

An Analysis of Market Channel of Pomegranate Fruit in Dhule District (M.S.)

Ahire S. C.

Research scholar, Uttamrao Patil College, Dahivel Tal. Sakri, Dist. Dhule (M. S.), India

Abstract: Horticulture is a best way for economic empowerment. India stands second after china in production of the fruits. Maharashtra state stood first in the production of pomegranate. Out of total production of pomegranate in India, Maharashtra shares 70% production. The pomegranate fruits are produced in the draught prone area of Maharashtra state includes Solapur, Ahmednagar, Pune, Sangali and Dhule Districts. As far as Dhule district is concerned, Sakri and dhule tehasils were at the forefront in the pomegranate production. Market is an important and last step in pomegranate cultivation process. So for as market chain of pomegranate fruit is concerned, it is very complicated. An attempt is made to study pomegranate fruit market chain in Dhule district of maharashtra state. The study has some objectives they are to study pomegranate fruit market chain in Study area. To study relation between pomegranates growers fruit rates and market chain. For the present study the following methodology has been used. The stratified random sampling method has been adopted for the selection of the villages and sample growers and data analyses have been done. The data analyzed with help of statistical techniques and all other information is represented by charts and graphs. The benefits of pomegranate are based upon the distance between growers and consumers. To gate good returns chain needs to be smaller. There are certain market chains between growers and consumers i.e. pre-harvest contractors. Every market chain gains its own benefits, hence the rate of fruit increase. It has been survey that when growers gets 45 Rs./Kg. rate then it is sold 101Rs./Kg to consumers. It means that for the production cost for of month is 45Rs, where market chain gains 56 Rs. Additional amount it weighs on growers. To gets good returns growers should have market awareness growers need to sell his fruit in small chain or he should directly reach to the consumers to avoid market chain.

Keywords: Trade Channel, Value Chain, Pre-Harvest Contractor, Commission agents, Wholesaler, Aggregator

1. Introduction

Horticulture is a best way for economic empowerment. India stands second after china in production of the fruits. The pomegranate crop in India is considered it is mentioned in few literatures that it was produced 400 years before. In world, India ranks first in the production of pomegranate fruits. Because of pomegranate crop characteristics like drought tolerant, low maintenance, market rates etc. It has become popular in drier parts of country. From last few decades this crop has emerged as an important cash crop for drier parts of the country. Maharashtra state is popularly known as the 'fruit' of India. (Kunthe Y. N. - 2006) Maharashtra state stood first in the production of pomegranate. Out of total production of pomegranate in India, Maharashtra shares 70% production. The pomegranate fruits are produced in the draught prone area of Maharashtra state includes Solapur, Ahmednagar, Pune, Sangali and Dhule Districts. As far as Dhule district is concerned, Sakri and dhule tehasils were at the forefront in the pomegranate production. Since these tehasils are neighboring to the leading pomegranate in the vicinity of Nasik district. Therefore pomegranate cultivation is higher in these two tehasils in comparison to other tehasils. New cropping patterns have been accepted by the farmers of the study region, due to climate change and uneven rainfall. Geographical and economical factors have boosted the cultivation and production of pomegranate crop. The pomegranate farming in study region became popular due to many favorable factors such as low water requirements; low capitals inputs, low labor charges and also suitable small land holders. Inter cropping pattern are suitable factors for the cultivation and production of pomegranate crop to large extent. Cropping pattern has been changed considerably. Agricultural economy has been changing in draught prone

area. Hence pomegranate cultivation is increasing in Dhule study region.

2. Demarcation of the Study Region

The district of Dhule formerly known as west Khandesh, district headquarters since 1960. Lies between 20°38' to 21°23' North latitude and 73°47' to 75°11' East of longitude. It covers an area of 7195 square kilometers. As of 20011 Dhule had a population (2,050,862) of 1,054,031 Males constitute 51.39% of the population and 996,831 females 48.61%. Dhule district is mainly located in to the Panzara and Kan River basin area.



3. Objectives

- To study pomegranate fruit market chain in Study area.
- To study relation between pomegranates growers fruit rates and market chain.

4. Hypotheses

- As per the market chain is considered, bigger the length of market chain, lower the rate to growers and higher rates to consumers
- The ratio between grower's market rate and length of market chain is positive.

5. Data Collection and Research Methodology

The entire geo-economic analysis in present study is based on the empirical data collected from various offices as well as through intensive field work, survey, interviews and discussions made with the pomegranate growers. The interview of growers was the only source to work out for the purpose of geo-economic analysis.

Since the study aims the geographical analysis the sample survey method has been used for the present research. The stratified random sampling method has been adopted for the selection of the villages and sample growers and data analyses have been done. Out of total, 5% villages and pomegranate growers having highest acreage area under pomegranate crop per tehasils were selected for the field survey. On the basis of cultivation pomegranate land holding the growers were out of sample growers, 50% were small growers, 30% medium and 20% were large land holders. The data analyzed with help of statistical techniques and all other information is represented by charts and graphs. The result of primary data analysis is summarized in the form of suggestions and conclusions.

6. Trading Chain of Pomegranate

Various channels of the pomegranate supply chain are mentioned below

6.1 Pre Harvest Contactors

The last stage of fruit growing, the local contractors and pomegranate growers negotiate for the trade of fruit. The growers oral agreements by the harvesting of fruits, the growers to borrow money from the per harvest contractors whenever required. They had good faith on each other and maintain the good will. Contractor make maximum profit compared to growers. So growers also choose by diversification of fruits to different market. About 12.7 percent growers sold their fruits to pre harvest contractors with mutually convenient terms and conditions. The growers were bound to sell their pomegranate fruit to a particular agent. The harvest contractor always paid to growers 5 to 10 Rs. Per kg. lower rate than the prevailing market rate.

6.2 Village Level Aggregator

Around 10-15% of the produce from an orchard is sold through village level aggregators. These fruits are very small in size at the time of harvesting of fruits by the contractor and hence they are not plucked by the contractor. These are plucked by the farmer later on and sold through village level aggregators in APMC markets of Nashik, Malegaon and Satana. The major players involved in trade of pomegranates

are farmer, pre-harvest contractor, village level aggregator, Commission agent, wholesaler, semi-wholesaler and retailer. The role played by major stakeholders and the value added at each stage is briefly captured below:

6.3 Private Traders

Private traders survey the overall area with the help of local people. Pomegranate growers are communicated when pomegranate fruits production is high. The private traders are representative from national market. The national market places like Delhi, Kanpur, Kolkatta, Indor, Bhopal, Zhansi, Surat, Ahemdabad, etc. are stating the study region. Local any growers are employed by these traders as call pomegranate pilots. Pomegranate pilots help – by all means to traders, He is employed on monthly basis or on the basis of quantity. The growers negotiate with offered price and then decide to with trader, the availability of fruit is bulk then current price in local and destination market are important price determining factors. This type of marketing is popular in the study area. About 23.12 percent growers sold their fruit to private traders on the farm. It is marketing system is also known as on farm sale of pomegranate, which saves the expense of grower on marketing of fruits. The fruit harvesting processes like harvesting, shorting, packing, transforming etc. arranges by the traders. The amount of yield is made immediately on the same day of harvesting. But due to some trend by traders with growers now become more cautions.

6.4 Commission Agents

Commission agents are locally known as Dalal or agents. The cultivators sell their fruit through it consist detail of their commission chargers of the rate 4 to 10 percent at various market. The open auction system is widely considered to be superior to another system. It is some growers complained that is false type of competition. There is also unity of among fruit agents who decide the price by mutual understanding to open auction, so they do not offer better price for the fruits. Some commission agents perform the function of wholesalers and therefore obtain more profit in the trade of pomegranate.

6.5 Wholesalers

Two types of the wholesalers, first is local wholesalers and second is national wholesalers. Local wholesalers are the roe of commission agent, who got a key position in fruit marketing. They purchase fruit either from commission agent or directly from the growers in the market. They are supplies fruit to the local retailer and distributor who self fruit to a district or state place. National wholesalers are involved in distribution fruit all over national and international of level. They are also smaller wholesalers, who work under national wholesalers.

6.6 Retailer to directly sold to the consumers

It is ultimate node in the chain of middleman. The retailer is small trader who either own stall and dealings directly wholesalers. Retailer purchase small quantities fruits and seal out during the day by day. The retailers are spread all

over towns, cities and markets. So sometime they are also purchase fruit directly from the growers. Therefore, the retailer takes maximum profit in pomegranate trade.

Table 2: Market Channel wise Distribution of Sample Growers

Channel	Channel System	Category of Growers				% of Growers
		Small	Medium	Large	Total	
I	Producer→ Private traders→ Wholesaler at National market→ Retailer→ Consumer	31	41	28	100	30.5
II	Producer→ Wholesaler at Tahsil Market→ Retailer→ Consumer	35	14	11	60	18.3
III	Producer→ Wholesaler at District market→ Retailer→ Consumer	38	29	21	88	26.8
IV	Producer→ Pre-harvest Contractor→ Wholesaler at National Market→ Retailer→ Consumers	24	18	12	54	16.5
V	Producer→ Local Commission Agents→ Wholesaler at National Market→ Retailer→ Consumer	6	4	7	17	5.2
VI	Producer→ Wholesaler at District Market→ Retailer→ Consumer	1	2	6	9	2.7
Total		135	108	85	328	100

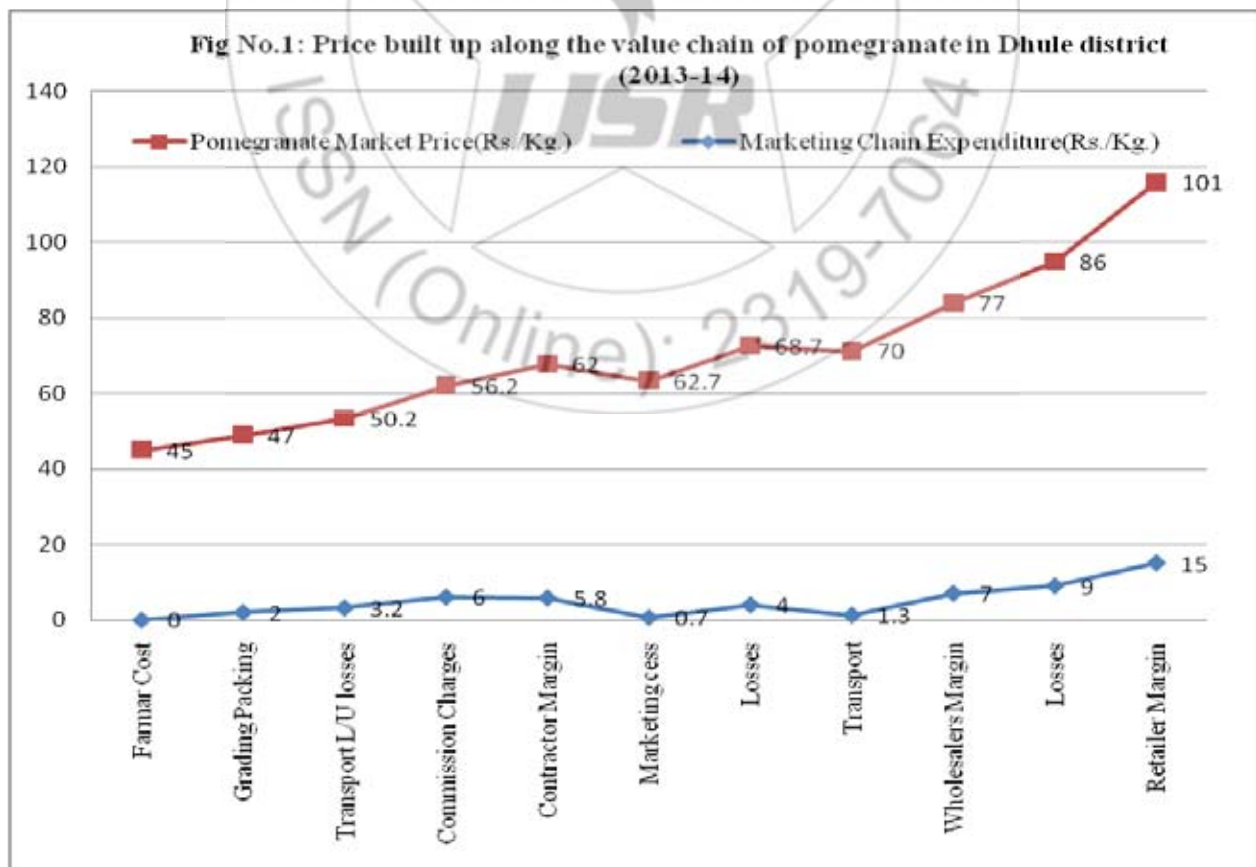
Source: Computed by Researcher, 2015 from field survey data

Value chain of 1 kg of pomegranate indicating the various activities and cost build-up a every step has been Fig 1. as shown below. The most commonly observed trade channel has been selected for the price build up of pomegranate i.e. Farmer - Pre harvest contractor - Commission agent - Wholesaler-Semi wholesaler - Retailer. The price build up is indicated for medium grade 'Bhagwa' variety of pomegranate in hast bahar. The transportation cost has been taken from Dhule to Mumbai The cost of retailing, which includes the cost of shop, wages, rent etc, has not been considered.

Table 2: Pomegranate Price Buildup Can be Summarized (Rs. / Kg.) in Dhule District.

Sr. no.	Particulars (Rs. / Kg.)	Farmer	Contractor	Wholesaler	Retailer
1	Cost of purchase price	36.6	45	62	77
2	Cost of Market, Transport, Wastage	2.4	11.8	8.3	9
3	Selling Price	45	62	77	101
4	Benefits	6	5.2	6.7	15

Source: Computed by researchers, 2015



As evident from above, farmers incur a cost of Rs 6/kg (2.4Rs.) of the produce, which may be cracked, rotten or maintenance of pomegranate orchard. Around 4-6 % damaged by the pest, is culled during sorting and grading on

the farm. The average price realized by the farmer is around Rs 45/kg and thus his net margin is Rs 36.6/kg.

As explained earlier, the cost of grading, packaging, loading, unloading, transportation and commission at APMC market, which is around 25-30% (17Rs), is borne by the contractor. It has been observed that after the replacement of wooden boxes and gunny bags by plastic crates and corrugated boxes as packaging material in recent years, percent of produce wasted during handling and transportation from farm to market has considerably reduced. Some contractors have reported that once the produce is packed at farm in the corrugated boxes, not even 1-3% of the total produce is wasted during handling and transportation to the destination markets. The price realized by the contractor is Rs62/kg at APMC Mumbai and his net margin is Rs 5.2/kg. The produce is traded in APMC market and it is bought by the wholesaler and he pays marketing cess @1%. Since commission agent facilitates trade and also pays to contractor on behalf of the wholesaler, he takes financial risk and thus charges commission at the rate of 8% from the contractor. The net margin realized by the wholesaler and retailer is around Rs 6.7 and Rs 15/kg respectively. At retail level pomegranates are mostly sold on the basis of count instead of weight.

6.7 Potential for Intervention

Based on the need assessment of the pomegranate value chain are action plans were drawn-up and stakeholder consultations undertaken to identify areas of potential interventions. Some of the areas identified for intervention is it is proposed to set up a pack house for pomegranates at Malegaon in Nasik district the pack houses may have facilities for: Pre-cooling, Sorting/grading, Packing, Cold storage. It is estimated that the throughput of pomegranates at Malegaon and Sangamner spoke shall be 2000 MT. This spoke will also handle other crops such as grapes, onion and maize. The details of the facilities have been captured in the subsequent chapter. Pomegranates may be transported in reefer vans to avoid physical and quality loss during Transit Since market of pomegranate has recently started from the region, farmers may be educated about Good Agricultural Practices.

7. Observations & Conclusions

- Small cultivators mostly sell their product on farm or to private traders.
- Pre-harvest contractors and private traders' take only top to middle grade fruits.
- Large growers mostly sell their products to district and national market.
- When compared production cost and cost of market channel, cost of market
- Channel is higher.
- The benefits of pomegranate growers for 06 months is lower than benefits of
- Private traders, wholesalers and retailers within 05 to 15 days.
- The only reason to get lower benefits is less market system awareness of the Pomegranate cultivators.

- Cultivators get consequently, Low income. The main reasons are commercially illiterate cultivators and less awareness about market system.
- The market rate of pomegranate increases step by step till it reaches to consumers.
- There are around five intermediaries.
- The price build up from farmer to consumer is around 2.5 times.
- The retailer deals in smaller volumes and his share in a consumer rupee is high

8. Suggestions

- There is need to decrease marketing channel.
- Need of growers' awareness of modern market system like farm to market or grower to consumer.
- Government agencies should assist to develop market system.
- As per the new regulations of govt. grower to retailers system is to be applied.
- There should be more transparent relationship between grower and traders.
- To develop good market system database of modern technology need by growers.
- Mobile apps related to market system is to be used eg. Kisan.
- Govt. agencies (Tahsil Agri. Dept.) need to spread awareness regarding market system.

References

- [1] Koujalgi C. B. and Mundinamano S. M. (2012): Analysis of pomegranate orchards for financial feasibility and economic viability sustainable cultivation in Karnataka' Research Journal of Agricultural science.
- [2] Madhi Babaei and Elahe Asemani (2012): 'Pomegranate Marketing Margins in the Neyriz, Iran,' Journal of development and Agricultural economics,
- [3] Pratibha Tewari & All (2014): 'Pomegranate Supply Chain', Director, Central Arid Zone Research Institute, Jodhpur (Rajasthan), INDIA
- [4] Raj Ganguly (2011): 'Analysis of Pro-poor Agriculture Value Chains in Maharashtra: Preliminary Findings', Projects Series, and India International Centre, New Delhi
- [5] Ravikumar K. T. (2009) : 'Production and Marketing of Pomegranate in Chitradurga district of Karnataka An economic analysis,' University of Agricultural sciences, Dharwad
- [6] Ravikumar K. T. and Hosmani S. B. (2011): 'Investment pattern and maintenance cost in Pomegranate Orchards – an economic analysis, Karnatka' Journal Agricultural Science
- [7] S. M. Patil(1998): 'Maharashtratil Phalotpadan', Continantal prakashan, Pune,(Marathi)
- [8] Singh H. P. (2009): 'Horticulture research and development in India, with special reference to pomegranate and minor fruits', University of agricultural sciences, Dharwad, India.

- [9] Singh Jasbir & Dhillon S. S. (1998): 'Agricultural Geography,' Tata McGraw- Hill Publication, New Delhi.
- [10] Suresh Phule(2009): 'Krushi Bhugol', Vdhya Bharti Prakashan, Nagpur,(Marathi)
- [11] Suryavanshi D. S. and Ahire S. C. (2012): 'The Study Of Pomegranate Plantation Volume In Dhule District (M.S.)', Interlink Research Journal, Latur
- [12] V. G. Rahul(2006): 'Kalpvkrsh Dalimb', Sanket prakashan, Aurangabad,(Marathi)S. V. Dhake(2003): 'Krushi Bhugol', Prashant publication, Jalgaon,(Marathi)
- [13] Vinay Supe(2010): 'Niryatsham Dalimb Utpadanasathi Ekatmik Aannadravyache Vyavasthapan' Dalimbvrutta, Pune ,(Marathi)
- [14] Vithal Garpur (2003): 'Krushi Bhugol', Pimpalasure prakashan, Pune,(Marathi)
- [15] Y. N. Khunthe(2006): 'Principal of Horticulture and fruit growing', A. D. H. Publication, New Delhi.pp182-185

