

A Study on Quality and Quantity of Export of Pomegranate from India to Other Countries

Dr. Kulkarni Vinod Ramakant¹, Swati Dharashivkar²

¹Associate Professor, {M. Com, M. A. (Eco), M. J., MBA (Mkt), MBA (HRM), LLB, M. Phil., PhD}, JSPM's Koutilya Institute of Management & Research, Wagholi, Pune
Email: kulkarnivinod[at]gmail.com

²PhD Student, PRN 21030171702, {BSC (Math), MBA (Mkt), LLB, FIII}, Bhartiya Jain Sanghatana's Arts, Commerce & Science College, Wagholi, Pune
Email: swatidharashivkar[at]gmail.com

Abstract: *India's foreign trade has undergone substantial changes after the liberalization and globalization. Our major exports include manufacturing goods such as Engineering Goods, Petroleum Products, Chemicals and allied Products, Gems and Jewelleries, Textiles, Electronic Goods, etc. which constitute over 80 per cent of our export basket. Now a days we are exporting various agricultural produce such as fresh fruits like mango, banana, grapes, orange, pomegranate, vegetables like onion, tomato, green chilli, lemon, ginger, garlic, lady's fingers, dairy products, cereals, rice, cashew, groundnuts, jaggery, etc. India has insignificant share in the world trade. India is required to make its commodities more competitive at the world level. It is also required to add new commodities and services at competitive prices in the export basket for increasing export performance. For this, India needs a comprehensive policy measure and integrated efforts.*

Keywords: ANAR, ANAR DANA, MT, APEDA, NHB

1. Introduction

The process of globalization has got momentum through the process of economic integration, and in the expansion of the volume of International Trade. As of 2014, the major exports from India were engineering goods, refined petroleum, gems, jewelry, chemicals, agricultural products and textiles. India's main export partners are the United States, the United Arab Emirates, China, Singapore and the Netherlands. India primarily exports to the United States, the United Arab Emirates, China, Singapore and the United Kingdom. Other major export products include vegetable saps, raw cotton, broadcasting equipment, iron ore, non - retail pure cotton yarn, vehicle parts and frozen bovine meat. Now we are also exporting various agricultural produces like fresh fruits and vegetables.

Export of pomegranate plays a vital role in bringing in the foreign currency in the economy of India. There is a wide scope to increase the export of pomegranate. The study will emphasis on the quality and quantity of export of pomegranate to other Countries. Also, the study aims to assess the developments in the export activities of India to Gulf Countries.

Objectives of Study:

- 1) To study the quality and quantity of pomegranate exported to other countries.
- 2) To study trends in the export of pomegranates.
- 3) To study the export specifications of pomegranate.

Pomegranate - uses and forms

Pomegranate (*Punica granatum*) is a favorite table purpose fruit in tropical and subtropical regions of the world. It is cultivated commercially in Maharashtra. Small - scale plantations are also seen in Gujarat, Rajasthan, Karnataka, Tamil Nadu, Andhra Pradesh, Uttar Pradesh, Punjab and

Haryana. In India, it is considered as a crop of the arid and semi - arid regions because it withstands different types of soil and climatic stresses. Pomegranate grows well under semi - arid conditions. The fruit can be eaten out of hand by deeply scoring several times vertically and then breaking it apart. The cluster of juice sacs are then lifted out and eaten. The sack also makes an attractive garnish when sprinkled on various dishes. Pomegranate fruit are most often consumed as juice. The juice can be used in a variety of ways as a fresh juice to make jellies, cold or hot sauces as well as to flavor cakes, baked apples etc. Pomegranate syrup is sold commercially as grenadine. Wild pomegranate seed are sometimes used as a spice, known as anardana (which literally means pomegranate [anar] seeds [dana] in Persian.) The seeds are separated from the flesh, dried for 10 - 15 days and used as an acidic agent for chutney and curry production. Pomegranate is also used to make a high quality wine.

Nutritional value: - All the parts of pomegranate tree, the roots, the reddish brown bark, leaves, flower, rind and seeds are used for medicinal purpose for thousands of years. Even in the ancient times 'Ayurveda' considered it a light food and a tonic for the heart. The rind and bark are used to get rid of helminthes (internal parasite worm) and stomach disorder. Pomegranate juice is a excellent treatment for anemia. Pomegranate is used for asthma, cough, sore throat, weight problem, scurvy, liver, kidney, gall bladder diseases.

Pomegranate Production in India

India was the world's largest producer followed by Iran with the production of 41.87 per cent and 36.29 to the world's total production. The production of pomegranate was attributed by the productivity of 13.69 MT/ha and the area under pomegranate which was 35.37 per cent of the total area of under pomegranate. With the highest production

India ranks first in pomegranate followed by Iran, USA, Turkey, Spain etc. The highest productivity was attained in Spain followed by Marracco and Afghanistan. In India, there

is need to improve upon the productivity of pomegranate to retain the first position as pomegranate producing country.

Table: Pomegranate producing countries in the world

| SN. | Country | Area (ha) | Production (MT) | Productivity (MT/ha) |
|-----|--------------|-----------------|------------------|----------------------|
| 1 | Iran | 63733 (41.18) | 650000 (36.29) | 10.19 |
| 2 | India | 54755 (35.37) | 750000 (41.87) | 13.69 |
| 3 | Spain | 3000 (1.9) | 60000 (3.3) | 20 |
| 4 | Turkey | 8500 (5.4) | 75000 (4.1) | 8.82 |
| 5 | USA | 14000 (9) | 100000 (5.5) | 7.14 |
| 6 | Tunisia | 2500 (1.6) | 42000 (2.3) | 1.68 |
| 7 | Morraco | 2230 (1.4) | 35000 (1.9) | 15.6 |
| 8 | Afgnistan | 1320 (0.8) | 20000 (1.1) | 15.1 |
| 9 | Iraq | 1427 (0.9) | 29000 (1.6) | 13.3 |
| 10 | Saudi Arabia | 2000 (1.2) | 20000 (1.1) | 10 |
| 11 | Israel | 1300 (0.8) | 10000 (0.5) | 7.6 |
| | Total | 154765 (100.00) | 1791000 (100.00) | |

(Source: www.codexalimentarius. net)

Pomegranate Varieties - Number of pomegranate varieties viz; Bhagwa, Ganesh, Arakta are produced in India. The

varietal characteristics of commercially grown pomegranates are presented in the Table.

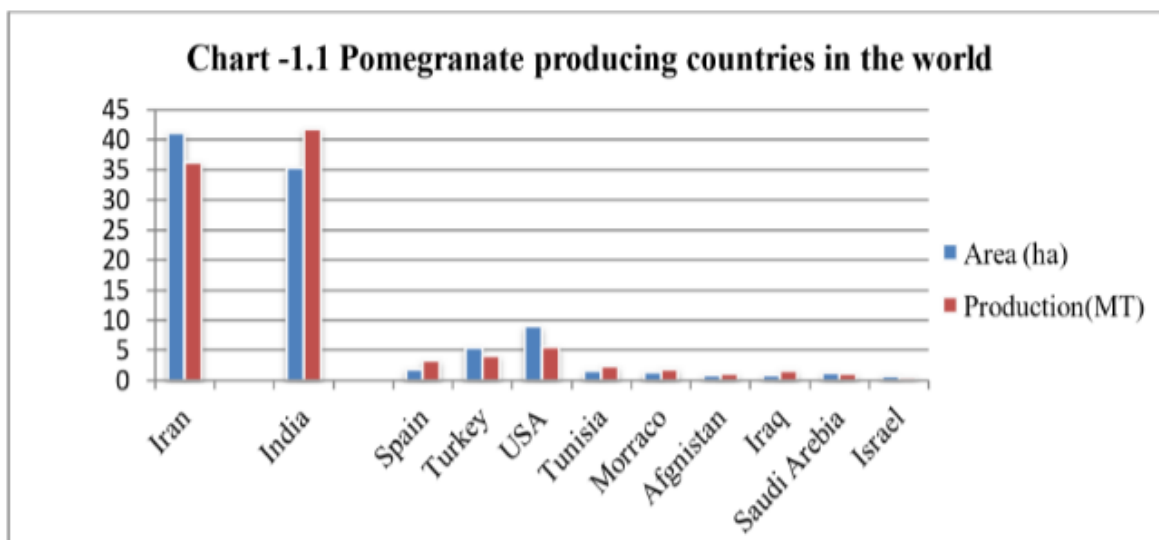


Table: Varietal characteristics of pomegranate

| Variety | Characteristics |
|---------|--|
| Bhagwa | The fruit is glossy red in colour with soft seeds and high T. S. S. |
| Ganesh | This variety has pinkish yellow to reddish yellow rind colour, having light pink arils and soft seeds. Fruit weighs between 225 - 250 gms with medium T. S. S. |
| Arakta | Fruits are dark red in colour with soft seeds and with high T. S. S. |
| Mridula | Fruit has bright red skin colour and weighs between 230 - 270 gms. The seeds are soft and high T. S. S. |
| Ruby | The fruit skin is red in colour and weighs between 225 - 275 gms. The grains are soft, having high T. S. S. |

a) Bhagava

The ‘Bhagwa’ variety of pomegranate under commercial cultivation is known by different names viz. ‘Shendari’, ‘Ashtagandha’, ‘Mastani’, ‘Jai Maharashtra’, and ‘Red Daina’ in various districts of Maharashtra such as Solapur, Nashik, Sangli, Satara, Ahemadnagar, Pune and Dhule districts. ‘Bhagwa’ variety of pomegranate is high yielding and possesses desirable fruit characters. This variety matures in 180 - 190 days with average yield of 30.38 kg fruits/tree. Bigger fruit size, sweet, bold and attractive arils, glossy, very attractive saffron coloured thick skin makes it suitable for distant markets. This variety is less susceptible to fruit spots and thrips as compared to other varieties of pomegranate.



b) Ganesh

This is a selection from 'Alandi' developed by Dr. Cheema at Pune, which revolutionized pomegranate cultivation in Maharashtra state. It is a prolific bearer with large sized fruit, yellowish red and pinkish aril with soft seeds. It is the commercial cultivar of Maharashtra. The average yield ranges from 8 - 10 kg per tree. This has soft seeds and pinkish flesh with juice of agreeable taste and bears heavily.



c) Arakta

The 'Arakta' variety of pomegranate is commercially cultivated in various regions of Maharashtra. Pre - released in the year 1989. It has now been released as 'PhuleArakta' for its cultivation by the Mahatm aPhule Krishi Vidyapeeth, Rahuri. 'Phule Arakta' variety of pomegranate is high yielding and possesses desirable fruit characters. The fruits are bigger in size, sweet with soft seeds, bold red arils. It also possesses glossy, attractive, dark red skin. It is less susceptible to fruit spots and thrips.



Quality Requirement in Pomegranate for Export

Quality parameters for export of Pomegranate viz; colour, size, weight etc. are important. Quality parameters for export purpose sample grading are presented in Table

| Grades | Fruit Characteristics |
|------------|---|
| Super size | Attractive fruits, large in size, dark red in colour, without blemish weighing > 750 g. |
| King size | Attractive fruits, large without blemish and weighing between 500 - 750 g. |
| Queen size | Large fruits, attractive without blemish and weighing between 400 - 500 g. |
| Prince | Fruits are attractive, blemish free and weighing between 300 - 400 g. |
| 12 - A | Fruits having 1 - 2 spots and weighing between 250 - 300 g. |
| 12 - B | Fruits weighing < 250 g. |

From the table it was observed that the fruits without blemish weighing more than 750gm with dark red colour and attractive in appearance were graded as super size by the sample farmers. The fruits without blemish weighing between 500 - 750gm and attractive in appearance were graded as king size. The fruits without blemish and weighing between 400 - 500gm graded as Queen size. Also the fruits without blemish weighing between 300 - 400gm graded as Prince. Fruits which have 1 - 2 spot, weighing between 250 - 300gm graded as 12 - A and fruits weighing less than 250gm graded as 12 - B.

2) Export specifications

Different exporting countries have their own specific quality requirement. Therefore an attempt was made to know the export specification according to which growers export their pomegranate to different countries.

Table: Export specifications of different countries

| Variety | Post Harvest Techniques | Middle East | Netherlands/ Germany | U. K. |
|----------------|-------------------------|------------------|----------------------|-----------------|
| Ganesh, Bhagwa | Size (gms) and Colour | 300 - 450 gm Red | 250 - 300 gm Red | 250 - 300gm Red |

(Source – MSAMB, Pune)

Table gives the country wise and variety wise export specifications for pomegranate. In U. K, Netherlands and Germany markets, the pomegranate fruits of 250 300 gm with red colour of *Bhagwa* and *Ganesh* varieties; (packed in 3 kg. box) were preferred, whereas in the Middle East countries, the fruits of 300 – 450 gm weigh with red colour of *Bhagwa* and *Ganesh* varieties packed in 5 kg. boxes were preferred mostly.

Export scenarios of Pomegranates during 10 years

| Years | Volume (tonnes) | Value (Rs million) |
|-------------|-----------------|--------------------|
| 2011 - 12 | 2, 238 | 49.236 |
| 2012 - 13 | 4, 527 | 99.44 |
| 2013 - 14 | 6, 303 | 143.45 |
| 2014 - 15 | 10, 315 | 210.9 |
| 2015 - 16 | 14, 039 | 298.87 |
| 2016 - 17 | 19, 652 | 567.01 |
| 2017 - 18 | 35, 175 | 911.94 |
| 2018 - 19 | 34, 811 | 1, 146.16 |
| 2019 - 20 | 33, 415 | 1, 194.28 |
| 2020 - 2021 | 35, 311 | 1, 206.95 |

(Source: APEDA & DGGIC Annual Export)

From the Table, it was found that export of pomegranates has surged from 2238 tonnes valued to Rs.49.24 million in 2011 - 12 to 35311 valued to Rs.1206 million in 2020 - 21.

Table Major Country - wise Exports of Pomegranates in 2020 – 21

| Country | Export (tonnes) | Value (Rs million) |
|---------------------------------|-----------------|--------------------|
| UAE | 17,389 | 517 |
| Netherlands | 2,567 | 198.53 |
| UK | 973 | 105.14 |
| Saudi Arabia | 1,789 | 62.77 |
| Russian Federation | 470 | 52.14 |
| Bangladesh | 4,783 | 46.81 |
| Egypt Arab Republic | 299 | 25.06 |
| Bahrain | 805 | 23.39 |
| Kuwait | 505 | 22.24 |
| Thailand | 280 | 19.59 |
| Nepal | 1,454 | 15.71 |
| Oman | 415 | 15.15 |
| Total (including others) | 33,415 | 1,194.28 |

(Source: DGCIS Annual Export)

| | |
|--------------------------------|---|
| Total export from India in MTs | 93673 |
| Value in INR Lakhs | 35613 |
| Total export from India | Export Value Rs.70 Million |
| Varieties grown in Maharashtra | Ganesh, Mrudula, Aarakata, Bhagwa (Ashtagandha/Shendri) |
| Area under crop in Maharashtra | 81376 ha. |

Export Specifications

| | | Middle East |
|---------|------------------|-----------------------|
| Variety | Ganesh, Bhagwa | 300 - 450 gm Red |
| | Arakata, Mrudula | 200 - 250 gm Deep red |
| Packing | | 5 kg |
| Storage | | 5 °C |
| Export | | By Sea |

As far as country - wise export of pomegranates for 2020 - 21 was concerned, UAE was the major buyer followed by Bangladesh, the Netherlands and Saudi Arabia.

(Source: NHB - National Horticulture Board)

As shown in the figure 1.2 India's export large of pomegranate was highest (55 per cent) to UAE, followed by 15 per cent to Bangladesh and 8 per cent to, Netherland. The Pomegranate exported to Saudi - Arabia and Nepal contributed to the tune of 6 and 5 per cent. From the figure it was found that more than half of the pomegranate export of India is concentrated to UAE.

2. Scope of study

The present study was undertaken in order to understand the export specifications of pomegranate to various countries with different quality parameters. Forward linkage indicates the exporting area of pomegranate which have great scope to identify the demand of pomegranate in export market. Hence all the study will help to arrive at the steps to be taken to grow the export of the pomegranate.

3. Limitations of Study

- 1) The data is collected from authorized sources of all Govt. regulated websites.

- 2) Current year data is not available and hence can not be studied in this article.
- 3) Further studies can be extended according to the specifications of the country in which the product is exported. Due to time constraint the study is limited to the in general and main attributes.

4. Findings and Conclusions

- 1) Maharashtra rank top at area and production of pomegranate however per unitproductivity is low. Generally 250 to 330 gm sized pomegranate fruits are preferred in European markets whereas in the Middle East country slightly bigger fruits (300 to450 gm) are preferred.
- 2) *Bhagwa* variety of pomegranate is preferred all over the world.
- 3) UAE is main importer of Pomegranate.
- 4) We are exporting very less quantity of pomegranate as compared to the production. There is much scope to increase the quantum.

References

Website

- [1] www.apeda.com
- [2] www.mahaanar.com
- [3] www.msamb.com
- [4] www.nhb.com