



## Pomegranate (*Punica granatum*)



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## Product Information

The pomegranate tree (*Punica granatum*) is a small tree, which bears pomegranate fruits (berries). Originating in the region of Iran, the tree is cultivated throughout the Mediterranean regions, Middle East, Caucasus, tropical Africa, Central and Southeast Asia, Latin and North America, with upcoming plantations in South Africa and Australia. Main producers of the fruit include Iran (leading exporter), India, Israel, Afghanistan, Iraq, Turkey, Egypt, Morocco, Tunisia, Uzbekistan, Azerbaijan, Spain and the USA. Pomegranates are traded under Harmonised System (HS) code: 0810.9075.30. No separate records for trade-in pomegranates are available; they are included in trade statistics of edible fresh fruit, not elsewhere specified.

## Global Trade – India’s Role

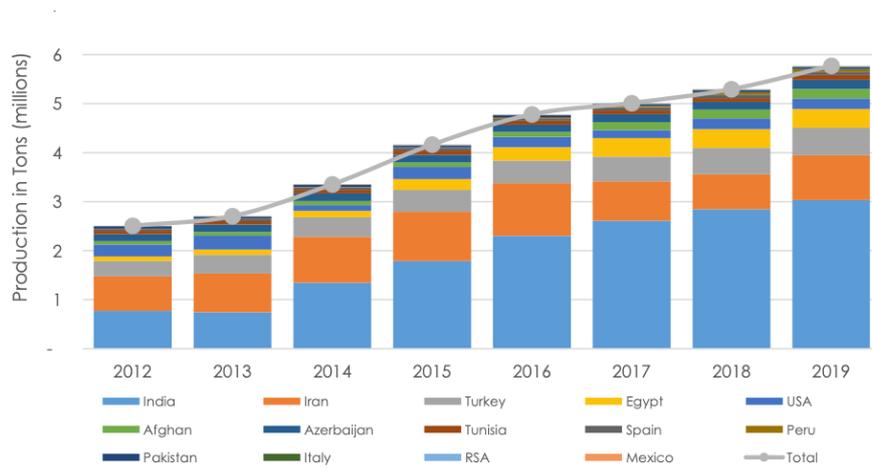


Figure 1. Leading pomegranate producing countries, 2012-2019 (Pienaar 2021<sup>1</sup>)

- Global area planted for pomegranates is estimated at 835.950 hectares, producing 8.1 million tons of fruit (average yield of 9.69 tons per hectare).
- India is the world’s largest producer of pomegranates by some margin with 3 million tons produced on 262.000 hectares. Production volumes have continually increased over the past decade, growing by 5% per annum due to strong demand both in local markets and for export.
- China and Iran were the second and third largest producers in the world with 1.2 million and 915.000 tons respectively. Thus, around 70% of world production comes from the top three countries, producing pomegranates on an estimated 476.000 hectares with a combined average yield of 10.8 tons per hectare.

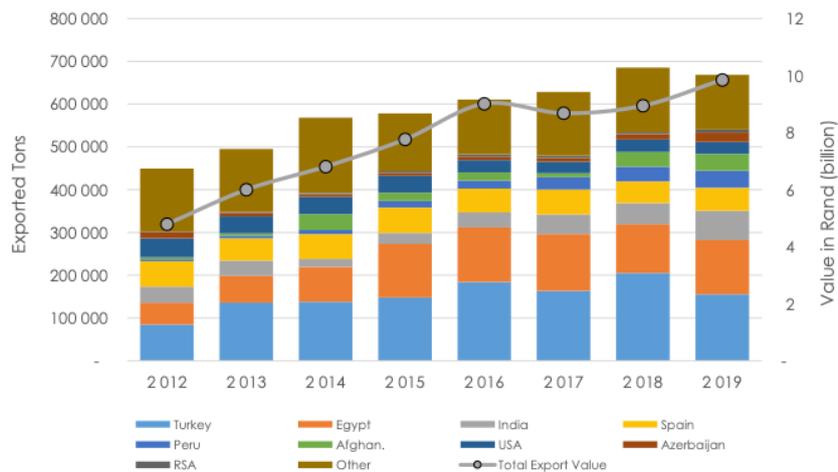


Figure 2. Leading pomegranate exporting countries, 2012-2019 (Pienaar 2021)

- In 2019, Turkey was the biggest exporter with a market share of 23% of global exports, followed by Egypt (19%) and India (10%).
- In 2020, Saudi Arabia was the leading exporter with a share of 27.2%, followed by the USA (17.8%), the Netherlands (14.2%) and others. India’s major export trade with Saudi Arabia has declined to -41.5%. Similarly, India’s export to the Netherlands decreased to -26.08%.

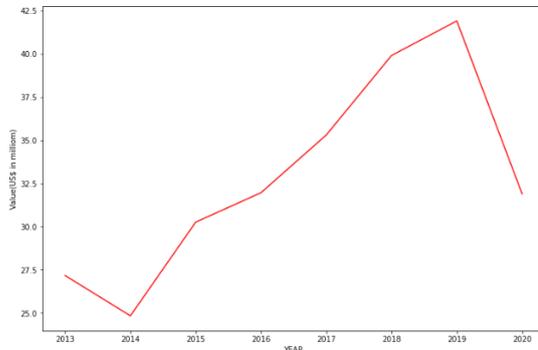


Figure 3. Indian pomegranate export trends from 2013 to 2020 (Tridge 2021<sup>ii</sup>)

Table 1. Top five importing countries from India in 2020 (Tridge 2021)

Trade flow	Export Share in 2020 (%)	Import Value In 2020 (US\$ million)	Export Growth value 2019-20 (%)
India to Saudi Arabia	27.222	8.70	-41.56
India to USA	17.89	5.72	-5.61
India to Netherlands	14.20	4.54	-26.08
India to UK	4.75	1.52	+3.18
India to Belgium	3.99	1.28	-61.62

## Import Trends in European Union

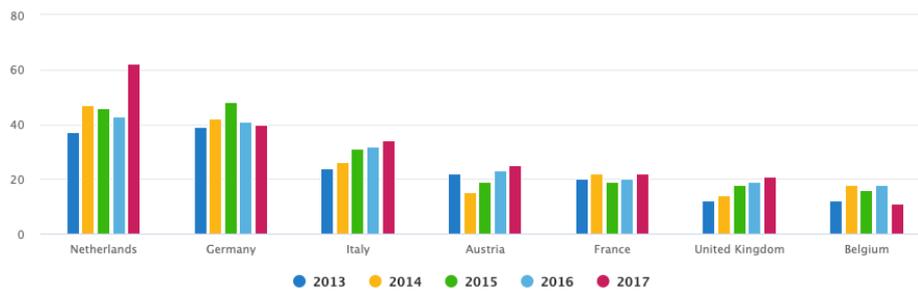


Figure 4. Leading pomegranate importing European countries (CBI 2021<sup>iii</sup>)

- Europe was a net importer of pomegranates, with an estimated net volume (import minus export) of close to 50,000 tonnes in 2017. Most of the import from developing countries, such as Colombia, Peru and South Africa, goes through the Netherlands. From here, pomegranates are distributed all over Europe, with Germany as the most important buyer.
- Turkey (43,000 tonnes), Peru (14,000 tonnes) and Israel (8,000 tonnes) were the main exporters of pomegranates to Europe in 2017. Turkey and Peru have increased their supply significantly over the last five years. Israel has moved to the third place with a lower export volume in 2017.

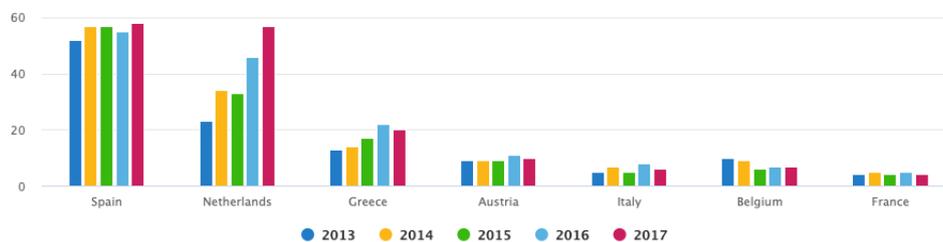


Figure 5. Leading pomegranate exporting European countries (CBI 2021)

- Spain has the largest production of pomegranates in Europe, reaching 50,000 tonnes, most of which are *Mollar de Elche*, an exceptionally sweet variety with a cream-red outside colour and a ‘protected denomination of origin’ (PDO). As a result, Spain does not only have a high consumption of pomegranates, but it is also the number one supplier within Europe.
- In Germany, the demand for pomegranates is growing every year and imports are on the rise. Currently, there is Turkish fruit on the market, mainly of *Hicaz* variety. Besides Turkey, Germany also imports pomegranates from Egypt, Iran, the US and Greece. Demand is currently stable; prices in Berlin stand around 7 Euro for a 4 kilo box.

## Market Segmentation

- European consumers are increasingly expressing a preference for fruit that is easy to prepare and ready to eat. Therefore, pomegranates are not only sold as whole fruit, but supermarkets are also offering the arils or fruity seeds packaged as fresh or deep-frozen products.
- The advantage of retailers selling the arils is that it provides you with a market for the less perfect fruit. Fruit with superficial outer defects can still be suitable as a ready-to-eat peeled product. Exporting the fresh arils will be difficult because of the limited shelf life and because it requires advanced technology, for example, modified atmosphere packaging.
- Turkish pomegranates are currently very popular on the German market. These have been on the market for about 2 months and, as it looks like now, they will continue to be sold until mid-January and February. The price per kilo for buyers amounts to between 0.50 and 0.80 Euro. In retail, the price level currently fluctuates between 1.30 and 1.50 Euro per kilo (Fresh Plaza 2021<sup>iv</sup>).

Product	Price	Country/Supermarket chain
1 x pomegranate (Israel)	€1.40	France/Auchan
1 x pomegranate	€1.12 - 1.75	United Kingdom/Tesco
80 g pomegranate arils	€1.00 - 1.12	United Kingdom/Tesco
1 x pomegranate	€1.49 - 1.79	Netherlands/Albert Heijn
100 g pomegranate arils	€2.00	Netherlands/Albert Heijn
1 kg fresh pomegranates	€2.90 – 3.95	Spain/Hipercor
125 g pomegranate arils	€2.95	Spain/Hipercor
1 x pomegranate	€1,19 - 1.49	Germany/Rewe
1 x pomegranate	€0,79 – 1,29	Germany/Nett Marken, Kaufland, LEDO

- The marketing value of pomegranates as a super fruit has not remained unnoticed by the food industry and food services. In the past years, pomegranates have become a popular ingredient for fruit juices, flavored water, jams, and salads and desserts. One can also find pomegranate seed oil as a food supplement and in personal care products.
- Product development and recipes help significantly in the promotion of fresh pomegranates. As consumers become more familiar with the fruit and its potential uses, they are increasingly using it in food and drink preparation at home. One of the strong pomegranate marketing companies is Pom Wonderful, which is also active with a number of products in Europe.

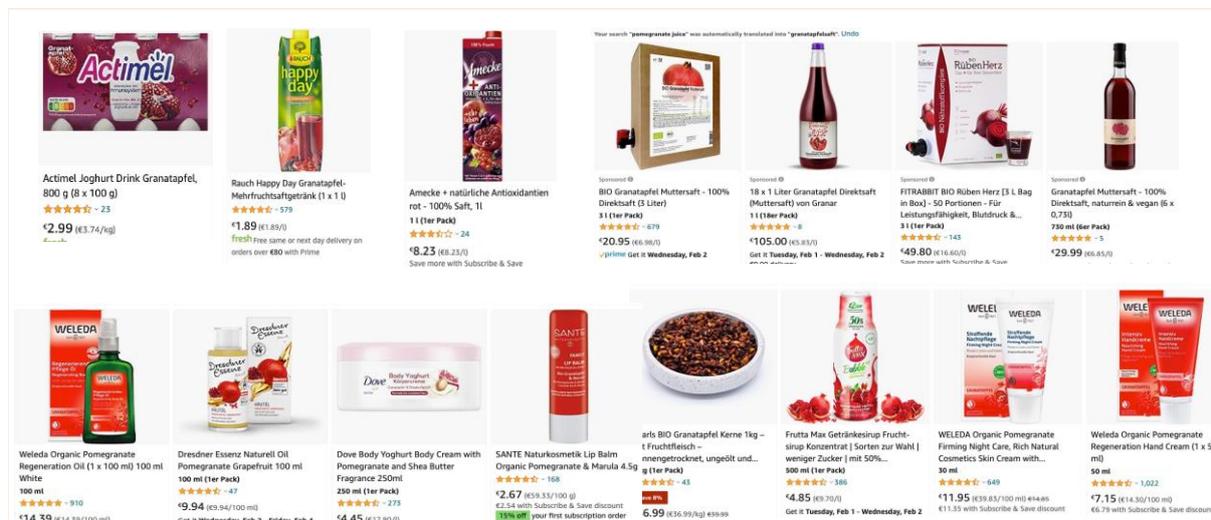
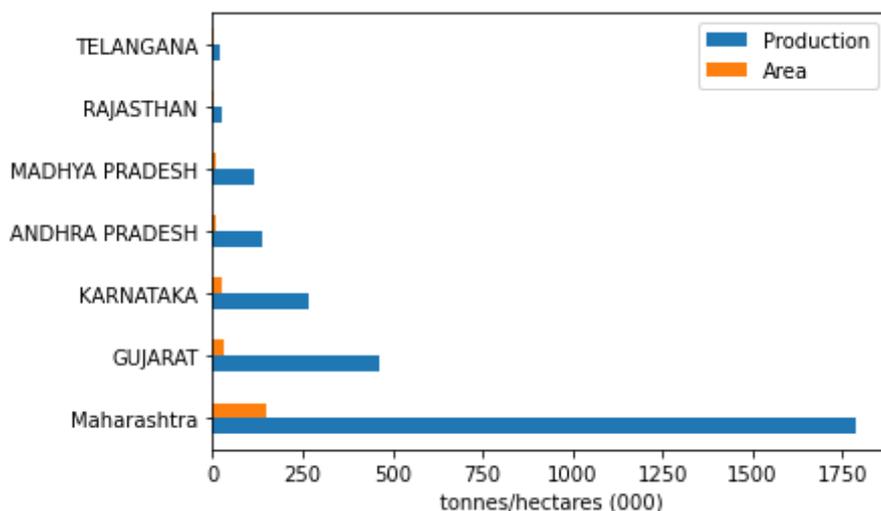


Figure 6. Pomegranate products sold by retail sector in Germany

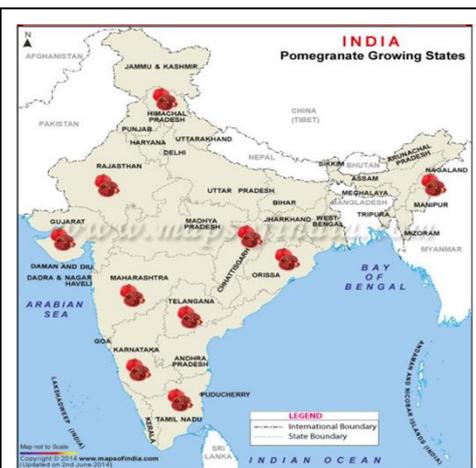
## Pomegranate Production in India



- Maharashtra state was leading in pomegranate production in India with a share of 63% of the total pomegranate production in India, followed by Gujarat 16%, Karnataka 9%, Andhra Pradesh 5% and others in 2017-18.
- Pomegranate fruit share is less than 3% of the total horticulture fruits produced in India.

Table 2. Pomegranate producing states

State	Districts
Maharashtra	Solapur, Nashik, Sangli, Satara, Ahmednagar and Pune
Karnataka	Bijapur, Bagalkot, Koppal, Belgaum, Gadag, Bellary, Raichur, Tumkur, Chitradurg and Davanagere
Gujarat	Kutch, Banaskantha, Ahmedabad, Sabarkantha and Bhavnagar
Andhra Pradesh	the Anantapur
Telangana	Mahbubnagar
Tamil Nadu	the Salem, Coimbatore and Periyakulam
Rajasthan	Hanumangarh and Ganganagar
Himachal Pradesh	Solan, Kullu, Sirmour



- Major pomegranate varieties cultivated in India are *Bhagwa*, *Ganesh*, *Arakta*, *Mridula* and *Ruby*.
- *Bhagwa*, a high yielding and disease resistant variety, after 2003 has changed the production scenario of pomegranate in India. The area under the crop has more than doubled. In 2010-11 the *Bhawa* variety was cultivated in 107.000 hectares area which has now increased to 246.000 hectares in 2018-2019 (Avinashilingam and Tewari 2020<sup>o</sup>).
- Pomegranate fruit can be produced all year round through induced flowering techniques. The peak production season of pomegranate in India is from December to March but can continue through to June/July.

State	Variety grown
Maharashtra	Ganesh, Bhagwa, G-137, Mridula and Ruby
Andhra Pradesh	Ganesh, Bhagwa, and G-137
Karnataka	Bhagwa, Jyoti and Ruby
Tamil Nadu	Mridula, Ganesh, Jyoti and Co-1 (hybrid)
Rajasthan	Jalore seed less and Bhagwa
Gujarat	Dholka, Jalore seed less and Ganesh
Madhya Pradesh	Jyoti and Bhagwa

- Figure 6 summarizes the export-oriented product segment post-harvest steps followed in India.

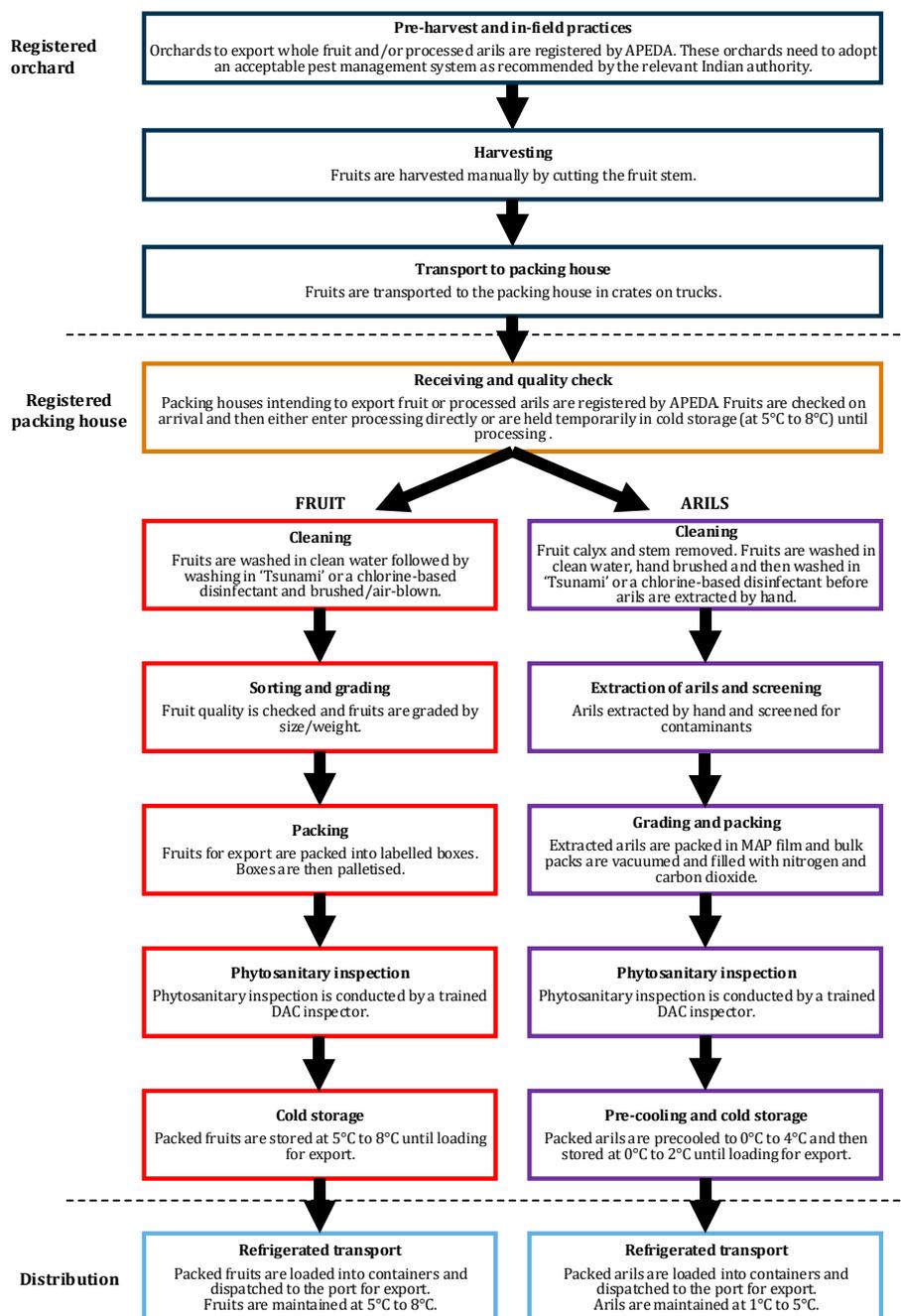


Figure 7. Post-harvest steps for pomegranate commodities produced in India for export<sup>vi</sup>

- Two types of markets are revolving around the collection centres depending on the quality of fruit. The wholesale export market works through service providers, whose job is to ascertain quality production and purchase the entire orchard from farmers before the crop is harvested.
- The first quality fruit is harvested, graded, cleaned and packed in different sizes of corrugated fibre boxes as per the specification of the region or country. Collected fruit is exported through Mumbai and Kolkata ports to different countries.

Variety	Countries		
	Middle East	Netherlands/Germany	U.K
Ganesh, Bhagwa	300-450 gm Red	250-300 gm Red	250-300 gm Red
Akrata, Mrudula	200-250 gm Deep red	200-250 gm Deep red	200-250 gm Deep red
Packing	5 kg	3 kg	3 kg
Storage	5 °C	5 °C	5 °C
Export	By Sea	By Sea	By Sea

Figure 8. Pomegranate Export Specification

- The second type of market is localized wholesale/retail market operating mainly for domestic consumption, fruit is collected and purchased in district *mandi*, from where it is transported to bigger *mandis* through land routes to various parts of the country, mainly Delhi.
- Figure 9 summarizes the average min, max and modal price from different markets across India in January 2022. These rates are from 289 markets in different states. As per the current market rates, the maximum price of pomegranate is 6020.00 INR/Quintal in Mahoba whereas the minimum rate is 600.00 INR/Quintal in Rahata across varieties. The average price is 4354.00 INR/Quintal across varieties<sup>vii</sup>.

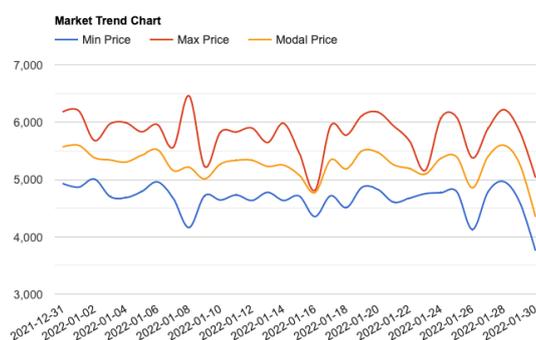


Figure 9. Pomegranate average wholesale price in India

## Challenges and Opportunities in Pomegranate Production in India

### Challenges

- Poor cultivation practices
- Lack of marketing facilities
- Lack of storage and processing units
- The slow pace in the adoption of technology
- High capital investment

### Opportunities

- Evolving varieties/hybrids with resistance/tolerance to bacterial blight disease, other biotic and abiotic stresses
- Development of pomegranate varieties for processing purposes.
- Ensuring the large scale availability of disease-free, quality planting material for pomegranate.
- Introduction and promotion of pomegranate cultivation in non-traditional areas.
- Adoption of scientific management practices, high-density planting, fertigation system, integrated disease and insect pest management etc.
- Reduction of postharvest losses through appropriate postharvest technologies (grading, packing, etc.) and value addition.
- Food safety and pesticide residue management for export promotion.

<sup>i</sup> [https://www.sapomegranate.co.za/wp-content/uploads/2021/05/PomegranateReport\\_2021F.pdf](https://www.sapomegranate.co.za/wp-content/uploads/2021/05/PomegranateReport_2021F.pdf)

<sup>ii</sup> <https://www.tridge.com/intelligences/pomegranate/IN/export>

<sup>iii</sup> <https://www.cbi.eu/market-information/fresh-fruit-vegetables/pomegranates/europe>

<sup>iv</sup> <https://www.freshplaza.com/article/200995/OVERVIEW-GLOBAL-POMEGRANATE-MARKET/>

<sup>v</sup> <https://kosmospublishers.com/wp-content/uploads/2020/02/Supply-Chain-of-Pomegranate-and-Its-Value-Addition-Impact-of-Improved-Variety-Bhagwa.pdf>

<sup>vi</sup> <https://www.awe.gov.au/sites/default/files/documents/final-report-pomegranates-from-india.pdf>

<sup>vii</sup> <https://www.commodityinsightsx.com/commodities/mandi-prices/pomegranate-market-price>