cost Rs.1298 including prices of 5 ply box, filler material, trade mark plastic rope etc.,

while pack house charges were Rs.88.00, transport charges from pack house to sea port Mumbai was Rs.132.00, sea freight charges were Rs.726.00 and the total expenses incurred by the exporter was Rs.2585.00, while total price received by the exporter was Rs. 13700.06 with profit margin to the tune of Rs.2098.07.

Cost of export of pomegranates to the Middle East countries.

Table III Cost of export of pomegranates to Middle East countries (Per quintal)

Sr. No	Items of cost	Unit	Rate (Rs./Box)	Amount
1	Harvesting charges paid by farmer	22	22.73	500.06
2	Weighing/ sorting charges paid by farmer	22	22.7	499.4
3	Miscellaneous charges	22	1.43	31.46
I	Total expenses incurred by farmer	22	46.86	1030.92
II	Price received by farmer	22	409.9	9017.8
3	Transport charges from farmers field to cold storage	22	2.5	55
4	Packing material charges			
	a. Corrugated box (5 ply)	22	55	1210
	b. Filler material (paper cutting)	22	3	66
	c. Trade mark and plastic rope	22	1	22
	Total packing cost	22	59	1298
5	Pack house charges	22	4	88
6	Transport charges from packhouse to sea port at Mumbai	22	6	132
7	Miscellaneous charges	22	3	66
8	Labour charges for grading in packhouse	22	5	110
9	Sea freight charges	22	33	726
10	Custom charges paid by exporter	22	5	110
III	Total expenses incurred by exporter	22	117.5	2585
IV	Price received by exporter	22	622.73	13700.06
V	Profit margin of exporter	22	95.36	2098.06
12	Custom clearance and local transport charges paid by importer	22	13.09	287.98
VI	Total export cost	22	143.68	3160.96
VII	Price paid by importer	22	622.73	13700.06
VIII	Price received by importer	22	740.9	16299.8
IX	Profit margin of importer	22	105.08	2311.76

The per quintal price incurred for import of these pomegranates to the importer of these Middle East countries were custom clearance and local transport charges were Rs.288.00 while price received by importer was Rs.16299.80 against margin received by importer was Rs.2311.76.

Constraints in export of pomegranates:

1. In European markets, the farmers are unable to know the information with regard to the prices fetched by the Indian pomegranate and also for the other countries also. The sample pomegranate

growers therefore opined that the APEDA should play a prime role in this regard and advice them for getting better prices in these markets.

2. Farmers as well as traders are not aware about Good Agricultural Practices. Certifications like GLOBALGAP, HACCP etc.

3. Farmers are not paying proper attention regarding export consignments for Europe for proper palletization and fumigation.

4. There is need for backward and forward linkages by adopting contract farming in pomegranate.

5. Contract farming based on centralized model may be adopted. As the processor buys the commodity from a large number of farmers under contract with the firm.

Conclusions:

1. Export of pomegranate has decreased drastically in quantity from 35175.17 tons in 2007-08 to 18211.67 in 2010-11 while in again it was increased to 30158.59 tons in 2011-12 and 36026.27 tons in 2012-13.

2. India's maximum pomegranate export was to the single country i.e. UAE, which was increased from 48 per cent during 2011-12 to 53.74 per cent in the year

2012-13. While in the year 2011-12 the second largest importing country was Bangladesh but in the year it was reduced to 4.89 per cent only. Other important countries were Netharland, Saudi Arabia, Russia, Thailand, Nepal etc.

3. Major ports for exporting pomegranate to the Middle East countries were Raj-Al-Kahmah and Jabal Ali Port, in Dubai, Masqat and Salalah in Oman and Bandar- Abbas in Iran where more than 50 per cent pomegranates were exported from India

4. The per quintal price received by the farmer for exporting pomegranates to the Middle East countries was Rs.9017.80 of which expenses incurred for harvesting and sorting of pomegranates was Rs.1030.92,

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