Analyzing Economic and Margin Analysis in Saffron Marketing in Kashmir Valley

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Abstract

The study analyses economic parameters and margin- price spread analysis of saffron growers in Pampore vital for enunciating and offering comebacks to the economic and financial problems in research in agricultural sciences in general and business economics in particular. Accordingly, income and production of the growers in relation to the size of land holdings have been analyzed. In the three protuberant saffron growing villages of Pampore namely Letpora, Ledhu and Konibal the primary data was collected which was based on the interview. For the selection of the respondents, Purposive-Stratified-cum-Proportional sampling framework was followed. One-way ANOVA was used to analyze the relationship between saffron income and size of landholdings on the one hand and the relationship between saffron production and size of landholdings on another hand. The tabular method and percentage analysis were carried out to examine marketing cost, marketing margin, and price spread. The statistical treatment to the data uncovers the fact that there is a positive relationship between saffron income and the size of land holdings on the one hand and saffron production and the size of land holdings on another hand. Furthermore, we come to know that in all marketing channels except channel III, where firm enjoys the maximum share in consumer's rupee (15.38%), it is the retailer who enjoys the maximum share in consumer's rupee.

Keywords: Income, production, size of land holding, margin analysis, saffron marketing

Introduction

Farm size and productivity debate are in vogue in contemporary times in Indian Agriculture, especially post-green revolution. A linear programming farm-household models along with the series of farm survey data provide confirmation for a positive relationship between farm size and level of production and productivity. On minor farms, the natural factors like calamities, disasters, and disappointments in the land, capital and goods markets with strong capital checks and limits that influence both fixed (capital) and variable (labour) factors of production explain the positive relationship between farm size and productivity (Dorward, 1999). The variations in different market forms: land, capital, and goods markets, in particular, explain the variations in the factors of production that in turn explain the variations in the farm size and productivity liaison (connection). The Green Revolution encompassed the adoption of

chemical fertilizers, labour-saving technology, and modern irrigation tools, as a result, the direct relationship sets in and the inverse relationship is likely to disappear (Ghose, 2007). We find a positive relation between farm-size and productivity instead of negative in the post-green-revolution period. As farm size increases, income increases more than proportionately, which will widen the gap between rich and poor in rural areas (Qadri, 2018).

The marketing efficiency is function of costs, margins and price spreads and for continuous monitoring of marketing efficiency, we need to have a mental grasp of marketing costs and margins. It is measured through price spread (Gardner, 1975) which helps in the estimation of marketing cost involved in moving goods from the farm to the market. There is an inverse relationship between marketing efficiency and marketing cost. Higher the marketing cost incurred when compared with the services involved, lower will be the marketing efficiency and vice-versa. That is to say that the developments in marketing efficiency mean the reduction of marketing cost, keeping the number of services to the consumer fixed.

Price spread is the difference between the price paid by the consumer and the price received by producer taking account of the marketing cost of the intermediaries coupled with the margin received by them. Price spread examination is not only the analysis of marketing costs and marketing margins at different points of marketing but a perfect picture of a market system. It helps to evaluate whether the service area of marketing channels involved is delivered at a judicious, even-handed, and, reasonable cost.

Saffron production is very significant source of income for the saffron growing villages. It is a very labour intensive farming (Melfou, Loizou, Oxouzi, & Papanagiotou, 2015) offering a wide range of employment opportunities in the local community. The maximum marketing margins were received by the brokers followed by retailers in the marketing of saffron. The sub-firms, who usually performed the task of grading, incurred the maximum marketing cost. The producer got less share of the consumer's rupee in the channels involving saffron broker and vice versa (Wani *et al.*, 2008).

Insufficient, incomplete and unsatisfactory market channels and weak price signaling are among the factors affecting the commercialization of agriculture (Jaleta, 2007). Moreover, Emana and Gebremedhin (2007) in their study on market chain analysis argued that the marketing of horticultural crops is influenced to a great extent by insufficient local markets, poor price mechanism, inadequacy and inability of local markets to absorb the supply, low prices, presence of large number of intermediaries, inefficient marketing institutions and lack of coordination between institutions and farmers which results in communication gap between institutions and farmers. The main objectives of the present study were to analyse the relationship between saffron household income and size of landholding, to analyse the relationship between saffron production and size of land holding and to estimate marketing costs and marketing margins in different marketing channels.

Materials and Methods

The objective of the study has been fulfilled by relying on primary as well as secondary data. The primary data was collected by means of a structured interview schedule framed strictly in accordance with the objectives of the study and information on important socio-economic variables, as identified from the literature, have been collected.

Study Area

In valley, Kashmir saffron is generally cultivated in the districts of Pulwama and Budgam and out of these two districts the bulk of production comes from tehsil Pampore, popularly called the saffron town, of district Pulwama. The area of study, therefore, has purposively been preferred as tehsil Pampore.

Outline of District Pulwama

Kashmir division comprises of ten districts and district Pulwama is one of them which is plocated 32 km from Srinagar at an altitude of 32.88°N to 74.92°E and is enclosed in the north by Srinagar, in the west by Budgam and Poonch and by Anantnag in the east. The parting of three Tehsils *viz.* Pulwama, Shopian, and Tral gave birth to this district in the year 1979. It occupies a total geographical area of 1086 Km^2 as per Census 2011. It has been administratively shared into 4 tehsils/blocks namely, Awantipora, Pampore, Pulwama, and Tral.

Outline of Tehsil Pampore

Pampore accounts for the majority of the total area under saffron and is well-known all over the world for the excellent saffron it produces owed to its peculiar topographical features, apt climatic conditions, soil type, and water table. At the Beijing International Forum held in June 2011, Pampore has been acknowledged and documented as Globally Important Agricultural Heritage System (GIAHS) site by Food and Agriculture Organization of the United Nations (FAO). Pampore was formally recognized as GIAHS at the Beijing International Forum held in June 2011.

Tehsil Pampore comprise of 23 villages out of which 3 villages- namely Letpora, Ledhu, and Konibal- with maximum land under saffron cultivation were selected purposively. There are 60613 people living in Pampore according to census 2011, out of which 31654 are male and 28959 are female. Being highly labour-intensive activity, saffron farming involves more female participation in the field and post-harvest operations (Kamli & Wani, 2004) that is why Female Sex Ratio is very important and for Tehsil Pampore it is 970 which is higher than Jammu and Kashmir State average of 889. Pampore has a higher literacy rate of 70.69 % which is higher than Jammu and Kashmir State average of 67.16 % but, it is very unfortunate that the overall level of education of the saffron growers is low. People living in Pampore no doubt depend on manifold skills but a good number of people directly or indirectly depend on agriculture farming, particularly, saffron and walnut farming.

Sampling technique

The present study is based on both primary as well as secondary data. It adopted Purposive Stratified Proportional sampling for the selection of samples. There are 7 tehsils in district Pulwama and out of them we purposively selected tehsil Pampore as the bulk of saffron production comes from Pampore. Pampore comprises of 23 villages out of which, 3 villages- namely Letpora, Ledhu, and Konibal- occupying maximum land under saffron cultivation were selected purposively. We randomly took growers, dalals & local traders, retailers/wholesalers and firms from the 3 carefully chosen villages. Given the fact that the size of population (N) is known, in order to determine the sample size (n) of growers, the proportional method has been applied. We took 10 % as proportion and for that reason, the method for proportion turn out to be $n=N\times0.1$. Based on this method the sample size of 83, 82 and 36 growers were selected from Letpora, Ledhu, and Konibal respectively thereby generating the sample size of 201. Since, the sample size is not confined to growers only, dalals and local traders, retailers/wholesalers, and firms were selected randomly creating the total sample size of 229. Accordingly, 229 respondents were questioned. Conversation with other stakeholders also benefited the present study.

As far as secondary data is concerned, it has been obtained from diverse bases and data sources together with the official and non-official published data from different departments like Directorate of Planning and Marketing, Govt. of J&K, District Horticulture Offices, Spices Board of India, Census department, Saffron Research Station Pampore or Saffron Spice Park etc. In addition, many working papers and reports, GIAHS Saffron Site Report and its different parts, and many Economic Survey reports of J&K obtained from Directorate of Economics and Statistics have been consulted.

Estimation method

Presentation of data is a very important stage in statistics under which organized data are made very simple and eye-catching. And the tabular method is the best way of presenting data in the form of Tables, diagrams, and graphs. The present study used the statistical tools and techniques of the tabular method and percentage analysis to observe and analyse the relationship between income and size of land holdings on the one hand and the relationship between production and size of land holdings on another hand, and Margin and Spread analysis.

Analysis and interpretation of data

The present study deals with the wide-ranging and broad analysis of collected data which comprise the economic parameters of saffron growers as well as statistical analysis of data. Different figures, tables, and the concerned pie charts are presented to facilitate the analysis and interpretation of data.

Income and Size of Land Holdings

In this section, the relationship between income of the saffron growers and the size of land holdings (land under saffron cultivation) is reported and presented. The relationship between the incomes of the saffron growers with respect to their size of land holdings is shown in **Table 1** and **Table 2,** respectively.

Table 1: Income of saffron growers with respect to their size of land holdings

Land Size (kanals)	N	Minimum	Maximum	Mean	Std. Deviation
1-5K	68	22500.00	64500.00	46777.9412	12241.41302
6-11K	66	67500.00	135000.00	98338.6364	22245.85665
12 and above	67	138000.00	450000.00	209619.4030	75412.58031
Total	201	22500.00	450000.00	117988.8060	82170.79035

Source: Field survey

Table 1 shows that the income of saffron growers whose land holdings lie in the range of 1-5 Kanals varies from Rs 22, 500 to Rs 64, 500 with an average income of Rs 46, 777 and the income of the growers whose land holdings lie in the range of 6-11 kanals varies from Rs 67, 500 to Rs 1, 35, 000 with an average income of Rs 98, 338. Similarly, it shows that the income of saffron growers whose size of the land holdings is above 12 kanals varies from Rs 138000 to Rs 4, 50, 000 with an average income of Rs 2, 09, 619. It follows from **Table 1** that as the size of cultivable land increases the income of the growers also increases which implies that there is a positive relationship between saffron income and the size of land holdings.

Table 2: Results of One Way ANOVA Test

Sources of Variation	d. f.	F	Sig.
Between Groups	2	221.176	.000
Within Groups	198	-	-
Total	**200**	**-**	**-**

Source: Field survey

In **Table 2,** P-value is < 0.05 which indicates that there is strong evidence against the null hypothesis of no significant difference in income received by the growers from their production with respect to their size of land holdings. In other words, there is a significant difference in income received by the growers from their production with respect to their size of land holdings. Hence, we conclude that the income of saffron growers varies according to the size of their land holdings.

Production and size of land holdings

In this section, the relationship between production of the saffron growers and the size of land holdings (land under saffron cultivation) is reported and presented. The relationship between the productions of the saffron growers with respect to their size of land holdings is shown in **Table 3** and **Table 4** respectively.

Table 3, shows that the production of saffron growers whose size of land holdings lie in the range 1-5 kanals varies from 150 grams to 430 grams with an average production of 311grams and the production of saffron growers whose size of land holdings lie in the range of 6-11 kanals varies from 450 grams to 900 grams with an average production of 655 grams. Moreover, it shows that the production of saffron growers whose size of land holdings is 12 kanals and above vary from 920 grams to 3000 grams with an average production of 1397 grams. It follows from **Table 3** that as the size of cultivable land increases, the production also increases which implies that there is a positive relationship between saffron production and the size of land holdings.

Table 3: Production of saffron growers with respect to their size of holdings

Land size (kanals)	N	Minimum	Maximum	Mean	Std. Deviation
1-5K	68	150.00	430.00	311.8529	81.60942
6-11K	66	450.00	900.00	655.5909	148.30571
12 and above	67	920.00	3000.00	1397.4627	502.75054
Total	**201**	**150.00**	**3000.00**	**786.5920**	**547.80527**

Source: Field survey

In **Table 4**, P-value is < 0.05 which indicates that there is strong evidence against the null hypothesis of no significant difference in the production of saffron among different groups of growers with respect to their size of land holdings. In other words, there is a significant difference in the production of saffron among different groups of growers with respect to their size of land holdings. Hence, we conclude that the production of saffron growers varies according to the size of their land holdings. From the above discussion, we can say that there is a direct and positive relationship between income and the size of land holdings on one hand and production and the size of land holdings on the other hand. Higher the size of land holdings, higher the production and higher will be the income.

Table 4: Results of One Way ANOVA Test

Sources of Variation	**d. f.**	**F**	**Sig.**
Between Groups	2	221.176	.000
Within Groups	198		
Total	**200**		

Source: Field survey

Estimation of marketing costs, margins and price spread of saffron

Marketing channels

Marketing channel is a structured system or a system of agencies which in groups execute the entire activities essential to connect producers to realise the marketing activities. Marketing channels are "structures through which goods and services move from the producer to the consumer" (Stern *et al.*, 1996). Jr., (1992) defines marketing channel as a combination of channel management and physical distribution management. Former focuses on operating and setting up distributional network and latter is concerned with delivery of goods when and where they are needed. Rosenbloom (1999) view marketing channel in terms of long-term planning and operation. For constructing such channels, a structure is required which is consistent with needs and kinship of the people. Stern *et al.* (1996) differentiates the channel members. The producers develop, produce, and market the product, the wholesaler is a mediatory between producer and distributor/dealer, distributor/Dealer is a mediatory between wholesaler and retailer, the retailer is a link between distributor/dealer and customer who is the end user. The following marketing channels were recognised as the main marketing channels in saffron in J&K:

1. Grower-Consumer: Channel-I/Perfectly Compact Channel.
2. Grower-Dalal & local traders-Retailer-Consumer: Channel-II/Ordinary Compact Channel.
3. Grower-Firm-Retailer-Consumer: Channel-III/ Highly Compact Channel.
4. Grower-Dalal & local traders-Wholesaler-Retailer-Consumer: Channel-IV/Fairly Compact Channel.
5. Grower-Dalal & local traders -Firm-Wholesaler-Retailer-Consumer: Channel-V/De-compact Channel.
6. Grower-Firm-Wholesaler-Retailer-Consumer: Channel VI/Fairly Compact Channel.

Marketing margins and price spread

The disposal of saffron moves to the market through several agencies/institutions and marketing channels. The role played by marketing agencies and institutions in the marketing of saffron is quite indispensable as it perform important marketing functions in the form of grading and packaging which create value addition and also help in the expansion of markets. Every function or service involves cost. The intermediaries or middlemen make huge profits to remain in the saffron trade after meeting the cost of the function performed. In the marketing

of agricultural commodities, the difference between the price paid by consumer and the price received by the producer is known as price spread. On the other hand, margins are the price differentials for a particular good between different stages of marketing channel (Myers *et al.*, 2010). Neither there is margin for grower/ producer nor consumer because neither there is purchasing price of the grower nor selling price of the consumer. Further more, grower mainly focuses on disposal of his produce rather than gaining or keeping margin which is already included in the farm-gate price. Wollen and Turner (1970) well-defined all marketing costs right from harvesting of the product in the farm to pre-consumption as marketing margin. Subsequently, marketing margin is a part of price of a commodity that grower doesn't receive. The present study calculated margins, percentage share in consumer's rupee and total price spread with the help of following formulae:

Margin = selling price – purchasing price

Percentage share in consumer's rupee = price received-purchased price consumer price×100

Total price spread = consumer price **–** producer price

There is an inverse relationship between the number of intermediaries and percentage share in consumer's rupee. As the number of intermediaries increase, the percentage share in consumer's rupee declines. **Table 5** indicates that channel-I is profitable for saffron growers as it doesn't involve any intermediary between grower and the consumer which is why the percentage share in consumer's rupee is 100. This implies that 1 Re of the consumer directly goes into the pocket of the grower and price spread accordingly is zero.

Table 5: Margin, percentage share in consumer's rupee and price spread in channel-I

Marketing channel	Price received (Rs / Tolla)	Purchased price (Rs / Tolla)	Margin (selling price – purchasing price)	Percentage share in consumer's Rupee (%)	Total Price Spread
Grower	2000	-	0	100	0
Consumer	-	2000			

Source: Field survey

Table 6 indicates that in channel-II the intermediaries are dalals and local traders in the first place and retailers in the second place, and therefore, the percentage share of a grower in consumer's rupee declines and is to the figure of 76.19 %. This means little more than three-fourths of the share goes to the grower. In other words, out of 1 Re of the consumer, 76 paisa goes into the pocket of the grower and the remaining is distributed between the dalal and local trader (10 paisa) and retailer (14 paisa), respectively. In between the grower and the consumer, it is the retailer who enjoys a maximum share in consumer's rupee. That is to say, that the retailer's position is best in the channel-II. The margin of dalal/local trader and retailer is Rs 200 and Rs 300 respectively. Again, it indicates that in between the grower and the consumer it is the retailer who enjoys the highest margin followed by dalal and local trader respectively

Table 6: Margin, Percentage share in consumer's rupee & Price spread in channel-II

Marketing channel	Price received (Rs / Tolla)	Purchased price (Rs / Tolla)	Margin (selling price– price received)	Percentage share in consumer's Rupee (%)	Total Price Spread
Grower	1600	-	-	76.19	500
Dalal & local trader	1800	1600	200	9.52	
Retailer	2100	1800	300	14.29	
Consumer	-	2100			

Source: Field survey

Table 7 indicates that in channel-III the intermediaries are firms in the first place and retailers in the second place, and therefore, the percentage share of a grower in consumer's rupee declines and is to the figure of 73.08 %. This means little less than three-fourths of the share goes to the grower. In other words, out of 1 Rs of the consumer, 73 paisa goes into the pocket of the grower and the remaining is distributed between the firm (15 paisa) and retailer (12 paisa) respectively. In between the grower and the consumer, it is the firm who enjoys a maximum share in consumer's rupee. That is to say, that the firm's position is best in the channel-III. The margin of the firm and retailer is Rs 400 and Rs 300 respectively. Again, it indicates that in between the grower and the consumer it is the firm who enjoys the highest margin followed by retailer respectively.

Table 7: Margin, Percentage share in consumer's rupee & Price spread in channel-III

Marketing channel	**Price received (Rs / Tolla)**	**Purchased price (Rs / Tolla)**	**Margin**	**Percentage share in consumer's Rupee (%)**	**Total Price Spread**
Grower	1900	-	-	73.08	**700**
Firm	2300	1900	**400**	**15.38**	
Retailer	2600	2300	**300**	**11.54**	
Consumer	-	2600			

Source: Field survey

Table 8 indicates that in channel-IV the intermediaries are dalals and local traders in the first place, wholesaler in the second place, and retailer in the third place and therefore, the percentage share of grower in consumer's rupee declines and is to the figure of 76.09 %. This means little more than three-fourth of the share goes to the grower. In other words, out of 1 Re of the consumer, 76 paisa goes into the pocket of the grower and the remaining is distributed among dalals and local traders (7 paisa), wholesaler (4 paisa) and retailer (13 paisa) respectively. In between the grower and the consumer, it is the retailer who enjoys maximum

share in consumer's rupee. That is to say that retailer's position is best in the channel-IV. The margin of dalals and local traders, wholesaler and retailer is Rs 150, Rs 100 and Rs 300 respectively. Again, it indicates that in between the grower and the consumer it is the retailer who enjoys the highest margin followed by dalal and local traders and wholesaler respectively.

Table 8: Margin, percentage share in consumer's rupee and price spread in channel-IV

Marketing channel	**Price received (Rs / Tolla)**	**Purchased price (Rs / Tolla)**	**Margin**	**Percentage share in consumer's Rupee (%)**	**Total Price Spread**
Grower	1750	-	-	76.09	550
Dalal & local trader	1900	1750	150	6.52	
Wholesaler	2000	1900	100	4.35	
Retailer	2300	2000	300	13.04	
Consumer	-	2300			

Source: Field survey

Table 9 indicates that in channel-V the intermediaries are dalals and local traders in the first place, firm in the second place, a wholesaler in the third place and retailer in the fourth place therefore, the percentage share of a grower in consumer's rupee declines and is to the figure of 78.57 %. This means more than three-fourth of the share goes to the grower. In other words, out of 1 Re of the consumer, 79 paisa goes into the pocket of the grower and the remaining is distributed among dalals and local traders (5 paisa), firm (5 paisa), wholesaler (2 paisa) and retailer (9 paisa) respectively. In between the grower and the consumer, it is the retailer who enjoys a maximum share in consumer's rupee. That is to say, that retailer's position is best in the channel-V. The margin of dalals and local traders, firm, wholesaler, and retailer is Rs 100, Rs 100 and Rs 50 and Rs 200 respectively. Again, it indicates that in between the grower and the consumer it is the retailer who enjoys the highest margin followed by dalals and local traders, firm, and wholesaler respectively.

Table 9: Margin, percentage share in consumer's rupee & price spread in channel-V

Marketing channel	**Price received (Rs / Tolla)**	**Purchased price (Rs / Tolla)**	**Percentage share in consumer's Rupee (%)**	**Margin**	**Total Price Spread**
Grower	1650	-	78.57		**450**
Dalal & local trader	1750	1650	4.76	**100**	
Firm	1850	1750	4.76	**100**	
Wholesaler	1900	1850	2.38	**50**	
Retailer	2100	1900	9.53	**200**	
Consumer		2100			

Source: Field survey

Table 10 indicates that in channel-VI the intermediaries are firm in the first place, a wholesaler in the second place and retailer in the third place, therefore, the percentage share of a grower in consumer's rupee declines and is to the figure of 72 %. This means little less than three-fourths of the share goes to the grower. In other words, out of 1 Re of the consumer, 72 paisa go into the pocket of the grower and the remaining is distributed among firm (8 paisa), wholesaler (4 paisa) and retailer (16 paisa) respectively. In between the grower and the consumer, it is the retailer who enjoys a maximum share in consumer's rupee. That is to say, that retailer's position is best in the channel-VI. The margin of the firm, wholesaler, and retailer is Rs 200, Rs 100 and Rs 400 respectively. Again, it indicates that in between the grower and the consumer it is the retailer who enjoys the highest margin followed by firm and wholesaler respectively.

Table 10: Margin, percentage share in consumer's rupee and price spread in channel-VI

Marketing channel	Price received (Rs / Tolla)	Purchased price (Rs / Tolla)	Percentage share in consumer's Rupee (%)	Margin	Total Price Spread
Grower	1800	-	72		**700**
Firm	2000	1800	8	**200**	
Wholesaler	2100	2000	4	**100**	
Retailer	2500	2100	16	**400**	
Consumer		2500			

Source: Field survey

While comparing different Tables (**Table 5 to 10**) we come to know that in all marketing channels except channel III, where firm enjoys the maximum share in consumer's rupee (15.38%), it is the retailer who enjoys the maximum share in consumer's rupee, indicating that Retailer is King in saffron marketing. The average price of per Tolla (10gram) of saffron was Rs 2000, Rs 1600, Rs 1900, Rs 1750, Rs 1650 and Rs 1800 in channel I, II, III, IV, V and channel VI respectively. The price paid by the end user (final consumer) for per Tolla (10gram) of saffron was Rs 2000, Rs 2100, Rs 2600, Rs 2300, Rs 2100 and Rs 2500 in channel I, II, III, IV, V and channel VI respectively. The price spread for the marketing channels was also estimated. Since, direct marketing involves no intermediary, the price spread for channel I (direct channel) was zero while as for channel II, III, IV, V, and VI it was Rs 500, Rs 700, Rs 550, Rs 450 and Rs 700 respectively, indicating highest price spread for channel-VI. Therefore, channel-I is most profitable for saffron growers while as channel-VI is least profitable for them. The next profitable channel was found to be channel V as the price spread is least compared to all other marketing channels. Given below are the pie charts and histograms showing the Percentage Share in Consumer's Rupee and Price Spread in various channels.

Chart 1 indicates that the grower's share in consumer's rupee is 100% thereby meaning that channel-I is most profitable for saffron growers as it doesn't involve any intermediate between grower and the consumer

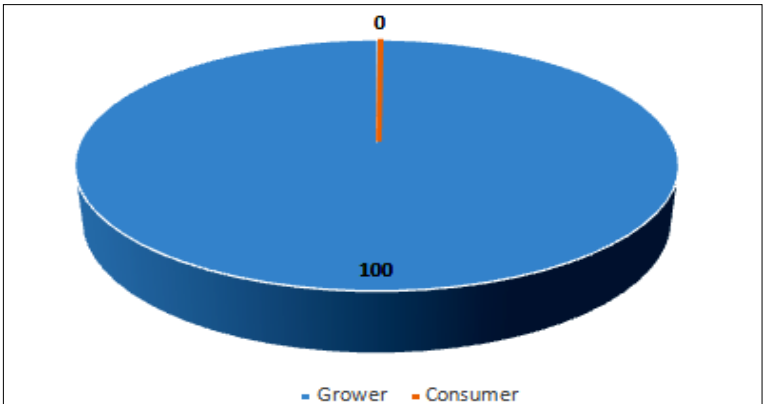

Chart 1: Percentage Share in Consumer's Rupee in Channel-I

Source: Field survey

Chart 2 indicates that the grower's share in consumer's rupee, dalal/local trader's share in consumer's rupee and retailer's share in consumer's rupee is 76 %, 10 %, and 14 % respectively. It shows that in channel-II in between the grower and the consumer it is the retailer who enjoys a maximum share in consumer's rupee.

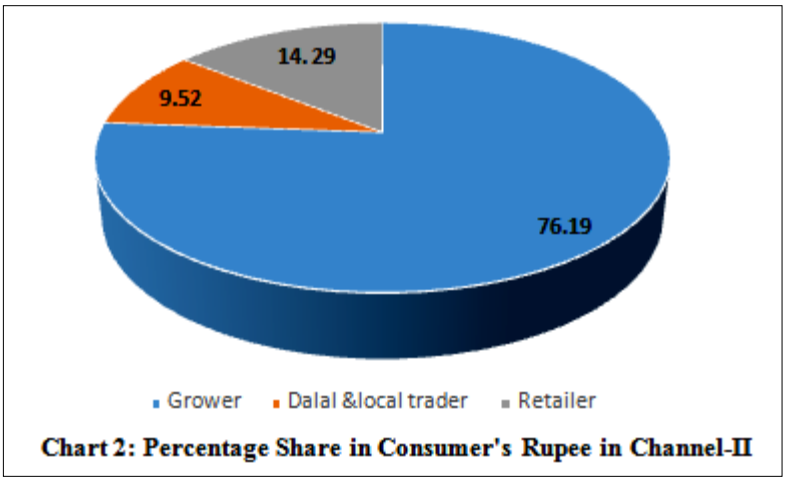

Chart 2: Percentage Share in Consumer's Rupee in Channel-II

Source: Field survey

Chart 3 indicates that the grower's share in consumer's rupee, firm's share in consumer's rupee and retailer's share in consumer's rupee is 73 %, 15 %, and 12 % respectively. It shows that in channel-III in between the grower and the consumer it is the firm who enjoys a maximum share in consumer's rupee.

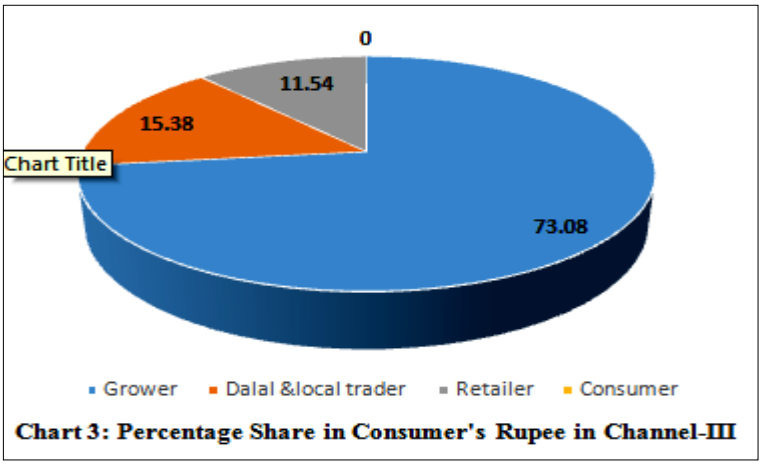

Chart 3: Percentage Share in Consumer's Rupee in Channel-III

Source: Field survey.

Chart 4 indicates that the grower's share in consumer's rupee, dalal/local trader's share in consumer's rupee, wholesaler's share in consumer's rupee and retailer's share in consumer's rupee is 76 %, 7 %, 4 %, and 13 % respectively. It shows that in channel-IV in between the grower and the consumer it is the retailer who enjoys a maximum share in consumer's rupee. But, the next best share in consumer's rupee is that of dalal and local trader. On the other hand, wholesaler's share in consumer's rupee is least in the channel- IV.

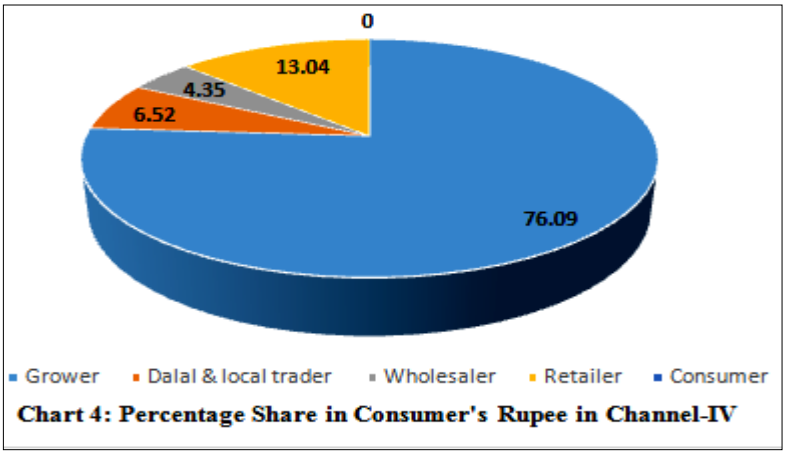

Chart 4: Percentage Share in Consumer's Rupee in Channel-IV

Source: Field survey

Chart 5 indicates that the grower's share in consumer's rupee, dalal/local trader's share in consumer's rupee, firm's share in consumer's rupee, wholesaler's share in consumer's rupee and retailer's share in consumer's rupee is 79 %, 5 %, 5 %, 2 %, and 9 % respectively. It shows that in channel-V in between the grower and the consumer it is the retailer who enjoys a maximum share in consumer's rupee. But, the next best position is that of dalal/local trader

and firm as both have the same share in consumer's rupee. On the other hand, the wholesaler has least share in consumer's rupee in channel-V as was the case in channel-IV.

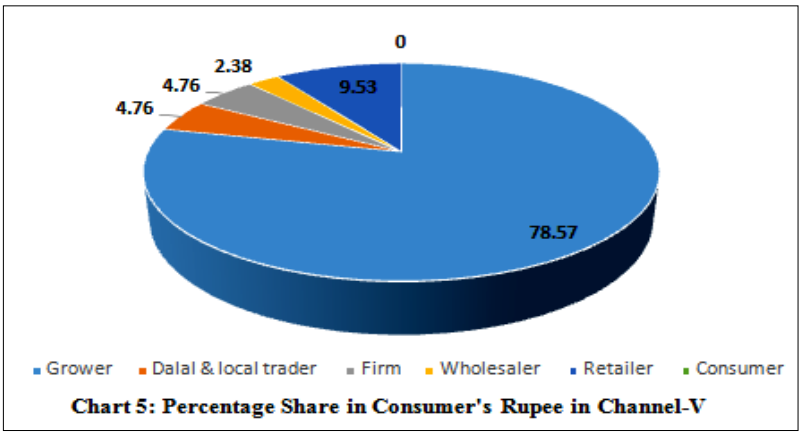

Chart 5: Percentage Share in Consumer's Rupee in Channel-V

Source: Field survey

Chart 6 indicates that the grower's share in consumer's rupee, firm's share in consumer's rupee, wholesaler's share in consumer's rupee and retailer's share in consumer's rupee is 72 %, 8 %, 4 % and 16 % respectively. It shows that in channel-VI in between the grower and the consumer it is the retailer who enjoys a maximum share in consumer's rupee. That is to say, that retailer's position is best in channel-VI. But, the next best position is that of a firm. On the other hand, the wholesaler has least share in consumer's rupee in channel-VI as was the case in channel-IV and channel-V.

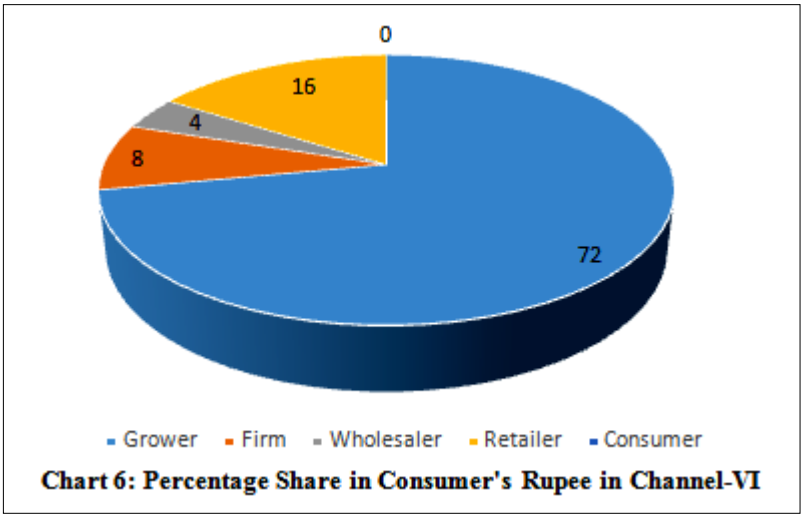

Chart 6: Percentage Share in Consumer's Rupee in Channel-VI

Source: Field survey

Therefore, we can conclude that in saffron marketing the retailers and firms enjoy a maximum share in consumer's rupee. In the total marketing margin of saffron the share of retail margin

is maximum (Turkamani, 2001). Moreover, there exists similarity between grape market and saffron market.

Results and Discussion

The key intermediaries involved in saffron marketing are brokers, local traders, agents, cooperative societies, government agencies, and companies (Mir, 1992; Munshi, 2002) . However, the present study found less role of government and cooperative societies in the marketing of saffron which is echoed well from their absence in the marketing channels which the present study identified, in this manner supporting the findings of more recent studies on the marketing pattern of saffron in Jammu and Kashmir (Wani and Saraf 2008). In earlier times saffron societies were present and active who look after the problems of the saffron market. The very recent literature highlights the fewer roles of such societies nowadays, with the result the problems of the saffron market get multiplied with every passing day.

The most prevalent marketing channel in the traditional saffron growing area of south Kashmir (Pampore) is Dalals (C1) Local Traders (C2) Agents (C3) Sub Firms (C4) and a very high price spread from farm to end user or grower to the consumer, which support our findings (Shafi *et al.,* 2014). Almost all studies found a big gap between farm gate prices and market prices of saffron and majority of the growers sell their produce through dalals (Munshi, 2002; Kubrevi and Khare, 2006; Wani *et al*., 2008; Ghorbani, 2008).

The present study found the retailers and firms enjoying a maximum share in consumer's rupee. In the total marketing margin of saffron, the share of retail margin is maximum (Turkamani, 2001; Wani and Saraf, 2008). However, firms and sub-firms are occupying a good amount of share in consumer's rupee (Shafi and Haq, 2014)

Conclusion

The intermediaries take a considerable amount of profit thereby leaving growers together with consumers collapse. The study revealed a significant positive relationship between saffron income and the size of land holdings on one hand and saffron production and the size of land holdings on the other hand. As a result, government and all the concerned authorities be duty-bound to provide far-reaching monetary and fiscal support coupled with non-monetary support, mainly capacity, and skill development, to saffron growers and all those related with this trade directly or indirectly so that their income will increase. Furthermore, they must provide direct marketing avenues to growers so that they can prevent from exploitation and increase their margin and profits which at the present moment are very low.

Suggestions and Future Directions

Distribution and Marketing of Kashmiri saffron should be through grower's organization in order to control and improve marketing and price fluctuations. Besides, the functioning of these organizations is to be made effective by providing proper marketing facilities,

infrastructure, and capable team. Growers should form an organization among themselves with the support of government and NGO's so that they are saved comprehensible, judicious and fair information about the market state of affairs. The coverage of National Saffron Mission should be stretched out to other useful and functional areas of horticulture cultivation. Active and operational measures are needed to diminish marketing losses at various stages of production, distribution, and, marketing of saffron. The National Saffron Mission should focus on the consolidation and reinforcement of institutions, setting up of processing units, saffron spice parks cum research centers in all the major saffron growing villages in order to improve the market pattern of saffron.

The major role of the present research is that it provided contemplativeness towards the economic indicators of income and production of saffron growers together with their margin and price spread setting so as to put forward methods and means to reduce the large chain of intermediaries and consolidate saffron market which at the present moment is in deteriorating condition. By highlighting the main characters in the saffron market and working on the ways to reduce unhealthy marketing chain, government and the concerned folks can increase the awareness of growers towards saffron agronomy. In order to upturn the envelopment of budding tycoons, rural in particular towards saffron cultivation, it is very important to highlight the large pool of attributes of saffron that generates value addition in saffron business. It will bring efficacy and success to the saffron market and increase the margin and share of a grower in consumer's rupee. The present study, for that reason, needs to be extended in the area of characteristics demand theory for saffron in order to create hedonic models which are most frequently estimated using regression analysis.

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